State of Oregon Department of Environmental Quality

Hearing Officer's Report and Response to Comments

Date: Jan. 7, 2025
Hearing Officer: Tiffany Yelton-Bram
Date of Hearing: Oct. 8, 2024
Company: NEXT Renewable Fuels Oregon
USACE/ DEQ Permit No. 2020-383

Background

NEXT Renewable Fuels Oregon (NEXT), applied to Oregon Department of Department of Environmental Quality (DEQ) for a Clean Water Act Section 401 water quality certification (WQC) to construct a renewable diesel and aviation fuel manufacturing facility, located at the Port Westward Industrial Park in Clatskanie, Oregon.

DEQ prepared a draft 401 water quality certification (WQC) and proposed it for public review and comment in a public comment period from Sept. 5, 2024, through Oct. 25, 2024. In addition, DEQ held a virtual public hearing for the proposed certification on Oct. 8, 2024. This report and Response to Comments describes DEQ's review and consideration of the public comments submitted during the comment period and public hearing.

Public comment

DEQ received 887 written comments and 40 oral comments. Comments received during the public comment period as well as comments received at the public hearing are summarized or stated below. Similar comments are grouped in sections with headings that begin with "Comments related to..." followed by the common topic. Individual comments and summarized comments are numbered following each section heading. For example, the first comment appears under the heading "1. Comments related to 401 review scope" and is enumerated with *1.1*. The second comment is enumerated with *1.2.* and so on.

Comments grouped in sections are provided as examples and are not an exhaustive list of such comments. DEQ responses follow each comment or group of comments.

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1. COMMENTS RELATED TO 401 REVIEW SCOPE

1.1. The [401] rule requires ODEQ to review requests for certification by not only looking at the project's potential discharges, but its activity as a whole, "including the activity's construction and operation."

DEQ Response: DEQ conducted a review of the NEXT application following EPA's final 2023 Clean Water Act (CWA) Section 401 Water Quality Certification Improvement Rule (2023 Rule), which went into effect on Nov. 27, 2023. The rule requires NEXT, as the applicant for a federal permit from the U.S. Army Corps of Engineers (USACE), to submit a "request for a 401 water quality certification" from DEQ. The federal permit from USACE is required under Section 404 of the CWA for activities that may result in any discharge into waters of the United States. The 401 WQC from DEQ documents that the applicant's activity will comply with all applicable water quality standards, limitations and restrictions (Section 121.2), based on thorough evaluation of the project using required documents submitted to DEQ as part of the request process for a 401 WQC. The 2023 Rule also explains that evaluation scope includes the water quality-related impacts from the activity subject to the USACE permit, including the activity's construction and operation.

The activity subject to the USACE permit for this proposed project is the construction of the Main Plant facility, roads, pipelines, rail spurs and stormwater facilities. The 401 WQC states that the discharge will comply with applicable provisions of the CWA, including state water quality standards.

The review included interdependent and interrelated activities associated with the construction and operation of the proposed facility. The interdependent and interrelated project components reviewed were stormwater treatment and discharge, water intake and outfalls, wetland and waters functional value assessment, the Biological Assessment, land use decisions, the mitigation proposal, alternatives analysis and vessel use. DEQ's 1200-C Construction Stormwater General Permit and the associated Erosion and Sediment Control Plan will be required for construction activities before any ground disturbing activities can take place at the site. DEQ's 1200-Z Industrial Stormwater General Permit is also required before construction activities can begin.

1.2. DEQ's process in this case has been flawed, providing incomplete information and rushing to a decision without adequate public engagement, ignoring the voices of the people most impacted, including residents of Port Westward and the Estuary who rely on fishing and clean water for crops and their livelihoods. Public notice and basic project information have been wholly inadequate.

DEQ Response: DEQ acknowledges and appreciates this feedback. Public engagement is a vital component of the regulatory process. The 401 WQC program follows the administrative process and rules for 401 WQC applications, found in Oregon Administrative Rule (OAR) 340-048-0027. Per EPA's 2023 401 Rule, DEQ has up to one year to issue a 401 water quality decision once a valid request for a 401 WQC is received. A valid request for certification to DEQ must include a copy of the federal permit application and a completed Request for Certification form (Section 121.5). DEQ received a valid request for a 401 WQC by NEXT on Jan. 13, 2024, and has until Jan. 12, 2025, to issue a decision with conditions or

a denial. Per Oregon Administrative Rules, the 401 program has, at minimum, a 35-day public notice period to receive public comments for this type of proposed action. DEQ extended the public notice period of the draft WQC for this project to 50 days, and pre-emptively scheduled a public hearing, to provide more time for public engagement.

Below is a summarized timeline of DEQ's public engagement during this process. Documents and recordings from these meetings, additional questions and answers and 401 WQC application documents are available at https://ordeq.org/next-renewables.

- Public Engagement History:
  - Sept. 7, 2021: Public information meeting
  - Nov. 5 – Dec. 5, 2021: Joint public notice of application with USACE
  - Feb. 8 - 23, 2022: DEQ re-opened the public notice of the application
  - Sept. 5 – Oct. 25, 2024: DEQ public notice of draft WQC announced and 50-day comment period
  - Oct. 8, 2024: Public hearing to share information, accept comments, and answer questions

1.3. *The relevant segment of the Columbia River is impaired for a number of parameters, including pH, temperature, DDE 4,4, Polychlorinated Biphenyls ("PCBs"), dioxin and dissolved gases.*

DEQ Response: The Columbia River between Mill Creek and Wallace Slough is classified as water quality limited under the CWA with an EPA approved Total Maximum Daily Load (TMDL) developed for temperature, dioxin (2,3,7,8-TCDD) and total dissolved gas. It is also listed on the Section 303(d) list of impaired waters for the parameters of polychlorinated biphenyls (PCBs) and DDE (4,4). Dissolved oxygen and pH are listed as attaining parameters, which means the water quality measurements for dissolved oxygen and pH fall within the established standards.

1.4. *Is DEQ and the public evaluating this application without the benefit of consultation with DOGAMI or evaluation of the design by the Army Corps of Engineers? That is to say, I'm concerned that the NEXT refinery will be a water quality catastrophe in the event of an earthquake or flood.*

DEQ Response: Oregon Department of Geology and Mineral Industries (DOGAMI) review is not a required element of DEQ's 401 WQC analysis. The 401 WQC administered by DEQ is a requirement of the USACE Section 404 dredge/fill authorization for the proposed discharge to wetland and waters on-site. USACE cannot issue their Section 404 authorization without a 401 WQC decision from DEQ. USACE is the lead regulatory agency for this federal permitting action and is evaluating the design of the project through their CWA Section 404 review process.

1.5. Please ask staff to withdraw the draft certification which has major flaws, causes massive harm to the area, violates the Clean Water Act and Oregon goals, and has high potential of major impact on the Columbia River.

1.6. I strongly urge DEQ to withdraw the proposed Clean Water Act Section 401 water quality certification for NEXT Renewable Fuels Oregon because of several concerns, the primary of which is that DEQ has not addressed serious questions concerning pollution of the State's waterways and with NEXT's statements that it's project would, in fact, cause water pollution.

DEQ Response: DEQ must issue a decision in response to a 401 WQC application and the required application materials. For this application, DEQ must issue a decision by Jan. 12, 2025. DEQ's decision options are to: *grant*; *grant with conditions*; *deny* or *waive* the 401 WQC. DEQ does not waive authority on issuing a 401 WQC decision in response to an application.

1.7. DEQ cannot blindly accept NEXT's unsupported conclusion that there will be no impacts to water quality.

1.8. NEXT's proposed permit violates the Clean Water Act, specifically the narrative water quality standards and anti-degradation rules.

1.9. The proposed refinery project would violate the Clean Water Act's water quality standards and anti-degradation rules, but DEQ proposes to authorize it anyway, without due consideration of concerns voiced by the community that relies on clean water for their crops and livelihoods.

DEQ Response: DEQ acknowledges the concerns raised in these comments. A 401 WQC identifies the conditions required to meet Oregon's water quality standards for waters impacted by a proposed project and is not a statement that a proposed project will have no impact on water quality. Upon careful review the information provided by NEXT, DEQ is reasonably assured that implementation of the project will be consistent with applicable water quality requirements under sections 301, 302, 303, 306 and 307 of the CWA and state water quality standards in Oregon Administrative Rules 340-041, provided the conditions of the 401 WQC are incorporated into the USACE Section 404 authorization and strictly adhered to by NEXT. The proposed project is covered by the 401 WQC, 1200-Z permit (industrial stormwater management during operations) and 1200-C (stormwater management during construction) permit. NEXT is required to obtain 1200-Z and 1200-C permit coverage by DEQ before construction can begin, and DEQ has yet to receive those applications. If DEQ proposes to issue stormwater permit coverage, the application must be posted for public review. DEQ is committed to engaging with the community during that process.

The Antidegradation Policy is to guide decisions that affect water quality to prevent unnecessary further degradation from new or increased point and nonpoint sources of pollution, and to protect, maintain and enhance existing surface water quality to ensure the full protection of all existing beneficial uses, as stated in OAR 340-041-0004. Degradation of

water quality is allowed only after a systematic decision-making process considering many factors.

The outfall at Port Westward to the Columbia River does not require an antidegradation review as part of the 401 WQC review process because it is an existing NPDES permitted outfall. OAR 340-041-0004(3)(a) does not require an antidegradation review for discharges into an existing mixing zone for a permitted source, as long as the Port continues to comply with the effluent limits set out in its NPDES permit.

The remaining stormwater runoff from contributing impervious areas not connected to the NPDES permitted outfall will be collected and treated prior to discharging to McLean Slough. McLean Slough is not a listed water quality limited water. The closest downstream waterbody listed as water quality limited is the Clatskanie River, which is listed on the Section 303(d) list of impaired water bodies for dissolved oxygen; however, the project design has provided reasonable assurance that it will not further degrade dissolved oxygen levels in Clatskanie River.

1.10. The Beaver Drainage Irrigation Company (BDIC) maintains broad authority granted by Oregon Statutes Chapters 547 and 554 to works related to water flow and drainage within the bounds of the district. The BDIC will exercise this authority for maintaining operations of drainage and irrigation within the district for Sanitary and Agricultural purposes as stated in the above-mentioned statutes and the BDIC bylaws, and fully expects any agencies attempting to regulate matters related to works within the district to perform due diligence regarding these statutes.

DEQ Response: DEQ acknowledges that BDIC provides important services to its members. Oregon Revised Statute (ORS) chapter 547 contains authorities related to the organization of drainage districts. ORS 554 covers corporations for irrigation, drainage, water supply or flood control. The proposed project will not inhibit BDIC from maintaining operations of drainage and irrigation within the drainage district. DEQ will maintain communication with the BDIC to share updates and answer questions.

1.11. The section 401 regulations specifically state that 401 certification should address "the activity's construction," but DEQ has explicitly disregarded water quality impacts related to the construction of the refinery and associated infrastructure. Similarly, DEQ's past statements on the scope of 401 review support analyzing an activity's indirect effects on water quality, but DEQ has disclaimed responsibility for considering a wide range of indirect impacts on water quality, from proposed mitigation to spill risk to shipping impacts. In short, DEQ's proposed approval does not appear to follow the law or past practice of the agency.

DEQ Response: DEQ conducts 401 reviews following the following EPA's final 2023 Clean Water Act (CWA) Section 401 Water Quality Certification Improvement Rule (2023 Rule), which went into effect on Nov. 27, 2023. A 401 review includes consideration of indirect impacts related to the construction of the project and compliance with project activities with a water quality nexus. DEQ has written NEXT's 401 WQC in accordance with the requirements of DEQ rules and EPA's 2023 Rule.

There is an existing NPDES permit #111746 for treated wastewater/stormwater discharges from Port Westward. The Port's water-intake structure and outfall structure have undergone Endangered Species Act (ESA) and Magnuson-Stevens Act (MSA) consultations (Corps 200200448 and NWP-2020-119-1). Water quality will be addressed by the proposed project's stormwater management plan, which meets DEQ 401 WQC requirements and Standard Local Operating Procedures for Endangered Species (SLOPES) V regulations for post-construction stormwater management. Treated stormwater runoff will be discharged at or below the pre-construction levels and therefore will not increase the volume of water in drainage ditches. USACE issued a permit for the existing dock, NWP-2007-998-1, which did not require a 401 WQC from DEQ.

The Columbia Pacific Bio-Refinery (CPBR) is the operator of the bulk liquid fuels terminal at Port Westward and the terminalling provider for the NEXT project. CPBR has spill response plans with EPA, DEQ and the U.S. Coast Guard in the event of a spill at Port Westward. CPBR practices spill scenario drills regularly, with the most recent drill being a worst-case scenario drill in August 2024. NEXT will be required to report spills to DEQ and the Oregon Emergency Response System (OERS). DEQ has emergency response equipment near the proposed NEXT site at CPBR to help mobilize a swift response if a spill occurs.

Water in existing ditches on the site proposed for impact is currently removed from within the diked areas by pumping it over the levee. Per the Oregon Department of Fish and Wildlife's (ODFW) comments in 2021, the existing levee system does not allow fish from the Columbia River to enter waterways inside the dikes.

2. COMMENTS RELATED TO CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

2.1. It will continue the use of fossil fuels at a time when we all know we need to get OFF climate harming fuels as soon as possible.

2.2. The Port Westward NEXT Refinery and Rail Yard proposal would be one of the largest greenhouse gas polluters in Oregon while using unsustainable feedstocks from the Midwest.

The hydrogen plant at the refinery used to make the fuel will rely on fracked gas. The proposal would be one of the largest greenhouse gas polluters in Oregon.

2.3. The project would emit over 1 million tons of greenhouse gas pollution each year, and it would rely on feedstocks from unknown sources as well as millions of cubic feet of fracked gas daily. NEXT told investors it would get most of its feedstocks by rail from the Midwest at the outset of production. Although NEXT calls its production "renewable," it has major negative climate consequences. The hydrogen plant at the refinery used to make the fuel will rely on fracked gas.

2.4. Biofuels produce substantial carbon in the atmosphere when burned, they produce carbon in the atmosphere when produced. Fracked gas is used to make the hydrogen necessary for the refining process.

2.5. NEXT would also consume over 14 million cubic feet of fracked gas per day, roughly on par with the entire City of Eugene. In short, the refinery would make it significantly harder to achieve the stated goal of your administration and agency: reducing Oregon's greenhouse gas emissions to 90% below 1990 levels by 2050.

DEQ Response*:* DEQ's 401 WQC review analyzes consistency with applicable water quality standards, limitations and restrictions. The proposed facility would be regulated under the newly approved Climate Protection Plan rules for its natural gas emissions. Under these rules, NEXT is considered an "Emissions Intensive, Trade Exposed" (EITE) entity and would be regulated directly for the emissions associated with the natural gas delivered to the facility. Emissions from EITE facilities are exempt from these emissions regulations at their facilities for the first three years. The emissions from the proposed NEXT facility, if constructed, would become regulated under the cap beginning in 2028.

NEXT is subject to greenhouse gas monitoring and reporting requirements under the Greenhouse Gas Program (OAR 340-215). Any future new, applicable greenhouse gas regulations adopted by the Environmental Quality Commission, DEQ's governing body, will be applied to this proposed facility in the appropriate manner and as defined by the commission in rule.

2.6. The lifecycle emissions of NEXT's product's feedstocks are key to understanding the project's overall impacts. While renewable diesel can be produced from truly waste feedstocks like "fish grease" and used cooking oil, the vast majority of these low-carbon feedstocks are spoken for on the market—a direct result of California's Low Carbon Fuel Standard that prioritizes these feedstocks. In actuality, NEXT's product will be made primarily from carbon-intensive, purpose-grown feedstocks like corn and soybean oil, shipped from the Midwest on long trains. Regulators must take into account the lifecycle emissions of a product labeled as "renewable" before buying into greenwashed selling points and authorizing a massive refinery in a sensitive area.

DEQ Response: DEQ's 401 WQC review analyzes consistency with applicable water quality standards, limitations and restrictions. NEXT has a DEQ Standard Air Contaminant Discharge Permit from the agency's stationary source air quality permitting program. This program regulates emissions generated from a stationary source. This includes emissions from on-site operations and equipment but does not include production of feedstocks, transport of feedstocks to/from the NEXT facility or the end use of fuel products developed using feedstocks.

3. COMMENTS RELATED TO AN ENVIRONMENTAL IMPACT STATEMENT

3.1. The EIS from the Army Corps of Engineers should be reviewed before a decision is made by DEQ.

3.2. DEQ is rushing its decision without having seen even a draft of the environmental impact statement from the Army Corps of Engineers.

3.3. NEXT and DEQ acknowledge that groundwater problems, safety and geotechnical issues are not fully addressed or even understood — issues that should be fully evaluated in an Environmental Impact Statement (EIS). DEQ is rushing to a decision prior to seeing an EIS, which is not consistent with DEQ's approach on other mega-projects, and frankly unfathomable.

3.4. Before DEQ approves NEXT's permit, it needs more information, including the Corps' EIS.

3.5. DEQ can and should require additional information about water quality impacts, including the draft Environmental Impact Statement for the facility to inform its analysis.

DEQ Response: An Environmental Impact Statement (EIS) is a document issued by the USACE that discusses the potential environmental impacts of a proposed action and how to mitigate those impacts. The purpose of an EIS is to inform the public and decision-makers about the potential environmental consequences of a proposed action. The EIS is part of the USACE CWA Section 404 dredge/fill review. The 401 WQC is part of the federal 404 authorization process led by USACE. The USACE, as the lead agency under the National Environmental Policy Act (NEPA), has determined the proposed project by NEXT may significantly affect the quality of the environment and will prepare a draft EIS for public review and comment prior to preparing the final EIS.

The EIS is not a required document for the DEQ Section 401 WQC review. NEXT has provided DEQ all the required documents related to water quality for the 401 review. DEQ reviewed the proposed NEXT facility's operations and design in a manner consistent with this authority. DEQ will review the draft EIS when it becomes available. Per Condition #8 of the 401 WQC, "DEQ may modify or revoke this certification, in accordance with Oregon Administrative Rules 340-048-0050, if the project changes, project activities are having an adverse impact on state water quality or beneficial uses or if the Applicant violates any of the conditions of this certification."

4. COMMENTS RELATED TO LAND USE AND LOCATION

4.1. NEXT's proposal conflicts with the interests of local farmers who have decades of first-hand knowledge regarding the hydrology and surface water movement in the area. NEXT continues to ignore and downplay community concerns.

4.2. A main concern of ours is the increase in industrial and delivery activity that would result [from] the construction of NEXT's refinery.

DEQ Response: DEQ appreciates the concerns that local farmers and community members have about the location of this proposed project. Land use zoning decisions are made at the local government level. Columbia County is the land use authority for the location of this proposed project. It is not within DEQ's jurisdiction to determine the location of any proposed

project. DEQ received a Land Use Compatibility Statement from Columbia County that states NEXT's proposed uses are consistent with the Columbia County Comprehensive Plan and the activity or use is allowed. Changes to this land use decision would need to come from either Columbia County or the Land Use Board of Appeals.

5. COMMENTS RELATED TO THE MITIGATION PLAN

5.1. *The BDIC has not yet signed on to the mitigation plan from NXT. This must happen before this project moves forward*.

5.2. Facility will impose impacts to the rest of the BDIC through the proposed mitigation project, shallow channels warm water and foster bacteria etc. which would contaminate irrigation water on food crops grown adjacent, could result in human health and safety problems. Mitigation is against the BDIC bylaws and articles of incorporation and the BDIC cannot legally approve such a project. DSL has also stated on public record that the mitigation site is unlikely to work as proposed. NEXT, DSL, USACE have acknowledged that there will be many impacts to BDIC.

DEQ Response: NEXT has engaged with the BDIC regarding the mitigation plan, including all board members, and design adjustments to the mitigation plan were made as a result of discussions with the BDIC. As far as DEQ understands, the mitigation site does not require approval by BDIC. Other mitigation sites are existing within the drainage district boundaries.

The impact to on-site wetland and waters requires mitigation approved by both USACE and Oregon Department of State Lands (DSL). DEQ is not the lead regulatory agency to determine appropriate mitigation compliance for wetland and waters impacts. The purpose of the mitigation site is to offset the permanent impacts to wetlands and waters occurring at the proposed facility site. Concerns regarding the mitigation plan were addressed in the Stewardship Solutions letter "*RE: DSL 63077 – RF Permit Application, Response to Public Review Comments*" dated December 3, 2021, as part of the DSL removal-fill permit process. Densely planted native vegetation provides shade to on-site waters and mitigates bacterial growth because pollutants and nutrients are absorbed by the plants and microorganisms in the soil. The proposed branching channels and planting plan will also slow surface water runoff rates and provide improved water storage on-site, which allow for better infiltration versus the existing straight waterways on-site. The mitigation site is owned by Oregon Port AG Investors, LLC and leased to NEXT. DSL approved their state removal-fill permit for this project in 2022. The DSL removal-fill permit includes conditions regarding the compensatory mitigation plan and mitigation monitoring reporting requirements, including conditions to directly address concerns raised by BDIC. DSL is responsible for overseeing the mitigation plan reporting and implementation requirements as described in the DSL removal-fill permit.

5.3. The mitigation associated with the project will also include heavy loads of glyphosate, as the herbicide will be used to control invasive plants at the mitigation site.

DEQ Response: Condition 15 of the 401 WQC discusses herbicide and pesticide use within 150 feet of a waterway. The Applicant is responsible for following the NPDES 2300-A general water quality permit, applicable regulations and adopting an Integrated Pest Management

plan that describes pest prevention, monitoring and control techniques with a focus on prevention of inputs to waters of the state. Glyphosate application typically binds tightly to soil and is broken down by bacteria in the soil after application. This reduces the load of glyphosate within surface waters because of the binding. The Biological Assessment (March 2023) provided references showing that glyphosate poses low acute toxicity to amphibians. In most conditions, over 90% of applied glyphosate dissipates within 180 days.

6. COMMENTS RELATED TO THE PORT OF COLUMBIA COUNTY'S NPDES PERMITTED OUTFALL

6.1. [NEXT] proposes to use millions of gallons of water in its industrial processes and then dump millions of gallons of "treated" wastewater into manmade ponds in the estuary on Beaver Island.

DEQ Response: Water rights are managed by the Oregon Water Resources Department (OWRD). Raw water intake for the project will be drawn from the existing Port Westward water intake with the Port's existing water right. There will be no increase of water allocation intake by the Port for the NEXT project. The March 2023 Biological Assessment states, "The permitted volume is well within the proposed water usage proposed by NEXT, and additional water usage will have no effect on Columbia River aquatic habitat." Treated wastewater discharged by Port Westward is covered under the existing NPDES permit #111746. Port Westward's water-intake structure and outfall structure have undergone ESA and MSA consultation (Corps 200200448 and NWP-2020-119-1). Wastewater systems will meet 40 CFR 60 Subpart QQQ, *Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems* requirements. The Port is not requesting a change to the existing NPDES permit at this time.

7. COMMENTS RELATED TO LEVEES AND FLOODING

7.1. The refinery is to be located behind levees built in the 60's. They were not deeply engineered, have already settled to some extent (some are dangerously 3-5 feet lower that adequate) and can be overtopped in a 100-year flood. They are at such risk of overtopping that the Army Corps of Engineers will not certify them. NXT has not demonstrated that they have addressed this problem and could mitigate any problems that arose from flooding.

7.2. BDIC levee system is not certified by FEMA and will not protect against a 100-year flood per FEMA's report in 2012. Lands proposed for the project are within the floodway and thus DEQ has not performed necessary work. BDIC levee system also has not been seismically analyzed but due to its construction materials likely would not survive seismic activity.

7.3. The project would disrupt a system of dikes and levees that control water drainage for much of the farmland in the Columbia River Estuary.

DEQ Response: DEQ does not issue decisions related to seismic stability of the levee or levee engineering. Floodplain development permits are approved at the local level through

the county planning department. In accordance with OAR 340-048-0020(2) (i), NEXT must submit findings prepared by the local land use jurisdiction that demonstrates the activity's compliance with the local comprehensive plan prior to the issuance of a 401 WQC. Other industrial development has been approved and constructed within the Port Westward Industrial Park.

DEQ's Post-Construction Stormwater Management Guidance requires applicants to address how sediment will be stabilized or removed prior to flood events if siting structural stormwater controls in floodplains are unavoidable.

USACE is the regulatory authority for levee management. The levee currently used as the access road for the Port Westward Industrial site will remain a road and will be consistent with current and past activities. USACE determined the proposed new use as a haul road will not alter the levee system; therefore, the proposed project will not alter, occupy or use a USACE federally authorized project and thus does not require permission from USACE under Section 408. The comments raise points and concerns outside of DEQ's authority and so, DEQ cannot act to deny or modify the proposed permit as requested.

Waterway G within the project site will remain in place to maintain existing drainage conditions for the areas outside of the project boundary. Treated post-construction stormwater runoff is required to discharge at a rate no more than the pre-construction runoff rate.

8. COMMENTS RELATED TO SEISMIC STABILITY

8.1. The proposal is located on unstable soil in diked land, leaving levees prone to failure near homes, farms, and a Zen monastery.

DEQ Response: Seismic stability of the project is not an element of DEQ's 401 WQC analysis. The proposed project will be designed to seismic requirements specified in the Oregon Specialty Contractors Code. In the final design phase, the following additional seismic considerations will be included for seismic resilience: ASCE 7 Minimum Design Loads and Associated Criteria for Buildings and Other Structures, International Building Code (IBC), National Earthquakes Hazards Reduction Program (NEHRP) Recommended Seismic Provisions and Local Seismic Hazard Maps and Data.

Regarding foundation construction, the final grade of the project site will be approximately 3 feet above the existing grade and fill material will consist of clean soil and aggregate. Concrete piles are proposed for the foundations under the tanks. The concrete piles will be constructed using deep soil mixing, which uses wet soil mixing with a binder slurry to provide a proper foundation for the concrete piles. This process constructs individual soilcrete columns that are 16 inches in diameter by 60 feet in depth, in rows with the columns overlapping for 100% mass stabilization. The deep soil mixing process that forms soilcrete columns is a common ground improvement technique in the Pacific Northwest to strengthen weak soils. Facility components will also be seismically supported with pile foundations by installing approximately 15,200 16-inch steel piles.

In accordance with OAR 340-048-0020(2) (i), NEXT submitted findings prepared by the local land use jurisdiction that demonstrates the activity's compliance with the local comprehensive

plan prior to the issuance of a 401 WQC.

8.2. If the weight limit requirements for the road for trucks is not known, how can a flare stack be planned for? A 300-foot-tall flare stack built for Deep South weighs 368,000 pounds. How much more will a 400-foot flare stack weigh? How can a secure foundation for a flare stack be built on land that is rated by the Oregon Department of Geology and Mineral Resources as having "violent" shaking in the event of the expected 9.0 or above magnitude earthquake we are overdue for?

DEQ Response: Seismic stability of the project is not an element of DEQ's 401 WQC analysis. The flare stack design, operations, maintenance and monitoring will be done in accordance with the air quality permit ACDP 32808. The flare height at the NEXT project is based on safety considerations following guidance from American Petroleum Institute Standard 521. DEQ does not have rules that would allow us to limit the height of a flare stack.

9. COMMENTS RELATED TO SPILLS

9.1. If an accident occurs causing a release of diesel, fracked gas, toxic chemicals or aviation fuel, the consequences would be bad for salmon and nearby communities.

DEQ Response: If a spill occurs within the facility's Main Plant, it will be contained and collected in the Main Plant's stormwater/wastewater system. The system will treat any spill material before being discharged to the Port's existing system approved by NPDES Permit #111746. The aboveground pipelines will be in operation only while a vessel or barge at the loading docks is being filled or unloaded. When the pipeline is not in operation, it will be filled with stagnant product or will be cleared. The pipelines will be inspected twice per day.

Conditions #13 and #14 of the 401 WQC address spill prevention and response during construction of the proposed project.

9.2. The company also makes little effort to provide realistic information about routine impacts, major spill impacts or worst-case scenarios in a seismic event... In the event of an accident, nearby and downstream communities and wildlife who will be exposed to the release of diesel, fracked gas, toxic chemicals or aviation fuel, in the event of an accident will bear the disastrous consequences.

9.3. *What aspects of the project prevent incidental spills from reaching neighboring properties and the Columbia River?*

DEQ Response: Oregon's spill rules will apply during the construction and operational stages of this facility. The Columbia Pacific Bio-Refinery (CPBR) is the operator of the bulk liquid fuels terminal at Port Westward and is the terminalling provider for the NEXT project. CPBR will be responsible for receiving the feedstock and loading finished product onto vessels at the dock at Port Westward. CPBR stages over 6,500 feet of containment boom, skimmers and two deployment vessels at the Port facility. A containment boom is placed around each ocean-going vessel until the transfer of fuel product is complete. Once an

ocean-going vessel enters the Columbia River, a second marine organization, Maritime Fire and Safety Association becomes an additional Oil Spill Response Organization (OSRO). CPBR has a spill contingency plan and contracts with Clean Rivers Cooperative as their OSRO. CPBR, DEQ, the U.S. Coast Guard and other responder agencies practice spill scenarios and spill drills regularly. CPBR has spill contingency plans with EPA, the U.S. Coast Guard and DEQ. NEXT is required to report spills.

Conditions #13 and #14 of the 401 WQC address spill prevention and response during construction of the proposed project.

9.4. Draft permit requires notification of state agencies but must also require notification of BDIC for spills.

DEQ Response: Condition #14 of the draft 401 WQC requires NEXT to report to OERS within 24 hours. DEQ added additional requirements to notify the BDIC if a spill occurs in the final 401 WQC.

10. COMMENTS RELATED TO BRADBURY SLOUGH

10.1. The public notice does not provide any discussion of Bradbury Slough, which provides high-value salmon habitate. [sic] It would receive pollution from the project.

10.2. DEQ's draft permit correctly identifies the Columbia River, McLean Slough and the Clatskanie River as affected waters of the state, but fails to identify and account for potential water quality violations in Bradbury Slough, Beaver Slough and smaller waterways within and near the project site.

DEQ Response: The proposed project is not discharging to Bradbury or Beaver Sloughs. Port Westward has an outfall at the Columbia River at river mile 53, east of the Port's dock. Treated stormwater discharge outside of the Main Plant will discharge to McLean Slough. The stretch of the Columbia River that encompasses Bradbury Slough has the same TMDLs and impaired beneficial uses listed in the 401 WQC, with an addition of arsenic as a parameter on the Section 303(d) list. Wastewater discharge effluent will be monitored and tested in accordance with the Port's NPDES Permit. Sampling and measurement procedures are required to comply with 40 CFR 136, or as specified in the NPDES permit.

11. COMMENTS RELATED TO STORMWATER

11.1. The project poses acute risks of water quality degradation through its construction and operation. Heavy metal and 6PPD-quinone contamination—a common byproduct of tire erosion from construction and continuous road use—are lethal to salmon in small concentrations. By constructing roads and filling drainages in a low-lying floodplain, NEXT's proposed activities will likely result in contaminants accumulating throughout the site over the life of project and especially in adjacent sloughs critical for juvenile salmon rearing.

11.2. For example, this level of impervious surface is harmful to water quality and will cause environmental degradation due to the loss of habitat.

11.3. NEXT would violate Oregon's water quality standards for temperature, turbidity and toxins by contributing contaminated stormwater and draining polluted water into the Columbia River and surrounding wetlands.

11.4. NEXT's refinery will add pollutants to the smaller waterways and drainage ditches on the property. By definition, these drainage ditches transport water—and pollutants—to waterways within the levee system that DEQ has not considered.

DEQ Response: The proposed project design is in accordance with water quality standards listed in OAR 340-041, which include temperature, turbidity and toxins. Stormwater runoff from impervious areas will be treated to meet DEQ and SLOPES V (Standard Local Operating Procedures for Endangered Species) programmatic requirements for post-construction stormwater management before discharge to on-site waters. The SLOPES V and DEQ Post-Construction Stormwater Management Plan design storms are equivalent and exceed the Columbia County stormwater requirements. SLOPES V is a set of guidelines used by USACE to comply with the Endangered Species Act (ESA) when authorizing projects related to stormwater, transportation and utilities, acting as a streamlined process for consultations with the National Marine Fisheries Service (NMFS) regarding potential impacts on endangered species. The concept of SLOPES exists nationwide, and "SLOPES V" specifically refers to the version used in Oregon. Stormwater management is achieved using best management practices to control sources of contaminants, control flows and volumes of stormwater, and treat stormwater prior to discharge.

The discovery of 6PPD and 6PPD-quinone is relatively new (discovered in 2020) and there is ongoing research related to best avoidance and treatment practices. 6PPD-quinone is not currently regulated in stormwater discharge permits; however, it is a pollutant under evaluation and is addressed in the post-construction stormwater management plan for this site. A study by Washington State Department of Ecology showed that stormwater and treatment flow best management practices had a high likelihood of treating 6PPD and 6PPD-q. As of November 2024, EPA announced an advance notice of proposed rulemaking under Section 6 of the Toxic Substances Control Act to gather information on the potential risks associated with 6PPD and 6PPD-q in tire material.

According to the Biological Assessment (March 2023) written for the project, any stormwater effects for the project outside of the Main Plant area are estimated to end at the confluence of McLean Slough and Beaver Slough, which is outside of the boundary presence of salmon and steelhead in the Clatskanie River and 4-7 miles from the project site. The treated stormwater/ wastewater discharged to the Columbia River is covered under the Port's NPDES permit.

11.5. *DEQ proposes that NEXT control groundwater with a liner, but NEXT's January 2023 Stormwater plan states that this liner would not work, and "*a *liner is not recommended at this time."*

DEQ Response: DEQ has included conditions in the 401 WQC that NEXT controls the access area's (project area outside of the Main Plant) stormwater treatment facilities with a liner due to the low level of infiltration and high levels of groundwater on-site. Lined

stormwater treatment facilities include an impervious bottom designed to prevent infiltration to groundwater. DEQ's post-construction stormwater management guidance requires a minimum separation distance of five feet between the bottom of the stormwater treatment facility and the seasonal high groundwater level unless otherwise approved by DEQ. A liner is required if the five-foot distance cannot be achieved. This is a standard practice to prevent pre-treated stormwater comingling with groundwater, and it is a common requirement for many stormwater facilities located in areas with high groundwater.

12. COMMENTS RELATED TO FISH AND AQUATIC SPECIES

12.1. NEXT's own Biological Assessment states, *"Because of potentially lethal effects from stormwater contaminants, the project will adversely affect Pacific Salmon EFH and the Pacific Coast groundfish EFH."*

12.2. NEXT's proposed project directly impacts the critical habitat of thirteen endangered salmon and steelhead stocks, including critically endangered spring/summer Snake River chinook.

DEQ Response: This statement in the Biological Assessment is related to heavy metal and 6PPD-quinone presence in stormwater. 6PPD-quinone is not currently regulated in stormwater discharge permits; however, it is a pollutant under evaluation and is addressed in the post-construction stormwater management plan for this site. Stormwater generated in the Main Plant area of the project will be regulated by the existing Port NPDES permit, which has an outfall to the Columbia River. This stretch of the Columbia River contains Evolutionarily Significant Units and Distinct Population Segments of salmon and steelhead. The remaining stormwater runoff in the access area of the project site will be treated prior to discharge to waterways which drain to McLean Slough. McLean Slough does not have an open water, salmon and steelhead passable, connection to the Clatskanie River due to the drainage district pump system. Stormwater treatment for the project has been designed to meet, or exceed, post-construction stormwater treatment standards by DEQ and SLOPES V (Standard Local Operating Procedures for Endangered Species) programmatic requirements.

U.S. Fish and Wildlife Service (USFWS) has not listed new threatened or endangered species or designated critical habitats that occur in the aquatic portion of the action area for the NEXT project since 2015. NMFS has listed additional species and designated critical habitats since 2015, so project impacts for these species and designated critical habitats from previously permitted Berth 1 improvements are addressed in the March 2023 Biological Assessment. The area of the Columbia River near the Berth 1 dock has not been identified by fisheries agencies for spawning or rearing. The closest presence of salmon and steelhead to the project in the floodplain is 4-7 miles south of the project in the Clatskanie River.

13. COMMENTS RELATED TO RAIL CONSTRUCTION AND USE

13.1. If the rail yard goes in, there are water issues that must be resolved. Yards inevitably contain runoff from trains like oil and grease and this polluted water would be headed straight into the Columbia River Estuary.

DEQ Response: All stormwater runoff from the rails on the project site will be detained and treated to DEQ's post-construction stormwater management standards prior to discharge. Treated runoff will discharge to on-site waters and McLean Slough.

13.2. The proposal includes miles of new rail tracks. This rail track includes a system that includes millions of gallons of tank storage to accommodate long trains of unsustainable feedstocks and toxic fuel.

13.3. What are the requirements for the natural gas trains that come into the rail yard, passing through agricultural land, including blueberry farms? The pollution, including operating oils and lubricants, will pollute the areas along the tracks to the rail yard. Storm water treatment will deal with the material in the water in the yard, but not the pollution along the tracks. Also, exhaust from the locomotives will settle out on the surrounding farms and go into the ground water there. These pollutants include PCBs and toxic materials from the diesel fuel burned by the trains.

DEQ Response: DEQ's 401 WQC review analyzes consistency with applicable water quality standards, limitations and restrictions. Direct regulation of trains or railroad activities is handled by the United States Department of Transportation Federal Railroad Administration and the Oregon Department of Transportation Rail Safety Division.

The proposed rail spurs (west rail spur, east rail spur and main plant rail spur) and tracks on the project site will run east and west from the existing Portland & Western's rail line through the proposed facility along the new access road to Hermo Road. The overall rail spur will be approximately 8,900 feet long, or 1.68 miles. On Nov. 6, 2022, the Land Use Board of Appeals overturned Columbia County's decision to expand the rail yard next to the fuel facility. On Dec. 16, 2022, NEXT submitted an updated, approved LUCS that no longer included the rail facility. Stormwater runoff generated by the on-site rail spurs will be detained and treated to DEQ's post-construction stormwater management standards.

14. COMMENTS RELATED TO MARINE VESSEL USE

14.1. [Commentor] understands that the NEXT facility's operation will significantly increase vessel traffic to and from the adjoining Columbia Pacific Bio-Refinery (CPBR).

14.2. NEXT proposes a refinery operation that would produce 50,000 barrels per day of fuel – a production scale that would require an annual average of 115 medium-sized tankers for imported feedstock and 56 medium-sized or Panamax vessels for export. The lower Columbia River and its estuary system cannot support salmon survival while sustaining vessel traffic of this magnitude.

14.3. The increased vessel pollution from NEXT's operation, in the sensitive Columbia River Estuary, and associated water quality violations, are too great—DEQ can determine that no conditions can assure that NEXT can comply with water quality requirements and deny the 401.

DEQ Response: The Port of Columbia County owns and operates the dock that will be used to transport fuel materials and products. Berth improvements related to the construction of an additional berth and vessel capacity were approved by USACE under permit #2007-98-1 and the permittee was Cascade Kelly, LLC dba Columbia Pacific Bio-Refinery. During the CPBR permitting process to upgrade Berth 1, the project noted that Berth 1 had an annual operational capacity of 264 barges or 108 ocean going vessels, which exceeds NEXT's annual vessel needs. Aquatic impacts from the upgrade to Berth 1 were evaluated during that permitting process.

The vessel use analysis for this project has concluded that the increase in vessels will not further degrade designated beneficial uses. The area of the Columbia River near the Berth 1 dock has not been identified by fisheries agencies for spawning or rearing. It is a narrow stretch used for quick migration rather than lingering activity. The vessel use is not anticipated to create erosion of the banks or stranding from wake. This is not an area of highly active commercial or recreational fishing. As conditioned in the 401 WQC, the project activity must provide unobstructed fish passage and movement of aquatic life at all times.

Each vessel is required to have a containment boom in place until the transfer of fuel product is complete. Once an ocean-going vessel enters the Columbia River the Maritime Fire and Safety Association becomes an additional Oil Spill Response Organization (OSRO). CPBR has a spill contingency plan and contracts with Clean Rivers Cooperative as their OSRO.

15. COMMENTS RELATED TO FEEDSTOCK

15.1. NEXT has refused to make any commitments about the feedstocks for, or the carbon intensity of, the fuel that NEXT claims would be "clean," "renewable" and "sustainable." NEXT's lack of transparency is important because different feedstocks—such as seed oil, palm oil, or animal fats—result in end products with significantly different carbon, social and environmental footprints.

15.2. The DEQ has stated that the feedstock will be brought in by barge but that is not accurate according to NEXT's documents, it will come in by rail.

15.3. In actuality, NEXT's product will be made primarily from carbon-intensive, purpose-grown feedstocks like corn and soybean oil, shipped from the Midwest on long trains.

DEQ Response: DEQ's 401 WQC review analyzes consistency with applicable water quality standards, limitations and restrictions. Both the Joint Permit Application to USACE, DEQ and DSL and Biological Assessment for the project state that feedstocks will primarily be received via barge and ocean-going vessels to Port Westward and the preference for feedstock transport is from marine transportation. The proposed facility will use the Ecofining Green Diesel technology process by the Honeywell UOP company to create the final products. Feedstocks will range from vegetable oils, used cooking oil, animal tallow and inedible corn oil. According to the applicant, palm oil will not be used for feedstock by this project.

15.4. *The feedstocks to make this inaccurately-named renewable fuel, according to NEXT's own reports, would be purposefully grown crops (such as soy) brought in by rail from the*

Midwest, increasing the release of diesel and other fossil fuel and toxic emissions, increasing unsustainable energy use to produce and transport these crops, exacerbating climate disruption, increasing competition for fertile land for food crops also threatened by climate disruption and increasing air, soil and water pollution, with the resulting adverse effects on human and ecosystem health.

15.5. However, feedstocks such as U.S. Midwestern corn and soybeans are allowed under Oregon's Clean Fuels Program, even though the dual use of these commodities for food and fuel has potential to drive up food prices. As the NEXT facility will likely expand RD usage in Washington and Oregon, we ask that DEQ monitor this potential impact and consider reducing or excluding impacted crop RD feedstocks as may be appropriate in the future.

DEQ Response: DEQ's 401 WQC review analyzes consistency with applicable water quality standards, limitations, and restrictions. DEQ's stationary source air quality permitting program that issued NEXT's Air Contaminant Discharge Permit looks at emissions generated from a stationary source. This includes emissions from on-site operations and equipment but does not include offsite production of feedstocks, travel to/from the facility or the end use of fuel products developed using feedstocks.

16. COMMENTS IN SUPPORT OF THE PROJECT

16.1. We support NEXT permitting because of the very substantial healthy climate benefits of renewable diesel (RD). Carbon intensities for many of the approved RD pathways in Oregon's Clean Fuels Program (CFP) are in the range of 20-40 g CO_2e/MJ, far lower than the equivalent value of about 100 g CO_2e/MJ for petroleum diesel. According to ODOE's most recent Clean Fuels Forecast, RD is projected to account for 10% of the total diesel volume used in Oregon for 2024, compared to just over 1% in 2021.

16.2. Nearby, NEXT is proposing the enhanced restoration of more than 470 acres of wetlands within the Beaver Drainage District. This wetland restoration will allow for better groundwater filtration and act as flood mitigation during storm events. There are wetland benefits to native plant species, pollinators and wildlife.

DEQ Response: DEQ acknowledges these comments.

17. COMMENTS RELATED TO PAST PRACTICES OF APPLICANT

17.1. ... NEXT's fraught history in the region. Bolstering DEQ's outright authority to deny the Certification is the authority set forth in ORS 468.070, which gives DEQ clear authority to deny a request for Certification based on prior behavior.

17.2. While Commenters acknowledge that this would be NEXT's first operation in Oregon, it is not without concern that NEXT's backers have a troubled history of environmental compliance in the region. Given this fraught history, DEQ can and should use its authority

under ORS 468.070 to deny this request for Certification, based on NEXT's historic disregard for environmental regulations.

DEQ Response: This application was reviewed based on the authority in ORS 468.070 and no applicable provisions were found. Any violations of the 401 WQC or other DEQ regulations would be addressed through DEQ's enforcement process and could result in orders to pay civil penalties or perform corrective actions. DEQ's Office of Compliance and Enforcement has an established process used to determine the appropriate response for non-compliance with applicable permit conditions and environmental laws and permits. DEQ may modify or revoke a 401 WQC in accordance with OARs 340-048-0050 if the project changes, project activities are having an adverse impact on state water quality or beneficial uses or if the Applicant violates any of the conditions of the certification.

18. CONCLUSION

Based on review of the information and documents submitted by the Applicant and the comments received during the public review process, DEQ intends to issue the proposed 401 WQC with the following noted revisions:

1. Included the 401 WQC review processing dates and timeline
2. Condition 2 includes Table 1 of Supporting Documents
3. Condition 8 clarifies it includes the off-site mitigation plan
4. Condition 14 includes the requirement to contact BDIC
5. Condition 24 includes the SWMP revision date

DEQ would like to thank all individuals who took the time to review the proposed 401 WQC as well as those who attended the virtual public hearing and/or submitted comments.

Non-discrimination statement

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