RULE-MAKING ORDER
PERMANENT RULE ONLY
CR-103P (December 2017)
(Implements RCW 34.05.360)

Agency: Department of Ecology AO # 19-02

Effective date of rule:
Permanent Rules
☑ 31 days after filing.
☐ Other (specify) ______ (If less than 31 days after filing, a specific finding under RCW 34.05.380(3) is required and should be stated below)

Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?
☐ Yes  ☒ No  If Yes, explain:

Purpose: The Department of Ecology (Ecology) is adopting amendments to multiple sections of Chapter 173-201A WAC, Water Quality Standards for Surface Waters of the State of Washington. This rulemaking amends the following sections:

- The numeric criteria for total dissolved gas in the Snake and Columbia rivers:
  - WAC 173-201A-200(1)(f)(ii)
- Specific sections of the rule to meet legal obligations in a 2018 Stipulated Order of Dismissal (see discussion below):
  - WAC 173-201A-200(1)(c)(ii)(B)
  - WAC 173-201A-210(1)(c)(ii)(B)
  - WAC 173-201A-240(5) Table 240 footnote dd
- The descriptions of marine water aquatic life use designations:
  - WAC 173-201A-210(1)(a)
  - WAC 173-201A-610 Table 610

Citation of rules affected by this order:
New:
Repealed:
Amended: WACs 173-201A-200(1)(f)(ii); -200(1)(c)(ii)(B); -210(1)(c)(ii)(B); -240(5); -210(1)(a); -610
Suspended:

Statutory authority for adoption: RCW 90.48.035 provides clear and direct authority to Ecology to revise the Surface Water Quality Standards (SWQS). Additionally, 40 CFR 131.20 requires states and tribes with Federal Clean Water Act authority to periodically review and update the SWQS.

Other authority: 40 CFR 131.20 requires states and tribes (with primacy for clean water actions) to periodically review and update the Water Quality Standards.

PERMANENT RULE (Including Expedited Rule Making)
Adopted under notice filed as WSR 19-16-063 on July 30, 2019 (date).

Describe any changes other than editing from proposed to adopted version: There are some differences between the proposed rule filed on July 30, 2019 and the adopted rule filed on December 30, 2019. Ecology made these changes for all or some of the following reasons:

- In response to comments we received.
- To ensure clarity and consistency.
- To meet the intent of the authorizing statute.

The following content describes the changes and Ecology’s reasons for making them.

Change to WAC 173-201A-200(1)(c)(ii)
We edited to retain the intent of the section as it applies to individual point source activities in response to public comment.

Proposed rule language
(ii) When the background condition of the water is cooler than the criteria in Table 200 (1)(c), (the allowable rate of warming up to, but not exceeding, the numeric criteria from human actions is restricted as follows:

(A)) incremental temperature increases resulting from individual point source activities must not, at any time, exceed $28/(T+7)$ as measured at the edge of a mixing zone boundary (where “T” represents the background temperature as measured at a point or points unaffected by the discharge and representative of the highest ambient water temperature in the vicinity of the discharge) and

Final Rule Language

(ii) When the background condition of the water is cooler than the criteria in Table 200 (1)(c), (the allowable rate of warming up to, but not exceeding, the numeric criteria from human actions is restricted as follows:

(A)) incremental temperature increases resulting from individual point source activities must not exceed the numeric criteria and must not, at any time, exceed $28/(T+7)$ as measured at the edge of a mixing zone boundary (where “T” represents the background temperature as measured at a point or points unaffected by the discharge and representative of the highest ambient water temperature in the vicinity of the discharge) and

Change to WAC 173-201A-200(1)(f)(iii)

We made edits to the proposed rule language in response to public comments.

Proposed rule language

(ii) The TDG criteria may be adjusted to aid fish passage over hydroelectric dams (when consistent with a department approved gas abatement plan. This plan must be accompanied by fisheries management and physical and biological monitoring plans) spilling for anadromous juvenile fish passage as of the 2020 spill season.

Final Rule Language

(ii) The TDG criteria may be adjusted to aid fish passage over hydroelectric dams (when consistent with a department approved gas abatement plan. This plan must be accompanied by fisheries management and physical and biological monitoring plans) spilling for anadromous juvenile fish passage as of the 2020 spill season.

Change to WAC 173-201A-200(1)(f)(ii)(B)

We made edits to the proposed rule language in response to public comments.

Proposed rule language

(B) To further aid fish passage during the spring spill season (generally from April through June), spill may be increased up to a maximum TDG saturation level of one hundred twenty-five percent calculated as an average of the two highest hourly TDG measures in a calendar day. This TDG criteria may be applied in place of (f)(ii)(A) of this subsection during spring spill operations when applied in accordance with the following conditions:

Final Rule Language

(B) To further aid fish passage during the spring spill season (generally from April through June), spill may be increased up to the following levels as measured at the tailrace fixed site monitoring location:

- a maximum TDG saturation level of one hundred twenty-five percent calculated as an average of the two twelve highest hourly TDG measures in a calendar day, and;
- at the tailrace fixed site monitoring locations, a maximum TDG saturation level of one hundred twenty-six percent calculated as an average of any two consecutive hourly TDG measures.

These TDG criteria may be applied in place of (f)(ii)(A) of this subsection during spring spill operations when applied in accordance with the following conditions:

Change to WAC 173-201A-200(1)(f)(ii)(B)(I)

We made edits to the proposed rule language in response to public comments.

Proposed rule language

(I) In addition to complying with the requirements of this chapter, the tailrace maximum TDG criteria applied at dams operated by the U.S. Army Corps of Engineers must be in accordance with legally valid Endangered Species Act consultation documents on Columbia River system operations, including operations for fish passage.

Final Rule Language

(I) In addition to complying with the requirements of this chapter, the tailrace maximum TDG criteria applied at hydropower dams operated by the U.S. Army Corps of Engineers shall be applied in accordance with legally valid Endangered Species Act consultation documents associated with spill operations on the Snake and Columbia Rivers system operations, including operations for fish passage. The Endangered Species Act consultation documents are those by which dams may legally operate during the time that the adjusted criteria in (f)(ii)(B) of this subsection are in use.

Change to WAC 173-201A-200(1)(f)(ii)(B)(II)

We made edits to the proposed rule language in response to public comments.

Proposed rule language

(II) Application of the tailrace maximum TDG criteria must be accompanied by a department approved biological monitoring plan designed to measure impacts of fish exposed to increased TDG conditions. Beginning in the year 2021, plans must include monitoring for nonsalmonid fish species and must continue for a minimum of five years, and thereafter as determined by the department.
Final Rule Language
(II) Application of the tailrace maximum TDG criteria must be accompanied by a department approved biological monitoring plan designed to measure impacts of fish exposed to increased TDG conditions throughout the spring spill season. Beginning in the year 2021, plans must include monitoring for nonsalmonid fish species and must continue for a minimum of five years, and thereafter as determined by the department.

Change to WAC 173-201A-200(1)(f)(ii)(B)(III)
We made edits to the proposed rule language in response to public comments.

Proposed rule language
(III) TDG must be reduced to allowances specified in (f)(ii)(A) of this subsection if the calculated incidence of gas bubble trauma in salmonids (with a minimum sample size of fifty fish required weekly) or nonsalmonids (with a minimum sample size of fifty fish required weekly) exceeds:
• Gas bubble trauma in nonpaired fins of fifteen percent; or
• Gas bubble trauma in nonpaired fins of five percent and gas bubbles occlude more than twenty-five percent of the surface area of the fin.

If gas bubble trauma exceeds these biological thresholds, additional monitoring must demonstrate the incidence of gas bubble trauma below biological thresholds before TDG can be adjusted to allowances specified in this subsection.

Final Rule Language
(III) TDG must be reduced to allowances specified in (f)(ii)(A) of this subsection if the calculated incidence of gas bubble trauma in salmonids (with a minimum sample size of fifty fish required weekly) or nonsalmonids (with a minimum sample size of fifty fish required weekly) exceeds:
• Gas bubble trauma in nonpaired fins of fifteen percent; or
• Gas bubble trauma in nonpaired fins of five percent and gas bubbles occlude more than twenty-five percent of the surface area of the fin.

If gas bubble trauma exceeds these biological thresholds, additional monitoring must demonstrate the incidence of gas bubble trauma below biological thresholds before TDG can be adjusted to allowances specified in this subsection. Gas bubble trauma monitoring data shall be excluded from comparison to biological thresholds when higher than normal river flow contributes to excess spill above the ability to meet subsection (f)(ii)(B). This monitoring data exclusion shall apply for one full calendar day after reduced river flow allows attainment of subsection (f)(ii)(B).

Change to WAC 173-201A-210(1)(c)(ii)
We edited to retain the intent of the section as it applies to individual point source activities, in response to public comment.

Proposed rule language
(ii) When the natural condition of the water is cooler than the criteria in Table 210 (1)(c), ((the allowable rate of warming up to, but not exceeding, the numeric criteria from human actions is restricted as follows:
(A)) incremental temperature increases resulting from individual point source activities must not, at any time, exceed 28/(T+7) as measured at the edge of a mixing zone boundary (where “T” represents the background temperature as measured at a point or points unaffected by the discharge and representative of the highest ambient water temperature in the vicinity of the discharge)(and

Final rule Language
(ii) When the natural condition of the water is cooler than the criteria in Table 210 (1)(c), ((the allowable rate of warming up to, but not exceeding, the numeric criteria from human actions is restricted as follows:
(A)) incremental temperature increases resulting from individual point source activities must not exceed the numeric criteria and must not, at any time, exceed 28/(T+7) as measured at the edge of a mixing zone boundary (where “T” represents the background temperature as measured at a point or points unaffected by the discharge and representative of the highest ambient water temperature in the vicinity of the discharge)(and

If a preliminary cost-benefit analysis was prepared under RCW 34.05.328, a final cost-benefit analysis is available by contacting:
Name: Susan Braley
Address: Department of Ecology
         Water Quality Program
         P.O. Box 47600
         Olympia, WA 98504-7600
Phone: 360-407-6414
Fax: N/A
TTY: People with speech disability may call TTY at 877-833-6341. People with impaired hearing may call Washington Relay Service at 711
Email: swqs@ecy.wa.gov
Note: If any category is left blank, it will be calculated as zero.
No descriptive text.

Count by whole WAC sections only, from the WAC number through the history note.
A section may be counted in more than one category.

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Date Adopted: 12/30/2019

Name: Maia D. Bellon

Title: Director

Signature: [Signature]