

Supplemental Application Information

(in addition to [EPA Form 1](#) , [EPA Form 2e](#) and [LUCS](#))

A. Facility Information

1. Facility Type: Check one. Hydroelectric Industrial
2. Current status of permit coverage:
 - a. Does this facility have NPDES permit coverage (individual or general permit) for this type of wastewater?
Yes No
If Yes, permit number _____
 - b. Is there a pending NPDES application on file with DEQ for this discharge? Yes No
If yes, date of submittal: _____ and file number, if available

3. Per Section 3 on EPA Form 2e, cooling water additives are not expected to contain prohibited toxics as listed in Schedule A of the permit. Yes No NA
4. Attach a line drawing or flow schematic showing water flow through the facility including sources of intake water, operations contributing to flow, treatment units, outfalls, and receiving water(s).
Check the box to indicate line drawing or flow diagram is attached.

B. Outfall Location

1. Do any outfalls discharge through a storm sewer? Yes No
2. If yes on B.1, check the box to confirm the discharge locations are on the topographic map per Section 7 on Form 1, including storm sewer entry and discharge point to the receiving waterbody. Yes No
3. If yes on B.1, check the box to confirm written approval of the storm sewer authority is attached.
4. Please provide the following discharge information for all industrial non-contact cooling water from the facility or cooling water discharges from a hydroelectric facility. Then provide the total maximum design effluent flow below (Q_{ed}). Attach additional pages if necessary.

Note: Use the flow reported here for the facility's permitted effluent flow limit.

Report. This can only be done when a prediction interval is provided. Calculate the estimate using the following equation: $[(7 \text{ Day } 10 \text{ Year Low Flow Value} + \text{prediction interval-lower value (Pil)}) / 2]$.

Please provide the source of information (e.g. USGS Low-Flow Statistics report) and any calculation(s) used to provide 7Q10 low stream flow rate (in cfs) or critical low stream flow. For discharges through a storm sewer, streamflow is determined for the stream at the point where the storm sewer discharges.)

- a. Stream flow rate (Q_a): _____ cfs
- b. Check the box to indicate this documentation is attached per C.3.

4. Calculate dilution at the regulatory mixing zone boundary (S_{25}) using the following equation. (Please note maximum dilution allowed in Schedule A, Table A1-1, is 22. Dilution allowed for a lake is always 1.)

$$S_{25} = [(Q_a * 0.25) + (Q_{ed} * 1.5472)] / (Q_{ed} * 1.5472)$$

Provide dilution (S_{25}): _____

D. Total Maximum Daily Load (Category 4A) for Temperature

Water bodies with a clean-up plan (also called TMDL) that will result in the waterbody meeting water quality standards and supporting its beneficial uses has been approved (Category 4A in the integrated report). Use Appendix A in the permit to answer the following questions for the applicable TMDL.

- 1. Receiving water where discharge occurs is identified in Appendix A of the permit. Additional excess thermal load limitations apply. Yes No If yes, fill in section D. If no, skip to section E.
- 2. Please provide the following TMDL information from Appendix A.

a. Basin/Subbasin and or Watershed name: _____

b. Timeframe: _____

c. Which TMDL Excess Thermal Load Limit applies (check one)

- Specific TMDL Excess Thermal Load
- Equation $[Q_{ed} * (0.14 * S_{25} - T_{SP}) * 3.78541]$

d. Please select from the following to designate the basis for temperature : (Please note the units)

- Biologically based numeric criteria (BBNC; found in Appendix A)
- Applicable system potential temperature (T_{SP} ; found in the TMDL)
_____ °F, _____ °C
- Site potential temperature (found in Appendix A) _____ °F, _____ °C

e. If a facility received a specific excess thermal load in Appendix A provide it here:
 _____ million Kcal/day

f. If a facility received an excess thermal load equation in Appendix A, provide the calculated value here: _____ million Kcal/day

E. Water Quality Standard Temperature Criteria:

1. In the table below, please indicate all fish uses that apply to the receiving water body, and when they apply.

Fish Use/Receiving Stream type	Applicable?	Applicable Timeframe (Fill in)
Salmon & Steelhead Spawning	<input type="checkbox"/>	
Bull Trout Spawning and Juvenile Rearing	<input type="checkbox"/>	
Core Cold Water Habitat	<input type="checkbox"/>	
Salmon & Steelhead Rearing & Migration	<input type="checkbox"/>	
Migration Corridor	<input type="checkbox"/>	
Lahontan Cutthroat Trout or Redband Trout	<input type="checkbox"/>	
Unidentified Tributaries and Lakes (Please check this box and the applicable fish use above from the nearest water body)	<input type="checkbox"/>	
Other fish use designation applies based on a site-specific water quality criterion.	<input type="checkbox"/>	
There is no fish use designation.	<input type="checkbox"/>	-----

2. Where spawning is a designated fish use, check the box if documentation is attached which indicates spawning is not or is not likely to be located within the downstream regulatory mixing zone.

3. Excess Thermal Load Limit

a. Please provide the following information about the receiving water body. If there is no fish use, as indicated above, then check not applicable.

- Non-lake discharge
- Lake discharge
- Not applicable

b. Calculate the excess thermal load using total maximum design effluent flow of all outfalls (Q_{ed}) in B.4.f above and dilution (S_{25}) in C4. above.

i. For a non-lake discharge use the equation $Q_{ed} * S_{25} * 1.14$ and provide the calculated value here: _____ million Kcal/day

ii. For a lake discharge use the following equation, ($Q_{ed} * 1.14$) and provide the calculated value here: _____ million Kcal/day

F. Impaired Water (Category 5) for pH

(Water bodies identified as not meeting water quality standards through the assessment method are in the impaired category, known as the 303(d) list, (Category 5 in the Integrated Report) named for the section of the federal Clean Water Act that establishes this overall process. The 303(d) list shows us which waterbodies are impaired.)

- 1. Receiving water where discharge occurs is listed as impaired on DEQ's 303(d) list in Category 5 for pH. Yes No

G. Cooling Water Intake Structure (for an Industrial Facility)

- 1. Per Section 9 on EPA Form 1, is the source of the water used for cooling from surface water? If no, please skip section I. Yes No
- 2. Inspection letter from Oregon Department of Fish and Wildlife as required in Schedule D1 of the permit for the CWIS is attached.
- 3. Is the source of surface water from a supplier independent of the facility? Yes No

H. Cooling Water Intake Structure (for a Hydroelectric Facility)

- 1. Below please indicate which CWIS factor(s) apply and reference that information in the documentation provided.
 - Volume of cooling water used relative to other power generation facilities and relative to total water use at the facility
Reference _____
 - Cooling water withdrawn relative to waterbody flow
Reference _____
 - Location of the intake structure
Reference _____
 - Technologies at the facility
Reference _____
- 2. Attached is a FERC license, Biological Opinion, as well as any biological opinion issued in conjunction with the FERC license documentation as required in Schedule D2 of the permit.

I. Total Residual Chlorine

- 1. Per EPA Form 2e Section 3, chlorine is added as a biocide and or potable (chlorinated) water is used for the non-contact cooling water supply. Yes No
- 2. If the source water was sampled for total residual chlorine using a 40 CFR Part 136 method of analysis and that source water has a total residual chlorine concentration less than the

Quantitation Limit of 0.05 mg/L, a total residual chlorine limit will not apply to that outfall(s). Provide the total residual chlorine results and corresponding outfall #(s) for that sample result.

Sample result (mg/L) _____ Outfall #(s) _____

J. Land Application

1. Wastewater will be land-applied. A land application plan is attached.
2. Location of land application (select all that apply):
 - On the property on which it was generated
 - On an adjacent property (provide signed copy of agreement with property owner)
3. Attached is a Land Application Plan that includes the following information:
 - site description, including site and surrounding property use, zoning, area (acreage receiving water), soil profile, depth to groundwater, setbacks.
 - description of application method details of sprinkler, hand line, or pivot system.
 - Figure of general location for land application and surrounding area
 - Figure with details to scale that includes (boundaries, size in acres, surface streams, springs, ditch or other water bodies, septic drain fields or on site-systems, stormwater management structures, bio-swales or stormwater collection systems, wells or proposed wells, escarpment (steep slopes or ridge lines), road cuts and filled low land, any drainage tiles or other field drainage system, any unstable landforms (slides, sink holes, etc.)
 - Signed land use compatibility statement.
 - Full wastewater characterization (in compliance with 40 CFR Part 136). Samples must be representative of all reuse water and analyzed for contaminants of concern that at a minimum will include:
 - i. Sodium Adsorption Ratio (SAR)
 - ii. Electrical Conductivity (EC), dS/m
 - iii. pH, SU
 - Wastewater monitoring schedule and analytical methods used
 - Flow schematic (size, capacity, flow rate) that includes components to collect, store and transport wastewater
 - Method of land application, Describe the irrigation system, where it is located, the size of the area that will be irrigated (in acres), what is grown in this area/crops, how the irrigation system operates (gravity flow, pumps, hand lines, big gun, in ground system, etc.), irrigation schedule including application rate of reuse water and fresh water, indicate the months when land application will occur and how the irrigation schedule was determined.
 - Maintenance and Monitoring. Discuss how the system is managed and maintained. Include what conditions are monitored and where to ensure the irrigation activities follow the permit. Identify when the system will be shut down. (i.e. The system will be shut down when wind speeds exceed 10 miles per hour to prevent wind drift off site.) How will the soil moisture be monitored? How frequently will the system be moved to avoid

ponding, flooding, or surface run off? Describe end of season irrigation shut down procedures. etc.

- Other information that describes how the site will be managed, as specified by DEQ.

Translation or other formats

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