October 5, 2006

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RE: Proposed modified NPDES permit DC0021199 for Blue Plains Wastewater Treatment Plant (noticed August 18, 2006)

For the following reasons, final issuance by EPA Region 3 ("the Region") and certification by the District of Columbia of the above-referenced permit modification would be unlawful and arbitrary.

I. Combined Sewer Overflow Provisions

A. Water-Quality Based Requirements for CSOs: Since 1997, the NPDES permit for the Blue Plains Wastewater Treatment Plant ("Blue Plains") has prohibited CSO discharges "in excess of any limitation necessary to meet the water quality standards established pursuant to District of Columbia law." NPDES Permit DC0021199, signed and effective January 22, 1997, Part III.2.c(2). The Region proposes to change this water quality standards ("wqs") provision so that it applies only "until such time as all of the selected CSO controls set forth in the LTCP have been placed into operation, and the Permittee so certifies to EPA, in writing." Proposed Permit Part III.E.

The proposed modification violates the anti-backsliding provisions of the Clean Water Act ("CWA" or "the Act") as well as statutory and regulatory mandates for permits to assure compliance with water quality standards. Section 402(o) of the Clean Water Act prohibits modification of an NPDES permit to contain effluent limits based on §301(b)(1)(C) of the Act ("water quality based limits") that are less stringent than the comparable effluent limits in the previous permit. EPA regulations contain a similar prohibition. 40 C.F.R. §122.44(l). The proposed modification violates these

¹ Documents cited herein are all incorporated by reference. All of the documents are on either on file at EPA Region 3, filed at the Environmental Appeals Board, posted on EPA's web site, or posted on the web sites of states in the Chesapeake Bay watershed.

"antibacksliding" prohibitions because it is a water quality based limit that is less stringent than the comparable effluent limits in the existing permit. The current permit's wqs provision does not terminate at some future date, but provides continuing protection against discharges in excess of any limitation necessary to meet standards. Thus, the proposed modification would plainly weaken the effluent limitation as compared with the existing permit.

Weakening of the wqs provision also violates requirements of the Act and EPA rules that permits contain limitations sufficient to ensure compliance with water quality standards. 33 U.S.C. §1311(b)(1)(C), 33 C.F.R. §§122.4(d) & 122.44(d). This violation is not somehow cured by the requirement that the permittee first place in operation the selected CSO controls from the LTCP. Those controls will not in fact prevent all water quality standards violations: Indeed, the LTCP itself acknowledges that they will not. E.g., LTCP at 14-1. Because the selected controls will not in fact prevent all standards violations, a permit modification that effectively allows violations that are currently prohibited would not only amount to illegal backsliding, but also violate 33 U.S.C. §1311(b)(1)(C), and 33 C.F.R. §§122.4(d) & 122.44(d).

At the very least, the weakening of the wqs provision is grossly premature. Both the permit and the LTCP require extensive post construction monitoring to determine the impact of the selected controls in reducing standards violations. EPA cannot possibly know today, 20 years before LTCP completion, what that monitoring will reveal. Nor can EPA know whether the LTCP will even work as predicted. To provide for eliminating of the wqs provision before EPA knows whether the selected controls are performing as promised, let alone well enough to protect water quality standards, would be arbitrary and irrational in the extreme, and contrary to 33 U.S.C. §1311(b)(1)(C), 33 C.F.R. §§122.4(d) & 122.44(d).

The Region asserts that "if" EPA determines after LTCP implementation that water quality standards are not being met and designated uses protected, the permittee "may" be required to revise the LTCP to provide for additional controls to meet water quality standards and protect designated uses. These assertions indicate that the Region views its duty to ensure compliance with the applicable standards and WLAs as discretionary, a view that is completely at odds with the statutory and regulatory provisions cited above. The Region's mere speculation that it might decide to require correction of standards violations at some unknown point in the future fails to satisfy the above-cited legal mandates for the permit to *ensure* compliance with applicable water quality standards.

B. Consistency with TMDL requirements: As the fact sheet acknowledges, the District and EPA have established TMDLs and associated CSO wasteload allocations (WLAs) for a variety of pollutants in D.C. waters. EPA rules expressly require that the permit contain effluent limits that are consistent with the assumptions and requirements of EPA-approved or adopted WLAs. 40 C.F.R. §122.44(d)(1)(vii)(B). Moreover, to comply with 33 U.S.C. §1311(b)(1)(C) and 40 C.F.R. §§122.4(d) & 122.44(d) – which require the permit to ensure compliance with water quality standards — the permit must

contain effluent limits that assure compliance with the WLAs, because compliance with the TMDLs and WLAs is necessary to assure compliance with water quality standards.

The proposed modification does not meet these requirements. It contains no effluent limitations specifically directed at ensuring CSO compliance with applicable WLAs. In the most recent preceding permit modification (Dec. 16, 2004), the Region did include WLAs in the permit, and referenced the required percent load reductions needed to comply. Although those provisions were inadequate for reasons stated in the petition for review to the Environmental Appeals Board by Friends of the Earth and Sierra Club (Petition for Review, NPDES Appeal No.05-01 – hereinafter "2005 Petition"), the Region did take the position in issuing that modification that inclusion of the WLAs and percentage load reductions needed to comply with those WLAs was warranted to comply with 40 C.F.R. §122.44(d)(1)(vii)(B). See response to comments, December 16, 2004. The Region does not explain what has changed between then and now to suddenly make exclusion of the WLAs justified.

The draft Fact Sheet for the current proposal asserts that EPA proposes to ensure consistency with the WLAs through the permit conditions requiring implementation of the LTCP performance standards, asserting that those standards "should achieve those WLAs." But under the Act and EPA rules, the permit must ensure achievement of the WLAs – it is not enough that the permit might or "should" result in compliance. 33 U.S.C. §1311(b)(1)(C); 40 C.F.R. §§122.4(d) & 122.44(d). EPA asserts that the WLAs were taken into account in developing the LTPC performance standards, using the same modeling that EPA and/or the District used to derive the WLAs. Modeling, however, is not a substitute for ensuring actual compliance by actual discharges. As noted above, EPA does not and cannot know in advance how the LTCP controls will actually work in practice. Moreover, the model does not answer the key questions raised in the 2005 Petition (at 12-15) of how compliance with the WLAs is determined.² For example, are the annual loads to be met only in the "average" year, or are they to be met in wetter years as well? If the annual loads do not apply in the wetter years, what is the applicable WLA for those years? Nor does a model satisfy requirements in EPA's rules that effluent limits be set for each outfall, 40 C.F.R. § 122.45(a), and that effluent volume be monitored at each outfall. 40 C.F.R. §122.44(i)(1)(ii). 2005 Petition at 15-18. The rules contemplate that the permit will set limits on actual effluent discharges, and require that compliance with those limits be measured (not modeled) at each outfall.

Inclusion of the specific WLAs and required percentage reductions in the permit in enforceable form, along with monitoring adequate to gauge actual load levels, is necessary to ensure that the requirements of those WLAs will consistently be met. Indeed, EPA has represented in federal court that the D.C. TMDLs do require inclusion in permits of required percentage load reductions to achieve WLAs. 2005 Petition, Exhibit 2. The proposed permit modification plainly does not meet this requirement.

² Because of the D.C. Circuit's ruling in *Friends of the Earth v. EPA*, daily TMDLs and WLAs for the District's waters must now be established. The Court held that the current annual loads are not sufficient to comply with the Act. The Region will have to revisit the issue of ensuring consistency of the permit's effluent limits with TMDLs/WLAs once the daily loads are established.

The Region asserts it would evaluate the post-construction monitoring required by the permit, and the "if" EPA determines that the performance standards do not ensure consistency with the applicable WLAs, then EPA "may" require the permittee to develop and implement additional controls to ensure consistency. Draft Fact Sheet at 4. These assertions indicate that the Region views its duty to ensure compliance with the applicable standards and WLAs as discretionary. As such, they plainly do not satisfy the requirements of the above-described statutes and rules that the permit must *ensure* compliance with applicable water quality standards and TMDLs/WLAs.

II. Nutrients

A. Failure to Ensure Compliance with Water Quality Standards in Chesapeake Bay: The draft permit modification is legally deficient because it fails to ensure compliance with water quality standards for Chesapeake Bay. Numerous studies and reports document that the Bay suffers from excessive nutrient loadings that cause water quality conditions harmful to aquatic living resources. See, e.g., EPA, NPDES Permitting Approach for Discharges of Nutrients in the Chesapeake Bay Watershed (December 2004)("Permitting Approach"); http://www.chesapeakebay.net/stressor1.htm; http://www.chesapeakebay.net/pubs/low_do_backgrounder.pdf; http://www.chesapeakebay.net/lowdo2003.htm; Washington Post, Jan. 24, 2005 at B-1; http://www.cbf.org/site/PageServer?pagename=sotb 2004 index; Washington Post, Aug. 4, 2005 at T-03. These excessive nutrient loadings cause or contribute to violation of water quality standards for dissolved oxygen, clarity, and other parameters in the Bay. Both Maryland and Virginia have listed the portions of Chesapeake Bay downstream form the District as impaired due to nutrients, and Maryland lists the Potomac downstream from the District as impaired due to nutrients and sediments. See Maryland and Virginia 303(d) lists, incorporated herein by reference.³

Blue Plains is one of the largest single point source contributors of nutrients to the Bay, and the largest point source for nitrogen in the entire Potomac basin. Government of the District of Columbia, The District of Columbia 2004 Nutrient and Sediment Tributary Strategy at 25 (June 2004)("DC Tributary Strategy").

To address water quality standards violations in the Bay due to nutrient pollution, EPA and the states participating in the Chesapeake Bay Agreement (*Chesapeake 2000*, http://www.chesapeakebay.net/agreement.htm) have agreed to cap annual nutrient loads for each major tributary basin and jurisdiction sufficient to achieve water quality standards (including water quality criteria) for the Bay. Permitting Approach at 1. These cap load allocations represent nutrient levels that the states and EPA agree must be achieved to meet dissolved oxygen criteria for the Maryland Portion of the Bay. Id.; Draft Fact Sheet 4. Thus, to ensure compliance with water quality standards in the Bay,

³ http://www.mde.state.md.us/assets/document/Final%202002list_Chap7_4list.pdf http://www.deq.state.va.us/wqa/pdf/2004ir/irch33ay04.pdf

nutrient effluent limits for Blue Plains must – at a minimum – ensure compliance with the cap load allocations for the District of Columbia and the Potomac River. ⁴

The proposed permit modification fails to assure compliance with the applicable cap load allocations. According to the draft fact sheet, the total nitrogen cap load allocation for the District is 2.4 million pounds/year, of which 2.115 million pounds is allocated to Blue Plains. Draft Fact Sheet 5. The fact sheet further states that, when Maryland and Virginia allocations are added in, the total cap load for nitrogen allocated to Blue Plains is 4,689,000 pounds/year total nitrogen. Id. The proposed permit modification authorizes substantially higher nitrogen loadings than allowed by these cap load allocations. The only enforceable effluent limit for nitrogen in the proposed modification is 8.6 million pounds per year – more than three times the nitrogen cap load allocation for the entire District of Columbia, four times the District's allocation to Blue Plains, and almost double the total Blue Plains cap when Maryland and Virginia allocations are added in. The proposed modification also contains an "interim total nitrogen goal" of 5.8 million pounds per year, which – even if a meaningful limitation on actual discharges – is also far in excess of the cap locations for Blue Plains.

Because the proposed permit modification allows nitrogen discharges from Blue Plains far in excess of limits that EPA and the Bay states agree must be achieved to meet water quality standards in the Bay, the proposal is unlawful and arbitrary. Pursuant to 33 U.S.C. §1311(b)(1)(C), the permit must contain any effluent limitations necessary "to meet water quality standards . . . established pursuant to any State law or regulations . . . or required to implement any applicable water quality standard established" pursuant to the CWA. Likewise, 40 C.F.R. §122.4(d) requires permit conditions to "ensure compliance with the applicable water quality requirements of all affected States." Pursuant to 40 C.F.R. §122.44(d), the permit must contain any requirements necessary to achieve any state water quality standards. The proposed permit modification violates all of these requirements because it expressly authorizes nitrogen discharges from Blue Plains at levels substantially above limitations needed to meet water quality standards for Chesapeake Bay.

⁴ We do not necessarily agree that the cap load allocations are sufficiently stringent to assure achievement of all applicable water quality standards in the Bay, nor do we agree that existing water standards for the Bay are sufficiently protective to meet the requirements of the Clean Water Act. As further discussed herein, however, the nutrient limits proposed for Blue Plains are insufficient to meet even the existing cap load allocations.

The permit proposal contains some ambiguity even as to this limitation. Note 10 to Part I.B. of the proposal (page 13 of the draft permit) states: "As provided in Part IV Section E of this permit, the permittee shall operate the Biological Nitrogen Removal (BNR) process to meet a total nitrogen effluent limit of not more than 8,600,000 pounds per year." Part IV. E, however, says that Blue Plains has been operating under a "voluntary goal" of meeting an annual nitrogen load of 8.5 million pounds. Although a limit of 8.6 million pounds is legally deficient for reasons discussed above, EPA must in any event clarify that whatever limit appears in the permit is an enforceable one – not merely a voluntary goal. 33 U.S.C. §1311(b)(1)(C); 40 C.F.R. §§122.4(d), 122.44(d), 122.45(a).

⁶ To the extent the Region intends the term "goal" to connote that the limitation is not an enforceable one, the proposed 5.8 million pound "limit" is deficient for that reason as well. See note 4, supra.

The proposed permit does include a schedule for submission of an "action plan," to include "a timetable to reduce existing total nitrogen effluent goal and achieve DC Tributary Strategy based total nitrogen limits." A mere requirement to submit a plan, however, does not meet requirements of the Act and EPA rules for effluent limits to ensure compliance with water quality standards. The permit language sets no deadline whatsoever for achievement of the relevant cap loads under the "plan": it is entirely open-ended. Further, the permit does not make the actual implementation of such plan or achievement of the cap loads an enforceable condition of the permit. The requirement to submit a plan is therefore assures no actual, enforceable effluent limitations, by any ascertainable date.

Nor is the requirement to submit a plan somehow sufficient under provisions of Maryland's water quality standards allowing for compliance schedules. No compliance schedule is permissible here because the Act required compliance with water quality standards by 1977. 33 U.S.C. §1311(b)(1)(C). Further, even if permissible, a compliance schedule in a permit must require actual compliance with the relevant standards within a specified time frame. COMAR 26.08.04.02.C. A requirement to merely submit a plan to develop a time frame does itself constitute a schedule for compliance with the relevant water quality standards themselves.

The deferral of effluent limits to meet the nitrogen cap loads for Blue Plains violates the letter and spirit of Chesapeake 2000, wherein EPA, the District, and other Bay agreement states committed to achieving Bay cleanup goals by 2010. Not only does the proposed permit contain no requirement to achieve the cap loads by 2010, but its provision allowing the District to defer submittal of a plan for another year severely undermines timely achievement of the 2010 deadline. If the District does not even have to submit a cleanup plan until late 2007, and EPA expects to review that plan prior to its implementation, then less than three years will be left for actual implementation of the plan if the 2010 deadline is to be met. EPA does not explain how it expects reductions of the magnitude required here can be achieved in such a time frame. It is arbitrary and unlawful for the Region to agree to a 2010 deadline without including provisions in the permit to ensure that the deadline will be met.

Finally, the proposed modification violates state and federal antidegradation policies. 40 C.F.R. 131.12; 21 D.C. Mun. Reg. 1102; Code Md. Reg. §26.08.02.04 & 04.01. Those policies require, among other things, that existing water quality be maintained. The proposed modification violates those policies by allowing an increase in nitrogen discharges from Blue Plains as compared to existing levels. According to the draft Fact Sheet, Blue Plains discharged 5.8 million pounds of nitrogen in 2004-05, yet the proposed modification would unlawfully allow that level to increase to as much as 8.6 million pounds per year.

B. Inconsistency with Tributary Strategies: In addition to violating the Act and EPA rules as explained above, the proposed permit modification violates the Region's own Permitting Approach. That Approach commits EPA to place total nitrogen and phosphorus limits in NPDES permits "consistent with the state tributary strategies."

Permitting Approach at 2. As shown above, the proposed permit modification does not meet this requirement. The nitrogen loads allowed under the proposal are far in excess of the loads provided for in the D.C., Maryland, and Virginia tributary strategies. See, e.g. Draft Fact Sheet at 4-5; D.C. Tributary Strategy; Maryland Tributary Strategy, Executive Summary at 4 (Sept. 2004)("strategy assumes a full upgrade of Blue Plains Treatment Facility (to 4 mg/l TN annual average)"); see also Maryland Tributary Strategy Statewide Implementation Plan at 14 (Feb. 22, 2006) (stating that the Point Source Strategy for the Bay is based on a two-part plan to 1) upgrade Maryland WWTPs to 3.0 mg/L or less nitrogen and 2) maintain nutrient loading caps as specified in the plan). http://www.dnr.state.md.us/Bay/tribstrat/implementation_plan/point_source.pdf Although the Permitting Approach allows for compliance schedules where authorized by state requirements, the proposed modification contains no compliance schedule for actually meeting the cap load allocations for Blue Plains (see discussion in II.A above): much less a requirement that such loads be achieved by 2010 as contemplated by the Permitting Approach and Chesapeake 2000.

The Region's proposal to depart from its own Permitting Approach is arbitrary and capricious. EPA developed the Permitting Approach after years of delay in Bay cleanup, ostensibly as a way of ensuring achievement of Bay water quality targets by 2010. The Region offers no rational explanation for abandoning or rolling back that strategy when its implementation has barely begun, nor can it.

C. Violation of CWA §117(g): Section 117(g) of the Act provides that EPA "shall ensure that management plans are development and implementation is begun by signatories to the Chesapeake Bay Agreement to achieve and maintain" – (A) the nutrient goals of the Chesapeake Bay Agreement for the quantity of nitrogen and phosphorus entering the Chesapeake Bay and its watershed; (B) the water quality requirements necessary to restore living resources in the Chesapeake Bay ecosystem; (C) the Chesapeake Bay Basinwide Toxins Reduction and Prevention Strategy goal; (D) habitat restoration, protection, creation and enhancement goals set by Bay Agreement signatories; and (E) the restoration, protection, creation, and enhancement goals set by the Bay Agreement signatories for living resources associated with the Bay ecosystem.

In failing to require achievement of the nitrogen cap loads for Blue Plains, the proposal violates the above-referenced EPA duties under §117(g). The Region has claimed that the "management plans" referenced in §117(g) are the state tributary strategies. EPA, Decision on Petition for Rulemaking to Address Nutrient Pollution from Significant Point Sources in the Chesapeake Bay Watershed at 57, http://www.epa.gov/water/cbfpetition/petition.pdf. Assuming for the sake of argument that is true, the proposed modification fails to require commencement of implementation of those strategies with respect to Blue Plains, for all the reasons discussed above. Rather than insuring implementation of needed strategies, the proposed permit represents yet another in a long line of delays by the EPA in addressing the Bay's critical water quality problems.

These comments are submitted on behalf of Friends of the Earth and Sierra Club, Washington, D.C. Chapter.



January 19, 2006

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RE: Proposed modified NPDES permit DC0021199 for Blue Plains Wastewater Treatment Plant (noticed December 14, 2006)

We strongly support setting a more protective annual limit on total nitrogen discharges from the Blue Plains Wastewater Treatment Plant, effective immediately upon the permit's effective date. We hereby reassert and incorporate by reference our previous comments dated October 5, 2006 regarding nutrient limits and combined sewer overflows.

A. Need For the Proposed Total Annual Limit on Nitrogen

An enforceable limit on nitrogen discharges from Blue Plains is long overdue. As we noted previously, Blue Plains is one of the largest single point source contributors of nutrients to the Bay, and the largest point source for nitrogen in the entire Potomac basin. Government of the District of Columbia, District of Columbia 2004 Nutrient and Sediment Tributary Strategy at 25 (June 2004) ("DC Tributary Strategy"). These excessive nutrient loadings cause or contribute to violation of water quality standards for dissolved oxygen, clarity, and other parameters in the Chesapeake Bay. Despite this, there has been a long history of delay in achieving the water quality improvements necessary to meet the goals of the Chesapeake Bay 2000 Agreement, and the Bay has seen little if any progress toward these goals.

According to EPA, the proposed limit on nitrogen discharges from Blue Plains will achieve nutrient levels that the states and EPA agree must be achieved to meet dissolved oxygen criteria for the Maryland Portion of the Bay, when implemented alongside cap load allocations to other Bay jurisdictions. The allocation was designed as part of EPA's approach to achieving the goals of the Chesapeake Bay 2000 Agreement through the implementation of tributary strategies. While we do not necessarily agree the cap load allocations are sufficiently stringent to assure

achievement of all applicable water quality standards for the Bay or to meet the requirements of the Clean Water Act, adoption of these or more protective limits in the Blue Plains permit is a critical step toward meeting water quality standards in the Bay.

Further, these or more protective limitations are needed to be consistent with state and federal antidegradation policies. 40 C.F.R. 131.12; 21 D.C. Mun. Reg. 1102; Code Md. Reg. §26.08.02.04 & 04.01. Those policies require, among other things, that existing water quality be maintained. According to EPA, Blue Plains discharged 5.8 million pounds of nitrogen in 2004-2005. The proposed limit on nitrogen is therefore consistent with the prohibition against allowing that level to increase.

Stronger nitrogen limits are also required for EPA's compliance with its duties under Section 117(g) of the Clean Water Act, which require that EPA "shall ensure that management plans are development and implementation is begun by signatories to the Chesapeake Bay Agreement to achieve and maintain," *inter alia*, the nutrient goals of the Chesapeake Bay Agreement for the quantity of nitrogen and phosphorus entering the Chesapeake Bay and its watershed, and the water quality requirements necessary to restore living resources in the Chesapeake Bay ecosystem.

B. Schedule for Compliance

We support making the nitrogen limit effective immediately upon the permit's effective date. The permit must assure compliance with water quality standards in all affected waters, and compliance with standards impaired by excessive nitrogen discharges from Blue Plains is long overdue.

EPA states that it intends to establish a schedule for compliance with the nitrogen limit in a separate enforceable document (such as a consent decree). Draft Fact Sheet at 5 (December 14, 2006). EPA must provide a meaningful opportunity for public comment prior to issuing a proposed and final compliance schedule. Moreover, any schedule for compliance must include a set of specific criteria for compliance and specified timelines for meeting the criteria. As we stated in our earlier comments, a mere requirement to submit a plan does not meet the requirements of the Clean Water Act and EPA rules for effluent limits to ensure compliance with water quality standards. Further, the schedule for compliance must require actual implementation of the criteria for compliance and actual achievement of the nitrogen permit limit as quickly as possible.

C. Annual Limit Period

The proposed permit sets a total nitrogen effluent limit of not more than 4,689,000 pounds per year. The Anacostia River and Chesapeake Bay's water quality needs are not defined by the calendar year. Therefore, the final permit must specify that the annual limit on total nitrogen is based on a rolling twelve month period, and that nitrogen discharges for any twelve month period shall not exceed the annual limit.

D. Monitoring

Finally, the final permit must require adequate monitoring. EPA regulations require the permit to "ensure compliance with the applicable water quality requirements of all affected States." 40 C.F.R. §§ 122.4(d) and 122.44(d). In order to achieve this requirement, EPA must ensure that the final permit includes sufficient monitoring requirements, and that the permit meets the minimum standards for monitoring set forth at 40 C.F.R. §§ 122.44(i) and 122.48. At a minimum, this means that the permit must require sufficient monitoring to accurately measure total nitrogen discharges each month, so that compliance with the nitrogen limit can be determined for every 12-month period.

These comments are submitted on behalf of Friends of the Earth and Sierra Club, Washington, D.C. Chapter.

Sincerely,
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