

SYNOPSIS

Proposed Amendments to the Rules for Water Quality Control, Chapter 391-3-6

The proposed amendments to the Rules for Water Quality Control would amend **Rule 391-3-6-.03**, Water Use Classifications and Water Quality Standards, and **Rule 391-3-6-.06**, Waste Treatment and Permit Requirements.

Purpose: The Federal Clean Water Act (CWA) requires States and authorized Indian Tribes to review their water quality standards at least once every three years, and revise them if appropriate. This process is referred to as a Triennial Review of Water Quality Standards process. EPD is proposing amendments to the Rules for Water Quality Control based on new EPA recommended criteria and comments received from the public.

Main Features: Under its Triennial Review of Water Quality Standards process, EPD proposes amendments to the Rules for Water Quality Control to accomplish the following:

- Update current language regarding Outstanding National Resource Waters (ONRW) and designate Headwaters of the Consauaga River in the Cohutta Wilderness as an ONRW;
- Adoption of a site specific copper criteria for Buffalo Creek;
- Adoption of the EPA 2012 Recreational Bacteria Criteria;
- Remove reference to the minimum flow at Peachtree Creek of 750 cfs and update specific water use classifications of various waterbodies;
- Clarification of the total lake loading of phosphorus; and
- Removal of the Variance to the Narrative Toxicity Standard on Cabin Creek.

RULES FOR WATER QUALITY CONTROL, CHAPTER 391-3-6

391-3-6-.03, “Water Use Classifications and Water Quality Standards.”** is being amended to incorporate the following changes in the following sections:

The asterisk “**” in the title is being removed because it is superfluous and potentially confusing. The footnote connected to the asterisk in the rule title, which is at the end of **391-3-6-.03(2)**, is also being removed.

391-3-6-.03(2), “Water Quality Enhancement” is being amended to clarify the three Tiers under the antidegradation policy; to update the attributes of waters being considered for Outstanding National Resource Waters (ONRW) status to include those with aesthetic and historic significance; to designate the Conasauga River in the Cohutta Wilderness Area as an ONRW; to add language that activities that result in short-term, temporary, and limited changes to water quality may be allowed if authorized by the Division; and to incorporate associated paragraph numbering revisions. In 2007, the Environmental Georgia Research & Policy Center first nominated the headwaters of the Conasauga River for ONRW protections. However, there were issues with the 2004 Procedures for Selection of ONRWs document that resulted in EPD working with a variety of stakeholders in late 2010 to update this document. The ONRW guidance document was finally revised in 2011 to include the Qualification Criteria and Nomination Process, the Protections of ONRWs, and Steps for Designation of ONRWs. On June 22, 2012, the Environmental Georgia Research & Policy Center submitted a complete

application package to EPD and on January 30, 2013, EPD received a letter from the U.S. Forest Service supporting the proposed ONRW designation for the headwaters of the Conasauga River, which falls entirely on National Forest System lands within the congressionally designated Cohutta Wilderness Area.

391-3-6-.03(5), “General Criteria for All Waters” is being amended to add site-specific copper criteria for Buffalo Creek, from Richards Lake Dam to the confluence with the Little Tallapoosa River, in sub-paragraph (e)(ii) to protect aquatic life from toxic effects. Acute and chronic criteria have been developed to protect for immediate effects, such as mortality, and longer term effects on reproduction, growth and survival. The site-specific copper criteria were developed using the Biotic Ligand Model that takes into account the receiving waterbody characteristics that affect metal bioavailability to aquatic organisms. The Biotic Ligand Model is a computer model that uses ten water chemistry parameters to calculate a freshwater copper criterion. Stream studies indicate the bioavailability of copper in Buffalo Creek is primarily dependent on the instream pH and Dissolved Organic Carbon (DOC) levels. Therefore, the acute and chronic site-specific copper criteria are given as equations based on instream pH and DOC concentrations. Additionally, amendments are also being proposed to move a footnote, to remove redundant phrasing, and to provide clarification by adding leading zeros to emphasize decimal numbers for the specific criteria for Nickel in sub-paragraph (e)(ii); and to add identifying numbers to clarify various chemical constituents in sub-paragraph (e)(iv).

391-3-6-.03(6), “Specific Criteria for Classified Water Usage” is being amended to revise the bacteria criteria for waters designated as Recreation, based on EPA’s 2012 Recreational Bacteria Criteria, in sub-paragraph (b). The criteria recommendations protect human health in coastal and non-coastal water for primary contact recreation including swimming, bathing, surfing, water skiing, tubing, and water play. The new criteria recommends two bacterial indicators for fecal contamination, E. coli for freshwater and enterococci for marine waters. Epidemiological studies determined that E. coli and enterococci are better indicators of gastrointestinal illness than fecal coliform. The proposed criteria include a 30-day geometric mean and a Statistical Threshold Value (STV). There should not be greater than a 10% excursion frequency of the STV in the same 30-day period. EPA no longer recommends values related to “use intensity” and does not address secondary contact recreational uses. Therefore, the bacteria criteria for waters designated as Drinking Water Supplies and Fishing are not being changed since these waters support secondary contact recreation in and on the water, and include incidental contact with the water, wading, and occasional swimming. Additionally, references to “fecal coliform” have been changed to “bacteria,” and the clarifying word “these” has been added, to the bacteria criteria for waters with designated uses of Drinking Water Supplies and Fishing under sub-paragraphs (a)(i) and (c)(iii); sub-paragraph numbering has been added to the Fishing designated use bacteria criteria under sub-paragraph (c)(iii); and an abbreviation for dissolved oxygen (“D.O.”) has been removed from sub-paragraph (f)(i).

391-3-6-.03(7), “Natural Water Quality” is being amended to replace the phrase “fecal coliform” with the word “bacteria” to reflect the revised bacteria criteria.

391-3-6-.03(12), “Fecal Coliform Criteria” is being amended to revise the title to “Bacteria Criteria,” and to update the information that describes the regulatory framework to support the requirement that States protect waters for recreational use using two new bacterial indicators, E coli and enterococci.

391-3-6-.03(14), “Specific Water Use Classifications” is being amended to remove the footnote for the Chattahoochee River, Atlanta (Peachtree Creek) to Cedar Creek, that states that specific

criteria apply at all times when the river flow upstream from Peachtree Creek equals or exceeds 750 cfs. Historically, 750 cfs was the minimum flow used to develop wasteload allocations for dischargers to the Chattahoochee River downstream from Peachtree Creek. Removal of the footnote will make clear that EPD will treat this section of the Chattahoochee River consistent with other regulated streams. In addition, this paragraph is being amended to update the designated uses of waterbodies throughout the State to include Recreation. The designation of Recreation is being added to five estuarine waters with coastal beaches, and fourteen lakes with DNR Park beaches. These beaches are used for primary contact recreation and are currently sampled for bacteria to protect human health.

391-3-6-.03(17), “Specific Criteria for Lakes and Major Lake Tributaries” is being amended to clarify that phosphorus lake loading limits apply to total phosphorus, and to update the bacterial indicator used based on the revised bacteria criteria, for the six lakes that have numeric criteria; and to correct sub-paragraph numbering in paragraph (a). The 1990 Lake Law (O.C.G.A. § 12-5-23.1) requires that a multiple parameter approach for lake water quality standards be adopted. For each lake with water quality standards, numerical criteria should be adopted for a variety of parameters including: pH (maximum and minimum); fecal coliform bacteria; chlorophyll a for designated areas determined as necessary to protect a specific use; total nitrogen; total phosphorus loading for the lake in pounds per acre feet per year; and dissolved oxygen in the epilimnion during periods of thermal stratification.

391-3-6-.06, “**Waste Treatment and Permit Requirements.**” is being amended to incorporate the following change in the following section:

391-3-6-.06(4), “Degree of Waste Treatment Required” is being amended in sub-paragraph (d)5.(vii) to remove the temporary exception from water quality standards for water quality based whole effluent toxicity criteria for the discharge to Cabin Creek in the Ocmulgee River Basin in Spalding County. In April 2000, Georgia adopted a site-specific temporary variance from the water quality standards for toxicity from the Spring Industries Griffin Finishing Plant discharge downstream to the Walkers Mill Road crossing in Cabin Creek in the Ocmulgee River Basin in Spalding County. On January 10, 2002, EPA approved Georgia’s variance to the water quality-based chronic whole effluent toxicity criteria for Springs Industries. Springs Industries has since closed the Griffin facility. In December 2009, the Springs Industries’ permit (NPDES Permit No. GA0003409) was transferred to Spalding County Water and Sewerage Facilities Authority. The temporary exception from water quality standards is no longer needed.

STATEMENT OF RATIONALE
Proposed Amendments to the Rules for Water Quality Control, Chapter 391-3-6

The amendments to the Rules for Water Quality Control, Chapter 391-3-6, are proposed to address EPD's Triennial Review of Water Quality Standards process. The Federal Clean Water Act and 40 C.F.R. 131.20 requires States to review water quality standards at least once every three years and to revise them if appropriate. The proposed amendments are designed to address compliance with the latest EPA methodology and guidance as it pertains to Georgia's water quality control program, and to reflect input from stakeholders and permit holders.

It is unlikely that these changes will incur significant additional costs to the Department of Natural Resources or to the regulated community. This is because: 1) some of the revisions are simply clarifications of Rules; 2) the designation of the Conasauga River as an ONRW, the revision of the water quality criteria for copper in Buffalo Creek, and the removal of the variance for Springs Industries impact a very limited portion of the State and are changes supported by the landowner (in the case of the Conasauga River) and the permittee (in the case of Buffalo Creek); 3) the updating of designated uses of waterbodies will provide better protection of human health and will not cost additional regulatory resources; 4) the change in the bacteria criteria from fecal coliform to E. coli or Enterococci only applies to waters with a designated use of Recreation, the vast majority of waters in the State have a designated use of fishing and are not impacted, and the cost of monitoring fecal coliform versus E. coli and Enterococci are comparable though permittees and EPD may initially require resources to change testing methods; and, 5) the removal of the footnote regarding the 750 cfs flow in the Chattahoochee will not result in additional costs to EPD or permittees.