



REGION 1

BOSTON, MA 02109

June 11, 2025

Melanie Loyzim, Commissioner
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

RE: EPA action letter concerning Maine Rule 06-096 Chapter 583 (Nutrient Criteria for Class AA, A, B, and C fresh waters)

Dear Commissioner Loyzim:

On April 1, 2025, the Maine Department of Environmental Protection (DEP) submitted new and revised Water Quality Standards (WQS) contained in Rule 06-096 Chapter 583 to the U.S. Environmental Protection Agency (EPA) for review in accordance with Section 303(c) of the Clean Water Act (CWA). The public comment for this rulemaking was held from December 16, 2024, through January 28, 2025, and a public hearing was held on January 16, 2025. Maine's WQS revisions were adopted by the Maine Board of Environmental Protection and became effective on March 31, 2025. In a letter dated April 2, 2025, Jack Defoe, Maine Assistant Attorney General, certified that Rule 06-096 Chapter 583 was duly adopted as a statewide water quality standard pursuant to State law.

Pursuant to Section 303(c) of the CWA and 40 Code of Federal Regulations (C.F.R.) Part 131, EPA hereby approves the following sections of Rule 06-096 Chapter 583 throughout the State of Maine, including Indian Lands, as more specifically described and for the reasons explained in Attachment A:

- Section 1 – Purpose and Applicability
- Section 2 – Definitions
- Section 3 – Nutrient Criteria, except the second paragraph of Section 3
- Section 4 – Implementation, except Sections 4.B.(2), 4.C.(3), and 4.E.
- Appendix 1

EPA determined that the following sections of Chapter 583 are not new or revised WQS requiring EPA review and approval pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131.

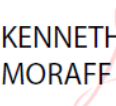
- Chapter 583 - Summary

- Section 3, second paragraph
- Sections 4.B.(2), 4.C.(3), and 4.E.
- Section 5 - Established Site-Specific nutrient values

Consistent with the requirements of the Endangered Species Act (ESA), EPA evaluated the potential impacts of this current action on federally protected species and their critical habitat and determined that consultation with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) was necessary. EPA initiated consultation with USFWS and NMFS in letters dated April 3, 2025. NMFS concurred with EPA's determination on May 28, 2025 and FWS concurred with EPA's determination on June 9, 2025.

We look forward to continued cooperation with Maine in the development and review of WQS pursuant to our responsibilities under the CWA. If you have any questions, please contact Nathan Chien (617-918-1649) or Mike Knapp (617-918-1055).

Sincerely,

 Digitally signed
by KENNETH
MORAFF
Date: 2025.06.11
10:39:28 -04'00'

Ken Moraff
Director
Water Division
EPA Region 1

Attachments: Attachment A – Technical Support Document of EPA Decisions on Rule 06-096 Chapter 583 (Nutrient Criteria for Class AA, A, B, and C fresh waters)

cc: Matt Hight, Environmental Specialist, Office of the Commissioner, Maine DEP
Brian Kavanah, Director, Bureau of Water, Maine DEP
Wendy Garland, Director, Division of Environmental Assessment, Maine DEP
Meagan Sims, Water Quality Standards Coordinator, Bureau of Water Quality, Maine DEP

Attachment A
Technical Support Document of EPA Decisions on
Rule 06-096 Chapter 583 (Nutrient Criteria for Class AA, A, B, and C fresh waters)

Chapter 583 – Summary:

This section provides a summary of why the rule was developed and how it will be used by DEP. It does not address designated uses, criteria, or antidegradation and it therefore is not a WQS requiring EPA review and approval pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131.

Chapter 583 – 1. Purpose and Applicability:

This section, including Appendix 1, details the waters which will be covered by Chapter 583 and references the designated and existing uses of aquatic life support, habitat, and recreation in and on the waters described in 38 M.R.S.A. §§ 464 and 465. This provides necessary information to apply and implement Chapter 583 nutrient criteria. EPA approves this section, including Appendix 1, pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131.

Chapter 583 – 2. Definitions:

Section 2 of the rule provides definitions for:

- August median flow
- Chlorophyll *a*
- Class
- Critical ambient conditions
- Geometric mean
- Impoundments
- Nutrient
- Percent nuisance algal cover
- Periphyton
- Phaeophytin
- Phytoplankton
- ppb
- Reasonable potential
- Response indicators
- Season
- Seasonal geometric mean of water column chlorophyll *a*
- Sewage fungus
- Spatial geometric mean of water column chlorophyll *a*
- TP
- Turbid
- Wadeable stream
- Waterbody type

Pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131, EPA approves these definitions as they provide the necessary information to apply and implement Chapter 583 nutrient criteria.

Chapter 583 – 3. Nutrient Criteria:

The first paragraph under Section 3 of the rule states:

“The Department will use the nutrient criteria in Table 1 to protect and maintain the designated and existing uses of aquatic life support, habitat, and recreation in and on the water of Class AA, A, B, and C fresh surface waters, excluding wetlands that usually lack aboveground water from June through September. The nutrient criteria apply from June through September. Site-specific TP values established in section 5 will be substituted for and supersede default TP values for the statutory classes of fresh surface waters set forth in Table 1. Site-specific values for non-TP nutrients established in section 5 must be attained in addition to TP values. Determinations of attainment or nonattainment of nutrient criteria are based on all data collected during a season.”

Pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131, EPA approves the first paragraph in Section 3 of Chapter 583 as it provides important information on how DEP will apply and implement Chapter 583.

The second paragraph under Section 3 states:

When reasonable potential exists for TP or another nutrient, the applicable values in Table 1 or section 5 will be used to determine appropriate nutrient limits in Maine Pollutant Discharge Elimination System (MEPDES) permits or National Pollutant Discharge Elimination System (NPDES) permits for interstate waters.

This paragraph pertains to the applicable values in Table 1 or Section 5 which will be used to develop nutrient limits in MEPDES or NPDES permits. EPA does not consider this paragraph a WQS requiring EPA review and approval pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131 as it does not address designated uses, criteria, or antidegradation.

Chapter 583 – 3. Nutrient Criteria – A. Total Phosphorus:

Pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131, EPA approves Chapter 583 – 3.A. as it specifies that total phosphorus concentrations in Table 1 will be calculated as the geometric mean of data taken over the course of a season.

Chapter 583 – 3. Nutrient Criteria – B. Response indicators:

Pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131, EPA approves Chapter 583 – 3.B. as it specifies how percent nuisance algal cover, water column chlorophyll *a*, and sewage fungus shall be measured to comply with the values in Table 1. Further, it describes which response variables are applicable to each waterbody type. A discussion of each of the response indicators is provided below.

Chapter 583 – 3. Nutrient Criteria – Table 1. Nutrient Criteria for Class AA, A, B, and C Surface Waters:

Table 1 includes Tables 1a., 1b., and 1c. and provides the applicable nutrient and response indicators for different Class AA, A, B, and C waterbody types to assess and protect designated and existing uses of aquatic life support, habitat, and recreation in and on the waters described in 38 M.R.S.A. §§ 464 and 465. Table 1a. establishes nutrient criteria for Class AA, A, B, and C wadeable

streams and river segments with rocky substrate. Table 1b. establishes nutrient criteria for Class AA, A, B, and C impoundments. And Table 1c. establishes nutrient criteria for other Class AA, A, B, and C surface waters. Each of these tables are shown below.

Table 1a. Nutrient criteria for Class AA, A, B, and C wadeable stream and river segments with rocky substrate

Nutrient criteria ^a		Statutory Class		
		AA & A	B	C
	Nutrient Indicators			
	Total Phosphorus	≤ 19.0 µg/L (ppb) TP ^b	≤ 30.0 µg/L (ppb) TP ^b	≤ 44.0 µg/L (ppb) TP ^b
	Other Site-Specific Parameters	See section 5.		
	Response Indicators			
	Percent Nuisance Algal Cover ^c	≤ 19.0	≤ 24.0	≤ 35.0
	Sewage Fungus ^c	No visible patches of sewage fungus		

a Attainment of these criteria will be assessed according to the decision framework in section 4.

b Geometric mean of TP in a season. Site-specific TP values established in section 5 supersede default TP values for the statutory classes. Site-specific values for other non-TP nutrients established in section 5 must also be attained in addition to applicable TP values.

c This indicator must meet the specified conditions during the entire season.

Table 1b. Nutrient criteria for Class AA, A, B, and C impoundments

Nutrient criteria ^a		Statutory Class		
		AA & A	B	C
	Nutrient Indicators			
	Total Phosphorus	≤ 19.0 µg/L (ppb) TP ^b	≤ 30.0 µg/L (ppb) TP ^b	≤ 44.0 µg/L (ppb) TP ^b
	Other Site-Specific Parameters	See section 5.		
	Response Indicators			
	Water Column Chl <i>a</i> (µg/L, ppb) ^b	Spatial geometric mean ≤ 6.0 and no value > 8.0	Spatial geometric mean ≤ 8.0 and no value > 10.0	Spatial geometric mean ≤ 8.0 and no value > 10.0
	Sewage Fungus ^c	No visible patches of sewage fungus		

a Attainment of these criteria will be assessed according to the decision framework in section 4.

b Spatial geometric mean of TP in a season. Site-specific TP values established in section 5 supersede default TP values for the statutory classes. Site-specific values for other non-TP nutrients established in section 5 must also be attained in addition to applicable TP values.

c This indicator must meet the specified conditions during the entire season.

Table 1c. Nutrient criteria for other Class AA, A, B, and C surface waters

Nutrient criteria ^a		Statutory Class		
		AA & A	B	C
	Nutrient Indicators			
	Total Phosphorus	≤ 19.0 µg/L (ppb) TP ^b	≤ 30.0 µg/L (ppb) TP ^b	≤ 44.0 µg/L (ppb) TP ^b
	Other Site-Specific Parameters	See section 5.		
	Response Indicators			
	Water Column Chl <i>a</i> (µg/L, ppb) ^b	Seasonal mean ≤ 6.0	Seasonal mean ≤ 8.0	Seasonal mean ≤ 8.0
	Sewage Fungus ^c	No visible patches of sewage fungus		

a Attainment of these criteria will be assessed according to the decision framework in section 4.

b Geometric mean of TP in a season. Site-specific TP values established in section 5 supersede default TP values for the statutory classes. Site-specific values for other non-TP nutrients established in section 5 must also be attained in addition to applicable TP values.

c This indicator must meet the specified conditions during the entire season.

The Chapter 583 rule establishes the nutrient criteria as a “combined nutrient criteria.” This combined nutrient criteria integrates thresholds for the causal indicator (total phosphorus and non-total phosphorus nutrients) and the response indicators (water column chlorophyll *a*, percent nuisance algal cover, and sewage fungus) into one nutrient WQS. EPA has published guidance titled, *Guiding Principles on an Optional Approach for Developing and Implementing a Numeric Nutrient Criterion that Integrates Causal and Response Parameters*, (referred to as, *Guiding Principles*), on how to develop and implement approaches to nutrient criteria that combine the causal parameter (i.e., the nutrient) and the biological response parameter (i.e., the symptom of eutrophication).¹ DEP has developed the Chapter 583 criteria consistent with the *Guiding Principles* document.

A discussion of how the causal indicators (total phosphorus) as well as the biological response indicators (water column chlorophyll *a*, percent nuisance algal cover, and sewage fungus) function as a combined nutrient criteria that is scientifically sound and protective of the applicable designated uses is provided below.

Total Phosphorus Indicators in Tables 1a., 1b., and 1c.:

Total phosphorus (TP) was chosen as the primary nutrient to control excess algal growth in freshwaters of Maine. DEP determined that phosphorus was appropriate because (1) it has a long history of being used as an indicator of lake trophic state, (2) phosphorus and nitrogen concentrations are highly correlated, and (3) management of phosphorus inputs is often more straightforward than that of nitrogen. Although EPA recommends dual-nutrient criteria² as a more

¹ EPA (2013) *Guiding Principles on an Optional Approach for Developing and Implementing a Numeric Nutrient Criterion that Integrates Causal and Response Parameters*. Available at: <https://www.epa.gov/sites/default/files/2013-09/documents/guiding-principles.pdf>

² EPA (2015) *Preventing Eutrophication: Scientific Support for Dual Nutrient Criteria*. Available at: <https://www.epa.gov/sites/default/files/documents/nandpfactsheet.pdf>.

appropriate approach to address the effects of nutrient pollution, EPA finds DEP's rationale compelling. In particular, the lack of strong correlations between nitrogen and biological responses in statewide analyses that would be indicative of its causal contribution to eutrophication in freshwater systems precluded its inclusion with these criteria. Section 4.C.(3) of Chapter 583 allows DEP to establish site-specific nutrient criteria when the impacts of eutrophication are present, but seasonal geometric total phosphorus or non-phosphorus nutrient concentrations are below the applicable thresholds. To pursue a dual-nutrient criteria, both Section 4.C.(3) and Section 5 could be used in the future.³

In deriving the TP criteria, the three waterbody class groups from Tables 1a., 1b., and 1c. were grouped together and analyzed. Given that monitoring methods for TP are the same for all three waterbody types and that all waterbody types were part of the aggregated dataset, EPA does not object to this approach. The following analyses were conducted to derive potential thresholds for the different waterbody class groupings:

- The 90th percentile of TP concentrations of reference streams with over 95% natural land cover and no point source discharges. This analysis was only used for the Class AA and A threshold. A low-gradient and a high-gradient streams dataset were summarized separately.
- 75th percentiles of TP concentrations for high gradient and low gradient waterbodies that met the classes' biocriteria standards (i.e., met Class AA/A standards for macroinvertebrates, met Class B standards for macroinvertebrates but not Class A, or met Class C standards for macroinvertebrates but not Class B).
- Logistic regression to predict the probability of attaining the classes' biocriteria standards based on TP concentrations from a set of high-gradient and a set of low-gradient streams. A 0.6 probability of attaining standards was used as a cutoff.
- Changepoint analysis to detect the largest change in percent nuisance algal cover for different TP concentrations. This analysis was only used for the Class C threshold.
- In addition, literature reviews of different regression models linking chlorophyll *a* and TP concentrations were explored to identify at what TP concentration chlorophyll *a* concentrations would exceed an 8 µg/L threshold (a response indicator). This analysis was only used for deriving the Class C TP threshold.

For each of the class groupings, the first three analyses (and the last two for Class C waters) were combined in a weight-of-evidence approach to derive the final criteria thresholds to ensure protection of applicable designated uses. These TP thresholds, shown in Tables 1a-1c of Chapter 583, were set at ≤19 µg/L, ≤30 µg/L, or 44 µg/L for Class AA & A, Class B, and Class C, respectively. As noted in footnote b of Tables 1a-1c, TP samples will be calculated for all waterbodies based on a geometric mean for a season (spatial geometric mean for impoundments) to compare to the threshold.

EPA finds DEP's approach to deriving TP concentration criteria is scientifically sound and defensible. A large dataset of TP concentrations from a diverse array of waterbodies was used in the State's analysis. Multiple lines of evidence were explored and weighted accordingly. Chapter

³ Any site-specific nutrient criteria resulting from this process would constitute a WQS revision requiring EPA approval as described in Section 5 of Chapter 583.

583 TP thresholds are within the range observed by EPA in its analysis of ecoregional criteria for the Nutrient-Poor Largely Glaciated Northeast, albeit higher than the 25th percentile of ecoregional data.⁴ Pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131, EPA approves the TP criteria in Tables 1a., 1b., and 1c. as scientifically defensible and protective of the applicable designated uses.

Percent Nuisance Algal Cover Indicator in Table 1a., Water Column Chlorophyll *a* Indicators in Tables 1b. and 1c. and Sewage Fungus Indicators in Tables 1a., 1b., and 1c.:

Chapter 583 is composed of three nutrient response indicators: percent nuisance algal cover, water column chlorophyll *a* (chl-a), and sewage fungus. These response indicators are signs or symptoms of excess primary productivity and are meant to provide clear indications that a waterbody meeting its designated uses and is not impaired due to eutrophication. DEP had originally included other response indicators as part of Chapter 583 but eventually settled on this list because these three are directly linked to excess primary productivity, are appropriate for the waterbody types included in this rule, and the other nutrient-related indicators initially chosen were already included elsewhere in state standards

Water column chl-a was chosen as the primary response indicator for all waterbodies except wadeable stream or river segments with rocky substrates. In these deeper waterbodies, excess algal growth will exhibit in the water column itself rather than the streambed. DEP developed different chl-a thresholds for Class AA and A waters than for Class B and C waters. Class AA and A waters were grouped based on the requirement from 38 MRS §§ 465.1 and 464.2 that aquatic habitat “shall be characterized as natural.” To derive a threshold for these waterbodies, DEP examined chl-a data for 115 minimally disturbed streams across the state (characterized by high percentages of upstream forest and wetland land cover) and 35 reference sites from low gradient streams with marshy vegetation and impoundments. The 90th percentile from these two subsets was combined to derive the 6 µg/L chl-a threshold for Class AA and Class A waters. For Class B and C waterbodies, DEP used a chl-a threshold of 8 µg/L. This value is based on DEP experience from lakes and ponds where this chl-a concentration has been seen to be consistent with nuisance algal blooms.⁵

Unlike lakes, impoundments may be horizontally stratified due to their linear flow. For these waterbodies, the chl-a response indicator will be calculated based on a spatial geometric mean of water column chl-a samples. Chapter 583 contains an additional requirement that no sample composing the geometric mean can exceed a threshold of 8 µg/L in Class AA and A waters and 10 µg/L in Class B and C waters to ensure that averaging multiple samples with a geometric mean does not miss a localized or less persistent algal bloom.

For wadeable stream or river segments with rocky substrates, percent nuisance algal cover was chosen as the primary response indicator. Responses to nutrients in these shallower streams can be readily measured through nuisance algal cover unlike deeper streams with mixed substrates. Three nuisance algal cover thresholds were derived, one for Class AA and A, one for Class B, and one for Class C. These distinctions were made on the basis of the habitat descriptions in 38 MRS §

⁴ EPA (2001) *Ambient Water Quality Criteria Recommendations, Information Supporting the Development of State and Tribal Nutrient Criteria for Rivers and Streams in Nutrient Ecoregion VIII*. Available at: <https://www.epa.gov/sites/default/files/documents/rivers8.pdf>.

⁵ See 06-096 CMR Chapter 581 – Regulations Relating to Water Quality Evaluations.

465. For each class grouping, one or more of the following analyses were conducted to derive potential threshold values:

- The 90th percentile of percent nuisance algal cover of reference streams with over 95% natural land cover and no point source discharges. This analysis was only used for the Class AA and A threshold.
- The 90th percentiles of percent nuisance algal cover for waterbodies that met the classes biocriteria standards (i.e., met Class AA and A standards for macroinvertebrates, met Class B standards for macroinvertebrates but not Class A, or met Class C standards for macroinvertebrates but not Class B).
- Logistic regression to predict the probability of attaining the classes biocriteria standards using percent nuisance algal cover as the predictor. A 0.6 probability of attaining standards was used as a cutoff. This analysis was used for Class B and C thresholds.
- Literature review of percent algal cover thresholds to protect aquatic life and recreation.

For each of the class groupings, at least two of the above analyses were combined in a weight-of-evidence approach to derive the final percent nuisance algal cover criteria. These thresholds, shown in Table 1a of Chapter 583, were set at $\leq 19\%$, $\leq 24\%$, or $\leq 35\%$ for Class AA and A, Class B, and Class C, respectively. As noted in footnote c of Table 1a, these values are not to exceed values, meant to be met during the entire season (June through September).

Sewage fungus is rare and typically found in waters receiving large inputs of carbon and nutrients such as from sewage or compost. Water with sewage fungus will usually have an unpleasant odor due to decomposing organic matter. Additionally, waterbodies with sewage fungus can have substantial growth of filamentous algae and a macroinvertebrate diversity dominated by pollution tolerant species. In order to prevent the impacts from high carbon inputs, DEP established a response indicator of “No visible patches of sewage fungus” for each waterbody type in Tables 1a., 1b., and 1c. Footnote c for each table states that this indicator must meet the specified condition during the entire season.

EPA finds that DEP’s approach to deriving the three eutrophication response indicators is scientifically sound and defensible. All three response indicators are robust predictors of primary productivity, and therefore, TP as well. DEP conducted a thorough analysis that incorporated statewide data from different waterbodies around the State. The approach of developing different thresholds for different waterbody classes is consistent with the classification method outlined in Maine WQS and the narrative description of designated uses in 38 MRS § 465. EPA encourages DEP to continue to track how well these response indicators are capturing waterbody responses to eutrophication. Given the time lag between when pollution occurs and when symptoms of eutrophication emerge, there is always a possibility that these indicators might not identify impaired waters quickly enough. With that caveat, DEP already anticipates 31 assessment units will be added to the State’s Clean Water Act Section 303(d) list based on these response indicators.

Pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131, EPA approves the percent nuisance algal cover indicator in Table 1a., water column chlorophyll *a* indicators in Tables 1b. and 1c. and sewage fungus indicators in Tables 1a., 1b., and 1c. as scientifically defensible and protective of the applicable designated uses.

Chapter 583 – 4. Implementation:

Section 4 of Chapter 583 provides a decision framework to determine if nutrient criteria are attained. Failure to meet any of the response indicators is sufficient to determine that a waterbody does not attain the nutrient criteria. DEP may decide not to assess a given response indicator where water conditions would preclude observations. A figure showing the decision framework is provided in Section 4 of Chapter 583 and is provided below. Pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131, EPA approves Section 4. Implementation of Chapter 583, excluding certain subsections as noted below, as scientifically defensible and protective of the applicable designated uses. Additionally, Section 4 of Chapter 583 is consistent with EPA's *Guiding Principles* as it incorporates its decision framework as part of the integrated WQS, clearly states the desired ambient condition of the waterbodies to ensure protection of designated uses, and allows for transparent and reproducible assessment decisions for all scenarios.

Figure 1. Decision framework

	Seasonal geometric mean TP concentration is less than or equal to the applicable value in Table 1 or an established site-specific value <i>AND</i> If the waterbody has a site-specific value for a non-TP nutrient established in section 5, the seasonal geometric mean concentration of the non-TP nutrient is less than or equal to the site-specific value for the non-TP nutrient	Seasonal geometric mean TP concentration is greater than the applicable value in Table 1 or an established site-specific value <i>AND/OR</i> If the waterbody has a site-specific value for a non-TP nutrient established in section 5, the seasonal geometric mean concentration of the non-TP nutrient is greater than the site-specific value for the non-TP nutrient
All applicable response indicators meet the values in Table 1	A. Nutrient Criteria Are Attained	B. Nutrient Criteria Are Attained Department may conduct a study to develop a site-specific TP value as described in section 4(B)
One or more of the applicable response indicators do not meet the values in Table 1	C. Does Not Attain Nutrient Criteria Department may conduct a study to develop a site-specific value for a nutrient as described in section 4(C)	D. Does Not Attain Nutrient Criteria

Chapter 583 – 4. Implementation – A. Figure 1, A. Nutrient Criteria are Attained:

Section 4.A. of Chapter 583 describes scenario A from the decision framework in Figure 1 shown above. In this scenario, the nutrient criteria are attained since the applicable TP and non-TP concentrations are met and all applicable response indicators are attained. As discussed above, EPA approves this Figure of Section 4.

Chapter 583 – 4. Implementation – B. Figure 1, B. Nutrient Criteria are Attained:

Section 4.B.(1) of Chapter 583 describes scenario B from the decision framework. In this scenario, the TP and/or non-TP nutrient concentration are not met but all applicable response indicators are attained, and nutrient criteria are attained.

EPA is not acting on Section 4.B.(2) of Chapter 583. This section outlines the steps that DEP would take to determine if a site-specific TP criterion is warranted. Since this section only describes the process to study and determine whether a site-specific criterion is warranted and does not address designated uses, criteria, or antidegradation, it is not a WQS requiring EPA review and approval pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131.

Chapter 583 – 4. Implementation – C. Figure 1, C. Does Not Attain Nutrient Criteria:

Scenario C from the decision framework is described in Sections 4.C.(1) and (2) of Chapter 583. Under Section 4.C.(1), nutrient criteria are not attained if the TP and/or non-TP nutrient concentration are met but one or more of the response indicators are not attained. Under Section 4.C.(2), the nutrient criteria are not attained if one or more of the response indicators are not attained and there is insufficient information to determine if the seasonal geometric mean TP or an applicable non-TP nutrient concentration is being met.

EPA is not acting on Section 4.C.(3) of Chapter 583. This section allows for the development of site-specific criteria if DEP determines that a nutrient caused or contributed to the non-attainment of the nutrient criteria. This section refers to the provisions of Section 4.B.(2) that DEP would apply in the assessment of and decision to propose to establish a site-specific nutrient criterion. Section 4.C.(3) does not address designated uses, criteria, or antidegradation and is therefore not a WQS requiring EPA review and approval pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131.

Chapter 583 – 4. Implementation – D. Figure 1, D. Does Not Attain Nutrient Criteria:

Section 4.D. of Chapter 583 describes scenario D of the decision framework. Under this scenario, the TP and/or non-TP nutrient concentration are not attained and one or more of the response indicators are not attained or there are insufficient data to determine that one or more of the response indicators in a waterbody is being attained, and nutrient criteria are not attained. As discussed above, EPA approves this Figure of Section 4.

Chapter 583 – 4. Implementation – E. Data Requirements:

Section 4.E.(1), (2) and (4) of Chapter 583 describe responsibility for sampling, sampling plans, and data quality to perform waterbody assessments or site-specific criteria evaluation. These sections do not address designated uses, criteria, or antidegradation and therefore are not WQS requiring EPA review and approval pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131.

EPA notes a misnumbering in Section 4.E. There are subsections (1), (2) and (4) but no (3).

Chapter 583 – 5. Establishment of Site-Specific Criteria:

Chapter 583 Section 5. states:

“If the Department determines that a site-specific value for TP or another nutrient is warranted, the Department will propose to amend this Chapter to add the site-specific value to section 5 through agency rulemaking. The amended Chapter will be submitted to the U.S. Environmental Protection Agency (EPA) for approval. The amended Chapter will become effective and the site-specific nutrient value will be established, subsequent to EPA approval.”

While Section 5 outlines the process that DEP will go through to amend Chapter 583 to include site-specific criteria for TP or another nutrient, it does not specifically address designated uses, criteria, or antidegradation and is therefore not a WQS requiring EPA review and approval pursuant to Section 303(c)(3) of the CWA and 40 C.F.R. Part 131. EPA notes that site-specific criteria established through DEP's rulemaking process and submitted to EPA pursuant to Section 303(c) of the CWA would be considered a WQS as it would establish specific criteria for a waterbody to protect designated uses, and would become the applicable criteria for CWA purposes upon EPA approval.

Other:

DEP outlined its planned approach for MEPDES and NPDES permits with the combined nutrient criteria in Section 6 of its Technical Support Document.⁶ Table 6 contains a decision framework for new or increased discharges and Table 9 outlines example permitting scenarios. Importantly, DEP plans to develop TP or non-TP nutrient limits for facilities when the downstream nutrient computed in a reasonable potential analysis exceeds the TP or non-TP nutrient threshold in Chapter 583, regardless of the response indicator status. In addition, DEP highlighted that its decision will be consistent with Maine WQS antidegradation provisions. This means that nutrient discharges that are projected to exceed Chapter 583 thresholds will trigger nutrient limitations even if the waterbody is not currently exhibiting signs of eutrophication. DEP's approach to implementing the Chapter 583 nutrient criteria is consistent with 40 C.F.R. §122.44(d)(1)(i) which states "Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

⁶ See Exhibit 5 Description of Draft Nutrient Criteria for Class AA, A, B, and C Fresh Surface Waters (Chapter 583).