

STATE OF COLORADO

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Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

February 9, 2012

Members of the Joint Agriculture, Livestock and
Natural Resources Committee
Colorado State Capitol
Denver, CO 80203

RE: Clean Water Act Requirements for Nutrient Regulations

Dear Members:

During the February 1, 2012 briefing to the Joint Agriculture, Livestock, and Natural Resources Committee, questions were raised regarding the specific federal statutory and regulatory citations requiring adoption of nutrient regulations. At the briefing, we were asked if there are specific numeric water quality standards for nutrients (nitrogen and phosphorous) in the Clean Water Act, suggesting that such specific standards are necessary for the existence of any federal mandate under the Act. The absence of a specific numeric nutrient standard in the Act does not mean it is not required by federal law. As explained by Colorado Legislative Council Staff¹, the Clean Water Act does not contain a list of numeric standards for every pollutant, but rather establishes a structure for the development of both numeric and narrative standards and requires that such standards be adopted by states. Furthermore, the Act requires that such standards be submitted to and approved by EPA. 33 U.S.C. §§ 303(c)(2)(A) and 303(c)(3); 40 C.F.R. §§ 131.20 and 131.21.

The Clean Water Act requires Colorado to identify the “designated uses” for each water body in the state to be achieved and protected, such as public water supply, recreation, and propagation of fish. 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. § 131.10. The Act then requires Colorado to adopt water quality standards to protect those uses. 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. §§ 131.3(b), 131.6(c), and 131.11(a)(1). In adopting standards, Colorado must base its standards on EPA’s section 304(a) criteria or develop standards based on scientifically defensible methods that reflect localized conditions. 40 C.F.R. § 131.11(b)(1).

Colorado law requires that the state maintain a program consistent with the Clean Water Act. C.R.S. § 25-8-202(6). Therefore, the process described above for adoption of water quality standards is the same

¹ Memorandum to Interested Persons from Lauren Ris, Re: *Water Nutrient Regulations and the Clean Water Act* (Aug. 15, 2011).

program required by the Colorado Water Quality Control Act, and the Water Quality Control Division and Commission act in accordance with those requirements. In many instances, such as chlorine, lead and selenium, Colorado has adopted EPA's section 304(a) criteria as table values generally applicable to all state waters. In other instances, such as for zinc, Colorado has opted to utilize the option to develop its own scientifically defensible standards. In the case of ammonia, there was an attempt to develop a scientifically defensible standard other than EPA's section 304(a) criteria, but when the scientific evidence was inadequate to support those alternative criteria, EPA's section 304(a) criteria were adopted in Colorado

In Colorado's streams and rivers, EPA's section 304(a) nutrient criteria would range from 10 – 67 ug/L (micrograms per liter) for total phosphorus (TP) and 120 – 880 ug/L for total nitrogen (TN). *See* 66 Fed. Reg. 1671 (Jan. 9, 2001) and Summary Table for the Nutrient Criteria Documents, available at http://water.epa.gov/scitech/swguidance/standards/criteria/nutrients/upload/2007_09_27_criteria_nutrient_ecoregions_sumtable.pdf.² Rather than adopt these criteria as standards in Colorado, the Division is proposing other nutrient regulatory controls based on scientifically defensible methods, taking into account localized conditions. The Division's proposal is a combination of a interim numeric values with limited application, and technology based effluent limits. The Division's proposed interim numeric values are much less stringent than EPA's section 304(a) criteria. The Division is proposing 110-170 ug/L for total phosphorus and 1,250 – 2,010 ug/L for total nitrogen in Colorado's rivers and streams, significantly less stringent than EPA's section 304(a) criteria. Moreover, the Division is not proposing to implement these as standards broadly throughout the state until after 2022. Before 2022, except in limited circumstances and only after a rulemaking hearing by the Commission, the Division's less stringent interim values would only be applied upstream of point source dischargers. Furthermore, if EPA's section 304(a) criteria were to be adopted in Colorado, they would translate to much more stringent effluent limitations in permits than those being proposed in Regulation No. 85.

If Fountain Creek is selected as an example, using EPA's criteria, the standards would be TP = 23 ug/L and TN = 560 ug/L. Under the Division's proposal, the standards would be TP= 170 ug/L and TN = 2010 ug/L. Furthermore, the Division's proposed standards would not affect any dischargers into Fountain Creek until after 2022.

Water quality standards include both numeric and narrative standards. 40 C.F.R. § 131.3(b). In Colorado, the applicable narrative standard requires that "state surface waters shall be free from substances attributable to human-caused point source or nonpoint source discharge in amounts, concentrations, or combinations which...are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life." 5 CCR 1002-31.11(1)(a)(iv). Discharge permits for municipal sewage treatment plants and other point sources must include effluent limits as needed to ensure that discharges do not cause or contribute to a stream not attaining the applicable water quality standards, including the narrative standards. 33 U.S.C. §§ 1311 and 1342; 40 C.F.R. § 122.44(d)(1). Accordingly, the imposition of effluent limits in permits to protect beneficial uses and to comply with Colorado's

² Detailed information regarding EPA's section 304(a) criteria for nutrients is available at <http://water.epa.gov/scitech/swguidance/standards/criteria/nutrients/ecoregions/index.cfm>.

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narrative standard is required by federal law. The Division is proposing the effluent limits in Regulation 85 to meet those requirements.

If Colorado fails to comply with the requirements of the federal Act and EPA determines that water quality standards are necessary to protect beneficial uses of Colorado waters, EPA must promulgate its own standards in Colorado. 33 U.S.C. § 1313(c)(4); 40 C.F.R. § 131.22(b). In doing so, EPA is required by law to adopt its section 304(a) criteria or develop a standard reflecting site-specific conditions based on a scientifically defensible method. 40 C.F.R. §§ 131.11(b)(1) and 131.22(c). In either case, such standards and the resulting effluent limits would likely be more stringent and therefore more costly to Colorado's citizens than those proposed by the Division.

We are currently reviewing all comments submitted by participants in the rulemaking and are considering revisions to our proposal based on those comments, as well as the scientific data and information. Consistent with the Notice for the rulemaking, we will submit our Rebuttal Statement to the Water Quality Control Commission by February 17, 2012.

Sincerely,

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Colorado Department of Public Health and Environment