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UNITED STATES DISTRICT COURT
DISTRICT OF MONTANA
GREAT FALLS DIVISION

UPPER MISSOURI WATERKEEPER,) No.
)
 Plaintiff,) COMPLAINT FOR
) DECLARATORY AND
 v.) INJUNCTIVE RELIEF
)
 UNITED STATES ENVIRONMENTAL)

PROTECTION AGENCY and GINA)
McCARTHY, Administrator, United States)
Environmental Protection Agency,)
)
Defendants.)
_____)

INTRODUCTION

1. Plaintiff Upper Missouri Waterkeeper (“Waterkeeper”) brings this action to address the failure of the U.S. Environmental Protection Agency (“EPA”) to comply with Clean Water Act requirements for approval of state submissions of water quality standards for Montana waters. EPA’s approval of Montana’s general numeric nutrient variance rule - which replaces protective, science-based water quality criteria for nutrient pollutants - violates the Clean Water Act and is arbitrary, capricious, and an abuse of discretion under the Administrative Procedure Act.

2. The Clean Water Act requires states (or the Environmental Protection Agency if states fail to do so) to develop water quality standards necessary to meet the requirements of the Clean Water Act, and especially to protect designated uses of water. 33 U.S.C. § 1313. Designated uses encompass the “fishable and swimmable” protections of the Clean Water Act: protecting and cleaning up our nation’s waters such that they are clean enough for drinking, for direct human contact, for fishing or recreation, for healthy aquatic resources, and for catching

and consuming fish and shellfish. Water Quality Standards include designated uses and criteria, often numeric, sometimes narrative, necessary to ensure that the designated uses such as the protection of recreational contact and protection and propagation of fish and wildlife, are attained and protected.

3. Montana promulgated numeric water quality criteria (also referred to as numeric nutrient criteria) for phosphorus and nitrogen (nutrient pollutants), based on years of scientific analysis and development, including EPA's Ecoregional Nutrient Criteria. Nutrient Criteria Development; Notice of Ecoregional Nutrient Criteria, 68 Fed. Reg. 557-560 (Jan. 6, 2003). Montana found - and EPA agreed - that the new, numeric nutrient water quality criteria are necessary to protect the designated uses of Montana's wadeable streams and certain additional specified waters.

4. At the same time that Montana promulgated its science-based numeric nutrient water quality criteria, Montana created and EPA approved the use of variances from the science-based criteria that excuse National Pollutant Discharge Elimination System (NPDES) permittees from meeting the science-based criteria.

5. The variance from science-based nutrient standards (hereafter, the "replacement standards") is not supported by science. The replacement standards provide for far less-stringent effluent limits than that which would otherwise be

required pursuant to scientifically-based numeric criteria that Montana found, and EPA agreed, are necessary to protect designated uses in Montana waters.

6. The replacement standards are also flawed in that they fail to consider what uses can be protected in individual Montana waters and what limits can be placed in particular Montana NPDES permits without causing substantial and widespread economic impact. Indeed, the replacement standards do not even fulfill the basic purpose of water quality criteria, as they do not describe the desired or achievable water quality condition.

7. EPA approved Montana's use of these replacement standards and, in so doing, authorized the state's use of weaker, less-stringent effluent limits that are not protective of existing uses, and do not reflect the water quality needed to protect attainable uses as shown by best available science. Furthermore, the allegedly "interim" replacement standard authorized by variance is based on cost and economic considerations, instead of science-based limits necessary to support designated uses. All of these decisions are contrary to the Clean Water Act and EPA's own regulations.

8. EPA's approval of Montana's twenty-year general and state-wide variance from nutrient water quality standards, is also arbitrary, capricious, and contrary to the evidence.

9. As set forth in detail below, Waterkeeper asks that EPA's approval of

the twenty-year general and state-wide variance from nutrient water quality standards be set aside.

PARTIES AND STANDING

10. Plaintiff Upper Missouri Waterkeeper, Inc. (“Waterkeeper”) is a non-profit membership organization dedicated exclusively to protecting and improving the ecological and aesthetic qualities of Southwest and West-central Montana’s Upper Missouri River Basin. Waterkeeper is located at 24 S. Wilson Ave., Suite 6-7, Bozeman, Montana 59715. As part of its mission Waterkeeper engages in policy, science and rulemaking related to Montana’s implementation of its Clean Water Act duties and citizens’ guarantee to a clean and healthful environment under our constitution.

11. Defendant United States Environmental Protection Agency (“EPA”) is an agency of the United States charged with overseeing and approving or disapproving state water quality standards pursuant to 33 U.S.C. § 1313 to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act.

12. Defendant Gina McCarthy, the Administrator of EPA, is the chief officer of EPA, the federal official ultimately responsible for EPA’s administration and implementation of its legal duties. Administrator McCarthy is sued in her official capacity.

13. Waterkeeper's donors, supporters, and members reside on or near, or recreate on the waters of Montana, including waters affected by the nutrient water quality standards and the variance therefrom. EPA's approval of Montana's variance rule, which replaces the science-based nutrient criteria, injures Waterkeeper and its members by allowing Montana to promulgate and implement water quality standards and issue NPDES permits that are not protective of designated uses—uses to which Waterkeeper's members put Montana's waters. Nutrient pollution causes and contributes to algal, bacteria and plant growth in waters which, in turn, depletes oxygen to the detriment of fish and wildlife, can create toxic conditions for wildlife and humans, and causes severe habitat and aesthetic degradation in affected waters. Waterkeeper members who recreate and/or fish on Montana's waters are adversely affected by nutrient pollution and the algal, bacterial and plant impacts it causes when it adversely affects or kills fish and invertebrate populations through oxygen depletion or habitat alteration; when toxic algal blooms can affect humans, pets and wildlife that come into contact with that water; and when nutrient-fed algal and plant blooms create unsightly and disruptive conditions in waters of the state.

14. Plaintiff has representational standing to bring this action. EPA's approval of Montana's standards by operation of a twenty-year variance has an adverse impact on Plaintiff and Plaintiff's supporters' ability to use and enjoy

water bodies in Montana, and has injured the recreational, environmental, aesthetic, and/or other interests of Plaintiff and its members. These injuries are traceable to EPA's erroneous approval and are capable of redress by action of this Court.

15. Plaintiff has organizational standing to bring this action. Plaintiffs have been actively engaged in a variety of educational and advocacy efforts to improve water quality standards in the state of Montana. EPA's approval of Montana's unprotective standards by operation of a twenty-year variance adversely affect Plaintiff's clean water advocacy efforts. These injuries are fairly traceable to Defendants' violations and are redressable by the Court.

JURISDICTION AND VENUE

16. Waterkeeper brings this action for review pursuant to the Administrative Procedure Act, 5 U.S.C. § 551 *et seq.*

17. This court has jurisdiction over this action pursuant to 28 U.S.C. § 1331 (federal question jurisdiction) and 5 U.S.C. §§ 701-706 (Administrative Procedure Act).

18. Venue is proper in this Court and this Division under 28 U.S.C. § 1391(e) because Waterkeeper and its members reside in the District of Montana, Waterkeeper maintains its office in Bozeman and Waterkeeper's mission and purpose is the protection of the Upper Missouri River. Because the bulk of the

Missouri River watershed is in the portion of the state and counties where venue is proper in Great Falls, Montana, this case is being filed in the Great Falls Division of U.S. District Court, District of Montana.

LEGAL AND FACTUAL BACKGROUND

NUTRIENT POLLUTANTS

19. Nutrient pollutants are phosphorus and nitrogen. Nutrient pollutants act as fertilizer in water, causing and contributing to the growth of harmful algae blooms, bacteria and excessive plant growth. These algal, bacteria and plant blooms, in turn, cause and increase turbidity in water, cause and contribute to reductions in dissolved oxygen, and for certain types of algae, can produce toxins. These problems all adversely affect fish, aquatic invertebrates, wildlife and human health. EPA, *Nutrient Criteria Technical Guidance Manual: Rivers and Streams* at 3-5 (July 2000). Nutrient pollution impairs designated uses by impairing fishing, impairing wildlife and impairing human health and contact with waters affected.

20. Nutrient pollutants can cause their damage downstream from the source, sometimes for great distances (for example hypoxia in the Gulf of Mexico is a nutrient problem caused by pollutants in the Mississippi River system), and can accumulate in aquatic systems by attaching to sediments, causing algal blooms to increase and recur when sediments are remobilized, thereby causing new or repeated water quality problems even after the original source of pollution is

removed. Nutrients are sometimes referred to as “conservative” or “cumulative” pollutants because of their ability to damage waters away from a source and for an extended period of time.

21. In 2000, EPA, in recognition of the problems caused by nutrient pollution, issued direction and guidance to the states to develop numeric nutrient criteria to protect designated uses in all waters. EPA, Nutrient Criteria Development; Notice of Nutrient Criteria Technical Guidance Manual: Rivers and Streams, 65 Fed. Reg. 46167-46169 (July 27, 2000). EPA urged the states to develop standards by 2003, and provided states with guidance on standards development and a set of standards, developed by ecoregion, that states could adopt if they chose not to develop their own or until they developed their own. *Id.*

22. The state of Montana has long acknowledged that nitrogen and phosphorus are two of the most problematic types of pollution in Montana’s waters. In fact, excess nitrogen and phosphorus account for nearly twenty percent of all stream miles impaired by all forms of water pollution in Montana. Unhealthy nitrogen and phosphorus levels, in combination with the challenges presented by chronic dewatering and evolving precipitation and land use patterns, are cumulatively degrading dozens of waterways across Montana, rendering them unfishable, unswimmable, or unsuitable for recreation.

CLEAN WATER ACT REQUIREMENTS FOR DEVELOPMENT AND
PROMULGATION OF WATER QUALITY STANDARDS

23. The Clean Water Act requires states to set water quality standards necessary to achieve the requirements of the Clean Water Act: to restore and maintain the chemical, physical, and biological integrity of the Nation's waters, including the protection and propagation of fish and shellfish, and to prohibit pollution to water in toxic amounts. 33 U.S.C. §§ 1251(a) and 1313(c)(2)(A).

24. Required parts of a state's water quality standards are use designations and water quality criteria necessary to protect those designated uses. 40 C.F.R. §§ 131.6 and 131.10. Water quality criteria must ensure that designated uses of waters such as protection of fish and wildlife, consumption of fish, and recreational uses such as fishing, swimming and boating are achieved and maintained. *Id.* §§ 131.2 and 131.3(i). Criteria must protect the most sensitive use. *Id.* § 131.11(a). Criteria can be narrative (describing the condition needed to support the designated uses of the waterbody) or numeric. *Id.* § 131.3(b).

25. Whenever a state adopts a new or revised water quality standard, it must submit it to the EPA for review and disapproval or approval. 33 U.S.C. § 1313(c)(2). The standard becomes applicable only if EPA determines that the standard meets all requirements of the Clean Water Act, including that criteria are adequate to protect designated uses. 33 U.S.C. § 1313(c)(3).

26. While EPA regulation allows states the discretion to include in their state standards “policies generally affecting their application and implementation,” variances are themselves water quality standards and must be reviewed and approved by U.S. EPA. 40 C.F.R. §§ 131.13 and 131.14 (and earlier EPA policy).

27. EPA’s long term policies in place at the time of EPA’s approval of Montana’s nutrient criteria package and current regulations describing variances specify that variance criteria must reflect the “highest attainable condition” of the affected water body. *Id.* § 131.14(b)(1)(ii). For discharger-specific variance criteria this means “the greatest pollutant reduction achievable,” and for water body-specific variances this means “the highest attainable interim use and interim criterion” as measured by the availability of “feasible pollutant control technology.” *Id.*

28. Over the course of several years, Montana developed numeric criteria for phosphorus and nitrogen pollutants in Montana wadeable streams, as well as some select river reaches, culminating in Montana submitting final nutrient water quality standards for EPA review on August 15, 2014. Montana Dep’t of Environmental Quality Department Circular DEQ-12A. Montana’s nutrient water quality criteria for wadeable streams provide that phosphorus shall not exceed 25 micrograms (μ) per liter (L) to as high as 150 μ /L depending on the ecoregion (with 25 μ /L being the most common and widespread.) For nitrogen, the standard

varies from 275 μL to 1300 μL , again depending on the ecoregion. Table 12A-1 Department Circular DEQ-12A.

29. Montana's nutrient water quality criteria, set forth above, are based upon EPA's original ecoregional criteria guidance documents, on years of sampling and research by Montana Department of Environmental Quality, and on many scientific studies showing the necessary numeric criteria for nutrients in streams adequate to protect aquatic life and designated uses from the adverse effects of nutrient pollution.

30. As required by the Clean Water Act, Montana submitted its numeric nutrient criteria to EPA for review and approval. Based upon the scientific and technical record and based upon EPA's own guidance and research on nutrient pollution, EPA approved Montana's numeric nutrient criteria on February 26, 2015.

31. At the same time that Montana developed and finalized its science-based nutrient water quality criteria for wadeable streams, Montana also decided to develop what it terms a "variance" from the science-based water quality standards for nutrients. These replacement standards suspend application of the science-based nutrient water quality standards, replacing them with an end-of-pipe effluent standard for multiple dischargers (most in the state) in most wadeable streams of the state, of either 1.0 mg/L (1000 $\mu\text{g/L}$) total phosphorus and 10.0 mg/L (10,000

µg/L) total nitrogen, or 2.0 mg/L (2000 µg/L) phosphorus and 15 mg/L (15,000 µg/L) nitrogen, without regard to whether the discharger could meet the new science-based numeric water quality standards for wadeable streams, or limits more stringent than those authorized under the replacement standard. These end-of-pipe standards are up to 40 times higher (less stringent or protective) than the science-based nutrient criteria set forth in Department Circular 12A-1.

Furthermore, the replacement standard is for a period of up to twenty years, and broadly encompasses most dischargers and waters in the state.

32. This replacement standard was not based on years of science and technical analysis, nor was it compliant with EPA' ecoregional nutrient work and guidance.

33. Rather, it was based almost entirely on a "cost" analysis (in some instances Montana claimed it was a "cost-benefit" analysis) and a determination that reverse osmosis technology, the only technology considered, would be "too expensive" for pollutant dischargers.

34. Montana did not analyze data for each specific nutrient pollutant discharger, for classes of dischargers, or the highest attainable condition for each receiving water in deciding to adopt the weaker replacement standard.

Additionally, Montana did not consider whether the replacement standard would protect receiving waterways' designated use(s).

35. The Clean Water Act does not provide for or allow cost to be a consideration in setting water quality criteria. Criteria must be set to protect designated uses, and EPA is to disapprove any criteria that do not.

36. As required by the Clean Water Act, Montana submitted both its science-based numeric nutrient criteria and its weaker replacement or “variance” standard to EPA for review and approval. EPA approved both by approving Montana’s numeric nutrient water quality rule standards package on February 26, 2015.

37. While Montana’s weaker replacement standard may be reviewed by the state every three years (as provided by the Clean Water Act for all water quality standards) Montana has stated, and EPA has accepted, that unless a “low-cost technological innovation” becomes “widely available,” the weaker replacement standard will continue for twenty years and may be renewed even after that time. MCA § 75-5-313(8).

38. As a result of EPA’s approval of the replacement standard, the science-based numeric nutrient criteria are not the actual applicable water quality standards in Montana. Rather, the actual nutrient standard in Montana is the replacement standard, a standard that is not based on science, but is based solely on the cost of pollutant treatment.

39. The Administrative Procedure Act (“APA”) authorizes courts reviewing agency action to hold unlawful and set aside final agency action, findings and conclusions that are arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with the law. 5 U.S.C. § 706(2)(A). EPA approval of state water quality standards pursuant to the substantive requirements of the CWA are reviewed under this provision of the APA.

FIRST CAUSE OF ACTION—EPA’S APPROVAL OF THE VARIANCE
WATER QUALITY STANDARD IS CONTRARY TO LAW;
VIOLATION OF 33 U.S.C. § 1313

40. Montana developed numeric nutrient criteria for wadeable streams and specific river reaches, finding that the particular numeric nutrient criteria set forth in attachment A to this Complaint (Table 12A-1 of Department Circular DEQ-12A, incorporated herein by this reference) for nitrogen and phosphorus were scientifically-based and necessary to protecting designated uses of many Montana waterways. At the same time the state of Montana, based almost solely on cost, adopted a replacement standard that supplants the numeric nutrient criteria with less-protective requirements, which are not protective of designated uses. The replacement standard provides for effluent limits of 1.0 mg/L total phosphorus and 10.0 mg/L total nitrogen (or even higher for certain facilities) without a showing that the applicable designated uses will be attained through application of these effluent limits.

41. The Clean Water Act does not allow variances that fail to protect designated uses.

42. EPA's approval of Montana's replacement standard is contrary to the Clean Water Act in that it negates the scientifically-based nutrient water quality criteria, thereby improperly allowing water quality to be degraded below (in some cases well below) levels supporting a designated use.

43. EPA's violation has caused, and will continue to cause, direct injury to the recreational, environmental, aesthetic, and/or other interests of Waterkeeper, its members, and water users in the state of Montana by failing to protect designated uses in waters of the state from adverse effects of nutrient pollutants.

44. Based on the foregoing, and 5 U.S.C. § 706(2)(A), Plaintiffs are entitled to an order vacating EPA's approval of Montana's replacement standard found in DEQ Circular 12B.

SECOND CAUSE OF ACTION—EPA APPROVAL OF THE REPLACEMENT
WATER QUALITY STANDARD IS CONTRARY TO LAW – VIOLATION OF
40 C.F.R. § 131.14

45. EPA's long-established policy (now codified in regulations) for promulgation of variances requires that such variance criteria reflect the highest attainable condition for the time-limited duration of the variance. *See* 40 C.F.R. § 131.3(o). *See also* former regulation 40 C.F.R. § 131.10(g) which set forth the

consideration EPA required both for use attainability analysis and for the use of a variance.

46. The regulations further provide that variance criteria must be developed to require, as to each water body to which they are applicable, the greatest pollutant reduction and highest condition achievable, to last for the shortest period of time possible, and to include interim steps toward compliance with the underlying standards. 40 C.F.R. § 131.14. *See also* former regulation 40 C.F.R. § 131.10(g) which set forth the consideration EPA required both for use attainability analysis and for the use of a variance.

47. EPA regulations also mandate that all variance standards include a specified frequency for the State to reevaluate the highest attainable conditions for the affected waters, and specify that the variance will no longer apply if the State does not conduct the required reevaluation. 40 C.F.R. § 131.14(b)(1)(v).

48. In approving Montana's replacement standard, EPA failed to consider whether designated uses can be supported by more stringent numeric criteria in particular water bodies, and failed to consider whether the variance standard reflects the highest attainable use, as currently mandated by 40 C.F.R. § 131.14(b) consistent with EPA's earlier policy and the requirements of former 40 C.F.R. § 131.10(g).

49. EPA's approval of Montana's replacement standard for nutrients is contrary to the Clean Water Act and EPA regulations because it is unsupported by any record evidence showing that the variance reflects the highest attainable use.

50. While Montana states that it will review the variance standard every three years after adoption – and the Clean Water Act already requires this for all water quality standards – Montana also clearly stated it would not alter the twenty-year variance water quality standard unless a “low-cost technological innovation” becomes “widely available” during that period of time. This language renders any evaluation of the variance standard as likely empty and still not based on protecting designated uses or meeting Montana's duty to periodically reevaluate the highest conditions attainable under the variance, and is contrary to 40 C.F.R. § 131.14(b)(1)(v).

51. Based on the foregoing and 5 U.S.C. § 706(2)(A), plaintiffs are entitled to an order vacating EPA's approval of Montana's variance standard found in DEQ Circular 12B.

THIRD CAUSE OF ACTION—EPA APPROVAL OF THE REPLACEMENT
WATER QUALITY STANDARD IS CONTRARY TO THE EVIDENCE AND
ARBITRARY AND CAPRICIOUS

52. Montana developed numeric nutrient criteria for wadeable streams and specific river reaches, finding that the numeric nutrient water quality standards in Montana's Department Circular DEQ-12A are scientifically-based and

necessary to support and protect designated uses but, ultimately, based solely on cost-considerations, decided to adopt a weaker replacement standard.

53. Contrary to the entirety of the record demonstrating the necessity of numeric nutrient criteria in protecting designated uses in many Montana waterways, EPA approved the weaker replacement standard, unsupported by any consideration other than cost. EPA's approval is contrary to the entirety of the record and is arbitrary, capricious, and an abuse of discretion.

54. Montana based its replacement standard on a truncated analysis of wastewater treatment plants and private industry in the state. Montana did not scientifically evaluate the replacement standards on a case-by-case or waterbody-by-waterbody basis, instead vaguely asserting that for all publicly-owned wastewater treatment plants, meeting the scientific and record-based numeric nutrient water quality standards would be too expensive.

55. EPA's approval of Montana's replacement standard for nutrients is contrary to the evidence, unsupported by the record, arbitrary and capricious and an abuse of discretion.

56. Based on the foregoing, and 5 U.S.C. § 706(2)(A), plaintiffs are entitled to an order vacating EPA's approval of Montana's replacement standard found in DEQ Circular 12B.

REQUEST FOR RELIEF

Based on the foregoing, Upper Missouri Waterkeeper requests the following relief:

1. A declaration that EPA acted in violation of the Clean Water Act and applicable regulation in approving Montana's variance water quality standard for nutrients;
2. A declaration that EPA's approval of Montana's variance water quality standard for nutrients is arbitrary and capricious and an abuse of discretion;
3. Vacatur of EPA's approval of that portion of Montana's water quality standards that is the variance water quality standard for nutrients found in DEQ Circular 12B;
4. An award of Upper Missouri Waterkeeper's costs and attorneys' fees as determined appropriate under the Equal Access to Justice Act; and
5. Such other and further relief as the Court deems just and equitable.

Respectfully submitted this 31st day of May, 2016,

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