December 5, 2023

Proposed Rule Adoption, Amendment, and Repeal

This document contains the rules proposed to be adopted, amended, and repealed by the Department of Environmental Quality to implement Senate Bill 358 and § 75-5-321, MCA, related to narrative nutrient standards and the Adaptive Management Program. This document is being shared with Water Pollution Control Advisory Council (WPCAC) members prior to first publication to provide an opportunity for council members to comment on the proposed action (75-5-307(1), MCA).

The rules as proposed to be adopted provide as follows:

NEW RULE I TRANSLATION OF NARRATIVE NUTRIENT STANDARDS (1) Narrative nutrient standards are found at ARM 17.30.637(1)(e). The department translates the narrative standards at ARM 17.30.637(1)(e) as provided in Part I of Department Circular DEQ-15 (December 2023 edition).

(2) The department adopts and incorporates by reference Department Circular DEQ-15, entitled "Translation of Narrative Nutrient Standards and Implementation of the Adaptive Management Program" (December 2023 edition), which provides procedures and requirements for the translation of narrative nutrient standards and implementation of the Adaptive Management Program. Copies of Department Circular DEQ-15 may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.

NEW RULE II IMPLEMENTATION OF THE ADAPTIVE MANAGEMENT PROGRAM (1) Owners or operators of point sources may choose to enter the Adaptive Management Program to achieve nutrient standards and to address nutrients in a specific watershed. To enter the Adaptive Management Program, the permittee must provide an Adaptive Management Plan (AMP) to the department for review and approval.

(2) MPDES permits may include limitations and conditions consistent with the assumptions and elements of department-approved AMPs. Related MPDES permit limitations and conditions must be derived to achieve narrative nutrient standards as provided in NEW RULE I.

(3) Adaptive Management for Wadeable Streams and Medium Rivers.

(a) The AMP must contain, at a minimum, the following:

(i) monthly effluent monitoring for total phosphorus (TP) and total nitrogen (TN) concentrations;

(ii) a monitoring plan for assessing near field response variables and causal variables downstream and upstream of the facility, consistent with Circular DEQ-15 (December 2023 Edition);

(iii) a plan for examining all possible pollutant minimization activities which may reduce nutrient concentrations in the effluent including, but not limited to:

(A) documentation, to be included in the Operations and Maintenance Manual, of process control strategies identified and implemented through optimization;

(B) ongoing training of operations staff in advanced operational strategies;

(C) minor changes to infrastructure to complement and further advance operational strategies; and

(D) implementation of pollutant trading and the reuse of effluent, if feasible;

(iv) documentation of any nutrient reduction activities for the broader watershed, if any are planned; and

(v) A plan for reporting progress to the department on an annual basis. The annual progress report must be submitted to the department by March 31st of each year and shall include, at a minimum:

(A) A description of any deviations from the AMP, and planned corrective actions;

(B) A summary of near field monitoring data;

(C) A description of any facility upgrades and/or reductions achieved in nutrient effluent concentrations resulting from pollutant minimization activities; and

(D) A description of any actions to further reduce effluent nutrient concentrations that will be implemented in the current year.

(b) After an AMP has been received and approved, the department shall determine if prioritization of phosphorus reduction is appropriate for both the point source and the receiving water body. To determine if it is appropriate to prioritize phosphorus reductions from a point source and in a receiving water body, the department may consider:

(i) existing controls on point and nonpoint sources of pollution;

(ii) the presence and variability of the pollutant(s) in the effluent;

(iii) dilution of the effluent in the receiving water, if appropriate;

(iv) monitoring and assessment information for the receiving waterbody collected by the department or the permittee;

(v) whether phosphorus or nitrogen limits plant and algal growth in the waterbody;

(vi) the ratio of nitrogen to phosphorus in the effluent and instream; and

(vii) any other credible, pertinent data available, including data provided in the AMP.

(c) If the department determines prioritization of phosphorus reduction is appropriate under (3)(b), then the department shall develop and implement TP effluent limits by translating the narrative nutrient standards for the ecological region in which the facility is located. The department shall derive a TP effluent limit that protects the most sensitive beneficial use in the waterbody. TP effluent limits apply during a growing season as provided in Circular DEQ-15 (December 2023 edition), unless a lake or reservoir is affected by the point source, or another downstream use requires protection in which case the limits may apply year-round.

(i) TP reductions may come from facility upgrades, watershed nutrient reduction projects, or both, so long as the AMP documents the activities, and their effectiveness is addressed in the annual progress report.

(d) The department may find, based on TP reductions required under (3)(c), associated water quality and response variable monitoring, or other credible department data, that beneficial uses of the receiving waterbody are protected.

(e) If the department concludes under (3)(b) and (c) that the prioritization or limitation of phosphorus alone is not appropriate and that a discharge causes, has

reasonable potential to cause, or contributes to an in-stream excursion above the narrative nutrient standards in NEW RULE I, then the department shall:

(i) Develop effluent limits for TN and/or TP by translating the narrative nutrient standards for the ecological region in which the facility is located. The department shall derive a TN and/or TP effluent limit that protects the most sensitive beneficial use in the waterbody. The MPDES permit must be consistent with the assumptions and elements of the department approved AMP under 3(a).

(ii) Require a permittee or multiple permittees to develop and include in their AMP a watershed plan describing how nutrients will be reduced in the watershed. To achieve the effluent limits developed under (e)(i), the watershed plan must:

(A) identify and quantify all major sources of nutrient contributions in the watershed in which the facility is located;

(B) identify all partners that will assist in implementing the nutrient reductions including each partner's level of support;

(C) document action items for the reduction of nutrients in the watershed and specific goals for reductions including expected timelines to achieve the reductions and anticipated load reduction based on sound scientific and engineering practices;

(D) demonstrate the ability to fund the watershed plan either individually, or in conjunction with other permittees and nonpoint sources, or other partners, including municipal and county governments, in the watershed;

(E) if partners are used to implement nutrient reduction actions in lieu of permittees, the watershed plan must include enforceable written agreements reflecting commitments by partners to implement nutrient reduction actions and must identify the period of commitment;

(F) include continued or expanded monitoring of response variables and water quality as performance indicators to determine if the plan is effective in achieving compliance with narrative nutrient standards;

(G) identify the timeframes for completing and submitting each component of the watershed plan under (3)(e)(ii)(A) through (F);

(H) be submitted to the department annually by March 31st, along with the progress report in (3)(a)(v), documenting progress and effectiveness of the watershed plan;

(I) be approved by the department; and

(J) in addition to this rule, be subject to requirements contained in Department Circular DEQ-15 (December 2023 edition).

(f) Compliance with the narrative nutrient standards shall be determined at a point or points downstream of the facility established consistent with the requirements in Department Circular DEQ-15 (December 2023 edition).

(4) Adaptive Management for Large Rivers. The AMP must meet the requirements in (3)(a) above and, as appropriate, additional requirements in (4)(a) below.

(a) The department or permittee(s) may develop a mechanistic water quality model for a large river. A calibrated and validated model may be used to derive phosphorus limits for use in MPDES permits that protect beneficial uses along the modeled reach, achieve narrative nutrient standards, and achieve other applicable water quality standards related to nutrients (dissolved oxygen and pH). Permittee-

developed mechanistic models must be documented in the AMP. Based on modeling, each MPDES permit limit will be allocated considering each facility's relative load, its current treatment for nutrients, estimated cost for projected facility upgrades, the limits of technology, and other considerations as appropriate.

(b) For large rivers where a model has not been developed, the department shall derive MPDES permit limits for phosphorus and/or nitrogen, where necessary, based on best available information regarding the protection of beneficial uses, achieving narrative nutrient standards, and achieving other applicable water quality standards related to nutrients (dissolved oxygen and pH).

(c) TP effluent limits apply during a growing season as provided in Circular DEQ-15 (December 2023 edition), unless a lake or reservoir is affected by the point source(s), or another downstream use requires protection in which case the limits may apply year-round.

(d) The nutrient reductions required under (4)(a) and (4(b) will be evaluated using data collected in each river by the department and/or permittee(s) to confirm that beneficial uses are protected, applicable water quality standards are achieved, and to determine if further reductions for phosphorus and/or nitrogen are needed. Sampling methods must be documented in the AMP consistent with requirements in Circular DEQ-15 (December 2023 edition).

(e) A permittee or multiple permittees shall develop a watershed plan for the reduction of nutrients in the watershed if, based on data and information in (4)(a) and/or updated modeling, the department concludes that phosphorus control alone is insufficient to protect beneficial uses and water quality standards. The watershed plan must:

(i) identify and quantify all sources of nutrient contributions in the watershed in which the facility or facilities are located;

(ii) identify all partners that will assist in implementing the nutrient reductions including each partner's level of support;

(iii) document action items for the reduction of nutrients in the watershed and specific goals for reductions including expected timelines to achieve the reductions and an anticipated load reduction based on sound scientific and engineering practices;

(iv) demonstrate the ability to fund the watershed plan either individually, or in conjunction with other permittees and nonpoint sources, or other partners, including municipal and county governments, in the watershed;

(v) if partners are used to implement nutrient reduction actions in lieu of permittees, the watershed plan must include enforceable written agreements reflecting commitments by partners to implement nutrient reduction actions and must identify the period of commitment;

(vi) include continued or expanded monitoring of the response variables as performance indicators to determine whether the plan is effective in achieving compliance with the narrative nutrient standards;

(vii) identify the timeframes for completing and submitting each component of the watershed plan under (4)(e)(i) through (vi);

(viii) be submitted to the department annually by March 31st, along with an annual progress report documenting progress and effectiveness of the watershed plan;

(ix) be approved by the department; and

(x) in addition to this rule, be subject to requirements contained in Department Circular DEQ-15 (December 2023 edition).

(f) Compliance with the narrative nutrient standards, and other applicable water quality standards per (4)(a) and (b), shall be determined at a point or points downstream of the facility or facilities established consistent with the requirements in Department Circular DEQ-15 (December 2023 edition).

(5) A permittee under the adaptive management program is not precluded from pursuing, at any time, other regulatory compliance options including, but not limited to variances, compliance schedules, reuse, trading, recharge, or land application.

(6) The department adopts and incorporates by reference Department Circular DEQ-15, entitled "Translation of Narrative Nutrient Standards and Implementation of the Adaptive Management Program" (December 2023 edition), which provides procedures and requirements for the translation of narrative nutrient standards and the implementation of the adaptive management program. Copies of Department Circular DEQ-15 may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.

The proposed adoption of new Circular DEQ-15 (draft document provided alongside this summary to WPCAC members):

CIRCULAR DEQ-15: TRANSLATION OF NARRATIVE NUTRIENT STANDARDS AND IMPLEMENTATION OF THE ADAPTIVE MANAGEMENT PROGRAM

The rules as proposed to be amended provide as follows, new matter underlined, deleted matter interlined:

17.30.201 PERMIT APPLICATION, DEGRADATION AUTHORIZATION, AND ANNUAL PERMIT FEES

(1) The purpose of this rule is to provide fee schedules for use in determining fees to be paid to the department under 75-5-516, MCA. The types of fees provided under this rule are:

(a) application fees for individual permits (Schedule I.A);

(b) application fees for non-storm water general permits (Schedule ~~1~~I.B);

(c) application fees for storm water general permits (Schedule ~~1~~I.C);

(d) application fees for other activities (Schedule ~~1~~I.D);

(e) degradation authorization fees (Schedule II);

(f) annual fees for individual permits (Schedule III.A);

(g) annual fees for non-storm water permits (Schedule III.B); ~~and~~

(h) annual fees for storm water general permits (Schedule III.C)~~.~~; and

(i) annual fees for adaptive management program participation (Schedule III.D).

(2) through (5) remain the same.

(6) The fee schedules for new or renewal applications for, or modifications of, a Montana pollutant discharge elimination system permit under ARM Title 17, chapter 30, subchapter 11 or 13, a Montana ground water pollution control system permit under

ARM Title 17, chapter 30, subchapter 10, or any other authorization under 75-5-201, 75-5-301, or 75-5-401, MCA, or rules promulgated under these authorities, are set forth below as Schedules I.A, I.B, I.C, and I.D. Fees must be paid in full at the time of submission of the application. For new applications under Schedule I.A, the annual fee from Schedule III.A for the first year must also be paid at the time of application. For new applications under Schedule I.B and I.C, the annual fee is included in the new permit amount and covers the annual fee for the calendar year in which the permit coverage becomes effective.

(a) through (h) remain the same.

Schedules I.A and I.B remain the same.

(i) through (n) remain the same.

Schedule I.C remains the same.

(o) remains the same.

(p) The authorization fee for individual MPDES permittees who elect to participate in the adaptive management program for implementing nutrient standards in Schedule I.D is assessed upon submission of an adaptive management plan under [NEW RULE II] for each 5-year permit cycle the permittee is eligible for participation in the adaptive management program.

Schedule I.D Application Fee for Other Activities

Category	Amount
Short-term water quality standard, turbidity "318 authorization"	$ 250
Short-term water quality standard, remedial activities and pesticide application "308 authorization"	250
Federal Clean Water Act section 401 certification	See ARM 17.30.201(6)(o)
Review plans and specifications to determine if permit is necessary, pursuant to 75-5-402(2), MCA	2,000
Authorization for adaptive management program participation pursuant to [NEW RULE II]	5,000
Major modification	Renewal fee from Schedule I.A
Minor modification, includes transfer of ownership	500
Resubmitted application fee	500
Administrative processing fee	500

(7) remains the same.

Schedule II remains the same.

(8) (a) remains the same.

Schedule III.A III.B remain the same.

8 (b) through (d) remain the same.

Schedule III.C remains the same.

8 (e) through (11) remain the same.

(12) The annual fee for individual MPDES permittees who elect to participate in the adaptive management program for implementing nutrient standards in Schedule III.D is assessed upon submission of an adaptive management plan annual report [NEW RULE II] for each year the permittee is eligible for participation in the adaptive management program excepting the year in which the application fee is assessed.

Schedule III.D Annual Fee for Adaptive Management Program Participation

Category	Minimum Fee	Fee Per Million Gallons of Effluent per Day (MGD)
Annual fee for adaptive management program participation pursuant to [NEW RULE II]	$3,000	$3,000

17.30.507 SPECIFIC RESTRICTIONS FOR SURFACE WATER MIXING ZONES (1) Mixing zones for surface waters are subject to the following water quality standards:

(a) narrative water quality standards, standards for harmful substances, numeric acute and chronic standards for aquatic life,~~;standards in Department Circular DEQ-12A;~~ and standards based on human health must not be exceeded beyond the boundaries of the surface water mixing zone;

(b) through (3) remain the same.

17.30.516 STANDARD MIXING ZONES FOR SURFACE WATER

(1) and (2) remain the same.

(3) Facilities that meet the terms and conditions in (a) through (e) qualify for a standard mixing zone as follows:

(a) Facilities that discharge a mean annual flow of less than one million gallons per day (MGD) to a stream segment with a dilution ratio greater than or equal to 100:1. For purposes of this procedure, the stream dilution ratio is defined as the seven-day, ten-year (7Q10) low flow of the stream segment without the discharge, divided by the mean annual flow of the discharge. For nutrients, total nitrogen, and total phosphorus the stream low flow used in calculating the dilution ratio is based on the seasonal 14-day, five-year (14Q5) low flow, which is the lowest average 14 consecutive day low flow, occurring from July through October, with an average recurrence frequency of once in five years. In this case discharge limitations will be based on dilution with the applicable low flow value, the 7Q10, or the seasonal 14Q5.

(b) Facilities that discharge a mean annual flow less than one MGD to a stream segment with a dilution less than 100:1. In cases where dilution is less than 100:1, discharge limitations will be based on dilution with 25 percent of the 7Q10 (or 25 percent of the seasonal 14Q5 for nutrients, total nitrogen, and total phosphorus).

(c) remains the same.

(d) Facilities whose discharge results in a nearly instantaneous mixing zone. Discharge limitations shall be based on dilution with the 7Q10~~seven-day, ten-year~~ low

flow (or the seasonal 14Q5 for nutrients, total nitrogen and total phosphorus) of the receiving water except as limited by consideration of the factors listed in ARM 17.30.506. For surface waters, nearly instantaneous mixing will be assumed when there is an effluent diffuser which extends across the entire stream width (at low flow), or when the mean daily flow of the discharge exceeds the 7Q10~~seven-day, ten-year~~ (or the seasonal 14Q5 for nutrients, total nitrogen and total phosphorus) low flow of the receiving water. A discharge may also be considered nearly instantaneous if the discharger so demonstrates in accordance with a study plan approved by the department. For the purposes of this demonstration nearly instantaneous mixing will be assumed when there will be not more than a ten percent difference in bank-to-bank concentrations at a downstream distance less than two stream/river widths.

~~(e) Facilities that discharge the parameters found in Department Circular DEQ-12A to surface water. Discharge limitations must be based on dilution with the entire seasonal 14-day, five-year (seasonal 14Q5) low flow of the receiving water without the discharge.~~

(4) The length of a standard mixing zone for flowing surface water, other than a nearly instantaneous mixing zone, must not extend downstream more than the one-half mixing width distance or extend downstream more than ten times the stream width, whichever is more restrictive. For purposes of making this determination, the stream width as well as the discharge limitations are considered at the 7Q10 or seasonal 14Q5 low flow. The seasonal 14Q5 low flow ~~may~~shall only be used ~~only~~ for nutrients (as defined in ARM 17.30.702), total nitrogen, and total phosphorus. ~~The seasonal 14Q5 low flow may be used only in conjunction with base numeric nutrient standards in Department Circular DEQ-12A.~~ The recommended calculation to be used to determine the one-half mixing width distance downstream from a stream bank discharge is described below.

(a) A1/2 = [0.4(W/2)2V]/L, where:

(i) A1/2 = one-half mixing width distance;

(ii) W = width in feet at the 7Q10 or seasonal 14Q5;

(iii) V = velocity of the stream at the 7Q10 or seasonal 14Q5 downstream of the discharge (in ft/second);

(iv) L = lateral dispersion coefficient for the 7Q10 or seasonal 14Q5 downstream of the discharge (in ft2/second), where:

(b) L = CDU, where:

(i) C = channel irregularity factor immediately downstream of the discharge, where:

(A) C = 0.1 for straight, rectangular streams;

(B) C = ~~O~~0.3 for channelized streams;

(C) C = 0.6 for natural channels with moderate meandering;

(D) C = 1.0 for streams with significant meandering; and

(E) C = 1.3 for streams with sharp 90º or more bends;

(ii) D = average water depth at the 7Q10 or seasonal 14Q5 downstream of the discharge (in feet);

(iii) U = shear velocity (in ft/sec), where:

(c) U = (32.2DS)1/2, where:

(i) 32.2 is the acceleration due to gravity (32.2 ft/sec2);

(ii) D = average water depth at the 7Q10 or seasonal 14Q5 downstream of the discharge (in feet); and

(iii) S = slope of the channel downstream of the discharge (feet/feet).

(5) through (6) remain the same.

17.30.602 DEFINITIONS

In this subchapter the following terms have the meanings indicated below and are supplemental to the definitions given in 75-5-103, MCA:

(1) through (40) remain the same.

~~(41) "DEQ-12A" means the department circular that is adopted and incorporated by reference in ARM 17.30.619 and is entitled "Montana Base Numeric Nutrient Standards." This circular contains numeric water quality standards for total nitrogen and total phosphorus in surface waters.~~

~~(42) "DEQ-12B" means the department circular that is adopted and that is entitled "Montana Base Numeric Nutrient Standards Variances." This circular describes procedures for receiving a variance from the standards and will document recipients of individual variances.~~

17.30.619 INCORPORATIONS BY REFERENCE

(1) The board adopts and incorporates by reference the following state and federal requirements and procedures as part of Montana's surface water quality standards:

(a) through (c) remain the same.

(d) 40 CFR 131.10(g), (h) and (j) (2000), which establishes criteria and guidelines for conducting a use attainability analysis; and

~~(e) Department Circular DEQ-12A, entitled "Montana Base Numeric Nutrient Standards" (July 2014 edition), which establishes numeric water quality standards for total nitrogen and total phosphorus in surface waters; and~~

(f) remains the same but is renumbered (e).

~~(2) If a court of competent jurisdiction declares 75-5-313, MCA, or any portion of that statute invalid, or if the United States Environmental Protection Agency disapproves 75-5-313, MCA, or any portion of that statute, under 30 CFR 131.21, or if rules adopted pursuant to 75-5-313(6) or (7), MCA, expire and general variances are not available, then (1)(e) and all references to DEQ-12A, base numeric nutrient standards and nutrient standards variances in ARM 17.30.201, 17.30.507, 17.30.516, 17.30.602, 17.30.622 through 17.30.629, 17.30.635, 17.30.702, and 17.30.715 are void, and the narrative water quality standards contained in ARM 17.30.637 are the standards for total nitrogen and total phosphorus in surface water, except for the Clark Fork River, for which the standards are the numeric standards in ARM 17.30.631.~~

(3) remains the same but is renumbered (2).

17.30.622 A-1 CLASSIFICATION STANDARDS

(1) and (2) remain the same.

(3) No person may violate the following specific water quality standards for waters classified A-1:

(a) through (g) remain the same.

(h) Concentrations of carcinogenic, bioconcentrating, toxic, radioactive, nutrient, or harmful parameters may not exceed the applicable standards set forth in Department Circular DEQ-7 ~~and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~.

(i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards contained in Department Circular DEQ-7 ~~and,unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~ when stream flows equal or exceed the design flows specified in ARM 17.30.635(2).

(j) and (k) remain the same.

17.30.623 B-1 CLASSIFICATION STANDARDS

(1) remains the same.

(2) No person may violate the following specific water quality standards for waters classified B-1:

(a) through (g) remain the same.

(h) Concentrations of carcinogenic, bioconcentrating, toxic, radioactive, nutrient, or harmful parameters may not exceed the applicable standards set forth in Department Circular DEQ-7 ~~and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~.

(i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in Department Circular DEQ-7 ~~and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~ when stream flows equal or exceed the design flows specified in ARM 17.30.635(2).

(j) and (k) remain the same.

17.30.624 B-2 CLASSIFICATION STANDARDS

(1) remains the same.

(2) No person may violate the following specific water quality standards for waters classified B-2:

(a) through (g) remain the same.

(h) Concentrations of carcinogenic, bioconcentrating, toxic, radioactive, nutrient, or harmful parameters may not exceed the applicable standards set forth in Department Circular DEQ-7 ~~and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~.

(i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in Department Circular DEQ-7 ~~and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~ when stream flows equal or exceed the design flows specified in ARM 17.30.635(2).

(j) and (k) remain the same.

17.30.625 B-3 CLASSIFICATION STANDARDS

(1) remains the same.

(2) No person may violate the following specific water quality standards for waters classified B-3:

(a) through (g) remain the same.

(h) Concentrations of carcinogenic, bioconcentrating, toxic, radioactive, nutrient, or harmful parameters may not exceed the applicable standards set forth in Department Circular DEQ-7 ~~and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~.

(i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in Department Circular DEQ-7 ~~and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~ when stream flows equal or exceed the design flows specified in ARM 17.30.635(2).

(j) and (k) remain the same.

17.30.626 C-1 CLASSIFICATION STANDARDS

(1) remains the same.

(2) No person may violate the following specific water quality standards for waters classified C-1:

(a) through (g) remain the same.

(h) Concentrations of carcinogenic, bioconcentrating, toxic, radioactive, nutrient, or harmful parameters may not exceed the applicable standards specified in Department Circular DEQ-7 ~~and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~.

(i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in Department Circular DEQ-7 ~~and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~ when stream flows equal or exceed the design flows specified in ARM 17.30.635(2).

(j) and (k) remain the same.

17.30.627 C-2 CLASSIFICATION STANDARDS

(1) remains the same.

(2) No person may violate the following specific water quality standards for waters classified C-2:

(a) through (g) remain the same.

(h) Concentrations of carcinogenic, bioconcentrating, toxic, radioactive, nutrient, or harmful parameters may not exceed the applicable standards specified in Department Circular DEQ-7 ~~and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~.

(i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in Department Circular DEQ-7~~ and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~ when stream flows equal or exceed the design flows specified in ARM 17.30.635(2).

(j) and (k) remain the same.

17.30.628 I CLASSIFICATION STANDARDS

(1) remains the same.

(2) No person may violate the following specific water quality standards for waters classified I:

(a) through (i) remain the same.

(j) Beneficial uses are considered supported when the concentrations of toxic, carcinogenic, nutrient or harmful parameters in these waters do not exceed the applicable standards specified in Department Circular DEQ-7~~ and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~ when stream flows equal or exceed the flows specified in ARM 17.30.635(2) or, alternatively, for aquatic life when site-specific criteria are adopted using the procedures given in 75-5-310, MCA. The limits shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in Department Circular DEQ-7.

(k) Limits for toxic, carcinogenic, or harmful parameters in new discharge permits issued pursuant to the MPDES rules (ARM Title 17, chapter 30, subchapter 13) are the larger of the applicable standards specified in Department Circular DEQ-7~~ and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~, site-specific standards, or one-half of the mean in-stream concentrations immediately upstream of the discharge point.

17.30.629 C-3 CLASSIFICATION STANDARDS

(1) remains the same.

(2) No person may violate the following specific water quality standards for waters classified C-3:

(a) through (g) remain the same.

(h) Concentrations of carcinogenic, bioconcentrating, toxic, radioactive, nutrient, or harmful parameters may not exceed the applicable standards set forth in Department Circular DEQ-7~~ and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~.

(i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in Department Circular DEQ-7~~ and, unless a nutrient standards variance has been granted, Department Circular DEQ-12A~~ when stream flows equal or exceed the design flows specified in ARM 17.30.635(2).

17.30.635 GENERAL TREATMENT STANDARDS

(1) through (1)(e) remain the same.

(2) For design of disposal systems, stream flow dilution requirements must be based on the minimum consecutive seven-day average flow which may be expected to occur on the average of once in ten years(7Q10). When dilution flows are less than the above design flow at a point discharge, the discharge is to be governed by the permit conditions developed for the discharge through the waste discharge permit program. If the flow records on an affected surface water are insufficient to calculate a 7Q10 low flow ~~ten-year seven-day low flow~~, the department shall determine an acceptable stream flow for disposal system design. For nutrients, total nitrogen and total phosphorus, the stream flow dilution requirements must be based on the seasonal 14Q5, which is the lowest average 14 consecutive day low flow, occurring from July through October, with an average recurrence frequency of once in five years.

(3) remains the same.

17.30.702 DEFINITIONS

The following definitions, in addition to those in 75-5-103, MCA, apply throughout this subchapter (Note: 75-5-103, MCA, includes definitions for ~~"base numeric nutrient standards,"~~ "degradation," "existing uses," "high quality waters," "mixing zone," and "parameter"):

(1) through (18) remain the same.

(19) “Nutrients” means inorganic phosphorus and total inorganic nitrogen.

(19) and (20) remain the same but are renumbered (20) and (21).

(~~21~~22) "Required Reporting values (RRV)" means the detection level that must be achieved in reporting surface water or ground water monitoring or compliance data to the department unless otherwise specified in a permit, approval, or authorization issued by the department. The RRV is the board’s best determination of a level of analysis that can be achieved by the majority of commercial, university, or governmental laboratories using EPA approved methods or methods approved by the department. The RRV is listed in Department Circular DEQ-7., ~~Department Circular DEQ-12A, and in the definition of "total inorganic phosphorus."~~

(22) through (26) remain the same but are renumbered (23) through (27).

(~~27~~28) The board adopts and incorporates by reference:

(a) remains the same.

~~(b) Department Circular DEQ-12A, entitled "Montana Base Numeric Nutrient Standards" (December 2013 edition), which establishes numeric water quality standards for total nitrogen and total phosphorus in surface waters;~~

(c) through (e) remain the same but are renumbered (b) through (d).

17.30.715 CRITERIA FOR DETERMINING NONSIGNIFICANT CHANGES IN WATER QUALITY

(1) The following criteria will be used to determine whether certain activities or classes of activities will result in nonsignificant changes in existing water quality due to their low potential to affect human health or the environment. These criteria consider the quantity and strength of the pollutant, the length of time the changes will occur, and the

character of the pollutant. Except as provided in (2), changes in existing surface or ground water quality resulting from the activities that meet all the criteria listed below are nonsignificant, and are not required to undergo review under 75-5-303, MCA:

(a) and (b) remain the same.

(c) discharges containing toxic parameters, except as specified in (1)(d), which will not cause changes that equal or exceed the trigger values in Department Circular DEQ-7. Whenever the change exceeds the trigger value, the change is not significant if the resulting concentration outside of a mixing zone designated by the department does not exceed 15 percent of the lowest applicable standard;

(d) changes in the concentration of nitrate in ground water which will not cause degradation of surface water if the sum of the predicted concentrations of nitrate at the boundary of any applicable mixing zone will not exceed the following values:

(i) 7.5 mg/L for nitrate sources other than domestic sewage;

(ii) 5.0 mg/L for domestic sewage effluent discharged from a conventional septic system;

(iii) 7.5 mg/L for domestic sewage effluent discharged from a septic system using level two treatment, as defined in ARM 17.30.702; or

(iv) 7.5 mg/L for domestic sewage effluent discharged from a conventional septic system in areas where the ground water nitrate level exceeds 5.0 mg/L primarily from sources other than human waste.

For purposes of this subsection (d), the word "nitrate" means nitrate as nitrogen; ~~and~~

(e) changes in concentration of ~~total~~ inorganic phosphorus in ground water if water quality protection practices approved by the department have been fully implemented and if an evaluation of the phosphorus adsorptive capacity of the soils in the area of the activity indicates that phosphorus will be removed for a period of 50 years prior to a discharge to any surface waters;

(f) changes in the quality of water for any harmful parameter, and ~~nutrients~~total nitrogen and total phosphorus for reaches of the Clark Fork River listed at ARM 17.30.631~~, and parameters listed in Department Circular DEQ-12A,~~ except as specified in (1)(g), for which water quality standards have been adopted other than carcinogenic, bioconcentrating, or toxic parameters, in either surface or ground water, if the changes outside of a mixing zone designated by the department are less than ten percent of the applicable standard and the existing water quality level is less than 40 percent of the standard;

(g) for nutrients in domestic sewage effluent discharged from a septic system that does not require an MPDES or MGWPCS permit, except as specified in (1)(d) and (e), which will not cause changes that equal or exceed the trigger values in Department Circular DEQ-7. Whenever the change exceeds the trigger value, the change is not significant if the changes outside of a mixing zone designated by the department are less than ten percent of the applicable standard and the existing water quality level is less than 40 percent of the standard;

(h) remains the same.

(2) and (3) remain the same.

~~(4) If a court of competent jurisdiction declares 75-5-313, MCA, or any portion of that statute invalid, or if the United States Environmental Protection Agency disapproves~~

~~75-5-313, MCA, or any portion of that statute under 30 CFR 131.21, or if rules adopted pursuant to 75-5-313(6) or (7), MCA, expire and general variances are not available, then the significance criteria contained in (1)(g) are the significance criteria for total nitrogen and total phosphorus in surface water.~~

17.30.1304 DEFINITIONS

In this subchapter, the following terms have the meanings or interpretations indicated below and shall be used in conjunction with and are supplemental to those definitions contained in 75-5-103, MCA.

(1) "Act" means the Montana Water Quality Act, Title 75, chapter 5, MCA.

(2) "Adaptive management plan" means a watershed-specific plan developed under the adaptive management program to achieve the narrative nutrient standards and address nutrients in a specific watershed. ~~An adaptive management plan includes a watershed monitoring plan and, if required, an implementation plan.~~

(3) "Adaptive management program" means a watershed-scale program that protects water quality from the impacts of nutrient sources by:

(a) prioritizing phosphorus reduction, as appropriate, while accounting for site specific conditions;

(b) allowing for nutrient sources to be addressed incrementally over time by incorporating flexible decision-making which can be adjusted as management actions and other factors become better understood;

(c) reasonably balancing all factors impacting a waterbody while considering the relative cost of treatment options, their feasibility, and their expected water quality improvement;

(d) identifying specific nutrient reduction requirements; and

(e) setting as its goal the protection and achievement of beneficial uses of the waterbody.

(4) through (83) remain the same.

The department proposes to repeal the following rules:

17.30.1388 DEVELOPMENT OF AN ADAPTIVE MANAGEMENT PROGRAM IMPLEMENTING NARRATIVE NUTRIENT STANDARDS

17.30.660 NUTRIENT STANDARDS VARIANCES