UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAY 13 2016

James A. Capp, Chief
Watershed Protection Branch
Georgia Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr., Drive
Suite 1456, East Tower
Atlanta, Georgia 30334

Dear Mr. Capp:

For the reasons discussed below, the U.S. Environmental Protection Agency, Region 4 is withdrawing the Dissolved Oxygen (DO) Total Maximum Daily Loads (TMDL) it established in 2006 for the Savannah Harbor.

The 2006 TMDL was based on the state of Georgia's then-applicable DO water quality criterion, which required that DO meet 3.0 milligrams per liter (mg/L) throughout the water column at all times. However, since that time, the state has developed a more appropriate site-specific DO criterion for Savanah Harbor that incorporates new and more pertinent data and information about the site-specific conditions of this complex water system. The new criterion was established at 5.0 mg/L daily average and 4.0 mg/L minimum DO, with a provision which allows a 0.1 mg/L DO deviation from natural background if the water quality criterion cannot be achieved under background conditions. This criterion is the same as the South Carolina DO criterion. Therefore, the 2006 DO TMDL no longer reflects the state's applicable water quality criterion for the Savannah Harbor.

Rather than pursue a revision to the TMDL in light of the new site-specific criterion, the state of Georgia determined that a better way to implement the new criterion and address the continued DO impairment of the basin would be to engage stakeholders in the development of a TMDL alternative restoration approach. In 2010, representatives from the basin dischargers signed a memorandum of agreement to explore viable alternatives to address the DO impairments in the Savannah River basin and agreed on establishing individual wasteload allocations for the 24 affected dischargers.[1] After considering various options, all parties agreed to pursue an alternative restoration approach to develop more efficient pollutant allocations (with the opportunity for trading) among the dischargers. The approach was based upon a three-dimensional water quality model and designed to achieve up to an 84% reduction of the current permitted pollutant loads, enough of a reduction to achieve the site-specific DO criterion. The states will use the wasteload allocations included in the plan to reissue all the National Pollutant Discharge Elimination System (NPDES) permits in the basin within three years of the approval of the state of Georgia 2014 303(d) List of Impaired Waters. As part of the plan's implementation, the states and the dischargers requested the withdrawal of the 2006 DO TMDL upon submittal of the alternative

[1] The basin is defined as the portion of the Savannah River watershed from the Strom Thurmond dam to the Savannah Harbor.

restoration approach plan to ensure that no ambiguity exists regarding the applicable water quality reduction target and any future NPDES permitting and other plan implementation efforts.

The EPA believes that the result of this effort should restore the Savannah Harbor to meeting the site-specific DO water quality criterion. As requested, the EPA is therefore withdrawing the 2006 DO TMDL concurrently with the approval of the State of Georgia's inclusion of the Savannah Harbor as an impaired water in the state's 303(d) List of Impaired Waters. By including the Harbor in the impaired waters list, the state is committing to re-evaluate the effectiveness of the alternative restoration plan, revise it if needed, or develop a TMDL if the DO site-specific criterion is not achieved.

A rationale document explaining the basis for the TMDL withdrawal is enclosed for your reference. Please contact me or Ms. Gracy R. Danois of my staff at (404) 562-9119 if you have any questions or concerns with this action.

Sincerely,

James D. Giattina
Director
Water Protection Division

Enclosure

cc: David Baize, Chief
Bureau of Water
SC DHEC

Savannah River/Harbor Dischargers Group

WQR, Inc.

RATIONALE FOR WITHDRAWAL
2006 Dissolved Oxygen (DO) Total Maximum Daily Loads (TMDLs) for the
Savannah Harbor, State of Georgia

Background

The Savannah Harbor (Harbor) appeared on the state of Georgia's 2002 303(d) List of Impaired Waters as being impaired for DO due to point source discharges. The Savannah Harbor TMDL for DO was established by the Environmental Protection Agency in 2006, to satisfy a consent decree obligation required in Sierra Club v. EPA, Civil Action No: 94-CV-2501-MHS (N.D. GA.).

In 1992, the EPA, Region 4, disapproved a site-specific DO criterion adopted by the state of Georgia for the Savannah Harbor, which was determined to be under-protective of aquatic species in the upper part of the water column and over protective of aquatic species in the lower part of the water column. At that time, the EPA interpreted Section 303(c) of the Clean Water Act (CWA), 33 U.S.C. § 1313(c), to require the EPA to promulgate a replacement criterion or else leave the "disapproved" criterion in place for CWA purposes.[1] Due to lack of resources and scientific information, the EPA did not immediately pursue the development of a replacement DO water quality criterion for the Savannah Harbor. Therefore, the EPA developed its 2006 TMDL to address the disapproved but legally-applicable site-specific water quality criterion from 1992. The DO criterion was not scientifically defensible and resulted in a zero discharge wasteload allocation. In the executive summary for this TMDL, the EPA made it clear to all that the EPA expected a significant revision to the wasteload allocation once a new water quality criterion was adopted by Georgia and, suggested that the states may consider to administratively continuing the National Pollutant Discharge Elimination System (NPDES) permits identified in the TMDL until Georgia adopted an approvable DO criterion for the Harbor and revised wasteload allocations could be determined by water quality modeling.

In the late 1990s, the Georgia Ports Authority and U.S. Army Corps of Engineers, with the EPA's cooperation, undertook the development of an Environmental Impact Statement (EIS) to evaluate a Harbor deepening project. This EIS effort generated new data and water quality modeling information that was useful in the development of an appropriate DO water quality criterion for the Savannah Harbor. In March 2010, the EPA approved the state of Georgia's revised water quality criterion for DO in the Savannah Harbor based on the new water quality data and information. The new criterion was established at 5.0 mg/L daily average and 4.0 mg/L minimum DO. Also, a provision was added to the criterion which allows a 0.1 mg/L DO deviation from natural background if the water quality criterion cannot be achieved under background conditions. This criterion is the same as the South Carolina DO criterion. Shortly after the DO water quality standard was revised, the Savannah River and Harbor DO calculator was developed as an efficient method to evaluate oxygen-demanding substances reduction strategies. Georgia Environmental Protection Division (GA EPD), the South Carolina Department of Health and Environmental Control (SC DHEC) and the Savannah River/Harbor Dischargers Group applied the Savannah River and Harbor DO Calculator to develop a wasteload reduction implementation

[1] In 1997, the "Alaska Decision" changed how the EPA addresses disapproved water quality standards by establishing that disapproved standards are no longer appropriate for Clean Water Act purposes; however, the decision applied to standards adopted by states after May 30, 2000. See Alaska Clean Water Alliance v. Clark, No. C96-1762R (W.D. Wash. July 8, 1997); see also 65 Fed. Reg. 24,641 (Apr. 27, 2000).

strategy that will most practicably allow the DO water quality criterion to be met. The "*Subcategory 5R Documentation for Point Source Dissolved Oxygen Impaired Water in the Savannah River Basin, Georgia and South Carolina (2015)*" (the Savannah 5R) documents the total pollutant loading reduction of oxygen-demanding substances (5-day biochemical oxygen demand [BOD5] and ammonia) from the point sources in the Savannah Harbor basin[2] based upon a three-dimensional water quality model and designed to achieve up to an 84% reduction of the current permitted pollutant loads, enough of a reduction to achieve the applicable site-specific DO criterion. This plan and the background work that went into its development are available for public viewing on GA EPD website: http://epd.georgia.gov/sites/epd.georgia.gov/files/related_files/site_page/SavannahHarbor5RPlan_09152015.pdf.

Opportunity for Public Review and Comment

Pursuant to Section 553(b) of the Administrative Procedures Act, 5 U.S.C. § 553(b), the EPA for good cause finds that further public notice and comment is unnecessary in this instance, for the reasons set forth below.

Since 2006, the public has been aware through the EPA public notice process that the EPA expected that the revision to the applicable water quality criterion for the Harbor would result in significant changes to the 2006 Savannah Harbor DO TMDL. Once the revised criterion was approved and a different approach to address the impairment was contemplated, the reviewers and commenters of the 2006 EPA-issued TMDL were afforded the opportunity to participate in the collaborative effort to develop the alternative restoration approach and were invited to review and provide comments on the Savannah 5R document.

Furthermore, GA EPD provided the opportunity for the public to review and comment on the Savannah 5R plan for the Harbor from October 9, 2015 through November 10, 2015, as part of the revised state of Georgia's 2014 Integrated Report package. Public notice was mailed or emailed to all persons on GA EPD's mailing list for water issues, and was also posted on GA EPD's website.

The public notice issued by GA EPD contained specific language that clearly defined the intent to use the Savannah 5R plan as basis for the restoration activities in the basin. The expectation that the EPA-issued 2006 DO TMDL would be withdrawn was also stated in the notice. The language in the public notice was as follows:

> *The Savannah Harbor was first listed as being impaired for dissolved oxygen (DO) on the 2002 303d list. U.S. EPA issued a TMDL for DO in 2006. GA EPD subsequently revised its criteria for DO and the revised criteria were approved by U.S. EPA in 2010. GA EPD, SC DHEC, and U.S. EPA Region IV, along with Savannah River/Harbor Discharge Group, have been working together since 2012 to develop an alternative restoration plan to meet the new DO criteria. The document "Subcategory 5R Documentation for Point Source Dissolved Oxygen Impaired Water in the Savannah River Basin, Georgia and South Carolina" has recently been completed. At this time, GA EPD is revising its draft 2014 305(b)/303(d) list for Harbors and Sounds to change the assessment category for Savannah Harbor from 4a to 5R. It is our understanding that the November 2006 EPA Savannah Harbor TMDL, which was based on the previous Georgia DO criteria, will be withdrawn upon EPA's approval of GA EPD's 303(d) list. It is our intent to remove the Savannah Harbor from subcategory*

[2] For this purpose, the basin is defined as the portion of the Savannah River watershed from the Strom Thurmond dam to the Savannah Harbor.

5R once the alternative restoration plan has been implemented to meet applicable water quality standards.

GA EPD received 10 comment letters on this action, including a letter from the Southern Environmental Law Center on behalf of several environmental groups and a joint letter from the discharger stakeholder workgroup. There were no comments opposing of the proposed Savannah 5R plan and the reclassification of the Savannah Harbor waterbody. After consideration of the comments received, the final revised 2014 Integrated Report and the alternative restoration plan for the Savannah Harbor were submitted to the EPA on November 13, 2015.

Moreover, under the CWA regulations at 40 C.F.R. § 130.7, the EPA is only required to public notice the TMDL calculations necessary to achieve WQS. The regulations are silent as to public notice requirements for TMDL withdrawals.

The EPA is satisfied that the public has provided ample opportunity for review and comment of the decision to withdraw the 2006 TMDL, as documented in the revised 2014 Integrated Report submittal. Since no objections were raised regarding the 5R plan during the State's public notice process, the EPA considers any further public notice of this action unnecessary and duplicative.

Current TMDL Status

GA EPD, SC DHEC and the Savannah River and Harbor Dischargers Group requested the withdrawal of the 2006 TMDL upon submittal of the Savannah 5R plan to ensure that no ambiguity exists regarding the current applicable water quality site-specific criterion and any future implementation efforts. Otherwise, the NPDES permit conditions necessary to achieve the new water quality criterion would also be inconsistent with the assumptions and requirements of the 2006 TMDL's wasteload allocations. See 40 C.F.R. § 122.44(d)(1)(vii)(B).

The Savannah Harbor 5R watershed restoration plan assigns wasteload allocations for the 24 NPDES dischargers from Georgia and South Carolina, which will be used to reissue all the NPDES permits in the basin within three years of the approval of the 2014 303(d) Impaired Waters list. Further, the Savannah 5R plan includes provisions to re-evaluate the effectiveness of the plan and revise it if necessary, or develop a TMDL if attainment of the DO site specific criterion is not achieved.

Conclusion

For the reasons stated above, the EPA is withdrawing the 2006 DO TMDL for the Savannah Harbor. The EPA will follow the implementation of the "*Subcategory 5R Documentation for Point Source Dissolved Oxygen Impaired Water in the Savannah River Basin, Georgia and South Carolina (2015)*" and will continue collaborating with the states and the discharger's group as they work together to ensure that the Savannah Harbor meets the applicable water quality criterion for DO.