DEQ

Oregon Department of Environmental Quality

100-J NPDES General Permit

Response to Comments

Overview

DEQ accepted public comment on the proposed 100-J general permit from May 17 through June 26, 2023. A public hearing was held on June 22, 2023 for the proposed permit. This permit originally expired on July 31, 2001 and was administratively continued.

Public comments received by the close of the public comment period are summarized. DEQ's response follows the summary comment. Original comments are on file with DEQ. Comments that resulted in a revision to the permit are noted; for all other comments, no change was made to the permit.

The following individuals or entities submitted written comments by email.

List of commenters			
#	Commenter	Affiliation	
1	Annette Kirkpatrick	Hermiston Irrigation District	
2	Jake Madison	Northeast Oregon Water Association	
3	Christopher Rich	Perkins Coie LLP	
4	Ken Pearson	Schwabe	
5	Bob Levy	Windy River, LLC	
6	Curtis Engbretson	Westland Irrigation District	
7	Michael Campbell	Stoel Rives	

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Coverage and eligibility

1. Comment: Coverage and eligibility 2.g.

Allow the reuse of water from steam electric power generation facilities. Blowdown water from these facilities contains de minimis levels of pollutants and are an excellent source of reuse water. While subject to other effluent limitation guidelines, blowdown water for the purpose of reuse should have an established and separate permitting pathway to encourage effective water reuse.

(Commenter No. 5)

Response: 100-J permit coverage is available for a steam electric power generating facility that is not subject to 40 CFR Part 423 for a wastewater discharge of non-contact-cooling tower blowdown under this permit. As explained in the fact sheet in section 2.3, steam electric power generation facilities that are required to meet effluent limit guidelines under 40 CFR Part 423 must typically obtain an individual permit.

2. Comment: Coverage and eligibility 2.f.ii and 2.f.iii.

The cooling water intake structure requirement should be rephrased to specifically state that DEQ determines whether to provide coverage for a hydroelectric facility. EPA's framework recommends permit writers consider the four factors for evaluating whether BTA standard is met and is not themselves BTA standards.

Remove the last sentence in 2.f.ii. as follows: Any hydroelectric facility that does not have a Federal Energy Regulatory Commission license or Biological Opinion, or that needs take additional measures to satisfy cooling water intake structure Best Technology Available requirements for that facility.

Revise 2.f.iii. as follows: Any hydroelectric facility that has a FERC license or Biological Opinion but does not meet 'that DEQ determines has a cooling water intake structure that does not reflect the best technology available for minimizing adverse environmental impact, based on consideration of 'one or more of the four factors under EPA's July 2022 Revised Framework for Considering Existing Hydroelectric Facility Technologies in Establishing Case-by-Case, Best Professional Judgment Clean Water Act § 316(b) NPDES Permit Conditions as summarized below.

(Commenter No. 7)

Response: Coverage and Eligibility sections are revised to make this change.

3. Comment: Fact sheet coverage and eligibility 2.3.3 cooling water intake structures

Summarize the key points of EPA's guidance as follows: 'The memorandum describes EPA's position that EPA's CWIS rules in 40 CFR Part 125 do not apply to CWISs at hydroelectric facilities, but that these CWISs must meet Clean Water Act subsection 316(b) CWIS "best technology available" (BTA) requirements determined on a case-by-case basis using best professional judgment. The memorandum also sets forth four relevant factors for evaluating whether CWISs at hydroelectric facilities satisfy the BTA requirement.'

(Commenter No. 7)

Response: This is addressed in Section 16.2 of the fact sheet. No change was made to this section of the fact sheet.

Registration requirements

4. Comment: Registration for permit coverage 3.a.

Permit coverage ends if a general permit application is not received. DEQ may require an individual permit after reviewing a general permit application. Allow 1996 100-J general permit coverage to continue until DEQ makes a final determination on an application for individual permit coverage, if an individual permit is required.

Add the following to 3.a.: 'If DEQ requires an individual permit application in response to the permit registration application, or if an applicant otherwise submits an individual permit application, the applicant's 1996 100-J permit coverage will continue until DEQ takes final action on the individual permit application.'

(Commenter No. 7)

Response: Registration for permit coverage 3.a. is revised as 3.c. Under OAR 340-045-0060(1)(a), a permit is automatically terminated when DEQ issues a new permit for the same activity or operation. However, for this renewal, permit coverage is terminated if an application for general permit coverage under this permit is not received within three years of the effective date of the permit. If an applicant submits the application, and is then required to obtain an individual permit, that applicant met the condition to submit an application for 100-J general permit coverage. An applicant may file for an individual permit at any time. If an individual permit is required, that facilities permit status is maintained until final action on the individual permit.

5. Comment: Registration for permit coverage 3.b.

Allow existing hydroelectric facilities three years to submit an application, because it was not clear NPDES permit coverage was required for a hydroelectric facility. Put these facilities in the same category as those that submitted an application between July 2001 and Jan. 2023. The same amount of time and effort would be required of these facilities. Allow an existing hydroelectric facility to notify DEQ in writing of an intent to seek permit coverage within 60 days after the effective date to then allow three years time to submit an application.

Add the following to 3.b. and the fact sheet in Section 3. Registration for Permit Coverage: ',or that notifies DEQ in writing of an intent to seek permit coverage within 60 days after the effective date of this permit.' (Commenter No. 7)

Response: Condition 3.b. and the fact sheet in Section 3 are revised. Condition 3.b. is revised as 3.c.ii. as follows: Existing operations that submitted an application for 1996 100-J permit coverage between July 31, 2001 and Jan. 1, 2023, or an existing operation without individual permit coverage that notifies DEQ in writing of an intent to seek permit coverage within 60 days after the effective date of this permit must submit an application no later than three years after the effective date of this permit. In addition, this condition is revised to require a fee and provide that the conditions of the 1996 expired permit are in effect for these existing facilities.

Condition 3.a. is added to require existing sources to notify DEQ of its intent to apply for this permit within 60 days after the effective date of the permit.

Condition 3.b is an added requirement for existing sources to notify DEQ of its intent to provide spawning bed documentation, cooling water intake structure documentation, a land application plan, ambient natural lake temperature or a downstream effects analysis and the method of assessment proposed.

Condition 3.d is added to ensure timely submittals for continued coverage. Failure to follow through with registration requirements may result in termination of permit coverage.

Schedule A1.1. Table A1-1, permit limits for discharge flow

6. Comment:

Increase the industrial discharge flow limitation. More than 0.5 MGD can be reused. Encourage reuse. Increase the amount to 1.5 MGD, the amount of water necessary for one 125 acre pivot. Allow sector-specific increased volumes from data centers or exempt them. There are discharges from data centers that are consistent with the growing season and irrigation water use. Discharges from data centers generating non-contact cooling water discharges are consistent across the state with regard to operations and *de minimus* pollutant concentrations, effluent temperatures and locations are frequently located adjacent to irrigation districts/canals.

(Commenter Nos. 1, 2, 3 and 5)

Response: This is an NPDES general permit for a discharge to a water of the state, that allows but limits a discharge to be protective of water quality and its beneficial uses. A discharge of wastewater to a water of the state, for example an irrigation canal, must meet the limits in Schedule A1. Reuse requirements in Schedule A1.4 are for a direct land application of a discharge. An amount over 0.5 MGD may be land applied under an approved land application plan. See response to comment no. 7 below.

7. Comment:

A 0.5 MGD effluent limit is not justified. Volume is not based on technical considerations or likely environmental effects. If a registrant meets permit limits end of pipe, then a volumetric limitation is not necessary. Increase the permitted daily flow rate to 1.0 MGD. This will reduce the administrative burden on most discharges. A higher flow would not authorize greater impacts to surface water. Other states allow a high discharge. In 40 CFR Subpart J 125.91(a)(2), EPA allows 2 MGD.

(Commenter Nos. 3 and 4)

Response: The fact sheet contains the explanation for the 0.5 MGD limitation for this general permit in Section 6 Antibacksliding and Section 8.4 Limits to Address Temperature TMDL requirements. Facilities that discharge flows that are greater than 0.5 MGD to surface waters may apply for an individual permit.

Moreover, a permit for a new or increased discharge to a lake must be based on additional anti-degradation analysis as required in 340-041-0004(9). These requirements are more appropriately addressed through an individual permit. Coverage and eligibility section is revised to exclude new or increased discharges to a natural lake.

Schedule A1.1. Table A1-1, permit limits for temperature

8. Comment:

Exempt irrigation canals from temperature limits. Fish are not present in irrigation canals and are not impacted by downstream flows to surface waters.

(Commenter Nos. 1, 2, 3 and 5)

Response: A discharge to a surface water of the state requires an NPDES permit. Almost all surface waters in Oregon have fish use assigned to them under Oregon rules (OAR 340-041-0101 to 340-041-340-0340) as a beneficial use to be protected. Beneficial uses and their associated criteria protect uses that may occur within the water as well as protect waters downstream of the segment. DEQ is required to ensure that the discharges will not cause or contribute to exceedances of the temperature criteria in the rules (OAR 340-041-0028). The temperature limits in the proposed permit were developed to address this requirement.

The West Division Main Canal referenced in OAR 340-041-0310 is an example of a surface water that does not have a beneficial fish use. The permit reflects this, but also requires that these discharges will not cause or contribute to exceedances of any applicable temperature water quality standard downstream.

9. Comment:

Add note 8 to the thermal load limit in Table A1-1 Permit Limits to clarify that note 8 in Table A1-1 is applicable to both the thermal load limit and excess thermal load limit.

(Commenter No. 3)

Response: DEQ made this correction. Table A1-1, Note 8 is added to the thermal load limit in Table A1-1 Permit Limits

10. Comment:

Allow a 150 degree Fahrenheit temperature limit as allowed in the current permit. Do not apply the acute impairment temperature to discharges if there is no fish use designation. Note 8 in Table A1-1 should also apply to acute temperature limit.

(Commenter Nos. 2, 3 and 5)

Response: The maximum allowable discharge temperature must be protective of numeric criteria in OAR 340-041-0053, as well as antidegradation requirements in general permits, which contain protections for the most sensitive beneficial uses. In addition, this maximum temperature limit satisfies statewide narrative heat load criteria in OAR 340-041-0007(15) (a)(B)(iv) regardless of fish use designation. As in any NPDES permit, a discharge must consistently meet water quality standards. DEQ may also require water temperatures be controlled to the highest possible level. This permit allows a maximum temperature of 32°C (89.6°F) which is protective of water quality, complies with current regulations and ensures a significant heat load is not discharged under a general permit.

11. Comment:

Clarify how a registrant may demonstrate that their upstream discharge to an irrigation canal is not contributing to a deleterious impact downstream. For example, allow a registrant to certify that discharges to an irrigation canal are not immediately upstream of a designated fish use area and obtain a mixing zone waiver.

(Comment No. 3)

Response: Schedule D1 of the permit and Section 15.7 in the fact sheet are revised to address this comment. Schedule D1.6 specifies how an application may make this demonstration.

12. Comment:

Clarify Table A1-1 Note 8. Explain more clearly when a discharge does not cause or contribute to an exceedance of temperature water quality in a downstream discharge. Suggests the following: A discharge is presumed to not cause or contribute to an exceedance of temperature water quality standards in the next downstream waterbody if

- the temperature of the discharge does not exceed both the biologically-based numeric criteria and the ambient temperature of the nearest downstream impaired water, or
- if, except during storm events, the receiving waters are physically separated from next downstream waterbody with a fish use designation.

(Commenter No. 4)

Response: Generally, this permit is for a point source discharge to water of the state to be protective of the receiving waterbody's water quality. Beneficial uses and their associated criteria protect uses that may occur

within the water as well as protect waters downstream of the segment. Also see the response to comment in 11 above that will apply in limited circumstances.

13. Comment:

Calculate the thermal load limit and excess thermal load limit based on a change in temperature between the intake and discharge in the same body of water.

(Commenter No. 4)

Response: Calculation of the thermal load limit and excess thermal load limit are explained in Schedule A1, Tables A1-1 for industrial facilities. An additional TMDL thermal load limit may also be applicable in Schedule A1.2. The basis for these limits is explained in the fact sheet for this permit. For a discharge to a natural lake, this permit is revised to use the term natural lake and allow a determination of ambient temperature in a natural lake per OAR 340-0041-0028(6) as follows: 'The excess thermal load is the thermal load above the applicable biologically based numeric temperature criterion. For a discharge to a natural lake, the excess thermal load is the thermal load above its ambient temperature. The ambient temperature of a natural lake that is determined as required in Schedule D1.5 and is approved by DEQ will apply.'

Mixing zones within irrigation canals

14. Comment:

Streamline, exempt or modify mixing zone criteria within irrigation district canals. The development and submittal of mixing zone studies would be extensive. A mixing zone study would not provide improved environmental protection due to lack of aquatic life in irrigation canals and the limited impact non-contact cooling water discharges have to irrigation canals. Discharges will primarily occur during growing season, the amount of water that reaches downstream surface water bodies with designated fish uses will be reduced. Discharges of non-contact cooling water should not impact the ambient temperatures of a downstream surface waterbody which may be above the temperature criteria, regardless of any potential discharge from the irrigation canal.

(Commenter Nos. 1, 2, 3 and 5)

Response: This permit has streamlined mixing zone requirements. For most applicants, basic information is required. A mixing zone analysis is only required when an applicant selects that option provided in Schedule D1.2 and D2.1 for spawning documentation. Schedule D1.2 and D2.1 does apply to a water body where salmonid spawning is a designated use. This permit is revised to allow a critical mixing zone dilution that is greater than 22. See response to comment no. 23.

15. Comment:

The 100-J discharges of non-contact cooling water will not impact downstream surface water bodies.

(Commenter Nos: 3 and 5)

Response: DEQ does not have sufficient evidence to support this conclusion.

16. Comment:

For the data center sector, exempt discharges of non-contact cooling water to irrigation canals during spring and summer such discharges are not likely to impact downstream surface waters as a matter of policy. If monitoring shows downstream impacts to fish-bearing areas are measurable, benchmarks could be used to initiate action by the permittee or water manager at the interface.

(Commenter No. 3)

Response: An industrial discharge to an irrigation canal must meet permit limits in Schedule A1. Schedule D1 is revised to include requirements for a downstream effects analysis. See response to comment no. 11.

17. Comment:

Allow 100% of the volume of the canal for a mixing zone because all of the discharge can and should be beneficially reused.

(Commenter No. 3)

Response: The regulatory mixing zone for this permit is set to 25% of the 7Q10 low stream flow for a non-natural lake discharge where the receiving water has a beneficial fish use. See section 8.3 of the fact sheet for more information. Separately, temperature in receiving waters where fish use is not a designated beneficial use is addressed in condition A1-1, Note 8.

18. Comment:

Provide specific criteria for how a registrant may demonstrate that their upstream discharge to an irrigation canal is not contributing to a deleterious impact on a downstream receiving water. This would allow a registrant to certify that discharges to an irrigation canal are not immediately upstream of a designated fish use area and obtain a mixing zone waiver.

(Commenter No. 3)

Response: See the response to comment no. 11.

pH Limits

19. Comment: Schedule A2.1, permit limits for cooling water wastewater

Remove pH limit for non-contact cooling water from Table A2-1: Permit fact sheet noted that typically no substances are added to the cooling water. Also see, e.g., National Wildlife Fed. v. Gorsuch, 693 F.2d 156, 165, 175 (D.C. Cir. 1982); 73 Fed. Reg. 33,697, 33, 705 (June 13, 2008) (EPA confirmation that pollutants that merely pass through a hydroelectric project are not subject to an NPDES permit). Applying a limit to pass through source water that is already impaired would be unwarranted. Include verification in the permit application that ensures no substances are added to cooling water that may affect pH.

(Commenter No. 7)

Response: This NPDES permit addresses water extracted for cooling. The 1996 100-J general permit contained pH limits although it did not require sampling. Anti-backsliding provisions generally do not allow relaxation of effluent limits in renewed/reissued permits.

This permit did not relax the pH limit and includes updated limits for water quality limited water.

Regulations in 40 C.F.R. §§ 122.44(i) and 122.48 require permits contain monitoring for all limited pollutants, monitor effluent volume, and report the data at least once per year and specify the required monitoring frequency to provide representative data.

The permit application for this permit requires sampling and analysis of the wastewater. Monitoring may be reduced after 12 consecutive months of quarterly pH sample results show compliance with the limit. The permit is revised to address reduced monitoring. See also response to comment no. 39.

20. Comment: Schedule A2.2, permit limits for sump pump type wastewater

Limit the pH for hydroelectric facilities to the specific impairment of the stream. If the impairment is clearly for low pH, the high pH limit of 9.0 should remain. If the impairment is for high pH, the low pH of 6.0 should remain.

Add to Table A2-2 Note 1, 'If the listed impairment is solely for high pH, the daily minimum limit shall remain 6.0, and if the listed impairment is solely for low pH, the daily maximum limit shall remain 9.0.'

(Commenter No. 7)

Response: Schedule A1.1 Permit Limits for Industrial Facilities, Table A1-1: Note: 4, Schedule A2.1 Permit Limits for Hydroelectric Facilities, Table A2-1 Note: 1 and Table A2-2 Note 1 are revised to allow a range consistent with the impairment listing.

Oil and grease limits

21. Comment: Schedule A2.1., permit limits for cooling water wastewater

Remove oil and grease from cooling water discharge in Table A2-1. Cooling water at hydropower facilities does not come in contact with oil and grease. Fact sheet states O&G is not expected to be present in a cooling water discharge. Note 7 in Table A2-1 may inadvertently be applied to cooling water.

(Commenter No.7)

Response: The oil and grease limit of 10 mg/L will be removed from Table A2-1 Permit Limits. Schedule A2.3.c. prohibits the discharge of a visual sheen. The requirement for visual monitoring and sampling for oil and grease will remain in Schedule B6. Table B4. The permit application for this permit will still require sampling and analysis results of that wastewater for oil and grease.

22. Comment: Schedule A2.2, permit limits for sump pump type wastewater

In Table A2-2, clarify the oil and grease discharge limits are for comingled discharges. Add the following to Table A2-2 Note 2 'and roof drainage and cooling water that is commingled with other wastewater.'

(Commenter No. 7)

Response: This change is made to the permit.

Mixing zones for hydroelectric facilities

23. Comment: Schedule A2.1., Table A2-1, S₂₅ dilution

Describe how the critical dilution S_{25} is determined in the permit.

Revise the note for S_{25} as follows: S_{25} is the critical dilution 'factor at the edge of the regulatory mixing zone. For discharges to natural lakes, S_{25} is equal to one (1). For other discharges, S_{25} equals (($Q_a*0.25$) + ($Q_{ed}*1.5472$))/($Q_{ed}*1.5472$), where Q_a is the 7Q10 low flow of the receiving stream in cubic feet per second (cfs). dilution provided by DEQ will verify the value of S_{25} ' at the time of permit assignment and is limited to a maximum value of 22.

(Commenter No. 7)

Response: Schedule A2.1, Table A2-1, Note 6 and Schedule A1.1, Table A1-1, Note 9 is revised to include the equation for critical dilution (S_{25}). Additionally, there is a table with mixing zone maximum dilution values. A non-natural lake discharge will be assigned a critical mixing zone dilution (S_{MZ}) that is the lower of calculated value of S_{25} or the mixing zone maximum dilution (S_{MZ} Max) found in the table.

24. Comment: Schedule A2.1., Table A2-1, S₂₅ dilution

Dilution factor for reservoirs should be determined in the same manner as that for streams. Critical dilution factor for lakes should not be applied reservoirs. Oregon treats reservoirs as streams for purposes of temperature criteria. Reservoirs have flow characteristics. Describe the dilution factor for lakes as a natural lake or define at what point a stream segment becomes a lake.

(Commenter No. 7)

Response: Schedule A1.3.b will be revised to use the term natural lake consistent with natural lakes temperature criteria in OAR 340-041-0028(6) and a DEQ internal management directive, Temperature Water Quality Standard Implementation (https://www.oregon.gov/deq/Filtered%20Library/IMDTemperature.pdf) on DEQ's Internal Management Directives web page at https://www.oregon.gov/deq/Get_Involved/Pages/imd.aspx.

25. Comment: Schedule A2.1., Permit limits for cooling water wastewater

Maximum dilution of 22 is unnecessarily conservative. Allow S_{25} to exceed 22. Apply a thermal shock limit to facilities with a critical dilution factor that is greater than 22 that is similar to the thermal load limit using a dilution factor of 5% of the 7Q10 low flow. Qed * S_5 * 1.14, where S_5 is the critical dilution factor at 5% of the 7Q10 low flow. Compare using the difference in temperature 3.785 * Qe* Δ Tts, where Qe is the daily discharge flow of cooling water in millions of gallons per day (MGD) and Δ T is the daily effluent temperature in °C minus 25°C.

Add to Table A2-1, a Thermal Shock Excess Thermal Load (million kcal/day) calculated as Qed * S₅*1.14.

Add Note 6 to Thermal Shock Excess Thermal Load to Table A2-1 Permit Limits as follows: The thermal shock excess thermal load limit applies only to facilities for which DEQ has verified that the value of S_{25} equals or exceeds 22. The thermal shock excess thermal load is the thermal load in excess of 25°C. Qed is the maximum design average effluent flow from the facility for all cooling water outfalls (MGD). S_5 equals ((Qa*0.05) + (Qed*1.5472))/(Qed*1.5472), where Qa is the 7Q10 low flow of the receiving stream in cubic feet per second (cfs). DEQ will verify the value of S_5 and whether the thermal shock excess thermal load limit applies at the time of permit assignment.

Revise the fact sheet in section 8.3.2 Thermal Plumes Limitations to include this option.

(Commenter No. 7)

Response: A maximum critical dilution (S_{25}) of 22 was proposed to establish an excess thermal load limit and address thermal shock and migration blockage thermal portions of the thermal plumes requirements in OAR 340-041-0053(2)(d)(C) and (D). This permit is revised to set a critical mixing zone dilution above 22. A table is added to Schedule A1.1 and A2.1 that contains mixing zone maximum dilution values based on a range of flows. This table provides for a discharge to a large stream without using a significant portion of the assimilative capacity of that large stream in a general permit while still being protective of thermal shock and migration blockage portions of the thermal plumes requirements.

Determination of effluent flow rate

26. Comment: Schedule A1, Table A1-1

Allow the flow rate to be calculated rather than based on the design rating of the pump. Change Permit Limits in Table A1-1 note 1 that requires a maximum daily design flow. Allow an actual daily flow rate, average daily flow rate or percent of maximum daily design flow rather than a theoretical maximum that is based on the design rating of the pump.

(Commenter No. 4)

Response: A theoretical maximum is a calculation that is a basis for a design, but not what a pump will deliver as designed for equipment operation. This permit uses the maximum daily design flow that will discharge, as designed, for equipment operation and measured, as required, in Schedule B. DEQ will not allow a discharge for permit coverage or assign more than the allowable 0.5 MGD for a discharge to surface water.

Receiving water

27. Comment:

Clarify the term 'receiving water.' Suggest the following definition, "Receiving waters" means the point where non-contact cooling water is first discharged into the waters of the state.

(Commenter No. 4)

Response: In the fact sheet for this permit, the following sentence is added to Section 7. Schedule A: Permit Limit Development. 'Effluent limits serve as the primary mechanism in NPDES permits for controlling discharges of pollutants to receiving waters. The receiving water is where the discharge enters a water of the state.....'

In permit conditions, the term 'receiving water' is to describe where an oily sheen observation occurs. Clarification is added. Note j, in Schedule B, Tables B1 and B2. for a discharge through a storm sewer are revised follows: 'For a discharge through a storm sewer, a permit holder must observe its discharge for an oily sheen at the point where that storm sewer discharges into a receiving water. No observation is required at the point of discharge from the storm sewer to the receiving water, if the discharge point into the storm sewer can be observed and if, at that point, the discharge does not have an oily sheen.'

In Schedule A1, Table A1-1, Note 8, the term 'receiving water' is used to describe the location for a determination of fish use criteria. No further clarification is required in this section.

In Schedule D1.1, an outfall inspection is required. This condition is clarified, as follows: 'The inspection must verify the latitude and longitude of the outfall at its point of discharge into the receiving water.'

28. Comment:

A lake that is self-contained and has no natural surface water connection to other surface waters will have no impact on the water bodies subject to a Total Maximum Daily Load (TMDL). Premier Properties discharges to Stone Quarry Lake except on rare occasions during colder months when heavy rain events and accumulated rainwater lead to overflow discharges that are pumped into East Fork Pringle Creek. These pumped discharges are initiated solely for the purpose of maintaining optimal lake levels for access to the floating businesses present on the lake. Neither Stone Quarry Lake nor East Fork Pringle Creek are designated as fish use areas by the Oregon Department of Fish and Wildlife.

(Commenter No. 4)

Response: Premier's properties (108298 and 110603) operate under 1996 100-J permits for a discharge to Stone Quarry Lake. It is a discharge to Stone Quarry Lake that requires permit coverage. This permit will allow an applicant to submit its assessment of the natural lake ambient temperature. See response to comment no. 29.

29. Comment:

Do not require a permit for a discharge that does not have a reasonable potential to cause or contribute to an exceedance of water quality criterion and does not harm or adversely impact impaired waters. A temperature increase of no more than 4 degrees Fahrenheit and normally less than one degree Fahrenheit is a nominal temperature increase to Stone Quarry Lake. Neither Stone Quarry Lake nor East Fork Pringle Creek are designated as fish use areas by the Oregon Department of Fish and Wildlife.

(Commenter No. 4)

Response: A NPDES permit is required for a discharge of wastewater to a lake. As proposed, the excess thermal load limit in Schedule A1. Table A1-1, Note 7 would have been based on a 0.3°C increase above the biologically based numeric fish use temperature criteria of the nearest stream. This permit is revised to allow an applicant to submit, to DEQ, the results of an assessment of the natural lake ambient temperature as contained in OAR 340-041-0028(6) for the purpose of assigning an excess thermal load limit. Schedule A1,

Table A1-1 will be revised to allow an excess thermal load limit based on the natural lake ambient temperature. Schedule D1 is revised to include a condition that requires an applicant to meet basic sampling and analysis requirements to establish the natural lake ambient temperature for DEQ approval. The fact sheet in Section 8.1 Table 8-1: Temperature Criterion Information is revised to include this change.

Land application of industrial non-contact cooling water

30. Comment:

Require the use of best management practices in lieu of DEQ approval of land application plans. Non-contact cooling water does not contain nutrients or significant levels of pollutants. There are already fields being irrigated with non-contact cooling water within the district. The final permit should provide a requirement that irrigators follow best management practices.

(Commenter Nos. 1 and 2)

Response: General permits are written to include conditions that conservatively ensure protection of public health and the environment in a wide range of ecosystems and for as many similar facilities as possible. As a result, DEQ reviews publicly available information to assess potential ramifications of reusing a given effluent, looking at the chemicals that could be in place and what effects they would have in different environments. In this effort DEQ identified several potential contaminants associated with non-contact cooling water. These include Corrosion Inhibitors, Scale Inhibitors, Biocides, Dispersants, Oxygen Scavengers, Antifoaming Agents, and pH Adjusters. DEQ recognizes the specific additives, and their dosages will vary based on factors such as water quality, system design, and operational conditions so the actual environmental ramifications will be different for each facility. As such simply using best management practices may not be appropriate for all facilities across the state, especially those that are located inside designated groundwater management areas or over sensitive aguifers.

Simply land applying many of these compounds can potentially contaminate the soil. This can have adverse effects on soil health, microbial activity, and plant growth. With the potential for soil contamination there is also potential for groundwater contamination if corrosion inhibitors are not adequately managed during land application. There is also a risk of leaching or runoff into nearby waters of the state.

31. Comment:

Proposed permit directly regulates farming practices. ODA is the only state agency allowed to regulate farming practices. (See section 561.191, O.R.S.) Any regulation of irrigation of agricultural fields should be removed from DEQ's permit.

(Commenter Nos. 2 and 5)

Response: While the Oregon Department of Agriculture (ODA) is tasked with regulating farming practices Oregon Department of Environmental Quality (DEQ) is tasked with protecting the water quality across the state and regulates the land application of industrial effluent (ORS 215.246). As such DEQ is tasked with regulating the management and land application of this material. As stated in ORS 561.191 with two state agencies required to regulate this activity, DEQ has consulted with ODA. The ODA has reviewed and commented on this permit and their comments were incorporated into this permit. Schedule A1.4.a and A1.4.b are revised to include a requirement for land application during the growing season when crops need additional moisture.

32. Comment:

Allow ODA to develop the permit language related to land application.

(Commenter No. 2)

Response: DEQ regularly confers with ODA on land application permit conditions and developed the language in this permit from other land application permits, best management practices and recommendations from ODA. As stated in the previous comment DEQ is tasked with regulating this activity (ORS 215.246).

33. Comment:

Land application plan approval by DEQ is not necessary. Remove it. Non-contact cooling water does not generally contain nutrients or significant levels of other pollutants that pose a risk to groundwater via land application.

(Commenter No. 3)

Response: As stated in DEQ's response to previous comments there is a significant likelihood of various contaminants in non-contact cooling water discharge. Because of the likelihood of these contaminants DEQ has found land application plans to be an effective means of addressing the complexities associated with the beneficial reuse of different effluent streams in various ecosystems, hydraulic conditions, and soil types. Without using land application plans, DEQ would need to be more restrictive of the allowable effluent streams and irrigation rates in the proposed permit.

34. Comment:

Provide a waiver for data centers, due to consistent nature of the discharge, or allow a registrant to request a waiver based on a date, one year of data for example, to demonstrate that the discharge does not contain nutrients or other pollutants that would pose any significant risks from land application.

(Commenter No. 3)

Response: DEQ needs to maintain appropriate oversight of the land application of potential contaminants. In addition, general permits are written to cover as wide a range of facilities as feasible. If an entity believes a general permit does not address their conditions, they can apply for an individual permit.

Schedule B: Minimum monitoring and reporting requirements

35. Comment: Schedule B.2.a.i

Eliminate monitoring and reporting for months when there is no discharge. If there is no report due to no discharge, the next submitted discharge report should attest that there were no discharges for those previous months.

(Commenter No. 4)

Response: DEQ must receive a discharge monitoring report for each month to indicate if a discharge occurred. If there is no discharge, DEQ must receive a signed DMR for each month that simply states, 'no discharge.' DEQ will have electronic reporting in the future which will make reporting more efficient. Electronic reporting will contain a reporting code for months in which no discharge occurs.

36. Comment: Schedule B, sample type/required action

Allow continuous monitoring. For Sample type/Required Action allow Grab or Continuous.

(Commenter No. 4)

Response: An applicant will need to specify their method of sampling at the time of permit coverage.

Schedule B is revised to allow continuous monitoring. A calculation of excess thermal load using a maximum daily effluent temperature is added to the reporting statistic column in Tables B1 through B4. The excess thermal load must be calculated using the daily maximum effluent temperature from the continuous monitoring result. There are quality assurance and quality control requirements in Schedule B that must be addressed for continuous monitoring. For example, Schedule B.2.f.iii. requires minimum weekly verification that the continuous monitoring device is functioning properly. A representative daily grab sample, is required, if the continuous monitor is not functioning properly.

Schedule A is revised to specify timeframes for continuous monitoring results that will be used to determine when pH is out of compliance.

37. Comment: Schedule B.6., monitoring requirements for a hydroelectric facility

In Table B4, Note f, clarify how the 7-day rolling average is calculated.

Add to Note f, 'If only the required weekly temperature and flow measurements are taken, the temperature and flow measurements will be deemed to be the temperature and flow measurements for the preceding six days, and the 7-day rolling average is then calculated from the daily ETLs.'

(Commenter No. 7)

Response: In some cases, a grab sample may be taken more frequently than required. Per Schedule F.C6, those monitoring results must be reported in the calculation and reporting of the data submitted. The discharge monitoring report will include information on reporting sample results for the 7-day rolling average reporting.

38. Comment: Schedule B, minimum monitoring and reporting requirements

Allow monitoring to be suspended if a discharger demonstrates a history of compliance. Allow a permit holder to obtain a monitoring waiver if the registrant (i) has not exceeded discharge parameters for a period of five consecutive months, and (ii) the facility demonstrates it is unlikely or practically unable to exceed the discharge parameters. Require a facility to notify DEQ of any material change to its discharge or operations. The facility must certify annually that its operations during the previous year remained substantially unchanged and that operations will remain substantially unchanged during the next year. DEQ may revoke the suspension if the discharger is unable to comply with the discharge parameters.

(Commenter No. 4)

Response: A NPDES permit with numeric effluent limits is required to contain monitoring to determine compliance. This permit will contain a reduced monitoring scheme. Schedule F, sections D1 and D2 contain reporting requirements for material changes at a facility. Also see the response to comment no. 39.

39. Comment: Schedule B.7., additional monitoring and reporting

Allow for a reduction in monitoring for a monitoring parameter with the written approval of DEQ.

Add the following: Additional 'or Reduced' Monitoring and Reporting. 'The required monitoring frequency at an outfall may be reduced for a monitoring parameter with the written approval of DEQ if the registrant demonstrates that the discharge limit associated with that parameter is met at that outfall for an entire calendar year. For parameters for which the required monitoring frequency is more frequent than quarterly, the frequency may be reduced to quarterly. For parameters for which the required monitoring frequency is quarterly, the frequency may be reduced to annual. No reduction in monitoring frequency is allowed for required visual monitoring or required follow-up monitoring. DEQ may at any time, in writing, reinstate the monitoring frequency required by the permit for a parameter at an outfall if a discharge limit associated with the parameter is exceeded at the outfall, if there are changes in the facility or its operation that pose a reasonable risk of causing or contributing to a violation of water quality standards, or for any other appropriate reason.'

(Commenter No. 7)

Response: DEQ may allow a reduction in monitoring frequency for a parameter at an outfall based upon a request and sample results which are representative of the discharge and sampling protocols. A condition is added to Schedule B to allow a registrant to submit a request to DEQ for a reduction in the minimum effluent monitoring frequency at an outfall. The request shall include a 12-month summary of the discharge data for each parameter for which a reduction is requested as well as, a statement that sampling and analysis met Schedule B conditions 1 and 2. For a parameter assigned a monitoring frequency that is more frequent than quarterly, the frequency will be reduced to quarterly. For a parameter for which the required monitoring frequency is quarterly, the frequency will be reduced to annual.

DEQ will not allow a reduction in monitoring for flow (MGD), temperature or temperature related reporting. DEQ will only allow a reduction in visual monitoring for oil and grease at industrial facilities. A registrant must resume monitoring at the original frequency for the remainder of the permit term if a discharge limit associated with the parameter is exceeded at the outfall.

40. Comment

Offer an alternative to a full permit for no impact or nominal impact dischargers, such as a Letter of Authorization or an Alternative Discharge Control Mechanism, to facilities that can demonstrate that design and operational constraints make it functionally impossible to exceed the permit limits or negatively impact impaired waters. Suggest the following change: 'The registrant must sample effluent in a manner that is representative of the wastewater discharge and submit to DEQ monitoring results and reports as listed below, unless the registrant has received and operates under a Letter of Authorization or an Alternative Discharge Control Mechanism from DEQ, in which case monitoring and reporting shall be conducted in accordance with the Letter of Authorization or Alternative Discharge Control Mechanism.'

(Commenter No. 4)

Response: A NPDES permit is required for a discharge of wastewater. This permit will allow options for assigned permit limits and reduced monitoring requirements. See response to comment no. 38.

41. Comment: Schedule B.6., monitoring requirements for a hydroelectric facility

Most sump pump discharges are intermittent and short. Allow a sump pump to meter discharge flow using sump pump run times.

Add to Table B5, Note c: 'The registrant may also calculate sump discharge flows using sump pump run times.' Add the following to Table B5, Note e: 'or calculated when a discharge is occurring.'

(Commenter No. 7)

Response: Pump run time is one way to measure flow. In Schedule B, Tables B1 through B5, the sample type is revised to include measurement.

42. Hydro Comment: Schedule B.6., monitoring requirements for a hydroelectric facility

Installing monitoring for all cooling water discharges may be difficult. Allow the option of reporting the total cooling water design flow instead of measuring it.

Add the following to Table B4, Note c: 'In lieu of conducting weekly monitoring of the cooling water flow, the registrant may report the design daily maximum cooling water flow.'

(Commenter No. 7)

Response: An actual flow can be more than the design flow. Measuring flow is a requirement. In Schedule B, Tables B1 through B5, the sample type/ required action column is revised to include measurement as follows: meter/measure.

43. Comment: Schedule B.6., monitoring requirements for a hydroelectric facility

Add Thermal Shock Excess Thermal Load monitoring that is similar to the Excess Thermal Load in Table B4. (Commenter No. 7)

Response: This permit addresses the thermal plumes portion of the temperature criteria through a mixing zone maximum dilution. See response to comment no. 25.

44. Comment: Schedule B, pH monitoring

Do not require pH monitoring when there is no impact from the process or addition of chemicals. Sampling for pH should not be required for facilities when the non-contact cooling water is from the same body of water as the discharge and there are no additives to the non-contact cooling water.

(Commenter No. 4)

Response: For most facilities regulated under this permit pH is a pollutant of concern. Each basin has pH water quality criteria. This permit contains limits that allow a range and limits for impaired water. At any facility, pH can also be an indicator for problems with operations and maintenance. Monitoring for pH is required but may be reduced after pH data collection over a period of time. See response to comment no. 39.

45. Comment: Schedule B.6.b., monitoring requirements for a hydroelectric facility

Remove the requirement for pH, oil and grease monitoring, and visual monitoring for oil and grease in Schedule B.6, Table B4.

(Commenter No. 7)

Response: The requirement for oil and grease monitoring is removed from Schedule B6.b. Table B4. The requirements for pH and visual monitoring remain. Section 12 of this fact sheet is corrected to note the permit retains the pH limits for hydroelectric facilities. Monitoring for pH may be reduced after pH data is collected over a period of time. Also see response to comment no. 39.

Schedule D1 and D2: Special conditions

46. Comment: Schedule D2.1, spawning bed documentation

In addition to the spawning habitat documentation in Schedule D2.1, allow an option for a hydropower facility to provide documentation that the temperature effect of cooling water discharges does not exceed 0.3°C at any active salmonid spawning area downstream, where spawning redds are located or likely to be located, at the maximum discharge temperature, cooling water design flow, and 7Q10 low flow stream conditions during the designated spawning period. The assessment of spawning areas must be from a qualified fisheries biologist. The documentation of instream temperature effects must be from a registered professional engineer (for critical plume dilution).

Revise the fact sheet in sections 8.3.2 Thermal Plumes Limitations and 15.2 Spawning Habitat, to include this option.

(Commenter No. 7)

Response: Schedule D1.2 and D2.1 Spawning Bed Documentation will be revised to allow three methods one of which will include documentation to show the temperature effect of the discharges do not exceed 0.3°C at any active salmonid spawning area downstream, where spawning redds are located or likely to be located.

Additional detail is provided for each method.

The assessment of spawning area must be from a fisheries biologist. The term qualified is removed.

47. Comment: Schedule D2.2, cooling water intake structure

Clarify that the license and biological opinion are intended to provide information to support a BTA analysis, rather than to provide the BTA determination itself.

Revise D2.2. a., b. and d. as follows:

- a. An applicant must provide a FERC license or Biological Opinion, as well as any biological opinion issued in conjunction with the FERC license, to demonstrate CWIS Best Technology Available requirements have been satisfied.
- b. .Documentation in D2.a. above must 'The application for permit registration must demonstrate, using the FERC license, Biological Opinion, or other information, that a cooling water intake structure reflects the best technology available for minimizing adverse environmental impact, based on consideration of address one or more of the four factors under EPA's July 2022 Revised Framework for Considering Existing Hydroelectric Facility Technologies in Establishing Case-by-Case, Best Professional Judgment Clean Water Act § 316(b) NPDES Permit Conditions listed below.'
- d. Any applicant that needs 'to' take additional measures to satisfy CWIS BTA requirements will be denied coverage under this permit 'and must apply for an individual permit.'

(Commenter No. 7)

Response: Schedule D2.a. and d. are revised. The FERC license or Biological Opinion, as well as any biological opinion issued in conjunction with the FERC license must contain information that is used to support the BTA analysis. DEQ is using the four factors in EPA's July 2022 Revised Framework as the basis for BTA.

48. Comment: Schedule D2.3, oil and grease best management practices plan and environmentally acceptable lubricants

Allow an alternative to a schematic.

Add the following to D2.3.b.ii: 'or, in lieu of a schematic, a table of oil sources together with drainage drawings showing potential pathways for oil to reach water.'

(Commenter No. 7)

Response: This change is made to the permit.

49. Comment: Schedule D2.4, debris from trash racks

Design for disposal of debris from the trash rack varies. Some hydroelectric facilities are designed to pass woody debris.

Add 'This requirement does not prohibit passing woody debris and other material that collects on a trash rack downstream instead of removing it from the stream.'

(Commenter No. 7)

Response: If a facility is not designed to remove trash, and instead sluices (redirects) river debris, then this condition would not apply. Schedule D2.4 is revised as follows: 'When material is removed from the trash rack, the registrant must properly dispose of that material.' The fact sheet in section 16.4 will contain an explanation as follows: A trash rack captures solid materials including naturally occurring materials to prevent that material from entering the water intake system. Trash racks differ, for example, some facility's sluice the debris around the dam or have other configurations. This condition is a best management practice that is meant to prevent the reentry of any solid material that is removed (physically or mechanically) from existing trash racks to the receiving water. This condition does not prohibit passing woody debris and other material that collects on a trash rack downstream instead of removing it from the stream.

Fact sheet

50. Comment: Section 2.3, coverage and eligibility

Correct the ORS citation in the fact sheet in Section 2.3.3 Cooling Water Intake Structures.

(Commenter No. 7)

Response: Fact Sheet Section 2.3.3 is revised to include the correct statute as follows: 'DEQ will require an industrial facility to provide an inspection letter from Oregon Department of Fish and Wildlife for its cooling water intake structure or its contracted source of cooling water. Per Oregon Revised Statute 540.542 498.321, ODFW determines whether an intake structure is appropriately equipped.

51. Comment: Section 7.2.2, hydroelectric facilities

In the fact sheet in Section 7.2.2 change temperature to heat.

(Commenter No. 7)

Response: Sections 7.2.1 and 7.2.2 of the fact sheet are revised to include heat as a pollutant of concern.

General comments

52. Comment:

Supports renewal of the permit. Permit would allow industrial and commercial facilities to discharge non-contact cooling water into irrigation canals. If the water is used, it may prolong/extend water supplies. It will help economic development and remove a barrier for potential for growth and development. Permit has safeguards for cold water fisheries and limits on discharging pollutants of concern so there are no anticipated adverse environmental consequences.

(Commenter No. 6)

Response: Comment is noted.

53. Comment:

This permit will add unnecessary expense. Permit scheme is broader than necessary for a discharge to a lake with no natural surface water connection.

(Commenter No. 4)

Response: This is a low cost general permit that allows, but limits, a wastewater discharge to a surface water under current standards. This permit provides time and options for a facility to come into compliance with conditions of the permit.

54. Comment:

This permit adds too many restrictions to an irrigation canal.

(Commenter No. 1)

Response: The conditions appropriately protect the beneficial uses of water quality in the context of a statewide general permit. The fact sheet for the permit contains an explanation of how water quality criteria are applied under the general permit.

55. Comment:

Individual permits are not an option due to backlog, permitting timeframe and high cost.

(Commenter Nos. 1, 2, 3 and 5)

Response: Not all discharges can be assigned coverage under a general permit. However, it is always an option to obtain an individual permit. A non-contact cooling water discharge that is not eligible for a general permit must obtain an individual permit under OAR 340-045-0030. For non-process wastewater individual permit coverage, such as small cooling water discharges, permit fees are in the lowest cost category, see OAR 340-045-0075 Fee Tables.

Corrections

Reporting of Sample results in Schedule B2.g.i. is revised as follows: 'The registrant must report the laboratory DL and QL as defined above for each analyte, with the following exceptions: pH, temperature, BOD, CBOD, TSS, Oil & Grease, hardness, alkalinity, bacteriological analytes and nitrate-nitrite. For temperature and pH, neither the QL nor the DL need to be reported. For the other parameters listed above, the registrant is only required to report the QL and only when the result is ND.

Schedule A2, Table A2-1: Permit Limits, Note 5 is revised as follows: 'Qed is the maximum design effluent flow from a facility for all cooling water outfalls (MGD).'

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