

WATER POLLUTION CONTROL ADVISORY COUNCIL
1:30 P.M. December 13, 2023
Room 111, DEQ Metcalf Building & Zoom Webinar
FINAL MEETING MINUTES

ATTENDEES

Guy Alsentzer
Lisa Anderson
Nick Banish
Chad Bauer
Kirsten Bowers
David Brooks
Greg Bryce
Scott Buecker
Rachel Clark
Troy Clift
Ed Coleman
Tatiana Davila
Maira Davin
Abbie Ebert
Erik Englebert
Kristin Gardner
Torie Haraldson
Kelly Hendrix
Emilie Henry
Heather Henry
Shannon Holmes
John Iverson
Michelle Jenicek
Dorf Johnson
Thomas Kallenbach
Myla Kelly
Kristi Kline
Amanda Knuteson
Mike Koopal
Darrin Kron
Lindsey Krywaruchka
Tina Laidlaw
Casey Lewis

Joe Lierow
Jennifer Luparell
Tiffany Lyden
Kelly Lynch
Katie Makarowski
Erik Makus
Vicki Marquis
Christy Meredith
Kyle Milke
Jason Mohr
Kurt Moser
Alan Olsen
Aaron Pettis
Ron Pifer
Teri Polumsky
Adam Pummill
Eric Regensburger
Hannah Riedl
Christopher Romankiewicz
Shawn Rowland
Drew Shafer
Alanna Shaw
Eric Sivers
Christina Staten
Mike Suplee
Lauren Sweeney
Dennis Teske
Elise Thiel
Peggy Trenk
Andy Ulven
Matt Vincent
Amelia
Kevin
KC Harvey Environmental

CALL TO ORDER

Amanda Knuteson called the meeting to order and roll call.

APPROVAL OF AGENDA

Amanda Knuteson moved to approve the meeting agenda. Agenda approved. Seconded by Ron Pifer.

APPROVAL OF MINUTES

Amanda Knuteson moved to approve minutes for the September 22nd meeting. Minutes approved. Seconded by Ron Pifer.

BRIEFING ITEMS

1. Overview of Action Items- Lindsey Krywaruchka
2. Groundwater Discharge Rulemaking- Eric Sivers
3. Nondegradation Rulemaking- Rachel Clark and Eric Regensburger
4. Nutrient Rulemaking- Katie Makarowski, Mike Suplee, and Alanna Shaw

2024 Proposed Meeting Schedule - Amanda Knuteson/Tiffany Lyden

Amanda Knuteson reviewed the meeting schedule for 2024 and asked about any conflicts. Amanda Knuteson moved to adopt the schedule as written. Seconded by Ron Pifer. Schedule was adopted with the understanding that if some WPCAC members can't make a certain date they have the freedom to amend the schedule moving forward.

Overview of Action Items - Lindsey Krywaruchka, Division Administrator Water Quality Division

Lindsey opened by stating there are three rule packages being presented to WPCAC. These rules are within the legislative confines and the direction that they are given within the statute that the legislature has put forward. Then they are given to DEQ as the department with rulemaking authority. DEQ has worked with members of the public through established work groups extensively on all three rule packages. If there was a case where they had not worked with the public and work groups on these very technical and complex issues, there would have been more in-depth information presented and more engagement with WPCAC. DEQ has worked to bring this to WPCAC 30 days prior to any official start of rulemaking. There are still 30 days before the start date. There is time between now and then to weigh in on these rules. Any comment given will be responded to during this process.

Questions/Comments

Amanda Knuteson addressed an action item presented to have Amanda Knuteson to decide if they vote on rules.

Lindsey responded by saying she has only been here since DEQ had rulemaking authority and wanted to know more about WPCAC voting.

Amanda Knuteson responded that her understanding is that WPCAC acts in an advisory capacity only, their vote isn't binding to DEQ on any action. They would be giving a more formalized opinion if they should proceed or not and then it's up to the agency to do so. She went on to say she would abstain from a formal vote in this context, but it is important for each member to have the opportunity to give feedback. She asked if anyone in the group felt strongly about a formal vote versus providing feedback.

Groundwater Discharge Rulemaking - Eric Sivers, Division Policy Analyst Water Quality Division

Eric Sivers presenting (Proposed Rulemaking Slide presentation: Groundwater Discharge Rulemaking). Eric discussed proposed rulemaking in Title 17.30.10 of Administrative Rules of Montana which governs the Montana Groundwater Pollution Control System permit program.

(Slide 2) The permit program rules are in subchapter 10. The permit program is also governed by rules related to Groundwater Mixing Zones in Subchapter 5 and Non-degradation in Subchapter 7. The

rulemaking is limited to Subchapter 10 and only to the administration of the permitting program. There are four major changes: 1) Clarifying that the permitting threshold that applies to the domestic wastewater from public wastewater systems is based on the whole development. 2) Revising the way the permit threshold is expressed from 5K gpd to 1 lb/day TN, so, a change from flow to a load. 3) Updating and modernizing public notice procedures. 4) Administrative clean up. The public comment period closed December 14th, 2023.

(Slide 3) The major reason for this rulemaking is to close an existing loophole. It was an unintentional loophole. He supervised the groundwater permit program for seven years and saw this loophole becoming more and more utilized. This is a rulemaking package that he has worked on for several years. The way that the permit threshold in Subchapter 10 is expressed is that public wastewater systems smaller than 5K gpd are not subject to permit requirements. Sources of domestic wastewater (not industrial) that are public, that are large enough that they meet the threshold to be considered public wastewater systems, are reviewed and approved by the Engineering Bureau. The way that it is currently written, if you had a 57-home subdivision that had a cumulative wastewater load of over 14K gpd, you could run your piping such that all the wastewater is segregated into individual systems of less than 5K gpd and not be subject to permit requirements. This is something that they've started to see more frequently in the last few years and is the reason for this rule package.

(Slide 4) Eric Sivers showed a real-world example, of a proposed development that would be subject to permit requirements under the proposed rule. (Slide 5) Eric showed a second example where a permit would not be required under the current rule, but would be required under the proposed rule.

(Slide 6) Accompanying this change, the rule proposes changing the basis for expressing the permit threshold. That's a change from 5K gpd to 1-pound total nitrogen per day. They are basing this on the nitrogen load rather than the flow volume. That is appropriate because nitrogen is the contaminant of concern, they are directly basing the exclusion on what they are concerned about rather than flow, which was adopted as a proxy for system size, but does not characterize the issue of concern to ground water which is based on the nitrogen load. This only applies to public sewage systems. Small systems that have a handful of houses (a.k.a. multi-family systems) and individual systems are not subject to permits. Only applies to domestic wastewater, there is no threshold for sources of industrial wastewater. Industrial wastewater is subject to permit requirements regardless of discharge size. In May he proposed a tiered threshold that was based on treatment categorization. That has been done away with and has gone to just the single mass expression. It addresses the concern heard from members of the public about what if a system produces 15 parts per million total nitrogen as opposed to the other categorization. It's a better fit because it's on a scale rather than tiered categories.

(Slide 7) Slide provided examples of domestic and Industrial sources.

(Slide 8) The rule still gives DEQ the authority to require monitoring from permit excluded facilities. A level 2 system removes additional nitrogen beyond what the conventional septic system removes, so concentration of total nitrogen 24 mg/L or 60% removal. This rule is no change for level 2. It increases the threshold for systems that do better in terms of removing nitrogen from wastewater effluent. For reference, there are 82 public domestic wastewater systems currently permitted under the Montana Groundwater Pollution Control System, of those, level 2s account for 53. Of the rest, there are 10 conventional, 17 are considered more advanced nitrogen removal, and 2 lagoons that are larger

municipal systems. Looking at permitting, over half of the 82 permitted systems are level 2 and would experience no change with these proposed rules.

(Slide 9) Applying the proposed threshold to an example subdivision serving 19 homes with 4,750 gpd (a public wastewater system), a permit might be required depending on what treatment technology they pursue. If they're pursuing conventional septic system treatment, that puts them over 1 pound per day, then they would be subject to permit requirements, but if they chose a level 2 system or a more advanced nitrogen removal system, they would not be subject to permit requirements. They are a public wastewater system so they would be subject to department review and approval. Department engineers would perform the non-deg analysis. If the department identified a need for it, there is the authority to require monitoring and reporting.

(Slide 10) Other revisions include an update to the public notice procedures, removing the 30 day wait for public hearings. This is not a change to the public notice time period for a tentative permit decision, that is and will remain 30 days. This is if there is local interest in a hearing over the permit decision. That interested party may petition to hold a hearing, and this eliminates the 30 day wait for DEQ to schedule that public hearing. In this case it's appropriate because if someone is requesting a public hearing they're familiar with the permit project, they're aware of it, they're engaged, there's no reason to introduce a 30 day wait for the department to respond to that interest and request a hearing. Second, modernizing the public notice process: There are fewer newspapers of record in smaller communities. It's easier for DEQ to utilize the digital tools they have for engaging with the public. Third, Revising notified agencies: DEQ is a state program, there was a list of federal agencies that DEQ was required to notify at every permit decision, which is not needed. Administrative Cleanup: additional definitions for clarity, two definitions that were related to the tiered proposal brought in May. Without the tiers based on treatment category, there is no need to have those in there. Also providing two new rules that are copied over from the surface water program, administrative continuance and obligation to raise issues.

Comments/Questions

Adam Pummill asked how this would be applied to large land ownerships?

Eric Sivers responded; he has not seen any proposals along those lines in his time at DEQ. Professional hydrogeologists would identify whether there is a consistent receiving aquifer in this case and would proceed by best professional judgment. This only applies to public wastewater systems, it doesn't apply to individual household septic systems or to multifamily homes.

Ron Pifer commented that he agreed with this rule package and could vote on it today.

Dennis Teske commented that he also agreed, and the presentation helped to gain a better understanding of the process.

Amanda Knuteson commented; in the event of a vote later in the meeting, committee members will wait until after public comment.

Nondegradation Rulemaking - Rachel Clark Engineering Bureau Chief, Eric Regensburger Water Quality Modeler

Rachel Clark presenting (Nondegradation Rulemaking Slide Presentation).

(Slide 2) Changes predominantly were in response to SB-285 passed during the last session. The changes only apply to systems discharging to groundwater that are not required have a groundwater discharge permit. Most changes were to how DEQ does the surface water analysis for nondegradation. The non-deg changes had a due date of July 1, 2024. If the nonsignificance criteria is met, no further analysis is required. SB-285 required a method for analyzing groundwater mixing zone dilution and accounting for nitrogen attenuation in the subsurface. The changes clarify the legislative intent to adopt the maximum ¼ and ½ mile limit on surface water analysis that's based on the type of soil and require new categories of systems that are not required to perform numerical non-deg analysis when surface water is > 500'.

(Slide 3) Proposed schedule for rulemaking package: Intend to publish proposed rulemaking in February, public comment period in March, response to comments in April-May, publish notice of adoption in June with effective date of July 1.

(Slide 4) Eric Regensburger presenting. Eric reviewed the proposed changes to comply with SB-285. Changes account for wastewater nitrogen reduction in the environment; expand categories that cause nonsignificant changes in water quality related to subdivision wastewater discharges; account for wastewater dilution in surface water impacts analysis; limit distances to account for surface water impacts to ¼ and ½ mile downgradient of wastewater discharges; and limit additional analysis once nonsignificant criteria are met.

(Slide 5) One requirement of SB-285 was to account for nitrogen attenuation. They have an existing method that they use in the Nutrient Trading Circular called MEANSS. Presented at the May WPCAC meeting. It estimates environmental nitrogen reduction as wastewater discharges into the soil, migrates in groundwater, then discharges to surface water. Designed to be user friendly. Using available NRCS data, those attenuation amounts are then factored into the total load used in their nonsignificance calculations for groundwater and or surface water.

(Slide 6) Reviewed changes to nonsignificant categories from SB-285: Increasing flexibility and added new categories. One change is to allow more than one drainfield on a lot but maintain similar maximum effluent rates in current rule. Incentivize the use of better treatment systems, mainly level 2,3, and 4. Increase maximum effluent rate for level 2, 3, and 4 systems compared to conventional. Expand requirements for pressure dosing drainfields to all categories except lots >20 acres. Adding new categories for level 2,3,4 systems, adding a new category for waste segregation systems, new category for lots > 20 acres.

(Slide 7) Additional changes: New standard groundwater mixing zone lengths to provide flexibility and consistency between similar systems: Most small systems will have flexible groundwater mixing zone lengths between 100 and 500 ft. Add level 3 and 4 nutrient treatments.

(Slide 8) Update initial data requirements and the O&M requirements for level 2, 3, and 4 systems. Limit third party testing results to only account for 1/3 of the required data for classification as level 2, 3, and 4. Set lower limit of influent total nitrogen for systems tested on site by providers, 40 mg/L. More data required for level 4 approval than level 2 or 3. Remove loophole for technologies listed in DEQ-4. Increase long-term O&M monitoring for systems over 5,000 gpd that do not need a MGWPCS groundwater permit. Update long-term O&M effluent monitoring parameters to remove less useful parameters and add new ones. Grandfather-in previous approvals that meet level 3 or 4 requirements.

Questions/Comments

Mike Koopal asked about mixing zones, alluding to the fact that the current mixing zone distances are based on information from 30 years ago. He did not see the scientific justification in the packet for the extension of the mixing zones.

Eric Regensburger responded that currently there are lots of individual systems for single family homes that have a standard 500 ft mixing zone. The changes allow those same systems to go up to that 500ft, but when someone applies, there is no reason to go longer than they need to for the groundwater mixing zone. Therefore, there is no incentive for someone to put a 500ft mixing zone on their property because it encumbers that lot from doing other things (moving their well in the future etc.). Even with the flexible mixing zones, we anticipate that applicants will use the shortest possible distance, which is only 100ft, if they can meet the requirements. If they need to go farther to meet the non-deg requirements in the mixing zone that's fine. Since the 1990s when these mixing zone rules were adopted there has been a big change in subdivision regulations that require mixing zones to stay on the lot that they're designated for. In the past people could extend their mixing zones onto a neighbor's property, they can't do that anymore. Having these flexible mixing zones will not be abused because people are not going to propose longer mixing zones than they need because they only encumber their own property.

Ron Pifer asked what the term "nonsignificant changes" in water quality mean, particularly related to subdivisions.

Eric Regensburger responded the term "nonsignificance" goes hand in hand with nondegradation. We often refer to the rules as the nondegradation rules, but they actually allow a little bit of degradation to allow for humans to live and operate. The term nonsignificant is meant to describe the nondegradation concept, where changes are allowed as long as they're nonsignificant which means they're small enough to allow further development and small enough to not get close to the water quality standard for whatever parameter we're looking at. It's a subjective term, but the categories are a way to take specific properties or characteristics of any application and, if a person does all these things, we think that's going to be protective of the groundwater and surface water in a similar way that our numeric criteria (5 Milligram per Liter at the end of mixing zone) are, providing similar or better protection or nonsignificant changes to water quality.

Ron Pifer asked if the rule changes are going to make existing rules stricter and more difficult to implement.

Rachel Clark responded that the rule changes in response to SB-285 were specifically to make some parts of the nondegradation analysis easier to pass.

Teri Polumsky asked will every system be required to have pressure dosing for the drainfield.

Rachel Clark responded no, systems who do not want to do a numeric analysis would have to pressure dose. If you can pass non-deg using the regular methods, that's fine.

Ron Pifer asked regarding the pressure testing, is that something you'd have to do annually, and what frequency?

Rachel Clark responded that most level 2 systems also pressure dose. When you pressure dose, you design the drainfield and do a squirt test to make sure that there's adequate pressure through all the orifices in the line, then you cover it up, so then you wouldn't repeat the pressure squirt test. The pressure test would be one time. The sampling for level 2, 3, and 4 is more often, but the sampling that you take is not the pressure test. This applies to all new systems, but if someone could pass non-deg using the conventional means, there's no reason they cannot do that.

Eric Regensburger added the pressure dosing is only for those systems that are trying to show non-significance through those categorical exclusions, not through the typical numerical mixing zone.

Adam Pummill asked about increased requirements for sampling and testing. At what point is a certified operator requirement triggered?

Eric Regensburger responded there are no requirements for these types of wastewater systems to have certified operators. They are small enough that it's not required.

Rachel Clark added none of these systems would have to have a certified operator, those apply mostly to municipal collection and mechanical treatment systems. They do require ongoing maintenance.

Adam Pummill asked if there would be a requirement for the person taking the samples, if samples are required on these systems.

Rachel Clark responded that would be up to the manufacturer to specify who could do the maintenance on it.

Amanda Knuteson asked if a system that has a few dozen homes would also not have a certified operator?

Rachel Clark responded the certified operator provisions don't apply to these types of systems unless you have a municipal system, but they do all require maintenance and ongoing O&M contract and sampling.

Amanda Knuteson asked about presented timelines, is this nondeg package still being worked on for the next few months?

Rachel Clark responded we anticipate filing with the Secretary of State in February, the public comment period in March, final notice of adoption in late June, with the July 1st effective date.

Lindsey Krywaruchka clarified that DEQ is open to feedback between now and then.

Public Comment

Vicki Marquis commented regarding the groundwater rules, the way the rules were described today, the changes that are proposed to Administrative Rules of Montana 17.30.1024, under review procedures. In the notice that was published in the Montana Administrative Registrar, they propose to delete subparagraphs 5 through 9 to eliminate unnecessary repetition and potential conflict with other public notice requirements in ARM 17.30.1040. She did not see a conflict with that rule because the 1040 rule discusses how public comment will be done and this rule 1024 discusses the timing of it. Today she heard the department describe the reason to delete some of these as removing that 30 day wait period to have a public hearing, but in some cases the 30 day wait period is important for people to have the

opportunity to really understand the permit that's drafted. The other important piece in the subparagraphs that are proposed for deletion is they do provide a timeline by which DEQ is required to make a permit decision. Under subparagraph 7 and 8 they are required to make their final determination within 30 days after the public comment period or 60 days if there is a hearing. Those timelines are very important for permittees for predictability and planning to ensure the permitting process moves forward instead of a backlog, when they do not know when they're going to get their permit. Those are two very important provisions that are in the rule and are being proposed for deletion through this rule package.

Nutrient Rulemaking - Katie Makarowski, Program Section Supervisor Water Quality Planning Bureau, Mike Suplee Water Quality Standards Scientist, and Alanna Shaw Program Section Supervisor MPDES Water Protection Bureau

Katie Makarowski presenting (Narrative Nutrient Rulemaking: Slide Presentation).

(Slide 2) Katie Makarowski began the presentation with background information and an overview of the rulemaking package to meet the 30-day requirement prior to first publication in Montana Administrative Record. This package includes adoption of new rules as well as amendment and repeal of existing rules. Mike Suplee and Alanna Shaw will then provide a brief overview of our proposed new rules and circular. Katie Makarowski will then review the rulemaking timeline before comments and discussion.

(Slides 3&4) This rulemaking package centers on nutrient standards. Nutrients refer specifically to total nitrogen (TN) and total phosphorus (TP) in state surface waters. Excess nutrients can cause undesirable water quality conditions. Controlling nutrients is necessary to protect beneficial uses; recreation and aquatic life uses are the most sensitive to nutrient effects. Nutrients are one of the most common causes of impairment in Montana waterbodies.

(Slide 5) Narrative nutrient standards are at ARM 17.30.637 (1) (e). This is included in our general provisions that State surface waters must be free from substances attributable to municipal, industrial, agricultural practices or other discharges that will create conditions which produce undesirable aquatic life. Applies to all state surface waters since adoption in 1970's.

(Slide 6) In 2014 Montana adopted numeric nutrient standards for TN and TP for wadeable streams (grouped by ecoregion), two segments of the lower Yellowstone River, and nine individual stream reaches (site specific standards). Included in department Circular DEQ-12A. TN and TP concentrations were set to: protect beneficial uses, and prevent exceedances of other water quality standards affected by TN and TP concentrations (e.g., pH and dissolved oxygen).

(Slide 7) In 2014, DEQ also adopted a general variance available to MPDES permittees to account for the high cost of meeting stringent 12A standards and to allow for compliance with 12A standards over time. Ability to participate in the general variance diminished over time due to changes in federal regulations related to water quality variances, and legal challenges and litigation around variances.

(Slide 8) In 2021, the Montana legislature passed SB-358. SB-358 required a transition from numeric to narrative standards, and a new incremental/adaptive approach for addressing excess nutrients in watersheds. SB-358 directed DEQ to: adopt rules related to narrative nutrient standards in consultation with the nutrient work group; provide for the development of an adaptive management program which provides for an incremental watershed approach for protecting and maintaining water quality; and

amend rules to delete all references to department circular DEQ-12A, department circular DEQ-12B, base numeric nutrient standards, and nutrient standard variances.

(Slide 9) An important aspect to highlight of the work we are presenting today is that the department has consulted extensively all throughout this process with the Nutrient Work Group as required by SB-358. The Nutrient Work Group is an advisory group convened by the department. It was initially created in 2008 and the group represents 21 interest groups, including publicly owned and privately owned point sources of pollution, nonpoint sources of pollution and other interested parties shown on the slide. The Nutrient Work Group has the defined purpose of advising the department on nutrient standards, the implementation of those standards, and associated economic impacts. Since August of 2020 the department has held 44 Nutrient Work Group meetings, 39 of which were held following the passage of SB-358 in April 2021.

(Slide 10) In addition to consulting with the Nutrient Work Group, the department has also conducted additional stakeholder outreach. DEQ has: provided opportunity for formal public comment at each Nutrient Work Group meeting; met extensively with individuals representing various stakeholder interests, including bill proponents, permittees, conservation interests, EPA, and others; hosted listening sessions, informational meetings, and technical subcommittee meetings; presented at conferences and meetings; and provided periodic updates to WPCAC members and the public.

(Slide 11) Throughout the development of this rule package the department adhered to several guiding pillars: protect beneficial uses of state waters; be based on sound science; fulfill requirements of SB-358, Federal Clean Water Act, and current state rules and regulations; and be implementable across water programs.

(Slide 12 and 13) In this rulemaking package DEQ is proposing to: adopt 2 new rules and 1 new circular; amend 17 existing rules; and repeal 2 existing rules.

(Slide 14) New rule 1: Translation of Narrative Nutrient Standards, will be placed in 17.30.6 Water Quality, Subchapter 6 -Surface water Quality Standards and Procedures. New Rule 2: Implementation of the Adaptive Management Program, will be placed in 17.30.13 Water Quality, Subchapter 14-Montana Pollutant Discharge Elimination System (MPDES) Permits. Department Circular DEQ-15: provides details and procedures related to the two new rules.

(Slide 15) Of the 17 rules that are being amended, for 11 of them the only change is to remove reference to Department Circulars DEQ-12A, DEQ-12B, and/or nutrient standards variances, and for a few of them to remove the contingent voidness provision pertaining to nutrient standards and nutrient standards variances. Reason: To comply with SB-358 requirements to “delete all references to department circular DEQ-12A, department circular DEQ-12B, base numeric nutrient standards, and nutrient standards variances”.

(Slide 16) The 6 other rules that are being amended are as follows.

Amend: 17.30.201 Permit Application, Degradation Authorization, and Annual Permit fees. Overview of Change: Adding fees associated with the Adaptive Management Program (AMP). Application fee (\$5,000) with submission of AMP every 5 years. Annual fee (\$3,000 minimum, scaled based on discharge volume). Reason: Department received one-time funding in 2021 but no sustained funding to implement AMP. Fees are necessary to recover department costs associated with implementation, enforcement,

and compliance (e.g. reviewing AMPs, conducting compliance inspections, enforcing permit conditions, staff travel to provide training).

(Slide 17) Amend: 17.30.516 Standard Mixing Zones for Surface Water. Overview of change: for total nitrogen, total phosphorus, or nutrient parameters identified in Department Circular DEQ-7, specifies the stream low flow used in calculating the dilution ratio is based on the seasonal 14-day, five-year (14Q5) low flow. Reason: Seasonal 14Q5 initially adopted as the low-flow criteria in DEQ-12A; retained as it remains the appropriate low-flow statistic. Bottom-attached algae can be developed in about 15-20 days when nutrient concentrations are elevated. Use of seasonal 14Q5 for design of disposal systems should not allow excess algae levels to occur on average more than once in five years, which is within acceptable recommendations by US EPA.

(Slide 18) Amend 17.30.702 definitions. Overview of change: Define “nutrients” to mean inorganic phosphorus and total inorganic nitrogen. Remove reference to “total inorganic phosphorous” Added “required “to “Reporting Limit” definition. Reason: Total inorganic nitrogen and inorganic phosphorus are now consistent with only two parameters categorized as nutrients in Circular DEQ-7. Allow for clearer distinction between how nondegradation is implemented for the parameters defined as nutrients as compared to total nitrogen and total phosphorus. Updating term “Required Reporting Limit” to be more consistent with DEQ-7.

(Slide 19) Amend 17.30.635. Overview: Adjusted use of acronym “7Q10” after it is initially defined. Added the word “nutrients” to specify dilution requirements must be based on seasonal 14Q5. Reason: Improved clarity by appropriately using and defining the acronym. Improve consistency with amendments proposed in ARM 17.30.516 and ARM 17.30.702-the seasonal 14Q5 low flow is the most appropriate low-flow criteria for nutrients (as defined in amendments proposed to ARM 17.30.702) as well as TN and TP.

(Slide 20) Amend 17.30.715 Criteria for Determining Nonsignificant changes in water quality. Overview of change: Removes “nutrients” and references to Circular DEQ-12A from provision 17.30.715(1)(f). Add TN and TP for reaches of the Clark Fork River listed at ARM 17.30.631. Remove contingent voidness provision. Reason: to comply with SB-358 requirement to “delete all references to department circular DEQ-12A, department circular DEQ-12B, base numeric nutrient standards, and nutrient variances”. And to clarify that TN and TP are to be treated as parameters for which there are only narrative water quality standards (17.30.715(1)(h)) when evaluating nonsignificance under nondegradation.

(Slide 21) Amend 17.30.1304 Definitions. Overview of change: Removing a portion of the previously adopted definition: “An adaptive management plan includes a watershed monitoring plan and, if required, an implementation plan”. Reason: Amending the definition to match the definition of the Adaptive Management Plan contained in Circular DEQ-15. To be more concise; the components of the Adaptive Management Plan are described in greater detail in Circular DEQ-15 and are not necessary in the definition.

(Slide 22) Repeal: 17.30.1388 Development of an Adaptive Management Program. Framework rule adopted in 2022. Interim step to meet a statutory deadline between adoption of SB-358 and this current comprehensive rulemaking. Adoption of new rules will render framework rule unnecessary, redundant. Repeal: 17.30.660 Nutrient Standards Variances. Administrative update following the direct repeal of this rule by SB-358.

(Slide 23-24) Mike Suplee presenting. Mike covered proposed New Rule 1: Translation of Narrative Nutrient Standards. Specifies that narrative nutrient standards found at ARM 17.30.637(1) (e) must be translated as provided in Department Circular DEQ-15. This process will be taking a narrative statement and framing it with a consistent translation process for the purposes of incorporating it into permits and other uses. Adopts and incorporates by reference Department Circular DEQ-15.

(Slide 25) This is necessary to fulfill SB-358 and 75-5-321, MCA. To adopt rules related to narrative nutrient standards. Identifies the appropriate response variables affected by nutrients and associated impact thresholds in accordance with the beneficial uses of state surface waters. Ensures narrative nutrient standards will be translated consistently across department water programs.

(Slide 26) Circular DEQ-15 Part I: Provides narrative nutrient standards translators to determine if narrative nutrient standards are met. Combined criterion approach: Response variables=direct measures of the biological community or its effects (e.g., benthic algae biomass, macroinvertebrate metrics, dissolved oxygen delta). Causal variables= TN and TP concentrations. Consistent with EPA guidance. Weight-of-evidence procedures give greater weight to the biologically based response variable.

(Slide 27) Translators applicable: to different waterbodies - Wadeable streams & medium rivers, large rivers; to different beneficial uses - recreation, aquatic life; and to different regions - Western & transitional ecoregions, Eastern ecoregions. Also several exceptions are proposed for special conditions (e.g., dams, spring creeks, drought).

(Slide 28 and 29) Presented by Alanna Shaw: New Rule II describes the implementation within the MPDES permitting program of a new, optional compliance method- the Adaptive Management Program- that owners or operators of point sources may choose to achieve narrative nutrient standards and address nutrients in their watershed. MPDES permits may include limits and conditions consistent with the department-approved Adaptive Management Plan. Adopts and incorporates by reference Department Circular DEQ-15.

(Slide 30) New Rule II is necessary to fulfill SB-358 and 75-5-321, MCA to adopt rules related to narrative nutrient standards that “provide for the development of an adaptive management program that provides for an incremental watershed approach for protecting and maintaining water quality” and that: (a) reasonably balances all factors impacting a waterbody and (b) prioritizes the minimization of phosphorus, considering site-specific conditions. Goal of protecting beneficial uses by using sensible, adaptive, Montana approach.

(Slide 31) Adaptive Management Program provides for a long-term compliance schedule following an approved Adaptive Management Plan (AMP). Interim performance milestones from the AMP are to be evaluated annually and at each 5-year permit cycle. Permit limits and conditions derived to achieve narrative nutrient standards as provided in NEW RULE I. Attain water quality goals as soon possible. Adaptive Management Program is optional; permittee not precluded from pursuing, at any time, other regulatory compliance options (e.g. water quality standards variances).

(Slide 32) Implementation of AMP is Flexible: has facility and/or watershed focus (optimization, capital improvements, point and/or nonpoint source reductions, site specific data). Adaptive: Plan, implement, monitor, evaluate, adjust. Incremental: Compliance schedules with interim and final effluent limits. Addresses both TN and TP, where necessary; Allows for phosphorus prioritization, where appropriate.

(Slide 33) Adaptive Management Plan. Subject to Department Approval. Include monitoring (effluent and instream). Emphasize watershed implementation (e.g., facility optimization, nutrient source identification, pollutant reduction activities, load reduction estimates, partner commitments). Annual reporting. May involve the use of mechanistic water quality models, especially for large rivers.

(Slide 34) Circular DEQ-15 Part II: Includes details and procedures related to implementing the Adaptive Management Program including: program eligibility; phosphorus prioritization; lake, reservoir, downstream protections; identifying nutrients for permit limits; field audits; Adaptive Management Plan requirements (including pollutant minimization activities and watershed-scale plan); large rivers and water quality models; and integration with Total Maximum Daily Load.

(Slide 35-36) Rulemaking timeline presented by Katie Makarowski - file proposal notice with Secretary of State and publish in Montana Administrative Record, public comment period Feb 9 – April 2, with targeted adoption date in June 2024.

Questions/Comments

Ron Pifer commented that this is very detailed and based on scientific research spanning decades. He suggested sampling fisheries, may be a valuable parameter. He wanted to know more about the watershed monitoring, he wasn't sure if the smaller wastewater treatment would have the budget to do that. He went over circular 15 and looked at Table 2-4 and Table 4-1. Table 2-4 is criteria for wadeable streams, high and low ranges of TP and TN. In this case he is questioning the DEQ technical team on the standards that they came up with and how attainable the TP and TN levels are. He thought maybe they should be at the middle of these ranges and not the lower end if they can't attain it.

Alanna Shaw responded, by speaking about how DEQ is going to implement the range in terms of the MPDES permitting program. Permitting uses these ecoregional range values to calculate the water quality based effluent limits that permittees are subject to. The plan for implementing these ranges is to start with the upper end of the range in every case. If that is insufficiently protective of beneficial uses, then they can incrementally reduce to the appropriate place in that range for protecting the beneficial uses of the receiving water in question. The effluent limits are set to protect those beneficial uses. The compliance options consider the attainability and the flexibility that is needed by various Montana communities who are permittees.

Ron Pifer responded, the TN targets in table 2-4 reflect the lower part of the range in almost all the columns, whereas the TP is the lower part of the range for top four rows.

Mike Suplee responded, providing more information on the ranges and context to the work that has been done across the United States. Back when the original numeric nutrient standards were adopted, which are being removed, DEQ put together a technical support document and looked at the scientific information that was available about the kind of concentrations that protect uses and are associated with biological changes, excessive algal growth, etc. Each ecoregion was looked at individually. DEQ compiled all the different scientific studies that were available for the area, whether they have been conducted by DEQ or different states and Canada. These ranges represent the totality of that work. Each ecoregion has a range of values that would be appropriate for it based primarily on those findings. Some numbers are at the low end and some at the high end, this is because of the fundamental differences between eastern and western Montana. When you get right down to an individual ecoregion or regions

of the state, these ranges represent concentrations that are at the very highest end of, and in some cases above, any concentration that we observe in our reference sites. These ranges are based on dose response studies to science with a backward look at reference concentrations, they're not reference concentration-based, per se. If you then look at these types of concentrations in eastern Montana for example, where they're much higher, that is because the sensitivity of uses there are lower, concentrations are inherently higher there, and there are different ecologies, etc. If you look at these ranges across the totality of work that has been done over the past 30 years or more, you will find that they fall right in line with what you see in Maine, Vermont, Florida, Ohio, Minnesota, etc. In Table 4.1 there are very specific numeric concentrations for the lower Yellowstone River. These were based on site specific modeling work that was built for the Yellowstone River. One thing we heard repeated throughout this process with stakeholders is that ideally, we would like to get down to site specific numbers that are appropriate for an individual stream or river reach etc. In that case that work has been done and has been published and peer reviewed.

At the outset of this we did consider fish for eastern Montana, because in eastern Montana we have an abundance of species and that lends itself very well to biological type metrics. Unfortunately, there isn't much fish sampling done there. In western Montana where we have four species of salmonids, they don't lend themselves very well to understanding how biological changes occur, because there are not that many of them to make judgment of those changes. On top of that, fish are highly mobile (as an example, Mike explained a study in California where a wastewater facility alongside a river failed and many fish were killed within a few hours; within a day or so people were back fishing because fish had moved in from other regions). Their high mobility does not lend well to this sort of biological assessment, whereas macroinvertebrates tend to be more stationary in their location, high in diversity, and there is a long history in the United States and Europe of their use for this purpose, they have a high sensitivity to nutrients, etc. Looking at the totality of what kind of response variables we felt would be appropriate and would link well to the water quality standard in question, macroinvertebrates rose to the top.

Katie Makarowski added that she wanted to clarify the tables being referenced in circular DEQ-15. Table 2-3 gives the ecoregional TP and TN concentrations to protect aquatic life and recreation and beneficial uses, those apply broadly to wadeable streams and medium rivers. Table 2-4 addresses a special condition for spring creeks in the western and transitional ecoregions. DEQ is aware of the resources that would be required to conduct any monitoring for response variables. There are certainly a few layers to consider, the Adaptive Management Program being an optional choice. That could be selected by a permittee; it would only be imposed if that was selected. DEQ intends to provide training as a department and as a service to provide resources to any operators or owners that would need to be conducting this type of monitoring.

Ron Pifer said he didn't realize Table 2-4 was for spring creeks.

Mike Suplee added more about the spring creeks. They were pulled out specifically because they're unique. They're an inventoried aquatic resource in the state, about 70% of them are found in southwestern Montana primarily out on range land. There are no MPDES permits discharging to a spring creek, except for Big Spring Creek by Lewistown which isn't truly a spring creek, because it has 23 non-spring tributaries. It is excluded from that group. Spring creeks tend to have dense beds of aquatic vascular plants. They tend to be very low gradient; they don't get flushing flows much. Sometimes they

have a robust fishery, and they tend to have elevated nitrogen concentrations. We pulled them out because they are inventoried already per the citation in the circular and gave a range for total nitrogen that we felt was appropriate, based on what we already knew for normal everyday streams that are affected by runoff as well as the kinds of concentration ranges that we see for spring creeks, based on that inventory report.

Shannon Holmes thanked the presenters and commented that it is his opinion that DEQ should focus on how to extend the statutory timeline for this process. The financial magnitude of communities across Montana is at stake here. He is optimistic about the progress made over the last several months but does not feel we've hit the finish line. His opinion is that they continue the productive discussions that have been had over the last several months. He is concerned the rule package in its current state is going to lead to litigation after being put into Montana Code Annotated. However, there are some successes in this process. 44 nutrient work group meetings, all the stakeholders and DEQ staff, and the amount of effort that has gone into this process is extraordinary. The current version shows ecoregion values which were agreed to go into fact sheets. With this current version received last week that is not the case. It's his opinion that these values are unattainable with the current technology. There are some unanswered questions on feasibility arguments and requests to use a narrative rather than numeric approach for permit limits. The current version of the guidance introduces several new scientific metrics that are new and not well understood, backup reports to support that approach shown in the documents have not been available for review by any of the Nutrient Work Group members. Lastly there needs to be work on reconciliation of the existing TMDLs. The proposed approach leaves communities like the city of Bozeman without a feasible discharge scenario. One success is the current document works well for communities without TMDLs. Progress that has been made over the last several months has really created a lot of optimism.

Lindsey Krywaruchka responded; she clarified when DEQ says they are filing with the Secretary of State in January, that is the proposal notice date. That is a draft version, they really have until April to get these final, that's the proposed final filing date with Secretary of State. DEQ is locking in a timeline with Secretary of State starting in January and can't move that date, but she wanted to reiterate to everyone involved that they have until April to get this right. This isn't going into the MCA, these are administrative rules so they can open it back up as needed and continue to work it out, but that proposal is just a draft to have a spot with the Secretary of State. It's all draft until April. DEQ did provide the technical documents Shannon Holmes mentioned, they met with a group of bill proponents and walked through those items yesterday. She would be happy to have another conversation with Shannon Holmes about that and answer further questions.

Shannon Holmes responded that he appreciated that, and if April truly is the hard deadline, are there going to be continued Nutrient Work Group meetings or meetings with smaller groups?

Lindsey Krywaruchka responded we do not have any Nutrient Work Group meetings scheduled because there are a lot of resources that go into planning and scheduling those meetings. We're putting all our energy into these documents and this process, but we are committed to holding small group or individual meetings like we did yesterday between now and April. Especially for permittees it is very helpful to have a one-on-one conversation. We can't give you absolute certainty, but we can help clear up any questions.

Shannon Holmes responded he is optimistic based on the last several months and if the final date isn't until April, he feels they can find a collaboration or meeting time to go over these last concerns.

Alanna Shaw wanted to clarify the ecoregion fact sheet concern. Ecoregional range values are standard values that are used to calculate effluent limits. That calculation occurs in the fact sheet and only in the fact sheet. That is the only place those values will appear. The limits that are derived from that value, the interim limits in most cases will appear in the permit.

Public Comment

Michelle Jenicek commented that Eric Sivers mentioned that industrial wastewater discharges are subject to permitting, regardless of the discharge size. He specifically mentioned the cannabis industry. There are over 300 licensed cannabis grows throughout the state and many of these grows are discharging their wastewater through their septic systems or land applying it without a permit or any oversight. The industry isn't new, Montana medical marijuana was legalized in 2004 and recreational in 2020. She found circular DEQ-15 the easiest to read, however there needs to be more educational information on DEQ's website for the growers to refer to for direction. Also, ARM and statute typically get incorporated into an agency's policies and procedures that their staff should follow, however, DEQ does not post their specific policies and procedures online like most state agencies. These should be made easily available to the public for more transparency, in addition if you look at other states, DEQ or ecology websites, there is a lot of information out there provided to the cannabis growers and what is required for permitting.

Lindsey Krywaruchka thanked her for her comment.

Darf Johnson with the Montana Environmental Information Center commented that in the groundwater discharge rule package is 17-433, one issue that concerns him is which cumulative impact is being defined as related to a particular public system that's being permitted. He understands the department's intention in terms of wanting to combat this loophole, however this is self-limiting and is not what one would consider a cumulative impacts analysis in normal environmental decision making or analysis. What you're looking at with this definition is the end of the pipe. You're not evaluating the full cumulative impacts associated with the nutrient load as it ends up in the river or stream. If you're segmenting your analysis to just particular developments that are occurring, rather than evaluating the full comprehensive pollution load in a river or stream, you're not going to be able to determine whether that waterbody is suffering from high nutrient loads, and this seems to be untethered to Montana's nondegradation policy and laws.

Lindsey Krywaruchka responded that "cumulative" in the proposed rule is just for this subchapter.

John Iverson with the Treasure State Resource Association commented that there are notable improvements, but the latest version of the Nutrient Rulemaking package was just shared and he would like to review that and discuss it further with DEQ before moving forward so they would ask for a little more time.

Alan Olson, Executive Director for the Montana Petroleum Council and member of the Nutrient Work Group, appreciates all the work and time. He commented he doesn't think they can spend enough money to comply with these rules. We are looking at standards that cannot be met with current technology. He thinks this needs more work and time.

Thomas Kallenbach commented he thinks the general overview is helpful, but the implementation of the non-deg and Groundwater discharge rule packages is in the details. He thinks there are several details that need to be looked at and since it's been put in front of the committee to vote, he would urge them to take a closer look and see how those two pieces are connected and how they'll work. For example, with the new discharge permit rules, you run the risk of having hundred-home subdivisions on septic systems, having undergone no non-deg analysis. Their mixing zone would be the end of the pipe and they may be completely exempt from any kind of nondegradation analysis, up to 16,000 gal a day. He thinks that's something that needs to be looked at and considered carefully.

Eric Sivers responded to the idea that there would not be any non-deg review or mixing zone review. DEQ is talking about public wastewater systems that are reviewed and approved by department engineers in the Engineering Bureau. Non-deg analysis is conducted by those staff. There is no reason there would not be a mixing zone and that analysis would be conducted by engineering staff.

Matt Vincent with Montana Mining Association commented there's been great discourse, but that he would echo previous comments about the Nutrient Rule package. He thinks there will need to be some significant changes between the draft and the final.

Kelly Lynch, Executive Director of the Montana League of Cities and Towns, commented that she echoed the prior comments regarding the Nutrient rule package. She wanted to add that it's critical to be able to read the actual language in the documents that were revised and sent out last week. They've had great conversations with DEQ and are getting closer to a great program that is going to work in the way they intended it.

Shannon Holmes asked a question to Lindsey Krywaruchka, she mentioned discussions will continue through April, but she is looking at submitting a draft and starting the process soon. He is concerned that if there are significant changes to the current draft, what is DEQ's stance on making changes to the draft sent out last week?

Lindsey Krywaruchka responded our ears are open, if there is scientific justification, DEQ is committed to those principles. She reiterated that if DEQ does not get in line for rulemaking now, they will lose their spot. Rulemaking is a very open and public process and that's what will govern the whole thing, and we are committed to that.

Shannon Holmes responded there must be a way of doing a statutory extension if it truly isn't a product that we all can agree on, but if we have from now until April, he will keep a positive mindset that they can get there.

Amanda Knuteson circled back to the voting conversation, looking at the three rule packages presented and having another meeting in January, she asked if DEQ was willing to do a quick presentation of any changes to the drafts at the January meeting. That will give DEQ and WPCAC an opportunity to determine if a vote is appropriate or necessary.

Lindsey Krywaruchka agreed to bring information on any changes to the January meeting.

Ron Pifer added that after hearing the presentations and comments from the public today, he hopes WPCAC and DEQ can come up with solutions and make these rule packages successful.

Lindsey Krywaruchka wanted to remind everyone that DEQ is open to questions, meetings, and phone calls to address any concerns and questions.

Agenda Items for January 26th Meeting

1. Lindsey Krywaruchka to bring bullet points on changes and updates to draft rule packages.
2. Elections in January for WPCAC Chair and Vice Chair.

Meeting Adjourned