

EXHIBIT 5

**NPDES PERMIT MODIFICATION
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
WASTE WATER TREATMENT PLANT AT BLUE PLAINS
WASHINGTON, DC**

NPDES Permit Number DC0021199

**Response to Comments
March 19, 2004 Public Notice
December 16, 2004 Issued Permit**

I. General

On March 19, 2004 the United States Environmental Protection Agency, Region III (EPA) offered for public comment in the *Washington Post*, a modified draft NPDES permit for the District of Columbia Wastewater Treatment Plant located at 5000 Overlook Avenue, SW, Washington, DC. This draft permit included modifications to the NPDES permit that was issued by EPA to this facility on January 24, 2003. The thirty (30) day public comment period ended on April 19, 2004.

During this 30-day public comment period, EPA received comments from four entities: including the District of Columbia Water and Sewer Authority (WASA), the Blue Plains Regional Committee (BPRC), the Sierra Club and Friends of the Earth represented by EarthJustice and the Maryland Department of the Environment. In reaching its decision regarding the issuance of the final modified permit, the region considered these comments and made certain changes in response to those comments to the permit and the fact sheet.

The following is a summary of the comments that EPA received during the public comment period and EPA's responses thereto.

II. Comments and Responses

A. Comments received from the Blue Plains Regional Committee (BPRC). The following comments were received from Donna M. P. Wilson, Esq., BPRC Chair, Prince George's County.

1. **Comment:** The commenter states that the modified draft permit contains inappropriate references to the CSO Long-term Control Plan (LTCP) without inclusion of an approved schedule. EPA needs to resolve the outstanding CSO LTCP schedule issue and negotiate a reasonable and fiscally implementable schedule with WASA and

the District of Columbia Department of Health. The final permit should not be issued with the current LTCP references until the schedule issue has been resolved.

Response: As noted in the Fact Sheet, the permit conforms to the 1994 Combined Sewer Overflow Policy in that it requires immediate implementation of WASA's LTCP. Because the deadlines for compliance with water quality standard-based requirements have passed, such schedules cannot be included in permits, except in those instances where they would be allowed by the water quality standards - which is not the case here.

The CSO Policy provides that, unless the permittee can presently comply with all of the requirements of the Phase 2 permit, the NPDES authority should include, in an enforceable mechanism, compliance dates on the fastest practicable schedule for those activities directly related to meeting the requirements of the CWA. CSO Policy Part IV. B. 2. For major permittees, such as WASA, the compliance schedule should be placed in a judicial order. Id. The order, which the CSO Policy notes is the main focus for enforcing compliance with the Phase 2 permit (see CSO Policy at V.C.2.) serves to bind the permittee to implement its LTCP. Ideally, prior to issuance of the Phase 2 permit, the Court will have issued an order, either on consent, reflecting the agreement of the parties or the Court's own determination as to an appropriate schedule. In this instance, EPA and WASA agree that the WASA-developed LTCP should be implemented. The issue of the schedule has now been re resolved and has been set forth in a Consent Decree that is shortly to be lodged with the Court in U.S. v. District of Columbia Water and Sewer Authority, et al., Civil Action No: 1:002CV0251 (D.D.C.).

The overarching goal of the CSO Policy is to achieve compliance with the CWA by protecting designated uses of water bodies and providing for protection of water quality standards (WQS). In issuing the Phase 2 permit, EPA accepts the LTCP as reasonably calculated to comply with the CSO Policy and protect WQS. EPA acknowledges that implementation of the more than \$1 billion dollar project will take some time, encompassing several permit cycles. EPA and WASA agree that the LTCP should be implemented, therefore, it is reasonable and appropriate for EPA to issue the Phase 2 permit requiring implementation of the LTCP and for the permittee to commence the measures necessary for it to

achieve CWA compliance.

- 2. Comment:** Commenter states that the modified draft permit lacks a “water quality standards (WQS) compliance determination” and that EPA is obligated to make its own formal determination that any CSO discharges remaining after implementation of the LTCP will not cause or have the reasonable potential to cause or contribute to a violation of applicable WQS.

Response: The CSO Policy provides that a permittee who has selected the demonstration approach for its LTCP must demonstrate *inter alia* that the planned control program is adequate to meet WQS and protect designated uses, unless WQS cannot be met as a result of natural background conditions or pollution sources other than CSOs, and that any discharges remaining after the plan is implemented will not preclude the attainment of WQS or the receiving water’s designated uses or contribute to their impairment. See CSO Policy at II. C.3.b. The Policy does not direct, much less require, EPA to make a specific finding that the LTCP will meet WQS.

Notwithstanding the preceding, the DC Department of Health (DOH) is responsible for establishing WQS and administering the WQS program for the District. By letter dated August 28, 2003, DOH advised EPA that it had determined that the LTCP was in compliance with the CSO Policy, including that the CSO discharges remaining after implementation of the LTCP will meet the narrative WQS in all receiving waters.

See also response to Comment C. 3.a. *supra*. In addition, in issuing the Phase 2 permit, EPA accepts the position that the LTCP is intended to comply with the CSO Policy and is designed to be protective of water quality standards. However, if after the LTCP controls are in place water quality standards are still not met, additional controls may be needed to meet water quality standards. The post-construction monitoring program and permit re-opener enable any such additional controls.

- 3. Comment:** Commenter states that the modified draft permit inappropriately applies various total maximum daily load (TMDL) and general WQS compliance requirements. The proposed permit language includes several references to related TMDLs and WQS that seem inappropriate in this context. Clearly EPA must determine whether or not the LTCP will meet WQS. TMDLs should be used as

benchmarks to ensure that DC-WASA is meeting the CSO requirements. TMDLs should not, however, be included as permit limits--this was simply not the intent of the Clean Water Act policy--particularly since the District has not yet developed a number of TMDLs needed to assess water quality, including those for the Potomac receiving waters.

Response: The commenter failed to identify any specific references to TMDLs or other WQS that are inappropriate in this instance, therefore, EPA has no basis upon which to respond.

As a general response, however, EPA regulations clearly contemplate the use of TMDLs as a factor in developing permit limits. NPDES regulations found at 40 C.F.R. 122.44 (d)(1)(vii)(B) provide:

(vii) When developing water quality-based effluent limits under this paragraph the permitting authority shall ensure that:...

(B) Effluent limits developed to protect a narrative water quality criteria, a numeric water quality criteria, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 C.F.R. 130.7

The water quality-based effluent limits in this permit are consistent with the assumptions and requirements of all available waste load allocations (WLAs) from TMDLs prepared by the District of Columbia and approved by EPA. The permit reflects the WLAs from the various TMDLs that allocate wasteloads for WASA's CSO discharges.

The permit may be reopened when TMDLs for the Potomac River are established, in order to specify limits based on newly developed WLAs. If the permit is not reopened, newly approved TMDLs will be considered during the next permit cycle. In the meantime, EPA has determined that a combination of the narrative WQBELs to implement the District's narrative WQS, along with the other effluent limits in the permit, and the nine minimum controls (NMCs) and the LTCP are sufficient to ensure compliance with WQS and are consistent with the existing applicable TMDL WLAs.

See also response to Comment A.2, above.

B. Comments received from the Sierra Club and Friends of the Earth. The following comments were received from David S. Baron, Esq., attorney for EarthJustice and submitted on behalf of the Sierra Club and Friends of the Earth.

1. Comments regarding the Long Term Control Plan:

- a. Part III.C.2 of the draft permit refers to the "LTCP" without referencing a specific version of the plan. To ensure clarity, the permit should provide such a specific reference (i.e., District of Columbia Water and Sewer Authority, Combined Sewer System Long Term Control Plan, Final Report, July 2002).

Response: EPA has made this change and it can be found at Part III.C.2. See C.1.j.(I) below.

- b. Rather than attempting to characterize which plan components are the "principal" ones, the permit should simply reference the pages of the LTCP that set out the plan components: pps. 13-1 to 13-17. Alternatively, the relevant sentence should be revised to read as follows: The LTCP facilities for controlling discharges to the above named receiving waters ~~are principally comprised of~~ include, among other things, diversion structures, a system of underground storage tunnels, [etc.].

Response: EPA has revised the relevant sentence in Part III.C.A.1 as suggested above.

- c. Footnote 4 of subparagraph III.C.A.7.b. requires clarification. Does the footnote mean that the diversion capacities from the referenced outfalls have previously been estimated based on computer modeling, or that compliance with these capacities after LTCP completion will be determined by computer modeling? If it is the latter, then we question the sufficiency of modeling alone to determine that the specified diversion levels are in fact being achieved.

Response: EPA estimated the diversion capacities from the referenced outfalls based on computer modeling. The footnote has been revised, however, the reference is III.C.A.7.c not III.C.A.7.b.

The CSO outfalls covered by Footnote 4 are all located in Rock Creek. They all divert to the Rock Creek Interceptor, which conveys flow to the Potomac Pumping Station. From the Potomac

Pumping Station this flow will be pumped to Blue Plains or diverted to the new Potomac Tunnel. The Rock Creek Interceptor is located in the stream valley but the diversions are located well above the sewer, making monitoring and access difficult. The following table shows the average year frequencies and volumes for those outfalls which are expected to overflow.

CSO NPDES No.	Description	No. Events (No./avg.yr)	Overflow Volume (mg/avg. yr)	% of Total
032	26 th Street-M St	-	-	-
034	Slash Run	-	-	-
035	Northwest Boundary	-	-	-
038	Kalorama Circle East	-	-	-
039	Belmont Rd	1	0.02	0.4%
040	Biltmore St	1	0.05	1.0%
041	Ontario St	-	-	-
042	Quarry Rd	-	-	-
043	Irving St	1	0.26	5.2%
044	Kenyon St	1	0.01	0.2%
045	Lamont St	4	0.76	15.2%
046	Park Rd	2	0.01	0.2%
048	Oak St - Mt Pleasant	2	0.14	2.8%
050	M St - 27 th St	-	-	-
051	Olive - 29 th St	-	-	-
052	O St - 31 st St	-	-	-

054	West Rock Creek Diversion Sewer	-	-	-
056	Normanstone Drive	-	-	-
	Total these CSOs		1.25	25%
	Total Rock Creek CSOs Overflow Volume (including Piney Branch and CSOs Monitored under footnote 3)		5	100%

As shown by the table, a number of outfalls do not overflow and the frequency and volumes of those predicted to overflow is small. Differences between predictions and actual conditions will be identified by post-construction monitoring and adjustments can be made if they are necessary.

- d. Subparagraph III. D provides for Phase 2 monitoring. Since the LTCP proposes building the tunnels sequentially, there is no reason to defer Phase 2 monitoring on the Anacostia until the Rock Creek and Potomac tunnels are completed. Commenter asks the Region to confirm that the above reading correctly reflects the intent of Part III.D. of the permit. To further clarify the permit on this score, commenter urges EPA to amend the relevant language in the first paragraph of Part III. D as follows:

<u>Phase</u>	<u>Post Construction Condition</u>
1	Following the placing in operation of the inflatable Dams and pumping stations Rehabilitation
2	Following the placement in operation of the Anacostia, Rock Creek and Potomac Storage tunnels <u>respectively, as each tunnel is placed in operation.</u>

Response: Commenter urges EPA to amend the relevant language in the first paragraph of Part III.D. Commenter is correct that Phase 2 monitoring for completed facilities is not intended to be deferred until final completion of the LTCP. EPA has added the suggested language.

2. Comments Regarding the Water Quality Based Requirements for CSOs.

- a. Commenter supports the inclusion of Part III.E.1 in the draft permit, but the introductory clause ("Except as otherwise specified below") must be deleted. Nothing that is "specified below" Part III.E.1. could lawfully justify or authorize the discharge of any pollutant at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above DC water quality standards. The permit must prohibit all such discharges pursuant to 33 U.S.C. §1311(b)(1) (C) and 40 C.F.R. §122.4(d) and 122.44(d). Moreover, the addition of the "Except as otherwise provided clause" violates the antibacksliding provisions of the Clean Water Act and EPA's rules. Accordingly, Part III.E.1 must be revised as follows:

1. ~~Except as otherwise specified below,~~ The permittee shall not discharge any pollutant at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above District of Columbia water quality standards, including numeric or narrative criteria for water quality.

Response : The addition of the opening clause of this provision was not intended to alter existing water quality based effluent limits and accordingly, EPA has removed the introductory clause. EPA agrees that the permit must contain requirements necessary to achieve WQS, including state narrative criteria, pursuant to 33 U.S.C. §1311(b)(1)(C) and 40 C.F.R. §122.4(d) and 122.44(d). The permit contains numeric WQS which are expressed as WQBELs. In addition, EPA has set forth the narrative WQS as effluent limits. As in all NPDES permits, the discharge is required to achieve any more stringent limits necessary to meet DC water quality standards.

- b. For the same reasons, we object to the introductory clause of the last sentence of Part 10.C. of the Draft Fact Sheet, to the extent it is meant to imply that the prohibition on causing or contributing to excursions above D.C. water quality standards only applies "where TMDLs have not been established." The fact that TMDLs have been adopted does not somehow authorize the discharge of pollutants at a level which will cause, have the reasonable potential to cause, or contribute to an excursion. Nor do the TMDLs by themselves assure that such excursions will not occur, particularly where those TMDLs address only annual loadings (see part 2.b below).

Response: See response to a., above.

c. We support the inclusion of TMDL-derived effluent limits in Part III.E.2, but these provisions require clarification and modification to comply with the Clean Water Act and EPA rules, as follows:

1. *average annual load and determination of compliance:* Almost all of the TMDL-related effluent limits are framed in terms of total "average annual" loads, and/or percentage reductions in "average annual" loads. The permit, however, does not specify how "average annual" loads are to be calculated. For example, Part II.E.2.d. requires the anticipated average annual load of biochemical oxygen demand (BOD₅) from CSOs in the Anacostia to be reduced by 90.3%, to not greater than 152,906 pounds per year, but does not specify how the annual average load actually produced by CSOs is to be calculated, or how compliance is to be determined. Does "average annual" refer to the average of various loadings measured at different times over the year?

Response: The average annual load limits are based on the daily simulations in the LTCP submitted by WASA. These simulations modeled for the years 1988, 1989 and 1990, which represent dry, wet and average rainfall years. This span of years also was used for the TMDL modeling assumptions from which the limits were derived.

- a. How and where is compliance with this load limit (and/or with the 95% reduction requirement) to be measured? Part III.E.3 of the draft permit requires twice per year monitoring of BOD at two Anacostia outfalls "in order to measure compliance with the TMDLs," but nowhere does the permit explain how the results of this limited monitoring can or will illustrate compliance or noncompliance with the annual average TMDL, or with the percentage reduction requirement. Without such details, the permit does not assure compliance with water quality standards as required by 33 U.S.C. §1311(b)(1)(C) and 40 C.F.R. §§122.4(d) and 122.44(d).

Response: Part III.E.3. sets forth monitoring requirements for the two Anacostia River and two Rock Creek outfalls. Samples are to be taken from these outfalls to gather data that is "representative" of all of the CSO discharges that occur into these two receiving waters. Until such time as construction of the tunnels is complete, however, EPA anticipates noncompliance with CSO limits set forth in this permit. In the interim, the monitoring data gathered will provide greater confidence regarding characterization of the effluent under a variety of circumstances.

In order to determine whether or not the permittee has complied with the TMDL - based limits after construction of the tunnels is complete, the post-construction CSO discharge data will be compared against data for each of the three types of years that comprise the "average annual year". For the purpose of LTCP and TMDL modeling, EPA chose a dry year (1988), a wet year (1989) and an average rainfall year (1990) based on the data supporting the LTCP. If the actual post-construction discharge data falls at below the average annual year, discharges from the system would comply with the permit. If the post-construction discharge data were above the highest rainfall year, then, EPA would evaluate why. In this case, there may be a violation of the permit. If the non-compliant discharges, however, are due to an anomalous rainfall event, e.g. a hurricane, EPA may exercise its discretion not to enforce against the permittee. This information represents EPA's preliminary thinking regarding this matter and actual enforcement decisions will be made after the tunnels and other LTCP controls are complete.

- b. We have the same concerns with respect to all of the other effluent limit provisions in Part III.E.2. of the permit. Virtually all of them set limits on annual average loadings of specified pollutants from CSOs without specifying how compliance will be determined: e.g., how the annual average of loadings actually discharged in a given year or percentage reductions in loadings will be measured for purposes of assessing compliance with the loading limits in the permit. As noted above, twice per year monitoring at 2 outfalls will not by itself provide information on average annual loads. If EPA is proposing to translate or extrapolate this monitoring data into estimated average annual loadings, the permit needs to explain how this will be done, and EPA needs to offer reasoned support for such an approach. The reasoned support must justify not only the method for determining annual loads, but also the adequacy of the required monitoring to determine such loads. For example, the permit sets an annual average loading limit for total suspended solids in the Upper Anacostia, but requires no compliance monitoring at all in the upper Anacostia. EPA provides no basis for concluding that monitoring in the Lower Anacostia will or can be sufficient to determine compliance with a TMDL for the Upper Anacostia. The permit must require monitoring that will "assure compliance with permit limitations." 40 C.F.R. §122.44(D)(1). In the absence of any showing that the monitoring required in the draft will indeed assure compliance with annual average TMDLs,

the draft permit's monitoring provisions do not comply with this requirement.

Response: As discussed at 1.a above, the monitoring requirements at Part III.E.3 are intended to determine whether or not the TMDL-based limits are being met prior to construction of the structural components of the LTCP. Because the limits either will be met or not, the twice per year monitoring frequency is representative of the non-continuous discharges expected to occur. Construction will not be completed during this permit cycle and thus the post-construction monitoring requirements are unlikely to become effective during the permit term.

EPA selected the outfalls at Part III.E.3 according to the requirements of 40 C.F.R. 122.44(I)(1) and (2), which speak to the representativeness of monitoring, e.g., volume, size and duration of the discharge. The modeling performed during the development of the LTCP provides information regarding the behavior of the CSO during various sizes of storm events. In addition, EPA has added a requirement for the permittee to provide an estimated flow volume. Hourly precipitation data is available through the Reagan International Airport.

In choosing representative outfalls for monitoring, EPA made several practical considerations, specifically, the accessibility of the outfalls to be sampled and the amount of surface area draining through such outfalls. EPA chose two outfalls to represent CSO discharges for each of the Anacostia River (outfalls 010 and 012), and Rock Creek (outfalls 049 and 052). For compliance purposes, these outfalls are surrogates representing all CSOs for the water bodies into which they discharge.

Flow monitors were installed on CSOs 010, 012 and 049 during the LTCP process so some historic flow data is available for them. In addition, these outfalls were sampled during the development of the LTCP, so they are accessible and in adequate condition for sampling. Further, they represent the largest CSO drainage areas into the Anacostia with the exception of the Northeast boundary which drains to CSO 019.

Even though CSO outfall 019 drains a very large area of the District, it was not chosen for monitoring because treatment trains (screening, chlorination, dechlorination) are already in place on

that outfall and therefore the discharge would not be representative of untreated CSO discharge. CSO 007 (Fort Stanton), also sampled in development of the LTCP, was not chosen because of the low volume of its discharge. The outfalls included in the permit for sampling are representative of these discharges.

Outfall 049 was the only outfall on Rock Creek that was sampled during the LTCP planning so EPA chose a second outfall, CSO 052. Outfall 052 drains a large area and is located in the lower portion of Rock Creek which is listed as impaired under CWA Section 303(d) due to organics, metals and bacteria.

EPA believes that the monitoring data gathered from these outfalls complies with the requirements of 40 C.F.R. § 122.44(I) and provides sufficient information about loadings to the Anacostia and Rock Creek. The monitoring is representative of the discharges and meets the requirements of 40 C.F.R. § 122.41(j)(1) and complies with 40 C.F.R. 122.44(I)(1) because, coupled with readily available rainfall data, associated flow volumes also should can be reliably estimated. In the case of outfalls 049 and 012, EPA has actual flow data from the LTCP.

Comment: We contend that the permit must establish outfall-specific loading limits and require sufficient monitoring to determine whether such limits are being met. The permit provides neither, and therefore does not comply with 33 U.S.C. §1311(b)(1)(C), and 40 C.F.R. §§122.4(d), 122.44(d).

Response: See immediately preceding response. Outfall-specific monitoring would be unnecessary because the monitoring requirements of the permit are representative of the CSO flows to the affected receiving waters. Though further refinements to monitoring requirements may be appropriate in future permits, even before construction is complete, until that time, additional monitoring would impose unnecessary costs without adding informational benefits.

Comment: In addition, several of the TMDL-derived limits refer to reductions in the "anticipated" average annual load. This reference is unlawful to the extent it suggests that compliance can be determined by merely predicting the anticipated or expected annual load. Under the Clean Water Act and EPA rules, effluent limits must be expressed in a way that assures actual compliance with

standards, not merely predicted or anticipated compliance. The word "anticipated" must therefore be deleted wherever it appears in Part III.E.2.

Response: The commenter is correct in that the limit is based upon the TMDL, which does not use the word "anticipated" in describing the annual load. This is not longer an issue, as, in response to another comment, EPA has changed the TMDL derived limits from percentage reduction to load allocation. EPA disagrees with the commenter, however, that permit limits are not based on projections, predictions and other assumptions. Permit writing agencies must necessarily draw on models, making assumptions and predictions, in order to derive permit limits to protect water quality.

2. *Need for Daily Loads:* As we have repeatedly stated in comments on proposed TMDLs for D.C. waters, annual and seasonal load limits are not sufficient to assure compliance with water quality standards. Our reasons for so contending are set forth in detail in those comments, which we incorporate herein by reference. We also explained why daily loads are required in our opening and reply briefs in Friends of the Earth v. EPA, No. 02-1123 (D.C. Cir., final briefs filed 2-21-2003), also incorporated by reference. Because the draft permit does not include daily loading limits for the pollutants addressed in Part III.E.2 of the draft, or monitoring requirements sufficient to ensure compliance with daily limits, it likewise fails to assure compliance with water quality standards, and therefore does not comply with 33 U.S.C. §1311(b)(1)(C), and 40 C.F.R. §§122.4(d), 122.44(d).

Response: The commenter is attempting here to challenge the underlying TMDLs EPA has used as the basis for the WQ based effluent limits. TMDLs cannot be challenged in a permit proceeding -- only whether the NPDES permit appropriately translates the TMDL-related limits into WQBELs. See, In re: City of Moscow, Idaho, 10 E.A.D. 135, 159-161. Commenter puts forth the arguments it has made in Friends of the Earth, Inc. v. EPA, Civil Action No 04-92 (D. D. C.). The effluent limits in this permit are consistent with the assumptions and requirements of the applicable WLAs as required by 40 C.F.R. §122.44 (d) (1) (vii)(B). Moreover, on November 29, 2004, the Court granted EPA's motion for summary judgment in Friends of the Earth, upholding the calculation of TMDLs on an annual and seasonal, rather than a daily, basis.

EPA does not accept commenter's attempt to incorporate by reference numerous documents, including, but not limited to letters and legal briefs, which are primarily related to TMDL actions and which the commenter has not specifically referenced to support a specific comment for a specific point. Many of the documents are not even addressed to EPA.

C. Comments received from the District of Columbia Water and Sewer Authority. The following comments were received from Walter F. Bailey, Director, Department of Wastewater Treatment.

1. Comments covering Parts I and III of the draft permit.

- a. Traditional part designation and page numbering are missing throughout the draft (e.g., Part I Page ___ of ___)

Response: This was not a portion of the modified draft permit open to public comment. EPA has not changed this in the final modified permit.

- b. I.A. Footnote 8. Outfall 001 has been established as a CSO-related bypass and is a component of the LTCP. All other monitored CSO outfalls are required to report with DMRs. Outfall 001 should not be singled out for 24-hour reporting.

Response: This was not a portion of the modified draft permit open to public comment and will remain unchanged.

- c. I.B. Footnote 10. First line, the word "section" following "As provided in" does not appear to be necessary and should be deleted.

Response: EPA has made this change.

- d. I.C. Footnote 4. The commenter requests the word "flow" be added to the second line following "the discharge, and" to make clear that sample compositing is to be flow based.

Response: EPA has made this change. The sentence now reads, "Collect one grab sample every two (2) hours beginning within 2 hours of the start of the discharge, and flow composite samples up to a maximum of 24 hours."

- e. Part I.C footnote 6. The word "tow" should be "two".

Response: EPA has made this change.

- f. Part III.B.1.a.(viii). The commenter requests that the Fact Sheet reference the Consent Decree as follows: second line insert "in accordance with the above referenced Consent Decree" following "rehabilitated". This wording should be consistent with the Fact Sheet at Part III.B.1.f.(iv). Additionally, the commenter requests that Part III.B.1.a.(viii) be modified by inserting "Following rehabilitation" in the first line ahead of "Operate".

Response: EPA has revised the Fact Sheet reference that the rehabilitation is also a requirement of the Consent Decree, and has inserted the requested language in the permit.

- g. Part III.B.1.c.(ii). Commenter states that the Fact Sheet on page 12 for Part III.B.1.c states the purpose of that condition to be control of SIU discharges to the CSS during wet weather. However, the condition of III.B.1.c.(ii) in line four states "...prohibit batch discharges". The Fact Sheet and the NMC condition appear to be in conflict as to the procedure to be applied to SIU batch discharges. To set the standard at "prohibition" except for a safety hazard is not reasonable. In view of permittee's belief that a measure other than prohibition is appropriate, commenter suggests the following language for the Part III.B.1.c.(ii):

Use pretreatment regulations to require permitted significant industrial users discharging directly to the CSS to establish management practices to control batch discharges during wet weather conditions whenever possible. Conduct an annual inspection of the above users to identify the existence of any batch discharges. Evaluate batch discharges identified to determine if the discharges should be controlled during wet weather taking into consideration, volume, frequency, characteristics and the need to protect life and property.

Response: EPA has made this change.

- h. Part III.B.1.f.(iv) and (viii). Language in Part III.B.1.f.(iv) concerning the public education workshops is redundant to the language in (viii). Part (viii) needs to be revised to state that the workshops will be held four times per year.

Response: EPA has made these changes.

- i. Part III.B.1.f.(vi). Commenter requests that the condition be modified and the reporting requirements under III.F.2 and III.F.3 be consistent with other NMC conditions to read:

"Work on a regular and ongoing basis with the DC Department of Public Works (DPW) and National Park Service (NPS) to maximize litter control

in the CSS, targeting neighborhoods that contribute disproportionate amounts of trash to the CSS.”

Add new requirement j at III.F.2, as follows:

“j. CSS Litter Control - Number of meetings or conferences with DPW and NPS. Summary of topics discussed and actions adopted.”

At F.III.3 add “h. CSS Litter Control”.

Response: EPA has made these changes except that a new requirement at “m” has been added at Part III.F.2.

- j. The commenter suggests the following clarifications to Section C. Long Term Control Plan (LTCP):
- i. Add the following: “The LTCP is the recommended plan included in the Combined Sewer System Long Term Control Plan, Final Report, July 2002 submitted by the permittee to EPA and the District of Columbia Department of Health”.

Response: EPA has made this clarification.

- ii. Add the following: “All combined sewer flow stored in the Anacostia River, Rock Creek and Potomac River storage tunnels shall be emptied within 59 hours of the end of a wet weather event. If another wet weather event occurs before 59 hours has elapsed, the 59 hour period shall start from the end of the last wet weather event that occurs. A wet weather event occurs as a result of storm water runoff, including snow melt, entering into or being conveyed in the CSS. All flow stored in the storage tunnels and appurtenant structures shall be conveyed to Blue Plains for treatment.”

Response: EPA has made this clarification to Part III.C.A.5.

- iii. Add the following: “10. The monitoring, reporting and compliance provisions under subsections III.C.A.8. and 9, above, shall become effective when the respective CSO control facilities are placed in operation.”

Response: EPA does not agree to add this language because until there is a Consent Decree which establishes a schedule for completion of the LTCP tasks, implementation of all the requirements of the LTCP are immediate under the

terms of this permit.

In addition, immediate CSO monitoring and reporting requirements are included in the permit to confirm the adequacy of the data characterizing the occurrence patterns and quality of the CSOs prior to construction of the planned controls.

- k. Commenter provided four pages of handwritten clarifications to Part III.C at pages 40 through 43, inclusive.

Response: EPA has made the clarifications in these pages.

- l. Commenter provided four pages of handwritten clarifications to Part III. D. Post Construction Monitoring found on pages 44 through 47, inclusive.

Response: EPA has made these clarifications.

2. Comments on Part III. Section E of the draft permit related to discrepancies in the TMDL documents and in the TMDL values included in the draft permit.

General - Commenter states that the permittee believes that all TMDL-derived limits should be deleted from the permit.

Response: EPA believes that TMDL-derived limits are appropriate and required for this permit. See response to Comment A. 3, and Part III.C.3.d above.

- a. Part III.E.2.d and e: Anacostia TMDL for BOD, nitrogen and phosphorus. The loads in the draft permit for nitrogen and phosphorus are much lower than those allocated in the TMDL.

Response: EPA has made these changes.

- b. Part III.E.2.h: Anacostia TMDL for Total Arsenic: The draft permit allocates a total arsenic load to CSO in the Upper Anacostia of 1.03 pounds per year, whereas the final TMDL allocated a load of 1.30 pounds per average year to CSO. Commenter requests that this discrepancy be corrected.

Response: EPA has made this change.

- c. Part III.E.2.h: Anacostia TMDL for Total Copper: Commenter requests that the load discrepancy between EPA's Amended Decision Rationale for the TMDL and DC DOH's Final TMDL be revised as appropriate.

Response: The amended decision rationale is incorrect. EPA reviewed the calculations

for the amended decision rationale tables and found the allocations between the upper and lower Anacostia River for lead and zinc were also in error. The permit contains the corrected allocations, the sum of which equal the total CSO allocations given in the District's approved TMDL report regarding these metals.

- d. Part III.E.2.h: Anacostia TMDL for PCBs: The commenter requests that the allocation for the permit be increased to agree with the Final TMDL allocation of 0.2709 lbs/average year.

Response: EPA has corrected this error. Increasing the number of decimal places to four yields the following: Upper Anacostia - 0.1485 #/yr; Lower Anacostia - 0.1224 #/yr.

- e. Part III.E.2. Piney Branch TMDL for Copper, Lead and Zinc: The commenter states that discrepancies between the TMDLs for metals in Rock Creek and organics and metals in the Rock Creek tributaries must be resolved before any TMDLs may be used for permit purposes.

Response: EPA has made these corrections. EPA agrees that the draft permit's allowable CSO load limits calculations needed to be corrected. The District's TMDLs for Piney Branch require a 96.5% reduction, without an explicit margin of safety for all constituents. The allowable CSO load for all constituents is revised to reflect this. The Rock Creek TMDL allocated CSO loads to Piney Branch are to ensure WQS are met in Rock Creek. The Rock Creek tributaries allowable CSO loads will achieve WQS for Piney Branch. Measurements from Outfall 049 will be representative of discharges into Piney Branch.

- f. Part III.E.2. Piney Branch TMDL for all Parameters: Commenter states that the load allocations to the CSO are unclear in the DOH TMDL. The basis for the load allocations in the draft permit are equally unclear and do not appear to be based on the TMDL. Commenter requests that the TMDL and loads in the permit be revised with public notice and opportunity for comment.

Response: EPA has clarified the limits for Piney Branch. Since the limits are essentially the same as in the draft permit modification, further public notice is not required. The final DC Rock Creek tributaries TMDL report requires a 96.5% reduction for CSO loads for all constituents, except for PCBs, with an implicit margin of safety. For PCBs DC's TMDL allocates zero to land-based total PCB loads. The District subtracted the atmospheric load from the total load to get the land based load. See Appendix D of the District's TMDL report. The final report is available from the EPA Region 3 internet site and the administrative record for this permit.

3. **Comments on Part III of the draft permit related to the Phase 2 permit conditions.**

- a. The draft permit and fact sheet do not conform with CWA § 402(q) because they fail to make the Water Quality Standards compliance determination required by the policy.

Response: See response to Comment A. 2., above.

EPA disagrees with the Commenter's interpretation of the CSO Policy and Section 402(q) of the CWA. Section 402(q) of the CWA requires that all permits "shall conform" to the 1994 CSO Policy. The modifications to the permit do conform to the Policy. There is nothing in the policy that requires EPA to include in the permit, or to elsewhere make a determination that the LTCP will comply with WQS. What the Policy does indicate in discussing WQBELs (specifically in the discussion regarding numeric performance standards based on average design conditions) is that such WQBELs should be developed under 40 C.F.R. §§ 122.44(d)(1) and 122.44(k). Though these regulations require NPDES agencies to include WQBELs when a discharge would cause, have the reasonable potential to cause, or contribute to non-attainment of WQS, EPA has not interpreted those regulations to require a "compliance determination." Of necessity, NPDES permitting agencies must rely on models, including assumptions and predictions, in deriving WQBELs. To the extent those models, assumptions, and/or predictions prove erroneous, the CWA provides for reconsideration and re-evaluation upon re-issuance of NPDES permits.

The commenter has stated that it would be satisfied if EPA were to concur in DOH's determination and rationale. EPA has done so. By directing the Permittee to implement the LTCP EPA has accepted the LTCP as compliant with the Policy. In response to this comment, EPA has added a statement to that effect to the Fact Sheet.

Next, the commenter seems to tie a formal EPA approval of the LTCP to the WQS compliance determination. EPA does not interpret the CSO Policy to require any such approval, and the commenter has failed to cite to any such requirement which requires EPA to make any such determination. The CSO Policy itself never refers to an "approved" LTCP. It requires the permittee to demonstrate that the LTCP will meet WQS, and it refers, in the permitting section at IV. B. 2. to "selected" CSO controls. At no point does it refer to EPA approved or EPA approval of the LTCP.

In its introductory comments the commenter cites to EPA's "Guidance: Coordinating CSO Long Term Planning with Water Quality Standards Reviews" (July 31, 2001), citing an administrative process it argues requires, *inter alia* that EPA approve the LTCP and make a water quality standards

determination. That guidance document, however, describes a process for integrating LTCP development with WQS standards reviews, where possible, and is not directed toward NPDES permit writers. The document's references to "approval," therefore, are only abbreviated references to the formal, final actions that the NPDES agency takes in a permitting or an enforcement proceeding. The Guidance contemplates that WQS may be changed where necessary and creates a process to facilitate that change where appropriate. It is not applicable in this instance, as the DC WQS did not undergo review. As noted in the DC DOH letter of August 28, 2003, it is anticipated that implementation of the LTCP will result in WQS compliance. In footnote 13 to Attachment 3 to its comments, the permittee attempts to incorporate the December 2001 EPA Report to Congress, in its entirety, into its comments. To the extent that the commenter has referenced specific pages in the CSO Report, the commenter has not raised a specific comment, or at least not a comment suggesting why EPA should change this permit based on specific language in the Report to Congress. Moreover, CWA section 402(q)(1) refers to the CSO Policy with a specific reference to the date of publication of the CSO Policy, not to any subsequently issued guidance documents.

- b. The draft permit fails to conform to CWA § 402(q) because it contains the general water quality standards compliance requirement in Section III.E.1.

Response: EPA disagrees that the permit fails to conform to the CSO Policy based on its inclusion of "general" WQBELs. In the final permit, EPA has enumerated DC's narrative WQS as narrative WQBELs because EPA finds that, at the time of permit issuance, the CSO discharges are likely to cause, have the reasonable potential to cause, or contribute to non-attainment of these narrative WQS. This finding conforms to the CSO Policy for Phase 2 permits because the finding is the one required by 40 C.F.R. 122.44(d)(1). The CSO Policy cites to this regulation at 59 FR 18688, at page 18696.

For this permit, the LTCP evaluated hydraulic loadings and capacity of the Combined Sewer System (CSS) operated by WASA. On the basis of data gathered from flow meters installed in the CSS at key locations, CSO flows in the CSS were documented during storm events. The physical information describing the CSS and related land use and land form data was used to construct a computer-based model of the CSS to help predict the hydraulic response of the system during various storm events. Sampling was conducted at representative CSOs to determine wastewater characteristics during CSO events and to help assess potential environmental impacts. CSO samples were tested for total recoverable metals and cyanide, dissolved metals, pesticides/PCBs, volatiles and semi-volatiles, TSS, CBOD₅, and bacteria.

With regard to the determination of whether the discharges cause, have the potential to cause, or contribute to non-attainment of DC WQS, because the CSO discharges would be non-continuous discharges, the TMDLs for the receiving waters for these CSOs support the Agency's "reasonable potential" analysis. By meeting the limits set forth in the permit EPA believes water quality standards will be met. Absent the detailed analysis included in a TMDL (or TMDLs) for the Potomac River, EPA does not conclude that additional pollutant-specific WQBELs (beyond the narrative WQBELs) are necessary to assure compliance with WQS at this time. In addition, for compliance purposes, EPA agrees with WASA's implicit suggestion that additional pollutant-specific WQBELs for discharges into the Potomac River would be unnecessarily punitive given the Agency's anticipation that CSOs that occur prior to completion of construction are unlikely to comply with the narrative WQBELs in the permit.

- c. The draft permit fails to conform to CWA § 402(q) because it contains the TMDL-derived effluent limits in section III.E.2.

Response: See response to Comment A. 3.

The CSO Policy at IV. B. 2c. refers to WQBELs under applicable regulations requiring "at a minimum" the numeric performance standards based on average design conditions. The "at a minimum" reference does not appear to supplant the provisions of CWA Section 301(b)(1)(C), including the implementing regulation relating to TMDLs promulgated at 40 C.F.R. 122.44.(d)(1)(vii)(B).

- d. The TMDL-derived effluent limits and monitoring requirements in section III.E.2 and III.E.3, respectively, of the draft permit are erroneous and arbitrary and capricious because they incorrectly assume that the TMDLs can be employed directly as effluent limits for the CSO discharges remaining after implementation of the LTCP.
 - i. The loads allocated to CSOs in the TMDLs cannot be used directly as effluent limits after LTCP implementation because the numeric TMDL values and WASA's LTCP were developed from mathematical models and do not reflect the CSO discharges and other sources of water quality impacts under all rainfall conditions. In years when rainfall exceeds the rainfall volumes that are the basis for the design capacity of the selected controls, CSO loads can be expected to exceed the TMDL-derived effluent limits.
 - ii. The mathematical models that were used to develop the TMDLs and the LTCP are based on average years (1988, 1989 and 1990). The documentation supporting the TMDLs identify the average of these years

as the critical environmental condition for establishing a wasteload allocation for the CSOs. The wasteloads allocated to the CSO discharges remaining following implementation of the LTCP controls are the average annual values of the three-year period. It is these wasteloads that EPA proposes to use as effluent limits in section III.E.2 of the draft permit. Following LTCP implementation, actual loads will vary depending on rainfall volume, duration and frequency, with the expectation that the actual loads discharged will exceed the TMDL-derived effluent limits in those years when rainfall produces loads that exceed the average annual loads of the average annual years.

- iii. The monitoring requirements for the TMDL-derived effluent limits in section III.E.3 of the permit incorrectly assume that compliance with the TMDLs can be monitored directly. Therefore, the monitoring requirements suffer from the same flaws as the effluent limits themselves. Compliance with the TMDLs has to be measured against the average annual loads for the three-year period that is the basis for the TMDLs, not the loads in the year in which the monitoring is performed. The only way to accurately measure compliance with the TMDLs is to use the same sampling protocols and data analysis that were used to develop the TMDLs themselves. This would involve periodic monitoring of the CSO discharges and the water quality conditions in the receiving waters. This information would then be used to make a modeling evaluation to determine whether the selected controls in the LTCP are providing the degree of control required by the TMDLs, again, based on the average annual loads for the 3 years that is the basis for both the TMDLs and the LTCP.

The correct procedure for monitoring compliance with the TMDLs is set forth in the post construction monitoring provisions in section III.D of the draft permit. Moreover, section III.C of the draft permit contains monitoring requirements to ensure that the selected controls in the LTCP are providing the level of CSO control used to establish the wasteload allocations in the TMDLs.

Response: See response to B.2.c.1.a found on page 9, above, which discusses EPA's current thinking on how compliance with TMDL-derived limits will be enforced.

EPA's reliance on TMDLs as a basis for the limits is reasonable and consistent with the regulations. EPA regulations at 40 C.F.R. §122.44(d)(1)(vii)(B) state:

(vii) When developing water quality-based effluent limits under this paragraph the permitting authority shall ensure that:...

(B) Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 C. F. R. 130.7.

In addition, to the extent the Commenter suggests the TMDL-derived limits should be based on wet years, EPA disagrees. The TMDLs are based upon average years and the CSO Policy directs reliance on average years.

- e. The draft permit modification and fact sheet fail to conform to CWA § 402(q) and are contrary to the law because they neither contain nor acknowledge WASA's right to a schedule for implementation of WASA's LTCP based upon the erroneous conclusion that the policy requires WASA to immediately implement its LTCP. The commenter asserts that the obligation to implement the LTCP is, in itself a new water quality standard based effluent limitation and that, under the District of Columbia WQS regulations an LTCP is, in itself, an effluent limit.

Response: See response to comment A.1. above. EPA disagrees with the permittee's assertion that the LTCP is itself a water quality-based effluent limitation. The basic intent and purpose of the CSO Policy is to provide a mechanism for POTW's to achieve past-due compliance with the technology and water-quality based requirements of the CWA. Development and implementation of the LTCP is the means by which the permittee is intended to achieve compliance with water-quality based effluent limits. It is not a limit in and of itself. This is not a basis for allowing a schedule for LTCP implementation in the permit. The policy itself distinguishes between the LTCP and water-quality based effluent limits.

D. Comments received from the Maryland Department of the Environment. The following comments were received from Robert M. Summers, Ph.D., Director, Water Management Administration.

1. **Comment:** The permit should have a specific reopener provision indicating that the permit may be reopened to add nutrient load allocations to meet new criteria.

Response: EPA believes that the reopener clause found at Part II.A.13 is sufficiently broad and is intended to cover any instance, including modification of nutrient allocations, where the permit may need to be reopened. In response to MDE's concern, EPA has added clarifying language in the fact sheet to reflect that the

permit may be reopened to add nutrient load allocations.

2. **Comment:** MDE objects to what it believes is a weakening of the nitrogen goal in Section E of the permit. This part states that the permittee must use best efforts to meet the nitrogen goal when it does not interfere with other permit obligations.

Response: Part IV.E has been modified to reflect that best efforts to meet the nitrogen goal require optimal operation of the nitrogen removal technology to the extent that such operation does not impair the permittee's ability to meet other permit conditions. The District of Columbia, as a signatory to the 1987 Chesapeake Bay Agreement and subsequent amendments to that agreement, supports the goal of reducing nutrients to the mainstem of the Chesapeake Bay and to that end the Permittee has installed and operated a biological nitrogen reduction (BNR) process at the Blue Plains facility. Operation of BNR at Blue Plains is essential to the health of the Chesapeake Bay. The clarification language in this permit does not relax the nitrogen removal expectations included in the January 2003 permit. Rather, it acknowledges that under limited circumstances during hot weather, operation of the BNR process would require the addition of so much phosphorous that it could result in a violation of the phosphorous discharge limit set forth in the permit.