



# CHESAPEAKE BAY FOUNDATION

*Environmental Protection and Restoration  
Environmental Education*

October 4, 2006

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Ms. Mary Letzkus  
U.S. Environmental Protection Agency  
Region III  
Office of Watersheds (3WP13)  
1650 Arch Street  
Philadelphia, PA 19103

**RE: Draft Discharge Permit (DC0021199) for the Blue Plains Wastewater Treatment Plant, DC0021199, in Washington, DC**

Dear Ms. Letzkus:

The Chesapeake Bay Foundation has reviewed the draft National Pollutant Discharge Elimination System (NPDES) permit for the District of Columbia Water and Sewer Authority's (WASA) Blue Plains Wastewater treatment plant (Permit No. DC0021199). As highlighted below, the permit limit for total nitrogen (TN) is contrary to existing commitments to restore the Chesapeake Bay, as well as statutory and regulatory requirements of the Clean Water Act.

The Chesapeake Bay Foundation (CBF) is a non-profit environmental education and advocacy organization dedicated to the restoration and protection of the Chesapeake Bay. With over 170,000 members, CBF works to ensure that changes in policy, regulation, and legislation are protective of the quality of the Chesapeake Bay and its watershed. In addition, CBF has a vested interest in the health of the Potomac River. Throughout the year, our *Potomac River Program* takes hundreds of students and teachers on educational trips that include a variety of hands-on experiences such as testing water quality, trawling for fish, and learning about local issues that affect the Potomac and Anacostia rivers.

Blue Plains is, by far, the largest point source of nitrogen and phosphorus pollution in the Chesapeake Bay watershed. Consequently, CBF is very interested in ensuring that permit limits for Blue Plains are consistent with pollution load reductions necessary to restore the Chesapeake Bay, the Potomac River, and other tributaries. The plant has a design capacity of 370 million gallons per day and a peak capacity of 1.076 billion gallons per day. The collection system includes 1,800 miles of sanitary and combined sewers in the District of Columbia (DC), Montgomery and Prince George's Counties in Maryland and Fairfax and Loudoun Counties in Virginia.

The permit includes effluent limitations and monitoring requirements for Outfalls 001, 002, 019, as well as numerous combined sewer overflow outfalls. Outfall 002, the primary discharge point for the treatment plant, discharges into the Potomac River, just south of the confluence with the Anacostia River. Downstream of Blue Plains, the Potomac River is listed as impaired by nutrients by the State of Maryland. In addition, the signatories to the *Chesapeake 2000 Agreement* agreed to correct the nutrient and sediment-related problems in the Chesapeake Bay and its tidal tributaries sufficient to remove it from the impaired waterbodies (i.e., 303(d)) list by 2010.

**Philip Merrill Environmental Center**

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As part of this commitment, the Environmental Protection Agency (EPA) developed water quality criteria and designated uses for tidal waters that Maryland, DC, Virginia, and Delaware subsequently adopted into their water quality standards. Criteria for dissolved oxygen (DO), water clarity and chlorophyll a, were adopted in lieu of nutrient and sediment criteria and describe the water quality conditions of a "restored" Bay. To achieve these water quality standards, Bay signatories agreed to cap annual total nitrogen and total phosphorus loads to the Chesapeake Bay at approximately 175 million pounds and 12.8 million pounds, respectively. These watershed-wide cap loads were further allocated among the Bay jurisdictions who then developed Tributary Strategies that describe the list of pollution reduction measures, including limits on point sources, necessary to achieve the required pollution load reductions.

In particular, annual loads of TN from Blue Plains' Outfall 002 must be capped at 4.689 million pounds per year to achieve water quality criteria for DO in downstream waters (Blue Plains Draft Fact Sheet). The proposed permit would require an annual load limit for TN of 8.6 million pounds per year. This value is above the annual nitrogen discharge "goal" contained in the current permit (8.467 million pounds) as well as reported annual loads from 2004 of 5.986 million pounds (Chesapeake Bay Program Point Source Database, <http://www.chesapeakebay.net/data/index.htm>), so the permit will allow an increase in loads of TN into a waterbody already impaired for nutrients. According to Clean Water Act section 301(b)(1)(C) and 40 CFR 122.4 (d) permits must include effluent limitations sufficient to meet water quality standards. The proposed cap of 8.6 million pounds is far from what is needed to meet water quality standards and threatens further degradation of water quality in the Bay by allowing additional nitrogen loads.

The permit does contain a schedule to submit plans and conduct preliminary tests to evaluate different nitrogen removal technologies; however, the schedule gives no indication that the ultimate deadline is to achieve the required nitrogen reductions by 2010. Consequently, there is no assurance or specified timeframe for when the permit will comply with water quality standards and meet the commitments of the *Chesapeake 2000 Agreement*.

The permit limit for TN is also contrary to EPA's Response to CBF's December 2003 Petition as well as the *NPDES Permitting Approach for Discharges of Nutrients in the Chesapeake Bay Watershed* (December 2004). In their response to CBF's Petition, EPA stated they had existing authority to ensure that NPDES permits contain appropriate permit limits based on the revised water quality standards by the 2010 deadline and the *Permitting Approach* highlighted the process by which appropriate nutrient limits would be established. The *Permitting Approach* stipulates that "when the revised Maryland WQS are effective, EPA and the state NPDES permitting authorities agree to issue NPDES permits...consistent with the applicable state tributary strategy" (p.2). The approach allows for the incorporation of compliance schedules, but indicates that the compliance schedule should be in keeping with the 2010 deadline. As noted above, the proposed permit limit, 8.6 million pounds TN, is well above the amount necessary to restore Bay water quality (4.689 million pounds) and the compliance schedule focused on plans does not ensure nutrient reduction technology will be in place by the 2010 deadline, or even within a discernable time after 2010.

Finally, we note the permit must contain daily limits for ammonia that are protective of aquatic life. The current limits based either on weekly or monthly averages do not ensure protection of aquatic animals from toxicity due to short-term exposure to ammonia (U.S. EPA. 1999 Update of Ambient Water Quality Criteria for Ammonia).

Thank you for the opportunity to comment on this permit. We look forward to working with you to ensure that this permit honors the commitment that the EPA, the District of Columbia, and other Bay signatories have made to restore the Chesapeake Bay.

Sincerely,



Beth L. McGee, Ph.D.

cc: Rich Batiuk, U.S. EPA Chesapeake Bay Program  
Roy Hoagland, CBF