BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS
STATE OF OREGON
FOR THE
OREGON ENVIRONMENTAL QUALITY COMMISSION

IN THE MATTER OF: PACIFIC BIO PRODUCTS – WARRENTON, LLC (fka BIO-OREGON PROTEIN, INC.) Respondent.	**DEQ'S ANSWER TO RESPONDENT'S EXCEPTIONS AND BRIEF** OAH Case No. 2022-ABC-05366 Agency Case No. WQ/I-NWR-2022-031

Pursuant to OAR 340-011-0575(4)(b), the Department of Environmental Quality (the Department or DEQ) files this Answer to Bio-Oregon's (Respondent or Bio-Oregon) "Exceptions and Brief" filed with the Environmental Quality Commission (Commission or EQC) in appeal of the Proposed and Final Order (the Order) entered in the above-captioned matter by the Office of Administrative Hearings on October 17, 2023.

INTRODUCTION

Pacific Bio Products-Warrenton, LLC (fka Bio-Oregon Protein, Inc.) ("Bio-Oregon") owns and operates a fish meal processing facility located in Warrenton, Oregon (the Facility). The Facility has been in operation for over seventy years and was issued its first National Pollutant Discharge Elimination System (NPDES) permit in 1975, shortly after the program was adopted by Congress as part of the Federal Water Pollution Control Act (FWPCA) Amendments of 1972. The early iterations of Bio-Oregon's permit contained few effluent limits and required few treatment controls—the most recent version of Bio-Oregon's permit (prior to the permit at issue in this matter) was issued in 2007, included limits only for pH and flow volume, and lacked many of the conditions required to be included in NPDES Permits pursuant to federal law.[1] DEQ's permitting records do not explain why the Facility's prior permit lacked so many of

[1] *See* 40 C.F.R. § 122.44 (listing the conditions that must be included in each NPDES permit, including technology-based effluent limitations and standards).

the federally required elements, but DEQ endeavored to correct this error in the renewal permit that was issued to Bio-Oregon on February 17, 2022 (the Permit) and is the subject of this appeal.[2] From the beginning of the permit renewal process, DEQ recognized that the Permit was going to look very different from the permits the Facility operated under previously and would require the Facility to install wastewater treatment controls necessary to meet technology-based effluent limits—limits that have been applicable to the Facility under federal law since the mid-1970s. In 2011, pursuant to its authority in 40 C.F.R. § 122.21(g)(13), as part of the permit renewal process DEQ requested that Bio-Oregon provide additional monitoring data with its renewal application including sampling data on alkalinity, hardness, salinity, fecal coliform, metals, and other toxic pollutants.[3] The sampling results Bio-Oregon provided to DEQ with its permit renewal application in 2012 indicated that many of the pollutants DEQ requested sampling data for are present in the wastewater discharged from the Facility.[4] In 2017, DEQ met with Bio-Oregon to explain the significant changes the company could expect in its renewal permit; changes that DEQ was required to implement to bring the permit into compliance with the Clean Water Act. Approximately five years passed between when Bio-Oregon was notified that its renewal permit would include more stringent limits and the issuance date of the Permit. Rather than using that time to research and install treatment technologies necessary to meet the forthcoming limits—limits that other fish meal processors have had included in their permits since 1977—Bio-Oregon chose to continually challenge DEQ's conclusions.

Bio-Oregon's wastewater causes a visible waste plume in the Columbia River which has drawn attention from the U.S. Coast Guard.[5] The largest contributor of pollutants to the Facility's wastewater is something referred to as "stickwater." Merriam-Webster defines "stickwater" as "a viscous quickly

---

[2] Testimony of Tiffany Yelton-Bram, February 28, 2023 (Recording 1 of 2).
[3] *See* 40 C.F.R. § 122.21(g)(13)(stating that "[i]n addition to the information reported on the application form, applicants shall provide to the Director, at his or her request, such other information as the Director may reasonably require to assess the discharges of the facility…"); *see also* Exhibit A7, Letter from Mer Wiren, DEQ, to Michael L. Brown, Bio-Oregon Protein, Inc., (April 27, 2011).
[4] *See* Exhibit A8, Analytical Reports from Columbia Analytical Services (Aug.–Oct. 2011).
[5] Exhibit A6, Email with photo attachments from Michael Greenburg, U.S. Coast Guard, to Tiffany Yelton-Bram, DEQ (August 2, 2011).

decomposing and evil-smelling liquor that is obtained as a by-product in the wet process of manufacturing fish meal and fish oil by cooking the fish with steam and pressing and that is often concentrated by evaporation for use in animal feeds as a source of vitamins and amino acids."[6] Since the 1970s EPA has recognized stickwater as producing one of the highest waste loads in the entire seafood industry in terms of BOD_5, suspended solids (TSS), and oil & grease.[7] In developing technology-based effluent limitations (TBELs) applicable to the fish meal industry, EPA acknowledged that "end-of-pipe treatment of stickwater is particularly difficult," and thus "should be controlled by evaporation or barged to sea."[8] Note, however, that in recognizing the difficulties of treating stickwater EPA did not conclude that these facilities should therefore be allowed to discharge stickwater untreated—as Bio-Oregon has been doing—rather EPA concluded that stickwater should be managed so that little of it ends up in a facility's wastewater.

Because the TBELs set forth in the Permit were required to be achieved by July 1, 1977, DEQ is legally precluded from including a compliance schedule in the Permit to give Bio-Oregon additional time to comply with those limits. However, as noted above, DEQ gave Bio-Oregon advance notice that TBELs would be included in the Permit—time that Bio-Oregon could have spent identifying process changes or treatment options necessary for the Facility to comply with the TBELs. With respect to the water-quality based effluent limitations (WQBELs) in the Permit, as discussed in detail below, those limits were included in the Permit because the data provided by Bio-Oregon as part of its permit application showed those pollutants were present in the wastewater discharged from the Facility at levels that have a reasonable potential to cause or contribute to water quality standard violations.

[6] "Stickwater." Merriam-Webster.com Dictionary, Merriam-Webster, https://www.merriam-webster.com/dictionary/stickwater. Accessed 26 Mar. 2024.
[7] Exhibit A16, Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Fish Meal, Salmon, Bottom Fish, Clam, Oyster, Sardine, Scallop, Herring, and Abalone Segment of the Canned and Preserved Fish and Seafood Processing Industry Point Source Category, EPA 440/1-75/041a, Group I, Phase II (Sept. 1975) at 209; *see also* Exhibit A16 at 201 (Table 47).
[8] Exhibit A16 at 351.

Unlike for TBELs, DEQ has the discretion to provide permittees with additional time to identify treatment options and achieve compliance with WQBELs, which DEQ did in the Permit by providing Bio-Oregon four and a half years from the permit's effective date to identify and implement the technologies necessary to meet the WQBELs.[9]

Despite being given advance notice and opportunities to meet with DEQ to discuss the permit during the development process, Bio-Oregon continues to paint DEQ as "unreasonable" and argues that DEQ caught Bio-Oregon off guard with "unprecedented limits." While the TBELs and WQBELs in the Permit are new to Bio-Oregon, they certainly are not "unprecedented." WQBELs would be included in the permit of any facility that, like Bio-Oregon, has submitted application information and sampling data that indicates pollutants in the facility's wastewater at levels that have the reasonable potential to cause or contribute to exceedances of water quality standards. With respect to the TBELs, for over half a century fish meal processors on both coasts have been subject to TBELs in their NPDES permits. The absence of TBELs in prior iterations of Bio-Oregon's permit—which has allowed the company to avoid having to install meaningful wastewater treatment controls—has no doubt given Bio-Oregon a significant economic advantage over its competitors during the last fifty years.

As a state authorized to administer the federal NPDES program, DEQ is obligated to issue permits that comply with the Clean Water Act.[10] As discussed in greater detail below, the limits included in the Permit are supported by data that Bio-Oregon submitted to DEQ either with its permit application or through its compliance with the monitoring requirements in prior iterations of its permit. Bio-Oregon has put forth a number of arguments for why it cannot meet the limits set forth in the Permit, but, to date, Bio-Oregon has not provided any documentation to support those arguments.

---

[9] *See* Exhibit A1, National Pollutant Discharge Elimination System Waste Discharge Permit No. 101804 (issued to Bio-Oregon Protein, Inc. on February 17, 2022) at 23.

[10] 40 C.F.R. § 122.4(a) (stating that "[n]o permit may be issued when the conditions of the permit do not provide for compliance with the applicable requirements of the Clean Water Act, or regulations promulgated under the Clean Water Act.")

Throughout this process, Bio-Oregon has argued that "there are no feasible technologies available for Bio-Oregon to adopt that would allow Bio-Oregon to comply with the Permit."[11] However, to date, the company has provided little documentation to show what technologies it has considered, the cost associated with those technologies, and an accounting of why Pacific Seafoods—Bio-Oregon's parent company and one of the largest seafood processors in the country—cannot afford to implement those technologies.

As discussed in depth below, the Office of Administrative Hearing's reassignment of the case from Judge Rackstraw to Judge Fair was not an error that warrants a second contested case hearing on this matter, particularly where Bio-Oregon has not alleged any harm that it suffered due to the reassignment. Bio-Oregon's argument on this point is just another tactic to delay the effective date of the Permit.

The ALJ found that the evidence presented at hearing and included in the record established, by substantial evidence, that the Permit was developed in accordance with state and federal law. Thus, the Department respectfully requests that the Environmental Quality Commission (EQC) uphold the ALJ's Proposed Order in its entirety and adopt it as the Final Order of the Commission.

LEGAL STANDARD

The legal standards set forth by Respondent do not apply in the present case. Bio-Oregon's citation to ORS 183.482 is inapplicable, as those provisions apply to the jurisdiction of the Court of Appeals for judicial review of contested cases. Before the ALJ, DEQ had the burden to establish that the aspects of the Permit challenged by Bio-Oregon were lawful by substantial evidence.[12] DEQ—as the state agency responsible for issuing NPDES permits—has proposed to issue a permit to Bio-Oregon. The Permit,

[11] Respondent Bio-Oregon's Exceptions and Brief at 5.

[12] *See* ORS 183.450(5) (no order shall be issued except as supported by substantial evidence). Substantial evidence is a preponderance of the evidence. *See Staats v. Newman*, 164 Or App 18, 22 (1999) ("In enacting ORS 183.450(5), the legislature intended to prescribe a standard of proof that corresponds to the preponderance standard." (internal quotation marks omitted)).

when finalized, will constitute an agency order, as that term is used in ORS 183.450(5).[13] DEQ is the proponent of the Permit as it is drafted. Thus, under ORS 183.450(2) and OAR 340-011-0545(2), DEQ had the initial burden to prove that the proposed order is lawful and supported by substantial evidence.[14]

Pursuant to OAR 340-011-0575(6), the EQC "may substitute its judgment for that of the administrative law judge in making any particular finding of fact, conclusion of law, or order except as limited by ORS 183.650 and OAR 137-003-0665." However, should the matter be appealed to the Court of Appeals, the court will review the order to determine whether it is supported by substantial evidence in the record, within the range of discretion delegated to the agency by law, consistent with agency rule and practice, and correctly interprets applicable law.[15]

CLEAN WATER ACT OVERVIEW

Congress' objective in adopting the Clean Water Act (CWA)[16] was "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[17] To achieve this goal, as a general matter, the CWA prohibits a person from discharging[18] pollutants[19] from a point source[20] into waters of the United States unless the discharge is authorized by a NPDES permit.[21] NPDES permits are issued by the Environmental Protection Agency (EPA) or by state agencies authorized by EPA to implement

[13] ORS 183.310(6)(a) (defining an agency order).
[14] *See Benz v. Water Resources Commission*, 94 Or App 73, 75 (1988) (when state agency issues a permit and that permit is challenged, court reviews state action for substantial evidence in the record as a whole and for errors of law).
[15] *See* ORS 183.482(8).
[16] 33 U.S.C. §§ 1251 to 1387.
[17] 33 U.S.C. § 1251(a).
[18] As relevant to this case, the CWA defines "discharge of a pollutant" and "discharge of pollutants" both as "any addition of any pollutant to navigable waters from any point source." 33 U.S.C. § 1362(12).
[19] A "pollutant" is "dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water." 33 U.S.C. § 1362(6).
[20] The CWA defines a "point source" as "any discernible, confined and discrete conveyance . . . from which pollutants are or may be discharged." 33 U.S.C. § 1362(14).
[21] 33 U.S.C. § 1342.

the program.[22] In Oregon, DEQ has an approved NPDES permitting program and operates the program based on an agreement with EPA.[23] Thus, any entity discharging pollutants into navigable waters in Oregon must obtain a permit from DEQ.[24]

There are two categories of effluent limits in NPDES permits: 1) technology-based effluent limits (TBELs) and 2) water quality-based effluent limits (WQBELs).[25] Under the Clean Water Act, TBELs are the minimum level of control that must be imposed in a permit issued under the NPDES program.[26] Generally, TBELs for industrial facilities are established in one of two ways: 1) using EPA's national effluent limitations guidelines (ELGs), or 2) where there are no applicable ELGs, on a case-by-case basis using the permit writer's Best Professional Judgment (BPJ).[27] In setting case-by-case limitations, DEQ must consider the factors listed in 40 C.F.R. § 125.3(d)—these are the same factors EPA considers when it sets ELGs.[28] In some cases, a single permit may include TBELs based on both ELGs and BPJ.

In June 1974 and December 1975, EPA promulgated ELGs applicable to many subcategories of the seafood processing industry.[29] These ELGs were developed after an in-depth engineering and economic analysis of the sector and represent EPA's determination—based on the demonstrated performance of facilities within each category—of a reasonable level of treatment that is within the

---

[22] 33 U.S.C. § 1342(a)–(d).
[23] *See* ORS 468B.035(1); *see also* OAR 340-045-0005 through -0105; *see also* Testimony of Tiffany Yelton-Bram, February 28, 2023 (Recording 1 of 2).
[24] ORS 468B.050.
[25] *See e.g.*, Exhibit A5, U.S. Environmental Protection Agency NPDES Permit Writers' Manual, at 43, Exhibit 3-1 (listing the required components of a permit); *see also* Testimony of David Feldman, February 28, 2023 (Recording 1 of 2).
[26] 40 CFR § 125.3(a).
[27] 40 CFR § 125.3(c); *see also* Exhibit A5 at 80–116; *see also* Testimony of David Feldman, February 28, 2023 (Recording 1 of 2).
[28] *See* 40 C.F.R. § 125.3(d).
[29] *See* 40 C.F.R Part 408.

economic means of the industry.[30] One of the subcategories EPA developed ELGs for was the Fish Meal Processing Subcategory.[31]

WQBELs, in contrast, are developed independent of consideration of available treatment technology, and instead are established according to the water quality of the receiving stream. WQBELs are often set based on the results of a Reasonable Potential Analysis (RPA). An RPA determines whether there is a reasonable potential for a discharge to cause or contribute to violations of water quality standards, taking into account effluent variability, available dilution (if applicable), receiving stream water quality, and potential impact on relevant water quality criteria (such as aquatic or human health).[32] If the results of the RPA indicate there is the potential for the discharge to cause or contribute to exceedances of water quality standards, the permit writer sets limits as necessary to ensure the discharge does not cause or contribute to violations of state water quality standards.

BIO-OREGON PERMITTING HISTORY

Bio-Oregon's facility has been in operation since the 1940s and currently processes shrimp shells, crab shells, and raw fish matter into concentrated fish protein.[33] The first wastewater discharge permit was issued to the facility by the Oregon Sanitary Authority in September 1968.[34] In 1975, DEQ issued permit coverage to the facility under the then-new NPDES program.[35] DEQ has renewed Bio-Oregon's coverage multiple times since then, most recently on February 17, 2022, when DEQ issued to Bio-Oregon NPDES Permit No. 10184 (the Permit)—which is the subject of this appeal.[36] The Permit

---

[30] *See id*.; *see also generally* Exhibit A16.
[31] 40 C.F.R. Part 408, Subpart O.
[32] *See* 40 C.F.R. § 122.44(d)(1)(i) (requiring that WQBELs "control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality").
[33] *See* Exhibit A2, National Pollutant Discharge Elimination System Fact Sheet for Permit No. 101804, at 3.
[34] *See id.* at 7.
[35] *Id.*
[36] *See* Exhibit A1, National Pollutant Discharge Elimination System Waste Discharge Permit No. 101804 (issued to Bio-Oregon Protein, Inc. on February 17, 2022).

allows and regulates the discharge of treated process wastewater and stormwater to the Columbia River through three outfalls.[37]

Bio-Oregon's characterization of the history of monitoring requirements under the various permit's Bio-Oregon has held over the years is inaccurate and misleading. While it is true Bio-Oregon added an air scrubber to its facility in or around 1993 and that DEQ imposed additional monitoring requirements as a result, DEQ never relieved Bio-Oregon of the additional monitoring requirements – rather, those monitoring requirements were incorporated into the 2007 renewal permit. Although the 2007 permit included limits only for pH and flow volume,[38] the facility was required to monitor for additional parameters, including turbidity, total ammonia as nitrogen, five-day biochemical oxygen demand (BOD_5), Total Suspended Solids (TSS), oil & grease, temperature, and total residual chlorine.[39] The results of this monitoring, required to be submitted to DEQ monthly since 2008, showed that these pollutants are found in the effluent discharged from Bio-Oregon's facility.[40] Additionally, in 2011, in preparation for the permit renewal process, DEQ sent a letter to Bio-Oregon requiring the submission of additional sampling data, including for metals.[41] The results of that additional sampling indicated that certain metals are present in the effluent from the facility.[42]

Because the prior permit included very few limits on effluent discharges from the Facility, discharges from the Facility often create a visible plume near the Facility's outfalls in the Columbia River.[43] DEQ has acknowledged that the prior permit was deficient in that it did not include all the

---

[37] *See id*.
[38] *See* Exhibit A4, National Pollutant Discharge Elimination System Waste Discharge Permit No. 101804 (issued to Bio-Oregon Protein on December 7, 2007), at 2.
[39] *See id.* at 3.
[40] *See* Testimony of Jeffrey Linzer, March 1, 2023 (Recording 1 of 2).
[41] *See* Exhibit A7, Letter from Mer Wiren, DEQ to Michael L. Brown, Bio-Oregon Protein, Inc., (April 27, 2011); *see also* Testimony of Tiffany Yelton-Bram, February 28, 2023 (Recording 1 of 2).
[42] *See* Exhibit A8, Analytical Reports from Columbia Analytical Services (Aug.–Oct. 2011).
[43] *See* Exhibit A6, Email with photo attachments from Michael Greenburg, U.S. Coast Guard, to Tiffany Yelton-Bram, DEQ (August 2, 2011).

elements required by state and federal law.[44] Thus, the Department has been working since at least 2011 to ensure that the Facility's renewal permit is brought into alignment with all relevant state and federal requirements. Through correspondence and conversations going back to at least 2017, DEQ has communicated with Bio-Oregon regarding the likelihood that the renewal permit would be much more stringent than the prior permit, including DEQ's intent to use EPA's Fish Meal ELGs to develop the TBELs.[45]

ARGUMENT

I. The Contested Case Proceeding was Not Flawed

Bio-Oregon argues that the entire Order must be remanded back to the Office of Administrative Hearings (OAH) for a new hearing because OAH reassigned the Administrative Law Judge (ALJ) assigned to the case between the contested case hearing and issuance of the Order. This is incorrect. There is no rule that prohibits OAH from reassigning the ALJ assigned to a matter between the contested case hearing and the issuance of a Proposed and Final Order and Bio-Oregon has not alleged any specific harm that it suffered because of the reassignment. Therefore, the reassignment is not a critical procedural error for which a new contested case hearing is required. Furthermore, Bio-Oregon failed to object to the reassignment within the time allowed under the regulations and is therefore precluded from raising it as an issue now.

a. The applicable rules do not support Bio-Oregon's argument that only the ALJ who presided over the hearing can issue the Proposed and Final Order.

Bio-Oregon cites to numerous provisions of Oregon's Administrative Procedures Act (APA) that refer to "*the* administrative law judge" to support its position that only the administrative law judge who presided over the hearing can issue the Proposed and Final Order for the case. The support Bio-

[44] Testimony of Tiffany Yelton-Bram, February 28, 2023 (Recording 1 of 2); *see also* Testimony of David Feldman, February 28, 2023 (Recording 1 of 2).
[45] Testimony of Tiffany Yelton-Bram, February 28, 2023 (Recording 1 of 2); *see also, e.g.*, Exhibit A17, Letter from Mer Wiren, DEQ, to John Lin, Max Hepburn, and Dan Humphries, Bio-Oregon Protein (March 15, 2017) (summarizing a meeting that occurred on March 7, 2017).

Oregon cites for this argument is a tortured amalgamation of multiple statutory and regulatory provisions that is wholly unpersuasive. There is nothing in the APA or in the procedural rules governing DEQ's contested cases that prevents OAH from reassigning the ALJ assigned to a case between the contested case hearing and the issuance of the Proposed and Final Order. Once a reassignment occurs, the newly assigned ALJ becomes "the" ALJ for purposes of the APA and DEQ's rules. Not even the definition of "hearing officer" in the APA supports Bio-Oregon's position—that term is defined only as "includes an administrative law judge."[46] There is no limitation in the definition to suggest that the "hearing officer" means only the ALJ who presided over the hearing.

Contested case hearings are expensive and time consuming for both the State and the Respondent. If an entirely new contested case hearing needed to occur whenever an ALJ became unavailable to write the Proposed and Final Order, both parties would face significant increased expenses and inefficiencies for something neither party had any control over.

b. Bio-Oregon failed to object to the ALJ reassignment within the time allowed.

The applicable regulations require that ALJ reassignment requests be made to the Chief Administrative Law Judge within ten business days of an ALJ's assignment to a case. Here, Bio-Oregon failed to submit its request to the Chief Administrative Law Judge within the time allowed under the rules. Thus, the reassignment of the ALJ is not grounds for the EQC to decline to issue a Final Order upholding the ALJ's Proposed and Final Order.

As Bio-Oregon notes, OAR 471-060-0005(3)[47] provides every party and agency in a contested case the right to request a change in the administrative law judge assigned to the case, and the "first request of that party or agency shall be automatically granted so long as it is filed within the time limits established by section (4)." Section (4) of the regulation requires that the request be made "within 10

[46] ORS 183.310(4).
[47] OAR 137-003-0501(8) incorporates 471-060-0005 into the procedural rules for the Office of Administrative Hearings.

business days after an administrative law judge is assigned to the case." However, the rule also states that the time for filing this request can be extended

> if the party or agency making the request can demonstrate that the failure to make a timely request was caused by an excusable mistake, surprise, excusable neglect, reasonable reliance on the statement of a party, agency, or the Office of Administrative Hearings related to procedural requirements. In such cases, the party or agency may file the request within 10 business days after the circumstances that prevented a timely filing have come to an end.[48]

In the present case, the Proposed and Final Order states that "[o]n August 15, 2023, the OAH reassigned the matter to ALJ Samantha Fair after ALJ Rackstraw became unavailable to write the proposed order."[49] Neither party was notified of the reassignment until the Proposed and Final Order was issued on October 17, 2023. Thus, October 17, 2023, was the date on which "the circumstances that prevented a timely filing" came to an end; meaning Bio-Oregon had ten business days (until October 31, 2023), to object to Judge Fair's reassignment to the matter and to request that a different ALJ be assigned to issue the Order. Pursuant to the rule, all requests to reassign an ALJ

> must be in writing and sent or delivered to the Chief Administrative Law Judge or designee by filing the request with the Office of Administrative Hearings by hand delivery, mail, facsimile transmission, or electronic mail.[50]

In the present case, Bio-Oregon objected to the ALJ reassignment for the first and only time in the Exceptions and Brief it filed with the EQC on February 16, 2024. Thus, not only did Bio-Oregon not raise its objection within the time provided by law but it also failed to file its objection and reassignment request with the Chief Administrative Law Judge, who is the only person authorized to accept such requests.

Bio-Oregon's argument with respect to this issue suggests that parties to a contested case have some control over which ALJ is ultimately assigned to a given matter. While parties are given one

---

[48] OAR 471-060-0005(4)(b).
[49] Proposed and Final Order, *In the Matter of: Bio-Oregon Protein, Inc., nka Pacific Bio Products-Warrenton, LLC*, OAH Case No. 2022-ABC-05366 (October 17, 2023) at 3.
[50] OAR 471-060-0005(4).

opportunity to request and receive a reassignment of the ALJ without the need to state a reason, that party has no control over which ALJ the case is reassigned to. So, to the extent Bio-Oregon suggests it would have been afforded an opportunity to vet the new ALJ based on the ALJ's expertise and experience, those arguments are very misleading. Judge Fair has presided over other DEQ cases and, as stated in the Order, "reviewed the record in its entirety, including the hearing recording, exhibits and the parties' closing arguments."[51] Bio-Oregon has not alleged any improper bias on the part of Judge Fair or any specific harm that it suffered because of the change in the ALJ.

Bio-Oregon's opportunity to raise an objection to the ALJ reassignment with the Chief Administrative Law Judge expired ten business days after notice of the reassignment was provided in the Order. Thus, the reassignment of the ALJ is not grounds for the EQC to decline to issue a Final Order upholding the ALJ's Proposed and Final Order.

II. Water-Quality Based Effluent Limits (WQBELs)

a. Toxics Limits (Conclusions of Law #1 and #7 in the Proposed Order).

With respect to the WQBELs for toxic pollutants in the Permit, the specific Conclusions of Law in the Proposed and Final Order that Bio-Oregon has challenged are:

1. DEQ's limits on total copper, mercury, zinc and thallium for Outfall 001 are appropriate.

7. DEQ did not err in setting heavy metals limits and monitoring requirements for Outfalls 002 and 003 and did not err in denying an intake credit for metals present in the intake water for Outfalls 002 and 003.

Bio-Oregon challenges both conclusions arguing that they each represent an "erroneous interpretation of provision of law; outside the range of discretion to DEQ by law; inexplicably inconsistent with agency rule, officially stated position, and prior agency practice; not supported by substantial evidence in the record or substantial reason." Bio-Oregon's specific argument appears to be twofold: 1) that the data Bio-Oregon submitted to DEQ with its permit application was flawed and 2)

[51] Proposed and Final Order at 3.

that the reasonable potential analysis DEQ conducted which gave rise to the limits was "unprecedented and insufficient." Neither of these arguments are supported by the record. As DEQ discussed in-depth in its Closing Brief, effluent data provided by Bio-Oregon indicates that mercury, thallium, copper, zinc, and arsenic are present in the Facility's effluent in amounts that DEQ has determined have the reasonable potential to exceed state water quality criteria.[52] Thus, DEQ is obligated under the Clean Water Act to include WQBELs applicable to those pollutants in the Permit.

i. The data DEQ relied upon in setting the WQBELs was not flawed.

Bio-Oregon did not provide any testimony, documentation, or even argument during the hearing process to suggest that the reasonable potential analyses that DEQ conducted were "unprecedented" or "insufficient." Rather, Bio-Oregon's arguments during the hearing process were focused on the data that was used to complete the analyses. Specifically, Bio-Oregon argued that the data—which Bio-Oregon submitted to DEQ as part of its permit application along with a signed certification that the information was accurate—was flawed. Bio-Oregon did not raise concerns with the data it provided to DEQ at any point during the permit development process, and the written comments submitted by Bio-Oregon during the public comment period are devoid of any mention of data quality concerns.[53] As Dr. Brandstetter testified to during the hearing, DEQ reviewed the data at the time it was submitted to DEQ and during the RPA process and saw no issues that would preclude DEQ from using the data to conduct the RPAs.[54] The first DEQ heard of Bio-Oregon's concerns with respect to the data was during the hearing; well after the permit development process was concluded and the Permit was issued.

[52] *See* Department's Closing Brief at 6-9; *see also* Exhibit A2, National Pollutant Discharge Elimination System Fact Sheet for Permit No. 101804, at 44-81; *see also* Exhibit A8, Analytical Reports from Columbia Analytical Services (Aug.–Oct. 2011).
[53] *See generally* Exhibit R4, BioOregon Comments on Proposed NPDES Permit Renewal (Sept. 16, 2021).
[54] *See* full discussion in the Department's Closing Brief at 7-9.

DEQ makes permitting decisions according to the information a permit applicant provides in its permit application.[55] The federal regulations applicable to permit applications are very proscriptive about the types of information that must be included in NPDES permit applications and are very clear that the permit applicant has the obligation to submit accurate information and data to the permitting authority.[56] Indeed, permit applicants are required to certify that the information they submitted with their permit application is accurate and reliable.[57] Pursuant to 40 C.F.R. § 122.22(d), the person signing the permit application on behalf of the permittee must make the following certification:

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The company representative who submitted Bio-Oregon's permit application would have signed this certification.

Pursuant to 40 C.F.R. § 122.41(k), "[w]here the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information." At no point during the permit development process did Bio-Oregon inform DEQ that the information it submitted on and with its permit application was incorrect. Thus, DEQ was fully

---

[55] *See* Exhibit A5, U.S. Environmental Protection Agency NPDES Permit Writers' Manual at 41 (stating that "[u]pon receiving the appropriate application form(s), the permitting authority develops a permit for that facility on the basis of information from the permit application and other sources (e.g., previous permit requirements, discharge monitoring reports, technology and water quality standards, total maximum daily loads, ambient water quality data, special studies)").

[56] *See* 40 C.F.R. § 122.21.

[57] 40 C.F.R. § 122.21(k) (stating that "[a]ll applications, reports, or information submitted to the Director shall be signed and certified (See § 122.22)").

justified in relying on the information provided by Bio-Oregon to develop the limits in the Permit.

ii. The WQBELs in the Permit are necessary to protect applicable water quality standards.

As EPA noted in its Permit Writer's Manual, when technology-based effluent limits alone are not sufficient to protect applicable water quality standards, "the Clean Water Act (CWA) and its implementing regulations require development of water quality-based effluent limitations (WQBELs). WQBELs help meet the CWA objective of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters and the goal of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water (*fishable/swimmable*)."[58] Pursuant to OAR 340-041-0101 (Table 101A), the designated beneficial uses of the main stem Columbia River from the mouth of the river to river mile 86 include: public domestic water supply, private domestic water supply, industrial water supply, irrigation, livestock watering, fish & aquatic life, wildlife & hunting, fishing, boating, water contact recreation, aesthetic quality, and commercial navigation & transportation. Oregon has adopted specific water quality criteria to ensure these designated uses are supported, including aquatic life and human health criteria for toxic pollutants.[59] Where there are multiple designated uses for a water body, "the criteria must support the most sensitive use."[60] EPA notes in its Permit Writer's Manual that:

> EPA regulations at § 122.44(d)(1)(i) state, 'Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level that will *cause*, have the *reasonable potential to cause*, or *contribute* to an excursion above any [s]tate water quality standard, including [s]tate narrative criteria for water quality.' [emphasis added]. Because of that regulation, EPA and many authorized NPDES states refer to the process that a permit writer uses to determine whether a WQBEL is required in an NPDES permit as a *reasonable potential analysis*."[61]

[58] Exhibit A5 at 117.
[59] *See* OAR 340-041-8033, Table 30.
[60] Exhibit A5 at 120.
[61] Exhibit A5 at 139 (emphasis in original).

As DEQ's witnesses testified at the hearing, DEQ conducts reasonable potential analyses (RPAs) using EPA's methodology.[62] The RPAs specific to Bio-Oregon's permit are included in the Fact Sheet that accompanied the Permit.[63] As noted above, Bio-Oregon has not challenged the methodology used to conduct the RPAs, rather, Bio-Oregon's arguments rest solely on a late breaking argument that the data DEQ used to conduct the analysis was somehow flawed and that the Facility does not use toxic pollutants as part of its process.

iii. The source of the pollutants is irrelevant to the analysis.

Bio-Oregon's continued argument that they do not use metals in their process is completely irrelevant to the analysis. The testing results submitted by Bio-Oregon show these pollutants are present in the effluent from the Facility, thus, DEQ was obligated to conduct a reasonable potential analysis to evaluate whether the levels of pollutants in the effluent were present in quantities that could reasonably cause or contribute to a water-quality exceedance.[64] After conducting an RPA that determined there was the reasonable potential for the toxic pollutants to cause or contribute to a water quality standard exceedance, DEQ had an obligation under the Clean Water Act to include water-quality based effluent limits for those pollutants in the Permit.[65] If Bio-Oregon is unable to treat its effluent to meet those limits, the onus is on Bio-Oregon to determine where the pollutants are coming from and take steps to keep those pollutants out of its effluent.

iv. A Mercury Minimization Plan is required for Outfall 001

DEQ employee Dr. Erich Brandstetter testified at the contested case hearing that while mercury is evaluated for its potential toxicity to aquatic life, methylmercury is used to evaluate toxicity to

---

[62] *See* Testimony of Dr. Erich Brandstetter, February 28, 2023 (Recording 1 of 2); *see also* Exhibit A2 at 21 (stating that "DEQ has adopted EPA's methodology for RPA").
[63] *See* Exhibit A2 at 44-81.
[64] *See generally* Exhibit A8.
[65] *See* 40 C.F.R. § 122.44(d)(1)(i) (stating that "[l]imitations must control all pollutants or pollutant parameters . . . which the Director determines are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any [s]tate water quality standard").

people.[66] Because methylmercury is a fish tissue-based concentration rather than a water column concentration, permit limits for methylmercury cannot be expressed as a water column concentration.[67] Therefore, when mercury is detected in effluent on a consistent basis, the permit must contain a narrative effluent limit in the form of a DEQ-approved Mercury Minimization Plan.[68]

As described in the DEQ's Internal Management Directive for the Implementation of Methylmercury Criterion in NPDES Permits, mercury is considered to be consistently present in the effluent if 25% or more of the samples collected are above the Quantitation Level, which is currently 0.005 µg/l.[69] With respect to the sampling Bio-Oregon completed in 2011, the Quantitation Level that applied to the mercury samples from Outfall 001 at that time was 0.2 µg /l and 50% of the samples collected indicated mercury was present at levels at or above the Quantitation Level.[70] Specifically, the mercury results for the four samples collected for Outfall 001 were: 0.2 µg /l,[71] non-detect,[72] 0.3 µg/l,[73] and non-detect.[74] Since mercury was present in over 25% of the samples, pursuant to DEQ's IMD, which is based on EPA guidance,[75] inclusion of a mercury minimization plan for Outfall 001 was appropriate and supported by substantial evidence.

v. Bio-Oregon has not demonstrated that it qualifies for an intake credit.

With respect to Bio-Oregon's argument that the toxic pollutants present in its effluent are coming from the intake water Bio-Oregon uses in its processes, DEQ's regulations are very clear that the onus is on the discharger to demonstrate to DEQ that an intake credit for those pollutants is

---

[66] Testimony of Dr. Erich Brandstetter, February 28, 2023 (Recording 1 of 2).
[67] *Id.*
[68] *Id*. As Dr. Brandstetter testified to, because it is very expensive to test for methylmercury, mercury samples are used as a surrogate.
[69] Exhibit A12, DEQ's Internal Management Directive for the Implementation of Methylmercury Criterion in NPDES Permits, at 6.
[70] *See* Exhibit A8 at 15, 50, 69, and 90 (the "MRL" value indicated in each chart is the quantitation limit applicable to that sample).
[71] Exhibit A8 at 15.
[72] *Id.* at 50
[73] *Id.* at 69
[74] *Id.* at 90.
[75] Exhibit A12 at 5.

appropriate. The specific conditions that Bio-Oregon must demonstrate to DEQ are set out in DEQ's water-quality regulations, specifically OAR 340-045-0105.[76] To date, Bio-Oregon has made no such demonstration, thus DEQ has no legal basis to provide Bio-Oregon with an intake credit.

RESPONSE TO BIO-OREGON'S PROPOSED ALTERANTIVE FINDINGS OF FACT RELATED TO WQBELs FOR METALS AND TOXICS

With respect to the alternative Findings of Fact Bio-Oregon has proposed related to the WQBELs for metals and toxic pollutants, DEQ responds as follows:

Finding # 15 – DEQ objects to Bio-Oregon proposed deletion of this Finding. In addition to being supported by testimony on the record, the Finding is supported by the Permit Fact Sheet (Exhibit A2 at 6-7).

Finding #23 – DEQ objects to Bio-Oregon's proposed alternative. The Finding is supported by the record. Specifically, page 61 of EPA's Permit Writers Manual (Exhibit A5) notes that toxics data is commonly omitted from permit applications and that its omission renders the permit application incomplete. While seafood processors are not included among the category of industries that must submit toxics and metals data with its permit application, DEQ has broad authority pursuant to 40 C.F.R. § 122.21(g)(13) and OAR 340-045-0030(5)(a)-(b) to request additional information as part of a permit application; authority which the Department exercised when it sent the April 2011 data request (in the record as Exhibit A7) to Bio-Oregon soliciting the metals data (in the record as Exhibit A8). Thus, at DEQ's request, the submission of this data became a permit application requirement and had Bio-Oregon failed to provide the requested testing data its application would have been deemed incomplete.

[76] OAR 340-045-0105(3) (stating that "DEQ may consider pollutants in intake water as provided in section (3) when establishing water quality-based effluent limitations based on narrative or numeric criteria, provided that the discharger has demonstrated that the following conditions are met…").

Finding #25 – DEQ objects to Bio-Oregon's proposed alternative.

Finding #24 – DEQ objects to Bio-Oregon's proposed alternative and requested addition to this Finding. DEQ disagrees that there were any irregularities in Columbia Analytical Services' work that would render the data unreliable, as Dr. Brandstetter testified to.

Finding #26 – DEQ objects to Bio-Oregon's requested addition. As DEQ's witnesses testified to, the source of the metals in the effluent is not relevant to the analysis. The only relevant consideration in setting WQBELs is whether the pollutants are found in the effluent.

Finding #28 – DEQ objects to Bio-Oregon's request that this Finding be deleted. The Finding is an accurate representation of Mr. Brandstetter's testimony.

Finding #29 – DEQ objects to Bio-Oregon' requested addition. Although Bio-Oregon has challenged the data used to conduct the RPA analyses, Bio-Oregon did not provide any testimony or argument before the ALJ to suggest that the process by which DEQ conducted the RPA analyses was inadequate (to which DEQ would have had the opportunity to respond)—thus there is no basis for the proposed order to be amended to include this statement.

Finding #30 – DEQ objects to Bio-Oregon's proposed alternative.

Finding #57 – DEQ objects to Bio-Oregon's proposed alternative. The BOD_5, TSS, and Oil/Grease limits are Technology-Based Effluent Limits and thus were not set based on an RPA. The Ammonia limit is a WQBEL and was set according to the results of an RPA. The ALJ's statements with respect to the RPA that was conducted for Ammonia are accurate and supported by page 29 of Exhibit A2 as

cited.

Finding #65 – DEQ objects to Bio-Oregon's proposed deletion of this Finding. The ALJ's Finding is supported by the record. Specifically, the RPA's included in Exhibit A2 indicate that the levels of copper and zinc discharged from Outfall 001 have the reasonable potential to cause or contribute to an acute exceedance of aquatic life criteria (Exhibit A2 at 44). The levels of arsenic, copper, and zinc discharged from Outfall 002 have the reasonable potential to cause or contribute to an acute exceedance of aquatic life criteria (Exhibit A2 at 48). The levels of copper discharged from Outfall 003 have the reasonable potential to cause or contribute to an acute exceedance of aquatic life criteria (Exhibit A2 at 48).

b. Bacteria Limit (Conclusion of Law #2 in the Proposed Order)

With respect to the WQBEL for bacteria in the Permit, the specific Conclusion of Law Bio-Oregon has challenged is:

2. DEQ correctly applied OAR 340-041-0009(6) when setting enterococcus bacteria limits in the Permit for Outfalls 001 through 003.

As with the toxics limits, Bio-Oregon's argument with respect to this Conclusion of Law is that it is an "erroneous interpretation of provision of law; outside the range of discretion to DEQ by law; inexplicably inconsistent with agency rule, officially stated position, and prior agency practice; not supported by substantial evidence in the record or substantial reason." Bio-Oregon's primary argument for this is its assertion that the applicable water quality standard applies only to fecal sources and that the Facility is not a fecal source. However, the regulations do not define "fecal source" and the record is clear both that the raw fish matter the Facility processes includes fecal matter from the fish and that the effluent discharged from the Facility contains very high levels of fecal coliform bacteria. Thus, DEQ appropriately included a WQBEL for bacteria in the Permit.

The specific water-quality criteria from which the bacteria limit is taken is OAR 340-041-0009(1), which states:

> Numeric Criteria: Organisms commonly associated with fecal sources may not exceed the criteria in subsections (a)-(c) of this section:
> ***
> (b) Coastal water contact recreation, as designated in OAR 340-041-0101, 340-041-220, 340-041-230, 340-041-300 and 340-041-0320:
> (A) A 90-day geometric mean of 35 enterococcus organisms per 100 mL;
> (B) Not more than ten percent of the samples may exceed 130 organisms per 100 mL.

Pursuant 40 C.F.R. § 131.41, Oregon was required to adopt this standard,[77] which is implemented in NPDES permits according to OAR 340-041-0009(6) (entitled "Implementation in NPDES Permits). OAR 340-041-0009(6) states that:

> Upon NPDES permit renewal or issuance, or upon request for a permit modification by the permittee at an earlier date, bacteria in effluent discharges associated with fecal sources may not exceed the following amounts:
> (a) In water designated for coastal water contact recreation:
> (A) A monthly geometric mean of 35 enterococcus organisms per 100 mL, and
> (B) Not more than ten percent of samples in a month may exceed 130 enterococcus organisms per 100 mL.

This water quality criteria does not include a definition for "fecal source." In the absence of a definition, Bio-Oregon attempts to argue that the

> [t]he plain terms of OAR 340-041-0009(6)(a) show what is meant by 'associated with fecal sources,' providing examples of such facilities. Examples of fecal sources contemplated for regulation under this rule are domestic sewage treatment plants that process human waste or confined animal feeding operations that process animal waste.[78]

This statement is false. OAR 340-041-0009(6) makes no mention whatsoever of any specific type of facility. While OAR 340-041-0009 does have other subsections applicable specifically to sewage treatment plants, those subsections do not in any way limit the types of facilities that could be considered fecal sources under the broader rule. In its brief, Bio-Oregon argues that "OAR 340-041-0009(6) also provides that facilities whose discharges are not associated with fecal sources, like pulp

[77] *See* 40 C.F.R. § 131.41(e)(2) (stating that the criteria set forth in 40 C.F.R. § 131.41(c)(2) apply to marine coastal recreation waters of Oregon).
[78] Respondent's Exceptions and Brief at 44-45.

and paper mills, can be excluded from bacterial limits." This is also incorrect. The rule includes no such exclusion and it is incredibly misleading for Bio-Oregon to make these arguments that it purports are clear from the "plain terms" of the rule.

The purpose of the water quality criteria for bacteria is to protect human health. Specifically, the limits were set to reduce the risk that people who swim in the state's waters will develop gastrointestinal illness.[79] Enterococcus bacteria is considered an indicator of fecal pathogens; in other words, the presence of these bacteria in water indicates the potential presence of fecal pathogens that may cause gastrointestinal illness in humans. As Mr. Borok testified during the hearing, to be protective of human health, if enterococcus is present in a facility's effluent it is assumed to be pathogenic and indicative of the presence of fecal contamination unless the facility can demonstrate otherwise.[80] While DEQ's regulations do not provide clear guidance for which sources are subject to the criteria, the federal regulations which were the impetus for the criteria, notes that

> [t]hese values apply to enterococci regardless of origin unless a sanitary survey shows that sources of the indicator bacteria are non-human and an epidemiological study shows that the indicator densities are not indicative of a human health risk.[81]

In the issue paper DEQ created at the time it adopted the new federal criteria, DEQ acknowledged that some plant-based bacteria may skew enterococcus tests such that "it may be difficult for pulp and paper mills to achieve compliance with enterococcus criteria even if the discharge poses little risk to public health due to the lack of pathogenic bacteria in the discharge."[82] Thus, as noted in the issue paper, DEQ chose to use the term "fecal source" in the criteria to "allow flexibility to entities that can demonstrate to DEQ that their discharge does not come from fecal sources."[83] But again, the onus is on the

---

[79] *See* Exhibit A13 (stating that "[i]n 2012, EPA published new recommended Clean Water Act criteria for primary contact recreation in coastal waters. These recommended criteria are based on epidemiological studies conducted in the United States that examined the correlation between direct contact exposure to and ingestion of water and subsequent gastrointestinal illness.")

[80] Testimony of Aron Borok, February 28, 2023 (Recording 2 of 2); see also Exhibit A13 at 13.

[81] 40 C.F.R. § 131.41(c)(2), fn. c. (emphasis added).

[82] Exhibit A13 at 13; *see also* Testimony of Aron Borok, February 28, 2023 (Recording 2 of 2)

[83] Exhibit A13 at 13 (emphasis added).

permittee to "demonstrate through biochemical species identification techniques that the effluent contains non-fecal based bacteria species."[84]

Bio-Oregon has made no such demonstration. On the contrary, as Mr. Humphries, the General Manager at the Facility, testified at the hearing, when the raw fish matter arrives at the Facility in totes "the gut [of the fish] is busted" and that the raw matter "certainly" includes fecal matter from the open fish.[85] The totes are hosed down and the water flows, untreated, directly to Outfall 002, for which effluent testing has shown fecal coliform levels greater than 16,000 organisms per 100ml.[86] With fecal coliform levels so high in the effluent from the Facility, DEQ would be failing in its duty to protect public health if it failed to incorporate the bacteria limit in the Permit without a demonstration by Bio-Oregon that the high levels of fecal coliform present in its effluent are not pathogenic. If Bio-Oregon conducts testing to show that the bacteria present in its effluent is not pathogenic and does not pose a risk to people who may be recreating near or downstream of the Facility, DEQ will review that data and can remove the bacteria limits if appropriate. But to date, Bio-Oregon has not completed this testing or provided it to DEQ and thus DEQ has no grounds to remove the bacteria limit from the permit.

Bio-Oregon argues that DEQ's inclusion of the bacteria standard in the permit is a "drastic expansion of its efforts to enforce OAR 340-041-0009(6)(a)" that "DEQ has produced no evidence in the record justifying or explaining."[87] This argument, however, is also erroneous. The reason Bio-Oregon did not have a bacteria limit in the prior versions of its permit was because DEQ did not have data to show that bacteria was a concern. Bio-Oregon was not required to monitor for bacteria in prior versions of its permit; however, Bio-Oregon was asked to provide fecal coliform testing as part of its

[84] *Id.*
[85] Testimony of Dan Humphries, March 1, 2023 (Recording 2 of 2).
[86] Exhibit A8 at 8 (note test results were for fecal coliform, specifically); *see also* Testimony of Steven Hammer, March 2, 2023 (Recording 2 of 2).
[87] Respondent's Exceptions and Brief at 45.

renewal application in 2011.[88] Thus, the Permit at issue in this appeal is the first version of Bio-Oregon's permit for which DEQ had data that indicated the Facility had high levels of fecal coliform in its effluent.

RESPONSE TO BIO-OREGON'S PROPOSED ALTERANTIVE FINDINGS OF FACT RELATED TO WQBELs FOR BACTERIA

With respect to the alternative Findings of Fact Bio-Oregon has proposed related to the WQBELs for bacteria, DEQ responds as follows:

Finding #33 – DEQ objects to Bio-Oregon's request that this Finding be deleted. The ALJ's Finding is an accurate reflection of Mr. Borok's testimony and Exhibit A13. Bio-Oregon has provided no counter evidence to suggest that fish are not a fecal source.

Finding #34 – DEQ objects to Bio-Oregon's request that this Finding be deleted. The ALJ's Finding is an accurate reflection of Mr. Borok's testimony and Exhibit A13. Bio-Oregon has provided no counter evidence to suggest that fish are not a fecal source.

Finding #35 – DEQ objects to Bio-Oregon's requested addition to this Finding. DEQ has not alleged that Bio-Oregon is a sewage treatment facility and the Finding is otherwise accurate as written.

c. Thermal Load Limit (Conclusions of Law #5 and #6 in the Proposed Order)

With respect to the thermal waste load allocation in the Permit, the specific Conclusions of Law Bio-Oregon has challenged are:

5. DEQ did not err in denying an allocation of a portion of the thermal load reserve capacity of the Columbia River's TMDL to Bio-Oregon to meet its WLA.

[88] *See* Exhibit A7 at 3 (NPDES Permit Renewal letter requesting additional effluent data including fecal coliform testing).

6. DEQ did not err in denying an intake credit for the thermal load of the incoming water for Outfall 003.

As with the toxics and bacteria limits, Bio-Oregon's argument with respect to these Conclusions of Law is that they are "erroneous interpretation of provision of law; outside the range of discretion to DEQ by law; inexplicably inconsistent with agency rule, officially stated position, and prior agency practice; not supported by substantial evidence in the record or substantial reason." Specifically, Bio-Oregon argues that DEQ should have allocated a portion of the reserve capacity from the *Columbia and Lower Snake Rivers Temperature Total Maximum Daily Load* (Columbia River Temperature TMDL) [89] to the Facility in the Permit and that DEQ should have granted Bio-Oregon an intake credit for the temperature of the incoming water the Facility draws from the Columbia River. Once again, Bio-Oregon's arguments are based on a fundamental misunderstanding of both the applicable law and the facts.

A Total Maximum Daily Load (TMDL) "is the maximum amount of a pollutant that a waterbody can receive and still meet applicable [water quality standards]." In August 2021, EPA finalized the Columbia River Temperature TMDL. In that document, EPA set a wasteload allocation (WLA) specific to Bio-Oregon based on the Facility's existing heat load. By law, DEQ is required to issue permit limits that are consistent with the assumptions and requirements of any applicable TMDLs. The Department fulfilled that obligation by carrying the WLA assigned to Bio-Oregon in the Columbia River Temperature TMDL over into the Permit as a permit requirement.

At the outset, it is important to keep in mind that the TMDL was developed and promulgated by EPA, not DEQ. Thus, any concerns Bio-Oregon has about the data that was used to develop the WLA should be directed to EPA. When it developed the TMDL, EPA set aside 0.1°C of the point source allocation to be used for future use—this is referred to as the reserve capacity. The reserve capacity is like a savings account which has a finite amount of money deposited in it and multiple account holders

[89] Exhibit A18.

drawing from it (specifically, in the case of the reserve capacity for the Columbia River TMDL, it is shared by EPA, Oregon, Washington, and Idaho). If all the account holders were able to draw from the savings account unilaterally, the account would be depleted very quickly. Thus, as Mr. Burkhart testified to at the hearing, EPA has developed a process for states to follow to seek allocation of the reserve capacity. However, DEQ saw no reason to reach out to EPA to start that process with respect to Bio-Oregon's permit for multiple reasons.

First, Bio-Oregon's argument regarding allocation of the reserve capacity was not presented to DEQ during the permit development process, rather, Bio-Oregon raised this argument for the first time in its request for a contested case hearing.

Second, even if Bio-Oregon had made this request during the permit development process, Bio-Oregon has not provided any data to show that it cannot meet its assigned WLA. The evidence provided to DEQ with respect to the facility's WLA related only to Bio-Oregon's belief that it could not meet a daily limit.[90] As Mr. Burkhart testified during the hearing, the WLA from the Columbia River Temperature TMDL, and the associated permit limit in Schedule A.4 of the Permit, is calculated as an aggregate monthly limit across all three of the Facility's outfalls and Bio-Oregon has not provided DEQ with data to suggest that the facility cannot meet that aggregate monthly value.[91] Furthermore, Bio-Oregon did not appeal the daily maximum temperature limits set forth in Schedules A.2 and A.3 of the Permit which were set based on the results of a reasonable potential analysis.[92] If Bio-Oregon complies with these daily maximum temperature limits, compliance with the WLA should not be an issue.

Finally, there is no evidence in the record that Bio-Oregon has made any attempts to reduce the temperature of its effluent. If a facility were treating its effluent to the maximum extent practicable and

[90] Testimony of Robert Burkhart, February 28, 2023 (Recording 2 of 2).
[91] *Id.*
[92] *See* Exhibit A2 at 58–60.

was still struggling to meet the monthly WLA, that facility would have stronger grounds to request that a portion of the reserve capacity be allocated to the facility. But here, instead of taking responsibility for the potential impacts its effluent may have on an already temperature limited receiving body, Bio-Oregon is attempting to side-step responsibility by seeking an increased WLA rather than considering options for reducing the temperature of its effluent.

Bio-Oregon discharges to a segment of the Columbia River which serves as a migration corridor for salmonids.[93] Pursuant to OAR 340-041-0028(d)(4), the 7-day average maximum temperature of a stream identified as a salmonid migration corridor may not exceed 20°C (68°F).[94] Ms. Wentworth provided testimony during the hearing that the Facility has discharged effluent from Outfall 002 and 003 as high as 79°C (174°F) and 43.5°C (110.3°F) respectively.[95] For context, the boiling point of water is 100°C and the average temperature of a hot tub is between 37-38°C—temperatures far too hot for fish. As EPA noted in the Columbia River Temperature TMDL, like Oregon, most of the states with jurisdiction over the Columbia River have set water quality standards for temperature with a summer maximum of 20°C to protect salmon and steelhead migration, yet Bio-Oregon argues it should be permitted to continue to discharge effluent at temperatures over three times that.[96] DEQ recognizes that this is the first time Bio-Oregon will be subject to a temperature limit in its Permit and provided Bio-Oregon with additional time to identify treatment options and achieve compliance with the Permit limits. Specifically, the Permit gave Bio-Oregon four and half years—until October 1, 2026—to achieve compliance with the temperature limits.[97]

With respect to Bio-Oregon's argument that it should be given an intake credit for Outfall 003 to account for the temperature of the river water the Facility uses in its air scrubber, as DEQ explained

[93] *See* OAR 340-041-0101, Table 101B.
[94] *See* Exhibit A2 at 23.
[95] Exhibit R034.
[96] Exhibit A18 at 9.
[97] *See* Exhibit A1 at 23.

in detail in its closing brief, even if providing an intake credit would be consistent with the Columbia River Temperature TMDL, an intake credit would not be permissible under DEQ's regulations.[98] OAR 340-045-0105(3) sets forth five conditions that a discharger must demonstrate to DEQ before the Department can consider intake pollutants in establishing water quality-based effluent limits in a permit. Specifically, a discharger must demonstrate:

> (A) The facility withdraws 100 percent of the intake water containing the pollutant from the same body of water into which the discharge is made;
>
> (B) The observed maximum ambient background concentration and the intake water concentration of the pollutant exceed the most stringent applicable water quality criterion for that pollutant;
>
> (C) The facility does not alter the identified intake pollutant chemically or physically in a manner that would cause adverse water quality impacts to occur that would not occur if the pollutants were left in-stream;
>
> (D) The facility does not increase the identified intake pollutant concentration, as defined by DEQ, at the point of discharge as compared to the pollutant concentration in the intake water; and
>
> (E) The timing and location of the discharge would not cause adverse water quality impacts to occur that would not occur if the identified intake pollutant were left in-stream.[99]

As with the toxics and metals limits discussed above, Bio-Oregon has not demonstrated that it meets all five conditions. To the contrary, evidence in the record shows that, at the very least, subsection (D) likely cannot be met. In the Columbia River Temperature TMDL, EPA noted that the warmest ambient temperatures measured in the Columbia occurred "in the lower Columbia River and the lower part of the Snake River, where maximum temperatures reach 22-23°C."[100] The data provided by Ms. Wentworth in Exhibit R034, however, indicates that the peak temperature from Outfall 003 is 43.5°C, meaning the Bio-Oregon Facility warms the incoming water by approximately 20°C.[101] This near doubling of the heat load present in the intake water is not "negligible," as Bio-Oregon argues. And

---

[98] Department's Closing Brief at 16–18.
[99] OAR 340-045-0105(3).
[100] Exhibit A18 at 9.
[101] Exhibit R034.

even if Bio-Oregon was only adding a "negligible" amount of heat to the effluent from Outfall 003, pursuant to the regulations any amount of added pollutant disqualifies them from receiving an intake credit. Thus, DEQ did not err in declining to provide Bio-Oregon with an intake credit.

RESPONSE TO BIO-OREGON'S PROPOSED ALTERANTIVE FINDINGS OF FACT RELATED TO THERMAL LOAD

With respect to the alternative Findings of Fact Bio-Oregon has proposed related to the thermal load limit in the Permit, DEQ responds as follows:

Finding #46 – DEQ disagrees with Bio-Oregon's proposal to delete this Finding. The ALJ's Finding is supported by the record, including, as the ALJ cited, by testimony from Bio-Oregon's own witness.

Finding #47 – DEQ disagrees with Bio-Oregon's proposal to delete this Finding. The ALJ's Finding is supported by the record. Throughout the Columbia River Temperature TMDL, EPA states multiple ways in which conservative assumptions were used including on page 53, to which the ALJ cited.[102]

Finding #52 – DEQ disagrees with Bio-Oregon's proposal to delete this Finding. The ALJ's Finding is an accurate reflection of facts in the record, including Exhibit A18 and the testimony of DEQ employee Mr. Rob Burkhart. Bio-Oregon's assertion that it requested reserve capacity during the relevant comment periods is unsupported by the record. Although the comments Bio-Oregon submitted during the public comment period are in the record, notably Bio-Oregon has not cited to where in those documents they requested reserve capacity.

Finding #54 – DEQ disagrees with Bio-Oregon's proposal to delete this Finding. The ALJ's Finding is an accurate reflection of facts in the record, as supported by both

[102] *See also* Exhibit A18 at 86 (EPA notes that the TMDL "applies an implicit MOS [Margin of Safety] in derivation of the temperature allocations through the use of conservative assumptions.").

Exhibit A18 and Mr. Burkhart's testimony. Although the Columbia River Temperature TMDL is included in the record, notably Bio-Oregon has not provided any support for its assertion that EPA contemplated the use of intake credits.

Finding #55 – DEQ objects to Bio-Oregon's proposed alternative. The ALJ's finding is an accurate reflection of the record. In its Request for a Contested Case Hearing and Grounds for Hearing Request, the only temperature related limit Bio-Oregon challenged is "Schedule A.4 (Thermal Load Limit)" specifically, Table A.4. The daily maximum temperature limits found in Schedule A.2 and A.3 of the Permit were not among the permit provisions Bio-Oregon challenged.[103]

d. Technology-Based Effluent Limitations (Conclusions of Law #3 and #4 in the Proposed Order)

With respect to the technology-based effluent limitations (TBELs) in the Permit, the specific Conclusions of Law Bio-Oregon has challenged are:

3. DEQ correctly applied the Fish Meal ELGs to develop TBELs for BOD_5, TSS, oil and grease for Outfall 002, and DEQ did not err in its application of the factors listed in 40 C.F.R. § 125.3(d).

4. Because DEQ appropriately applied the Fish Meal ELGs to the Facility's effluent, DEQ was not required to establish separate TBELs for the fish processing for Outfall 002.

As with all the Conclusions of Law Bio-Oregon has challenged, it argues these conclusions are "erroneous interpretation of provision of law; outside the range of discretion to DEQ by law; inexplicably inconsistent with agency rule, officially stated position, and prior agency practice; not supported by substantial evidence in the record or substantial reason." Specifically, Bio-Oregon argues that DEQ's application of the Fish Meal ELGs to the Facility was improper and that the case-by-case Best Professional Judgment (BPJ) analysis DEQ undertook to set limits for the Facility's shrimp and

[103] *See* Request for a Contested Case Hearing and Grounds for Hearing Request at 4-7.

crab shell processing was insufficient. The ALJ determined, however, that DEQ provided ample evidence in the record, as presented both during the permit development process and throughout the contested case process, to support the TBELs in the Permit.

i. EPA's Fish Meal ELGs apply to similar facilities.

Bio-Oregon argues that the Fish Meal ELGs are inapplicable to the Facility because the facilities EPA studied when it set the ELGs processed anchovy and menhaden, which are not species Bio-Oregon processes. They also argue that the minor differences between Bio-Oregon's process and the processes employed by the facilities EPA studied make the ELGs inapplicable. DEQ reviewed Bio-Oregon's processes and effluent characteristics against those of the facilities studied by EPA when it set the ELGs and concluded that the process and effluent characteristics from the Bio-Oregon facility are so similar to those at the facilities studied by EPA that the ELGs are applicable—a conclusion that the ALJ agreed with.

Technology-based effluent limitations, or TBELs, represent the minimum level of control that must be imposed in an NPDES permit.[104] Unlike WQBELs, which are developed based on the effluent's potential impact on the receiving water, TBELs are developed based on demonstrated technologies that are available for reducing the discharge of pollutants.[105] When setting the TBELs for a specific source, a permit writer generally has two options: 1) if EPA has promulgated ELGs applicable to a facility, those limits would be directly applied; or 2) where there are no applicable ELGs, TBELs will be determined on a case-by-case basis using the permit writer's Best Professional Judgment (BPJ).[106] The federal regulations also contemplate that TBELs may be set using a combination of direct application of the ELGs and case-by-case BPJ determination.[107] When setting TBELs on a case-by-case basis, the permit writer uses the same statutory review factors EPA uses in

[104] *See* 33 U.S.C. § 1311(b); *see also* 40 C.F.R. § 125.3(a).
[105] *See e.g.*, Exhibit A5 at 68.
[106] 40 CFR § 125.3(c); *see also* Exhibit A5 at 81.
[107] 40 C.F.R. § 125.3(c)

promulgating the national ELGs but applies them to the specific circumstances of the facility being permitted.[108]

ELGs are applicable to similar facilities; a facility does not need to be identical to the facilities studied by EPA for the ELGs to be applicable. No two facilities are ever identical; if facilities had to be identical for an ELG to be applicable, the entire concept of ELGs would be unworkable as they would almost never apply. When EPA promulgates effluent limitation guidelines (ELGs), the agency's goal is to "ensure that industrial facilities with similar characteristics will meet similar effluent limitations representing the best pollution control technologies or pollution prevention practices regardless of their location or the nature of the receiving water into which the discharge is made."[109] EPA's analysis considers "the industry-wide economic achievability of implementing the technology," as well as the incremental costs of implementing that technology as compared to the pollutant-reduction benefits.[110] The ELGs do not require the use of the particular treatment technology EPA identifies, rather facilities are required to meet the effluent limitations that EPA determined are achievable based on proper operation of the model technologies EPA considered.[111] Each individual facility "has the discretion to select any technology design and process changes necessary to meet" the TBELs set forth in the ELGs.[112]

In setting the Fish Meal ELGs, EPA studied eight fish meal facilities.[113] Most of the facilities EPA studied had solubles units (i.e., evaporators) and thus did not discharge stickwater, however EPA

[108] *See* 40 C.F.R. § 125.3(d); *see also* Exhibit A5 at 81.
[109] Exhibit A5 at 81 (emphasis added). In promulgating ELGs, EPA can divide an industrial point source category into subcategories to address variations between "products, raw materials, processes, and other factors that result in distinctly different characteristics." (*Id*. at 85) In other words, EPA can issue generalized ELGs for categories of dischargers—there is no requirement for EPA to issue ELGs at the subcategory level, but the agency may choose to do so where it finds distinct differences in the characteristics of certain subcategories of the industry.
[110] *Id.*(emphasis added); *see also* 33 U.S.C. 1314(b).
[111] *Id*.
[112] *Id*.
[113] Exhibit A16 at 97.

also studied two "smaller, older plants" that, like Bio-Oregon, discharged stickwater.[114] With respect to the wastewater from these facilities, EPA found that "[t]he largest and strongest flow is the stickwater which is the liquid remaining after the oil is recovered from the press liquor. The waste load from the stickwater is one of the strongest in the entire seafood industry being very high in BOD, suspended solids, and grease and oil."[115] EPA found that the waste loads from the plants discharging stickwater and bailwater were "on the order of 20 to 40 times greater than those of the plants utilizing evaporators."[116] EPA found that in these facilities, stickwater accounted for 45% of the total flow of wastewater but 93% of the BOD and 94% of the suspended solids.[117] EPA noted that pre-discharge control of stickwater "is especially important since studies show that end-of-pipe treatment of stickwater is particularly difficult."[118]

Because, in part, of varying waste loads between plants with solubles units and plants without, EPA broke its ELG into two separate subcategories.[119] With respect to treatment options for plants without solubles units, EPA found that the two plants it studied that did not have solubles units either discharged stickwater or barged it to sea.[120] Thus, when setting the ELGs, EPA ultimately concluded that, at the time the ELGs were written in 1974, the Best Practicable Control Technology Currently Available (BPCTA) for facilities without solubles units was barging.

ii. DEQ's analysis concluded that Bio-Oregon's facility is so similar to those studied by EPA that the ELGs should be applied in the Permit.

In setting the TBELs for Bio-Oregon's permit, DEQ employed a hybrid of direct application of the ELGs and completion of a case-by-case BPJ analysis, as is allowed under 40 C.F.R. § 125.3(c)(3). With respect to the shrimp and crab shell processing conducted at Bio-Oregon, DEQ conducted a case-

[114] *Id.*
[115] Exhibit A16 at 351.
[116] *Id.* at 97.
[117] *Id*. at 210.
[118] *Id.* at 351.
[119] *Id.* at 199.
[120] *Id*. at 95.

by-case BPJ analysis to determine the applicable TBELs for that portion of Bio-Oregon's operations. With respect to the concentrated fish protein processing, early in the permit development process DEQ conducted a high-level case-by-case BPJ analysis considering each of the factors set forth in 40 C.F.R. § 125.3(d) applicable to BPT[121] level controls, but ultimately concluded that the process steps employed at Bio-Oregon's facility, as well as the characteristics of the wastewater discharged from Bio-Oregon are so similar as to justify direct application of the Fish Meal ELGs in the Permit.[122] Based on this and further analysis, DEQ concluded that regardless of the approach the Department took in development of the TBELs—case-by-case or direct application of the ELGs—the resulting TBELs in the Permit would have been identical.[123]

When establishing TBELs during a case-by-case BPJ analysis, DEQ is not expected to reinvent the wheel where a source's industrial process is similar to that at other permitted facilities. In the NPDES Permit Writer's Manual, EPA lists a number of resources permit writers can look to in setting TBELs, including "[e]ffluent guidelines development and planning information."[124] When EPA set the ELGs for the fish meal processing sector, it did so after an in-depth engineering and economic analysis of the sector, the results of which are set forth in the development document that is available for public review and included in the record as Exhibit A16. As described at length above, when EPA developed the Fish Meal ELGs set forth in 40 C.F.R. Part 408, Subpart O, it provided a detailed description of its analysis and rationale for those ELGs.[125] EPA noted in the development document that fish meal production was considered "one of the most important segments of the seafood industry in terms of its significance as a wastewater source" and thus was one of the most exhaustively studied segments of the

[121] BPT refers to the "best practicable control technology currently available."
[122] Testimony of Jeffrey Linzer, March 1, 2023 (Recording 1 of 2).
[123] *Id*.
[124] Exhibit A5 at 115.
[125] *See generally* Exhibit A16.

industry.[126] DEQ decision to rely on that exhaustive engineering and economic analysis was entirely reasonable, allowable under EPA's guidance, and supported by substantial evidence.

iii. Direct application of the Fish Meal ELGs to Bio-Oregon's concentrated fish meal processing was appropriate.

As described in the Fact Sheet, DEQ determined that, based on the generalized process flow description of the facilities EPA studied, as well as EPA's characterization of the waste water from those facilities, that the processes employed and the effluent generated by Bio-Oregon's concentrated fish meal operation are so similar to the facilities studied by EPA that direct application of the fish meal ELGs in the Permit was appropriate.[127] Specifically, DEQ applied the ELG values set forth in 40 C.F.R. § 408.152(b), which are applicable to facilities that do not have solubles plants, because the Bio-Oregon facility does not utilize a solubles plant to process stickwater.[128] As Mr. Linzer testified to at the hearing, DEQ reached this conclusion after a thorough review of EPA's development document that sets forth the basis and rationale for the ELGs and after conducting a high-level case-by-case BPJ analysis during the earlier stages of the permit development process.[129] DEQ concluded that because the process employed at Bio-Oregon is substantially similar to the process at the fish meal plants studied by EPA and because the effluent waste load from Bio-Oregon is substantially similar to that at the plants studied by EPA, whether DEQ directly applied the ELGs or completed a case-by-case BPJ analysis, the same limits would have resulted.[130]

It's important to keep in mind that TBELs are technology based effluent limits, the goal of which are to prevent pollution by requiring a minimum level of pollution control that is attainable using demonstrated technologies.[131] Thus, in setting TBELs, the analysis is heavily focused on the production

[126] *Id.* at 66.
[127] Exhibit A2 at 17.
[128] *Id*.
[129] Testimony of Jeffrey Linzer, March 3, 2023 (Recording 2 of 2).
[130] *Id.*
[131] *See* Exhibit A5 at 5-2.

process at the facility being permitted, how that process compares to other facilities that utilize a similar process, and what level of pollution control those other facilities have been able to achieve. In comparing the processes employed at Bio-Oregon to the generalized process flow description of the plants studied by EPA, DEQ concluded that they aligned by more than 80%.[132] Comparing the process flow diagram for Bio-Oregon's concentrated fish protein process—which Bio-Oregon provided to DEQ as part of its permit application—to the process flow diagram EPA prepared for a generic small fish meal production process, with the exception of a screw press step, Bio-Oregon utilizes almost all of the same steps prior to discharging its wastewater.[133] Specifically, prior to the discharge of the stickwater, each figure includes steps for: receipt of raw materials, cooking of raw materials, drying, grinding, and oil separating.[134] Where the typical plant studied by EPA includes a screw press step, Bio-Oregon has a step for "fine bone removal." Additionally, DEQ compared the data submitted by Bio-Oregon on the discharge monitoring reports the Facility submitted to the Department over the last decade pursuant to its prior permit to the data EPA considered when it set the ELGs and discovered that the two data sets were very similar.[135] Based on the significant similarities between Bio-Oregon's process and the process employed at a typical small fish meal production facility evaluated by EPA, DEQ determined that application of the fish meal ELGs was appropriate—a decision that was reviewed by EPA.[136]

Bio-Oregon argues that the Fish Meal ELGs are not applicable because the facilities EPA studied processed menhaden and anchovy which are oily fish species, while Bio-Oregon primarily

---

[132] Testimony of Jeffrey Linzer, March 1, 2023 (Recording 2 of 2).
[133] Compare Exhibit A2 at 40 (Appendix A) to Exhibit A16 at 96 (Figure 19). Note that EPA looks at the process steps at a very high level.
[134] *See id*.
[135] *See* Exhibit A16 at 101 (Tables 18 and 19). Although Bio-Oregon's DMR data is not in the record, both David Feldman and Jeffrey Linzer have testified to reviewing the data and finding it to be comparable to the data presented in Tables 18 and 19 of EPA's development document. *See* Testimony of David Feldman, March 1, 2023 (Recording 1 of 2); *see also* Testimony of Jeffrey Linzer, March 1, 2023 (Recording 1 of 2). Having generated the data and submitted it to DEQ along with the legally required certification attesting to its accuracy, it is reasonable to assume Bio-Oregon has access to copies of the DMR data.
[136] *See* Testimony of David Feldman, March 1, 2023 (Recording 1 of 2); *see also* Testimony of Jeffrey Linzer, March 1, 2023 (Recording 1 of 2).

processes Pacific whiting which is a leaner fish. But as DEQ referenced in the Permit Fact Sheet, the EPA development document for Subpart O refers to species "such as" menhaden and anchovy and more broadly references the reduction of fish waste when processed at the facility.[137] This description in the development document indicates that EPA did not intend for the application of these guidelines to be so limited. And regardless of the fish inputs, the ELG development process focuses on consideration of whether the processes employed by the facility are similar and whether the pollutants discharged are similar.[138] DEQ concluded that the processes employed by Bio-Oregon were consistent with the facilities EPA studied in developing the ELGs. In addition, the type and quantity of pollutants discharged by Bio-Oregon were also consistent with those facilities that EPA studied, largely because, like the facilities studied by EPA that do not utilize a solubles plant, Bio-Oregon discharges its stickwater—a practice EPA found to have one of the highest waste loads in the entire seafood industry in terms of BOD_5, suspended solids (TSS), and oil & grease.[139] Because EPA concluded that there is no cost-effective end-of-pipe treatment method for stickwater, the primary treatment technology that EPA relied on in developing the ELGs, was barging of the stickwater.

iv. The case-by-case BPJ analysis DEQ completed with respect to Bio-Oregon's shrimp and crab shell processing was sufficient under the federal permitting regulations.

Bio-Oregon argues that DEQ's case-by-case BPJ analysis for the crab and shrimp shell processing operations was "insufficient and, indeed, essentially nonexistent."[140] This assertion is unfounded. DEQ described in detail its analysis of each of the factors required by 40 C.F.R. § 125.3(d) in Appendix E of the Permit Fact Sheet, including its reliance on the economic analysis EPA conducted when it promulgated the Fish Meal ELGs.[141] To the extent Bio-Oregon has an issue with how DEQ

[137] Exhibit A2 at 17.
[138] Testimony of Jeffrey Linzer, March 1, 2023 (Recording 1 of 2).
[139] Exhibit A16 at 209; *see also id*. at 210 (Table 47).
[140] Respondent's Exceptions and Brief at 27.
[141] *See* Exhibit A2 at Appendix B.

characterized the production processes it engages in, the process descriptions and flow charts DEQ relied upon and included in the Permit Fact Sheet were provided directly by Bio-Oregon.[142]

Bio-Oregon has been aware of DEQ's intent to base the TBELs in the Permit on the Fish Meal ELGs since at least 2017.[143] Meaning, Bio-Oregon had five years to provide accurate process descriptions and flow diagrams to DEQ if it felt the information the Department was relying on was not accurate. Additionally, upon information and belief, at no point in the permit development process did Bio-Oregon provide data to show that TBELs based on the ELGs would be economically unachievable for the Facility. In the absence of additional, specific data, DEQ appropriately relied on the information it had been provided by Bio-Oregon when it established the TBELs in the Permit.

DEQ followed an established, approved-by-EPA, process in reaching the conclusion that the Fish Meal ELGs were achievable by the Bio-Oregon's Facility. Additionally, DEQ considered all the factors it was required to consider as part of a case-by-case BPJ analysis based on the information Bio-Oregon provided to the Department. Thus, the TBELs included in Schedule A of the Permit are supported by substantial evidence.

v. The Permit does not require the use of any specific technology to meet the TBELs.

Bio-Oregon argues that DEQ and the ALJ have improperly shifted the burden of considering the availability, cost, and effectiveness of treatment technologies in setting TBELs onto Bio-Oregon. This is incorrect. The TBELs are set at a level that DEQ assumes the Facility can meet based on available technologies, however the Permit does not require the use of any particular technology; Bio-Oregon is free to adopt whatever technology it determines to be the most cost-effective option for achieving the effluent limits established in the Permit.

[142] *See id*. at Appendix A (note company stamp).
[143] *See e.g*. Exhibit A17.

DEQ has presented ample evidence to support its position that the TBELs established in the permit are technologically and economically achievable based on the information Bio-Oregon provided to DEQ in its permit application. DEQ's permitting decisions are based largely on the information provided by a permit applicant as part of its permit application. Despite knowing of DEQ's intent to implement the Fish Meal ELGs in the Permit since at least 2017, Bio-Oregon has not, to date, submitted any detailed information to DEQ documenting its inability to afford the treatment technology EPA determined decades ago was economically achievable for the industry (i.e., barging), or its inability to meet the effluent limitations once treatment is implemented. Instead, Bio-Oregon has made numerous unsupported statements that the limits are not achievable.

During the hearing process, Bio-Oregon submitted a proposed alternative BPJ analysis conducted by its consultant, Steven Hammer. As DEQ's witnesses testified to, DEQ reviewed the alternative case-by-case analyses' provided by Mr. Hammer in 2021 and 2022, and determined that neither met the requirements of the Clean Water Act, and therefore neither justified a change in the Department's approach to how the TBELs were developed.[144] As Mr. Feldman testified, Mr. Hammer's alternative TBEL analysis does not appear to be complete in that, while it evaluates several treatment technologies, it offers no definitive conclusion on which level of control (e.g., BAT,[145] BPT, NSPS,[146] etc.) was appropriate; considers treatment technologies (i.e., AFF[147]) that are still being tested; and ultimately concludes that more time is needed to develop the TBELs than DEQ can legally provide.[148] Additionally, as Mr. Linzer testified to, Mr. Hammer's alternative TBEL analysis was not production based—as the ELGs are—and relies on an impermissible, post-treatment multiplier to address data

[144] *See* Testimony of David Feldman, March 1, 2023 (Recording 1 of 2); *see also* Testimony of Jeffrey Linzer, March 3, 2023 (Recording 2 of 2).
[145] BAT refers to the "best available control technology economically achievable."
[146] NSPS refers to "new source performance standards."
[147] AFF refers to "advanced foam fractionation."
[148] Testimony of David Feldman, March 1, 2023 (Recording 1 of 2); *see also* 33 U.S.C. § 1311(b)(1)(A) (establishing a July 1, 1977, deadline for achieving BPT).

gaps; whereas EPA would address those data gaps by utilizing a log-normal distribution that can account for the variability in seasonality and peak production.[149] For these reasons, DEQ determined that the alternative TBEL analyses' completed by Mr. Hammer are not an appropriate substitute for DEQ's TBEL conclusions.[150]

Additionally, Bio-Oregon did not provide this analysis to DEQ during the permit development process, including during the five years between when it learned DEQ intended to implement the ELGs in the Permit and when the draft permit was put out for public comment. Again, the Permit limits were established based on the information Bio-Oregon submitted with its permit application; if during the permit development process Bio-Oregon determined that TBELs based on the ELGs would not be technologically and economically achievable for the Facility, the onus was on Bio-Oregon to make that showing with actual data and documentation to support it. Without data and documentation showing that Bio-Oregon cannot implement the technology that EPA determined was achievable in 1974 based on its study of fish meal processing facilities, plus information showing other treatment technologies it has considered, DEQ has no sound basis for revising the limits.

RESPONSE TO BIO-OREGON'S PROPOSED ALTERANTIVE FINDINGS OF FACT RELATED TO TBELs

With respect to the alternative Findings of Fact Bio-Oregon has proposed related to the technology-based effluent limits in the Permit, DEQ responds as follows:

Finding #5 – DEQ does not object to Bio-Oregon's requested addition but does not agree that it is necessary to support the legal conclusions.

Finding #6 – DEQ does not object to Bio-Oregon's requested addition but does not agree that it is necessary to support the legal conclusions.

[149] Testimony of Jeffrey Linzer, March 3, 2023 (Recording 2 of 2).
[150] *See id.*

Finding #11 – DEQ objects to Bio-Oregon's proposed alternative with respect to the last two sentences. To the extent that the last sentence of the ALJ's Finding of Fact does not accurately convey Mr. Humphries testimony, DEQ suggests that it be struck from the Finding. Since Mr. Hammer does not work for DEQ, his statement regarding DEQ's understanding of the Facility's processes is merely his opinion and should not be adopted as a Finding of Fact. Bio-Oregon cites to the Permit Fact Sheet as support for the last sentence of its proposed alternative, however that sentence was pulled directly from the comments Bio-Oregon submitted during the permit development process and included in the background section of the Fact Sheet only.[151] The inclusion of that sentence in the Fact Sheet was not meant to convey DEQ's agreement that the processes conducted by Bio-Oregon are substantially different from those studied by EPA during development of the ELGs.

DEQ does not object to Bio-Oregon's request that the Finding be revised to include the fact that the Facility does not have an evaporator. However, Bio-Oregon's ability to use the concentrated stickwater is irrelevant—the Facility could dispose of the solids generated through this process another way.

Finding #14 – DEQ does not object to Bio-Oregon's requested addition but also does not agree that it is necessary to support the legal conclusions.

Finding #19 – DEQ objects to Bio-Oregon's proposed alternative. Ms. Yelton-Bram testified during the hearing that DEQ did not conduct a TBEL analysis when issuing the

[151] The sentence was pulled verbatim from the Applicant Review Comments Steven Hammer from SLR submitted to DEQ on behalf of Bio-Oregon on June 4, 2021.

prior permit and that was an oversight which DEQ sought to correct in the current iteration of the Permit.

Finding #38 – DEQ objects to Bio-Oregon's proposal to delete this Finding as well as its proposed alternative. This Finding is a general description of what an ELG is, it does not mention the Fish Meal ELGs specifically or which fish meal plants the ELG applies to. Bio-Oregon's proposed alternative finding is an improper legal conclusion.

DEQ objects to Bio-Oregon's requested addition. Bio-Oregon's characterization of the ELGs is inconsistent with Mr. Linzer's testimony during the hearing.

Finding #40 – DEQ objects to Bio-Oregon's proposal to delete this Finding. The ALJ's Finding is an accurate description of the ELGs developed for the fish meal processing industry. The ALJ did not state that that the ELGs applied to all fish meal plants, the Finding merely describes the fish meal plants EPA studied.

Finding #41 – DEQ objects to Bio-Oregon's proposal to delete this Finding. The ALJ's Finding is an accurate description of the factors EPA considered in setting the ELGs and is supported by the ELG document itself (Exhibit A16). The Finding makes no conclusion regarding the adequacy of EPA's consideration of those factors, which is well outside the scope of this matter.

Finding #42 – DEQ objects to Bio-Oregon's proposed alternative. The ALJ's Finding of Fact is an accurate representation of Mr. Linzer's testimony and Exhibit A2 (the Permit Fact Sheet) which clearly states on page 17 that case-by-case TBELs were developed for the shrimp shell, green crab shell, and dehydrated crab shell processing lines at the facility. Bio-Oregon's proposed alternative includes

inappropriate legal conclusions.

Finding #42n.16 – DEQ objects to Bio-Oregon's proposal to delete this footnote. The footnote is an accurate reflection of Mr. Linzer's testimony during which he explained why DEQ did not consider Mr. Hammer's report during the permit development process. As Mr. Linzer testified, the report was not submitted to DEQ until November 2022 (nearly nine months after the permit was issued) and did not provide grounds for DEQ to modify the permit because the methodologies Mr. Hammer utilized were not EPA approved methodologies.[152] Thus, DEQ did not find Mr. Hammer's report—which is included in the record as Exhibit R6—persuasive grounds to re-evaluate the method by which the TBELs in the permit were developed. DEQ began permit development meetings with Bio-Oregon back in March 2017 (see Exhibit A17). Bio-Oregon has known at least since that time of DEQ's intention to not only include TBELs in the permit but to set those TBELs according to the Fish Meal ELGs. Thus, Bio-Oregon had five years to develop their own case-by-case BPJ analysis for DEQ to consider during the permit development process.

Finding #59 – DEQ objects to Bio-Oregon's requested addition to this Finding. Bio-Oregon has not submitted any evidence or documentation into the record to support its assertion that barging stickwater is impractical or unnecessary.

Finding #60 – DEQ does not object to Bio-Oregon's proposed alternative Finding, however, changing it will have no impact on the legal conclusions.

DEQ objects to Bio-Oregon's requested addition to this Finding. The ELGs were developed in 1974 based on the technologies that were available at that time. At

[152] Testimony of Jeffrey Linzer, March 3, 2023 (Recording 2 of 2).

that time, DEQ assumed that the ELGs for plants without solubles units would be achieved by barging (i.e., not discharging) the stickwater. DEQ has not required that Bio-Oregon adopt any particular technology to comply with the limits in the Permit. If Bio-Oregon chooses to continue to discharge the stickwater to the river versus barging or trucking it, that is its choice to make.

e. Monitoring Requirements (Conclusion of Law #7–#10 in the Proposed Order)

The specific Conclusions of Law Bio-Oregon has challenged related to the monitoring requirements in the Permit are:

7. DEQ did not err in setting heavy metal limits and monitoring requirements for Outfalls 002 and 003 and did not err in denying an intake credit for metals present in the intake water for Outfalls 002 and 003.

8. DEQ did not err in imposing monitoring requirements at Outfalls 001 and 003 for BOD5, TSS, oil/grease, ammonia, alkalinity and hardness and at Outfall 002 for alkalinity and hardness.

9. DEQ did not err in imposing monitoring requirements and at the schedule frequency rate for VOCs and cyanide.

10. DEQ did not err in imposing WET testing requirements at Outfalls 001 through 003.

As with the other Conclusions of Law Bio-Oregon objected to, Bio-Oregon's argument with respect to the Conclusions of Law related to the monitoring requirements in the Permit is that they are an "erroneous interpretation of provision of law; outside the range of discretion to DEQ by law; inexplicably inconsistent with agency rule, officially stated position, and prior agency practice; not supported by substantial evidence in the record or substantial reason." Bio-Oregon's specific arguments for why the monitoring conditions included in the Permit are "unnecessary and lacking support in this record" offer little clarification for the grounds for their objection. Similar to its argument with respect to the toxics and metals limits, Bio-Oregon's argument appears to primarily be that the Facility does not use many of the pollutants that it is being required to monitor for and thus it is inappropriate for DEQ to require monitoring for those pollutants. This argument, however, ignores the fact that these

pollutants are known to be present in Bio-Oregon's effluent and that DEQ is obligated under the federal NPDES regulations to ensure the permits it issues provide for compliance with all applicable requirements of the Clean Water Act. The monitoring requirements included in the Permit are specifically designed to ensure DEQ receives the data necessary to ensure that future iterations of the Permit comply with Clean Water Act requirements, including compliance with applicable water quality standards.

In its contested case request, Bio-Oregon challenged the requirement to monitor: Outfall 001 for BOD_5, TSS, oil & grease, ammonia, alkalinity as CaCO3 and hardness; Outfall 002 for alkalinity as CaCO3 and hardness; and Outfall 003 for BOD_5, TSS, oil & grease, total copper, and alkalinity as CaCO3. With respect to the requirement to monitor for BOD_5, TSS, and oil & grease at both Outfall 001 and Outfall 003, plus ammonia at Outfall 001, Bio-Oregon was required to monitor for these pollutants under the Facility's prior permit.[153] As Mr. Feldman testified to during the hearing, the discharge monitoring reports submitted by Bio-Oregon pursuant to the prior permit showed measurable levels of these pollutants in Bio-Oregon's effluent.[154] While the levels of those pollutants might not justify permit limits at this time, DEQ has the authority to require continued monitoring to ensure the levels of these pollutants in Bio-Oregon's effluent do not rise to point where permit limits become necessary.[155] That Bio-Oregon does not believe it uses any substances that would result in the presence of these pollutants in its effluent is irrelevant—past monitoring data has shown that these pollutants are in their effluent thus continued monitoring is appropriate.

With respect to the requirement to monitor Outfall 003 for total copper, data provided by Bio-Oregon shows measurable levels of copper in the effluent from Outfall 003.[156] Additionally, the RPA results indicate that the amount of copper present in Bio-Oregon's effluent has the potential to cause or

[153] *See* Exhibit A4 at 3.
[154] Testimony of David Feldman, February 28, 2023 (Recording 2 of 2).
[155] *Id.*
[156] *See* Exhibit A8 at 17, 52, 71, 91.

contribute to an exceedance of the aquatic life criteria.[157] However, as DEQ explained in the Permit Fact Sheet, "the estimated maximum concentration at the edge of the mixing zone was only slightly above the criterion," but because the RPA was based on only four total copper samples—whereas the criteria are for dissolved copper—there is insufficient evidence to conclude reasonable potential.[158] Although DEQ determined the existing evidence was insufficient to support inclusion of a permit limit, the data indicates copper may be of concern so DEQ included additional copper monitoring for Outfall 003 to support a reasonable potential analysis in the future permit renewal.[159]

With respect to the requirements to monitor for alkalinity as CaCO3, as Mr. Feldman testified to at the hearing, monitoring for that parameter is necessary because it informs the pH limits in the Permit.[160] Alkalinity is a measure of the ability of water to neutralize acids and maintain a stable pH, this can affect the results of the pH and ammonia RPA and thus any pH or ammonia limits.[161]

With respect to the monitoring requirement for cyanide, as Mr. Feldman testified to at the hearing, data from Bio-Oregon indicates that many toxic pollutants are present in the facility's effluent, thus DEQ has reason to believe that other toxic pollutants, including cyanide, may also be present in the Facility's effluent. As Mr. Feldman further testified, DEQ would require this testing of almost any source of toxic pollutants to ensure these pollutants are not present in a facility's effluent in concentrations that may cause or contribute to a violation of state water quality criteria.[162]

As Mr. Feldman testified, the overarching purpose of these monitoring requirements is to characterize the presence of these pollutants in the effluent for the next renewal of the permit.[163] DEQ is required, pursuant to 40 C.F.R. § 122.4(a), to ensure that the permits it issues provide for compliance

---

[157] *See* Exhibit A2 at 52.
[158] *See id.* at 32.
[159] *Id*.
[160] Testimony of David Feldman, February 28, 2023 (Recording 2 of 2).
[161] *Id*.
[162] Testimony of David Feldman, February 28, 2023 (Recording 2 of 2); *see also* Exhibit A2 at 37.
[163] Testimony of David Feldman, February 28, 2023 (Recording 2 of 2).

of all applicable requirements of the Clean Water Act, including water quality standards; to do this, DEQ must have a firm understanding of the pollutants being discharged. This can only be achieved through effluent monitoring. If the monitoring data shows that certain parameters are present in the effluent from any given outfall in levels that may cause or contribute to a violation of a state water quality criteria, DEQ will include WQBELs for those parameters in the next permit it issues to the facility. Conversely, if the data shows that these parameters are not present in the effluent discharged from the facility or do not show a reasonable potential to exceed the water quality criteria, DEQ will reevaluate the need for these monitoring requirements during the next permit renewal cycle.[164]

With respect to the monitoring requirements for Volatile Organic Compounds (VOCs) set forth in Table B.9, those requirements were included in the Permit because Bio-Oregon currently has an air permit with limits for VOCs.[165] If VOCs are present in the air in the facility, it is reasonable to conclude that VOCs may also be present in the wastewater from the odor scrubber. Because DEQ does not currently have the data necessary to evaluate whether VOCs are in the effluent at levels that have the reasonable potential to cause or contribute to state water quality criteria exceedances, DEQ has required that this data be collected during the current permit term to "characterize the presence of these pollutants in the effluent for the next iteration of the permit."[166]

DEQ has broad authority to request information necessary to determine "whether cause exists for modifying, revoking and reissuing, or terminating [a] permit or to determine compliance with [the] permit."[167] Here, DEQ has provided adequate justification for why the monitoring requirements included in the Permit are necessary and has, very reasonably, required that this testing be completed just once per year. As Mr. Feldman testified to, this annual monitoring requirement is necessary to provide the Department with enough data to support the completion of a reasonable potential analysis

[164] *Id.*
[165] *See* Exhibit A2 at 37.
[166] *Id.*
[167] 40 C.F.R. § 122.41(h).

for these parameters during the next permit renewal.[168] Mr. Feldman also testified that if the monitoring data Bio-Oregon provides during this permit term indicates that the pollutants in Schedule B.9 are not present in the Facility's effluent, then DEQ may remove these monitoring requirements from the Permit in the next permit renewal.[169]

i. Whole Effluent Toxicity (WET) testing is reasonable because Bio-Oregon is known to have toxic pollutants in its effluent.

DEQ has not only the authority to, but a legal obligation to, include permit conditions that are necessary to ensure compliance with water quality standards. Oregon has a narrative water quality criteria that prohibits the introduction of toxic substances in "amounts, concentration, or combinations" that may be harmful to the environment.[170] By requiring WET testing, DEQ was fulfilling its legal obligation to ensure the permit includes conditions necessary to ensure compliance with the narrative toxics criteria.

Pursuant to 40 C.F.R. § 122.44, DEQ is required to included permit conditions necessary to ensure compliance with water quality standards, including state narrative criteria.[171] To determine whether a discharge has the reasonable potential to cause or contribute to a water quality criteria exceedance, permitting authorities "shall use procedures which account for . . . the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity) . . . ."[172] If WET testing results indicate that a discharge has the reasonable potential to cause or contribute to an exceedance of a narrative water quality criterion, "the permit must contain effluent limits for whole effluent toxicity."[173]

In addition to the stated goal in the Clean Water Act to prohibit the discharge of toxic pollutants in toxic amounts,[174] Oregon has a toxic substances narrative criterion that states

---

[168] Testimony of David Feldman, February 28, 2023 (Recording 2 of 2).
[169] *Id.*
[170] *See* OAR 340-041-0033(1).
[171] 40 C.F.R. § 122.44(d)(1).
[172] 40 C.F.R. § 122.44(d)(1)(ii).
[173] 40 C.F.R. § 122.44(d)(1)(v).
[174] 33 U.S.C. § 1251(a)(3).

> Toxic substances may not be introduced above natural background levels in waters of the state in amounts, concentrations, or combinations that may be harmful, may chemically change to harmful forms in the environment, or may accumulate in sediments or bioaccumulate in aquatic life or wildlife to levels that adversely affect public health, safety, or welfare or aquatic life, wildlife or other designated beneficial uses.[175]

As Mr. Feldman testified to during the hearing, WET testing is necessary to ensure compliance with this narrative criteria because neither EPA nor DEQ has set numeric water quality criteria for all toxic parameters that may be included in a discharge, therefore the toxic effect of the effluent as a whole would not be captured by regular effluent sampling.[176] Additionally, WET testing helps identify when two or more parameters that may be measured in levels that do not, on their own, have the reasonable potential to cause or contribute to a water quality criteria exceedance might combine to create a synergistic effect that does result in an exceedance.[177]

To ensure compliance with its obligations under the federal regulations, DEQ has developed guidance for permit writers to look to when evaluating whether WET requirements should be included in the permit.[178] Specifically, where the risk of aquatic toxicity exists, DEQ must evaluate WET testing data "to assess the reasonable potential for the effluent to cause toxicity and, therefore, exceed the narrative toxics criteria."[179] Where DEQ does not have WET testing data from a facility, the permit writer must "require semiannual (yearly for smaller sources) WET testing for [the] duration of [the] permit."[180] With respect to the Permit at issue in this case, in alignment with DEQ's guidance, because Bio-Oregon is considered a minor source, they were required to conduct WET testing annually.[181]

Because DEQ was acting pursuant to its legal obligation under the federal regulations to ensure Bio-Oregon's effluent—which is known to contain toxic pollutants—does not have the reasonable

---

[175] OAR 340-041-0033(1).
[176] Testimony of David Feldman, February 28, 2023 (Recording 2 of 2).
[177] *Id.*
[178] *See* Exhibit A11 at 97.
[179] *Id.*
[180] *Id.* at 98-99.
[181] *See* Exhibit A1 at 8 (Table B1).

potential to cause or contribute to an exceedance of Oregon's toxic substances narrative criteria, DEQ's decision to include an annual WET testing requirement in the Permit is supported by substantial evidence.

RESPONSE TO BIO-OREGON'S PROPOSED ALTERANTIVE FINDINGS OF FACT RELATED TO MONITORING REQUIREMENTS

With respect to the alternative Findings of Fact Bio-Oregon has proposed related to the monitoring requirements in the Permit, DEQ responds as follows:

Finding #61 – DEQ disagrees that Bio-Oregon's proposed additional Finding is necessary to support the Order's legal conclusions. The focus of the present matter is the Facility's wastewater discharges, thus whether the Facility has an air permit is not relevant.

CONCLUSION

For the reasons described above, the Department respectfully requests that the Commission uphold the ALJ's Proposed Order in its entirety and adopt it as the Final Order of the Commission.

DATED this 5th day of April 2024.

Respectfully submitted,

/s/ Erin Saylor

Erin Saylor
Environmental Law Specialist
Oregon Department of Environmental Quality

/s/ Diane Lloyd

Diane Lloyd, OSB #074786
Senior Assistant Attorney General
Of Counsel for the Oregon Department of Environmental Quality