UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
290 Broadway
New York, New York 10007-1866

RESPONSIVENESS SUMMARY FOR DRAFT NPDES PERMTS FOR BAYAMON RWWTP (NPDES PERMIT NO. PR0023728) PUERTO NUEVO RWWTP (NPDES PERMIT NO. PR0021555)

On July 1, 2011, the United States Environmental Protection Agency (EPA) public noticed in *El Vocero* the draft National Pollutant Discharge Elimination System (NPDES) permits for the above mentioned facilities owned by the Puerto Rico Aqueduct and Sewer Authority (PRASA). The public comment period for the draft NPDES permits closed on August 15, 2011.

According to 40 Code of Federal Regulations (CFR) 124.17, at the time that any final permit decision is issued under 124.15, EPA shall issue a response to comments. This response shall (1) specify which provisions, if any, of the draft permit have been changed in the final permit decision and the reasons for the change; and (2) briefly describe and respond to all significant comments on the draft permit raised during the public comment period, or during any hearing.

Comments made on behalf of PRASA were received in two letters from José Capeles P.E., dated August 15, 2011, from the following address:

Commonwealth of Puerto Rico
Puerto Rico Aqueduct and Sewer Authority
P.O. Box 7066
Bo. Obrero Station
San Juan, Puerto Rico 00916

All comments received have been reviewed and considered in this final permit decision. Based on the comments, the EPA has decided to revoke the current NPDES permits and reissue two individual NPDES permits. A discussion and response to the comments received is found below. Unless otherwise noted, the comments common to both permits are responded to jointly. EPA has determined that changes made to the draft permits as a result of the comments received during the public comment period are not substantive to the section 301(h) evaluation detailed in the Decision Document. Consequently, EPA believes that the assessment and conclusions presented in the Decision Document remain correct and that a revision of the Decision Document based on the response to comments is unnecessary at this time since any permit modifications of effluent limitations, monitoring requirements and other appropriate requirements do not significantly affect EPA's final decision to grant PRASA a section 301(h) waiver from secondary treatment requirements for both the Bayamón and Puerto Nuevo RWWTPs.

A. COMMENTS FOR BOTH DRAFT PERMITS (BAYAMÓN RWWTP & PUERTO NUEVO RWWTP)

1) Comment 1: Table 1: Technology-Based Effluent Limitations.

The draft permit was issued in response to PRASA's request for increased monthly average and daily maximum flows. PRASA agreed to maintain current BOD_5 and TSS loadings, with concomitant decreases in effluent concentrations, during discussions with the U.S. Environmental Protection Agency (EPA) and the Puerto Rico Environmental Quality Board (EQB). The monthly average BOD_5 limitations reflect this agreement. However, the monthly average TSS loading limitation is higher than the current limitation because EPA did not reduce the concentration limitation as expected, but maintained it as in the current permit. The decrease in the TSS weekly average loading is inconsistent with the increased monthly average and unexplained in the Fact Sheet issued by EPA.

It has been documented through over a decade of intensive monitoring, with reports submitted to EPA and EQB, that the existing BOD_5 and TSS limitations have not caused any environmental problems. Therefore, PRASA requests that EPA not lower the limitations for weekly average TSS loading from that requested by PRASA in its NPDES renewal application.

Response: EPA has considered PRASA requests and applied the loading limitations requested in its Renewal Application for the 301(h) Waiver for both permits complying with the Antidegradation Policy.

2) Comment 2: Table A-1: Sulfide - Note.

Footnote "@" indicates that the detection limit for sulfide is 100 µg/L. This appears to be a typographical error; it is assumed that the detection limit should be 2 µg/L. Correct footnote "@" to refer to a detection limit of 2 µg/L for sulfide.

Response: EPA included this footnote in error; it is usually included for the instance where the permit limit for Undissociated Sulfide is less than the available method detection limits. In this case, the permit limitation is well above detection. Therefore this footnote is not necessary, and has been removed from the final permit.

3) Comment 3: Table A-1: Sulfide - Note.

Footnote "@" indicates that the permit limitation is 2 µg/L. The effluent limitation is 14 µg/L. The limitation at the edge of the mixing zone is 2 µg/L. Correct footnote "@" to refer to the correct permit effluent limitation.

Response: EPA included this footnote in error; it is usually included for the instance where the permit limit for Undissociated Sulfide is less than the available method

detection limits. In this case, the permit limitation is well above detection. Therefore this footnote is not necessary, and has been removed from the final permit.

4) Comment 4: Special Condition 19.a.

The diffuser description is not correct based on the most recent inspection. It should be corrected to be consistent with, or referenced to, the description in the EPA draft Fact Sheet.

Response: Special condition 19.a has been revised as requested by PRASA. EPA notes the updated description of the diffuser, and has modified the description in this permit condition. By including it in this responsiveness summary, the description has also been entered into the administrative record for this permit issuance.

5) Comment 5: Special Condition 19.a.

The coordinates shown in SC 19.a, which are those specified in the final WQC, do not match those in Diagram-I (page 21 of 29).

Response: EPA has revised the final permit as requested by PRASA.

6) Comment 6: Special Condition 19.c: Acute Toxicity Tests

Acute toxicity tests for *Arbacia* are required, but the only EPA-approved test for this organism is for chronic toxicity. Delete the reference to acute toxicity testing for *Arbacia*.

Response: Section 19.d of this Special Condition specifies that acute testing shall be in accordance with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, (EPA-821-R-02-012) Fifth Edition, October 2002, which does not include an approved method for assessing acute toxicity using *Arbacia punctulata*. Therefore, EPA's interpretation of this condition is that acute testing is not required for *Arbacia Punctulata*. EPA has modified the wording of Special Condition 19.c to specify solely chronic testing for *Arbacia Punctulata*.

7) Comment 7: Special Condition 20.a

The second paragraph refers to Bacardí effluent, but presumably should refer to Bayamón (or Puerto Nuevo) effluent. Replace the reference to Bacardí effluent with reference to Bayamón (or Puerto Nuevo) effluent.

Response: This was a typographical error; the reference has been corrected to reflect either the Bayamón or Puerto Nuevo permit.

8) Comment 8: Special Condition 20.b

This requires that no test result for any species or effect in the combined discharge shall be greater than 83.32 TUc, a limit that was calculated by EPA on the basis that there are no numerical standards in the PRWQSR. However, contrary to EPA's statement in its draft Fact Sheet, the PRWQSR does have a numerical TUc limitation (incorporated by reference to EQB's *Mixing Zone and Bioassay Guidelines*). Therefore, this limitation should be treated in the same manner as all other limitations listed in Table A-1 that are subject to a mixing zone.

The appropriate TUc value is 102, not 83.32. In addition, the limitation for *Arbacia* should be specifically based on the IC25 endpoint. PRASA requests that these changes be made to the final permit. These requests are consistent with the PRWQSR, the existing permit, and EPA's own guidance on how to apply WET test results to compliance evaluations. The bases for these conclusions are discussed in detail in Attachment 2 and Attachment 3 to this comment document.

Response: The Definitions Section of the 2010 Puerto Rico Water Quality Standards Regulation (PRWQSR) defines the Criteria Continuous Concentration (CCC) as:

> "the EPA national water quality criteria recommendation for the highest instream concentration of a toxicant or an effluent to which organisms can be exposed indefinitely without causing an unacceptable effect. It is equal to CCC =1.0TUc."
>
> Also included in the Definitions Section is the calculation defining a chronic toxicity unit (TUc), which is the
>
> " . . . reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period, obtained during a chronic toxicity test, as defined by the following equation:
>
> $$TUc = 100/NOEC$$
>
> (The NOEC value should be expressed in terms of the percent (%) of the effluent in the dilution water)."
>
> 1303.1 WATER QUALITY STANDARDS: Section I. of the PRWQSR establishes the narrative water quality standard of
>
> I. Substances in Toxic Concentrations and Synergistic Toxic Effects
> The waters of Puerto Rico shall not contain any substance at such concentration which, either alone or as result of synergistic effects with other substances is toxic or produces undesirable physiological responses in human, fish or other fauna or flora.

EPA evaluated data from the combined discharge from the PRASA Puerto Nuevo and Bayamon facilities and the Bacardi Corporation, and determined that there existed reasonable potential to cause or contribute to an exceedance of this water quality standard, based chronic toxicity results for *Arbacia Punctulata* and on the numeric interpretation outlined in the definitions of the PRWQSR, as well as the "Technical Support Document for Water Quality Based Toxics Control" (EPA, March 1991) (TSD). EPA has calculated a numeric effluent limitation, which is protective of the narrative water quality standard for toxicity, using the approach outlined in the TSD.

9) Comment 9: Special Condition 20.c, Toxicity Reduction Evaluation

The stipulated Toxicity Reduction Evaluation (TRE) process addresses steps the permittee will take if the "toxicity is measured below the chronic toxicity effluent limitation", which is inconsistent with the limitation defined as a maximum value. Also the sentence is not clearly written.

Change the wording to read as follows: "This plan shall include steps the permittee intends to follow if the toxicity limitation is violated and must include, at a minimum:"

Response: EPA has revised the language in both permits to reflect PRASA's request.

10) Comment 10: Special Condition 20.d.1, 2, and 3

These items reference Bacardí, but presumably should reference Bayamón or Puerto Nuevo.

Response: This was a typographical error; the permits have been revised accordingly.

11) Comment 11: Special Condition 20.d.3.3

The requirement states that the TRE may be performed in conjunction with the Puerto Nuevo and Bayamón facilities. It should state that the TRE may be performed in conjunction with the Puerto Nuevo and Bacardí facilities. For the Bayamón RWWTP permit, the wording should be changed to state that the TRE may be performed in conjunction with the Bayamón and Bacardi facilities.

Response: This was a typographical error; the permits have been revised accordingly.

12) Comment 12: Special Condition 20.d.6

This item refers to SC 20.g.3. There is no g.3; it is presumed this is supposed to refer to f.3.

Response: This was a typographical error; the permits have been revised accordingly.

13) Comment 13: Special Condition 20 d.6 and 20.f.3

These items require reporting to be done within 30 days after permittee's receipt of the laboratory results. This is inconsistent with SC 19.g, which requires reporting within 60 days following completion of the test.

Change to maintain consistency with the final WQC, which requires reports within 60 days of the completion of the tests.

Response: This request is denied. The provisions of Special Condition 19.g are for mixing zone toxicity testing. The requirements of Special Condition 20 are to ensure compliance with the effluent limitation for toxicity, and could potentially trigger accelerated monitoring and potential toxicity reduction identification procedures. Reporting of results must be in a timely manner to address sources of toxicity.

14) Comment 14: Diagram-I

The coordinates shown in Diagram-I (page 21 of 28) do not match those in SC 19.a, which are those specified in the final WQC.

Response: See response to Comment 5 above.

B. SPECIFIC COMMENTS ON ATTACHMENT 2, COMBINED SEWER OVERFLOW (CSO) CONDITIONS, IN THE PUERTO NUEVO RWWTP DRAFT PERMIT

1) Comment 15: CSO Outfall Table

In the proposed permit, the Outfall 002 Barriada Figueroa location is indicated at the discharge location of the Department of Natural and Environmental Resources (DNER) pump station (near the San Juan Natatorium). The DNER pump station receives waters from numerous sources. PRASA does not have the authority to regulate all the flows received at the DNER Pump Station. Additionally, PRASA has identified one overflow weir located near the intersection of San Ramón and Del Carmen Streets in the sanitary sewer system. This is the only known location where sewage may flow into the storm sewer related to Barriada Figueroa. PRASA has the

authority to operate and maintain the sanitary sewer at this location. Therefore, PRASA has requested to replace the reference to Outfall 002 as Barriada Figueroa with a reference to the overflow weir installed near the intersection of San Ramon and Del Carmen Streets.

Response: EPA has modified the CSO Outfall Numbers to go from CSO Outfall Number 002 through 008. For this reason the Barriada Figueroa Outfall is now referred to as CSO Outfall Number 003.

Even though EPA recognizes that PRASA has no authority to regulate flows into the DNER pump station that are not contributed to it from PRASA's system, PRASA continues to utilize this pump station as a combined sewer overflow discharge point. Furthermore, EPA has information that indicates there may be portions of PRASA's collection system other than that described in the comment which discharge through this DNER pump station. Therefore the reference to CSO Outfall Number 003 will continue to be identified as Barriada Figueroa.

2) Comment 16: CSO Outfall Table

The coordinates for the corrected Outfall 002 location near the intersection of San Ramón and Del Carmen Streets are 18 ° 27' 2.47" N, 66 ° 4' 34.05" W and should be indicated in the Overflow outfall location column. Therefore PRASA requests the correction of the Outfall 002 coordinates.

Response: EPA has modified the CSO Outfall Numbers to go from CSO Outfall Numbers 002 through 008. For this reason the Barriada Figueroa Outfall is now referred to as CSO Outfall Number 003. The coordinates for Outfall 003 will remain as indicated in the draft permit. See response to Comment 15 above.

3) Comment 17: CSO Outfall Table

To avoid confusion, discussion of Outfall 002 should consistently reference its corrected location, which is near the intersection of San Ramon and Del Carmen Streets. Therefore, PRASA requested to change the Outfall 002 references, to "Outfall 002 near the intersection of San Ramon and Del Carmen streets.

Response: EPA has modified the CSO Outfall Numbers to go from CSO Outfall Numbers 002 through 008. For this reason the Barriada Figueroa Outfall is now referred to as CSO Outfall Number 003. The coordinates for Outfall 003 will remain as indicated in the draft permit. See response to Comment 15 above.

4) Comment 18: CSO Outfall Table

The receiving water body for Outfall 002 near the intersection of San Ramón and Del Carmen Streets in more correctly described as Caño Martin Peña via the storm sewer, not San Juan Bay Estuary. Therefore, PRASA requested to correct references to the Outfall 002 receiving water body to Caño Martin Peña via the storm water.

Response: EPA has modified the CSO Outfall Numbers to go from CSO Outfall Numbers 002 through 008. For this reason the Barriada Figueroa Outfall is now referred to as CSO Outfall Number 003. EPA has revised the final permit to reference the receiving waterbody for CSO Outfall Number 003 as Caño Martin Peña.

5) Comment 19: CSO Outfall Table

To avoid confusion, discussion of Outfall 003 should be consistently referenced as "Puerta de San Juan". Therefore PRASA requested to correct the Outfall 003 "Outfall 003 Puerta de San Juan".

Response: EPA has modified the CSO Outfall Numbers to go from 002 through 008. For this reason the Paseo La Princesa (now Puerta de San Juan) Outfall is now referred to as CSO Outfall Number 004. EPA has revised the final permit to reference CSO Outfall Number 004 as "Puerta de San Juan".

6) Comment 20: CSO Outfall Table

The coordinates for Outfall 003 Puerta de San Juan are incorrect as shown in the Overflow Outfall Location column. Therefore PRASA requested to correct the Outfall 003 coordinates to 18º27'53.524" Nm 66º7'11.538" W.

Response: EPA has modified the CSO Outfall Numbers to go from 002 through 008. For this reason the Paseo La Princesa (now Puerta de San Juan) Outfall is now referred to as CSO Outfall Number 004. EPA has revised the final permit to modify the coordinates for CSO Outfall Number 004 as "Puerta de San Juan".

7) Comment 21: CSO Outfall Table

The stated receiving water body (the Atlantic Ocean) for Outfall 003 Puerta de San Juan is not correct. Therefore, PRASA requested to change the Outfall 003 receiving water body to San Juan Bay.

Response: EPA has modified the CSO Outfall Numbers to go from 002 through 008. For this reason the Paseo La Princesa (now Puerta de San Juan) Outfall is now referred to as CSO Outfall Number 004. EPA has revised the final permit to include

the receiving waterbody for the CSO Outfall Number 004 Puerta de San Juan as San Juan Bay.

8) Comment 22: CSO Outfall Table

There is a misspelling in the description of Outfall 004. Therefore, PRASA requested to change "Cortez Industrial" to "Cortes Industrial".

Response: EPA has modified the CSO Outfall Numbers to go from 002 through 008. For this reason the Miramar Outfall is now referred to as CSO Outfall Number 006. This was a typographical error; EPA has revised the final permit to read "Cortes Industrial".

9) Comment 23: CSO Outfall Table

The coordinates for Outfall 004 Miramar (behind Cortes Industrial) are incorrect as shown in the Overflow Outfall Location column. Therefore, PRASA requested to change the coordinates to 18º26'50.060" N, 66º5'7.551" W.

Response: EPA has modified the CSO Outfall Numbers to go from 002 through 008. For this reason the Miramar Outfall is now referred to as CSO Outfall Number 006. EPA has revised the final permit to modify the coordinates, as requested.

10) Comment 24: CSO Outfall Table

The receiving water body for Outfall 004 Miramar (behind Cortes Industrial) is incorrect. Therefore, PRASA requested to change the description of the receiving water for Outfall 004 to San Juan Bay.

Response: EPA has modified the CSO Outfall Numbers to go from 002 through 008. For this reason the Miramar Outfall is now referred to as CSO Outfall Number 006. EPA has revised the final permit to modify the receiving water body to the San Juan Bay.

11) Comment 25: CSO Outfall Table

The coordinates for Outfall 005 Los Angeles (Retention Pond) are incorrect as shown in the Overflow Outfall Location column. Further, PRASA has permanently removed sanitary sewer input to the Los Angeles Retention Pond. Therefore, PRASA requested to remove Outfall 005 Los Angeles (Retention Pond) from the CSO outfall table in the final permit.

Response: As a response to an Administrative Order issued by EPA, PRASA certified that this outfall was eliminated. Therefore, EPA has removed this point from the CSO outfall table in the final permit.

12) Comment 26: CSO Outfall Table

Two CSO outfall locations have been identified in the Paseo La Princesa area. The first location is identified as Outfall 003 in the draft NPDES permit CSO Outfall Table. The second location has been identified as the end of the pier near the Puerta de San Juan. Therefore, PRASA requested to add a new CSO outfall to the table and identify it as Outfall 005 at the Paseo La Princesa Pier. The coordinates for Outfall 005 are 18º27'54.383" N, 66º7'10.887" W. The corresponding receiving water body is San Juan Bay.

Response: EPA has revised the final permit to include CSO Outfall Number 005 as described in the comment, which has been identified as "Paseo La Princesa Pier".

13) Comment 27: CSO Outfall Table

The process to add CSO outfalls to the permit is not balanced by a process to remove them. Therefore, PRASA requested to add the following sentence to the end of the paragraph following the CSO Outfalls table: "In a similar manner, if any of the CSO outfalls covered by this permit is confirmed to have been permanently eliminated, the permittee will be allowed to discontinue the practices at the eliminated outfall that are required for active CSO outfalls." When a CSO point is "eliminated" or no longer overflows, the discharge location must continue to be identified and included in the Post Construction Compliance Monitoring Plan (PCCMP). Only if the CSO point has been confirmed to be permanently eliminated should it be removed from the outfall list and CSO control measures at the outfall location will no longer be required. If PRASA permanently eliminates the CSO point and then later decides to reopen the CSO outfall, PRASA must notify EPA and request approval for reactivating the CSO point.

Response: EPA has revised the final permit to read: "In a similar manner, if EPA confirms that any of the CSO outfalls covered by this permit have been permanently eliminated by PRASA, the permittee may request that the outfall be removed from the list of active CSO outfalls authorized in the permit and that it may discontinue the practices at the eliminated outfall that are required for active CSO outfalls. EPA will determine whether such removal is appropriate in the exercise of its sole discretion. If subsequent to such removal, PRASA determines that it needs to resume discharges from a CSO outfall that has been removed from the active CSO list, PRASA shall notify EPA and shall not reactivate use of the CSO outfall until and unless it receives approval from EPA. If such approval is granted by EPA, PRASA shall resume all CSO outfall related practices required by the permit at the reactivated CSO outfall."

14) Comment 28: I. A.4

Operating the publicly owned treatment works (POTW) at maximum treatable flow (144 MGD according to the proposed permit limitation) may not be in the best interest of protecting the facility or the environment. Therefore, PRASA requested to edit the final sentence of item i.A.4 to read as follows: "The permittee shall maximize flows to the treatment plant within the constraints of the current treatment capacity of the POTW and the existing conveyance capacity of the collection system."

Response: EPA has revised the language in the final permit as follows: "The permittee shall operate the POTW treatment plant at maximum treatable flow during all wet weather flow conditions to reduce the magnitude, frequency, and duration of CSOs. The permittee shall deliver all flows to the treatment plant within the constraints of the treatment capacity of the POTW."

15) Comment 29: I. A.7

PRASA does not have the authority to implement or manage stormwater pollution prevention activities such as street sweeping, trash collection, and erosion control during third party construction projects on roadways. Therefore, PRASA requested to edit item I.A.7 to read as follows: "The permittee shall implement a pollution prevention program, consistent with the permittee's authorities, focused on reducing the impact of CSOs on receiving waters."

Response: EPA has revised the final permit to read: "The permittee shall implement a pollution prevention program, consistent with the permittee's authorities, focused on reducing the impact of CSOs on receiving waters and working with other state agencies to identify ways to prevent pollution."

16) Comment 30: I. A.9

The second sentence of Item I.A.9 states: "This shall include collection of data that will be used to document the existing baseline condition, evaluate the efficacy of the technology-base controls, and determine the baseline conditions upon which the long-term control plan will be based." This language fails to identify the specific types of data that will be collected. Therefore, PRASA requested to edit the second sentence of Item I.A.9 to read as follows: "This shall include collection of data according to an EPA-approved data collection Quality Assurance Project Plan (QAPP) based on standard CSO guidelines. The QAPP will be developed by PRASA and used to document the existing baseline conditions, evaluate the efficacy of the technology-based controls, and determined the baseline conditions upon which the long-term control plan will be based. The data collection QAPP will be submitted to EPA for review and comment within 90 days of the Effective Date of Permit (EDP). Implementation of QAPP activities will begin no later than 180 days after receipt by

PRASA of formal approval of the QAPP by EPA. Reporting frequency will occur as established by the QAPP, but will occur on no less than an annual basis."

Response: EPA agrees with the permittee regarding the need to develop a detailed plan to identify the specific types of data that need to be collected, identify the quality assurance procedures that will be employed, and the importance of submitting a draft version of the plan to EPA for review and comment. EPA has revised the second line in Section I.A.9 of Attachment 2 of the Puerto Nuevo permit as follows:

"This shall include collection of data according to an EPA-approved data collection Quality Assurance Project Plan (QAPP) based on EPA's principal guidance for Combined Sewer Overflows, which can be found http://cfpub.epa.gov/npdes/cso/guidedocs.cfm?program_id=5.

- Guidance for Nine Minimum Control Measures (EPA 832-B-95-003)
- Guidance For Long-Term Control Plan (EPA 832-B-95-002)
- Guidance For Monitoring and Modeling (EPA 832-B-99-002

The CSO data collection QAPP shall be developed by PRASA and used to document the existing baseline conditions, evaluate the efficacy of the technology-based controls, and determine the baseline conditions upon which the long-term control plan will be based. These activities shall be developed in conjunction with development of the Combined Sewer System Characterization Monitoring and Modeling Plan and CSO LTCP development required in Section III.B CSS Characterization. The CSO data collection QAPP shall be submitted to EPA for review and comment within 90 days of the Effective Date of Permit (EDP). If EPA provides comment on the QAPP, the permittee will provide an updated CSO data collection QAPP in response to comments provided by EPA. The updated CSO data collection QAPP shall adequately address all comments provided by EPA in order to receive formal approval by EPA and shall be submitted to EPA within 60 days of receiving comments from EPA. Implementation of CSO data collection QAPP activities will begin no later than 180 days after receipt by PRASA of formal approval of the QAPP by EPA. Reporting frequency will occur as established by the QAPP, but will occur on no less than an annual basis."

17) Comment 31: I. A.9.e

The proposed permit language includes the following: "e. Water quality impacts directly related to CSOs (e.g., beach closing, floatable wash-ups episodes, fish kills)." There is simply no economically feasible way to design a data collection program that would be able to establish cause-and-effect relationships that would distinguish the effects of CSO discharges from water quality degradation caused by other environmental factors, such as nonpoint source runoff. Therefore, PRASA requested to delete the language in I.9.e from the permit.

Response: The purpose of this item is to identify incidents related to CSO impacts. The permit language has been revised as follows:

"Water quality impacts or use impairments related to CSOs (e.g., beach closings or postings, shoreline wash-up of floatables, fish kills, street/basement flooding, etc.)."

18) Comment 32: I. B; first paragraph

The proposed permit language states: "The permittee shall develop and implement a plan that will result in a comprehensive characterization of the CSS developed through records review, monitoring, modeling and other means as appropriate to establish the existing baseline condition, evaluate the efficacy of the CSO technology-based controls, and determine the baseline conditions upon which the long-term control plan will be based." This is too generic in relation to supporting the LTCP goals. Therefore, PRASA requested to edit first sentence of Item I.B to read as follows: "The permittee shall not discharge any pollutant specified in the data collection QAPP at a level that causes or contributes to an in-stream excursion above numeric or narrative criteria developed and adopted as part of Puerto Rico's water quality standards."

Response: The permittee is referred to key EPA guidance documents for developing the Combined Sewer System Characterization and Long Term Control Plans, which can be at found at http://cfpub.epa.gov/npdes/cso/guidedocs.cfm?program_id=5.

- Guidance For Long-Term Control Plan (EPA 832-B-95-002)
- Guidance For Monitoring and Modeling (EPA 832-B-99-002

EPA agrees with the usefulness of a CSO data collection QAPP to support monitoring plans and to help characterize the CSS and the water quality impacts that result from CSOs. Since this activity builds upon the CSO data collection activities started in Section I.A.9., an additional sentence should be added at the end of this paragraph to ensure all CSO data collection requirements are identified early on in the process. A sentence will be added to the paragraph of CSS Characterization as follows:

The data collection activities required in this section shall be incorporated into the CSO data collection QAPP developed under Section I.A.9, for review and approval by EPA in the timeframes identified in Section I.A.9.

19) Comment 33: II. A

A number of the nine minimum control (NMC) measures requested in Section III.E of Attachment 2 of the draft NPDES permit will take years to complete. In addition, it will not be possible to develop and NMC report that indicates any real progress towards implementation of the nine minimum controls within the schedule stipulated in the draft permit because of the amount of information that needs to be obtained

during records reviews and personnel interviews and the subsequent information synthesis and evaluation required. Therefore, PRASA requested to edit Item II.A to read as follows: "A. Nine Minimum Controls Report. The permittee shall submit documentation that indicates progress towards implementation of each of the nine minimum controls that includes the elements below. With the exception of number nine (9) below, the permittee shall submit this documentation to the permitting authority no later that EDP + 6 months. The permittee shall submit such documentation for number nine (9) below no later that EDP + 1 year."

Response: The CWA requires immediate compliance with technology based controls (Nine Minimum Controls). The draft permit language will remain but the submittal date for the documentation will be revised to EDP + 6 months and each of the nine minimum controls shall include a schedule showing complete implementation of the control.

20) Comment 34: II. A.1

"Operation and maintenance" is defined on page 8 of Attachment 2. Therefore, PRASA requested to edit Item II.A.1 to read as follows: "Operation and maintenance programs for the sewer system and the CSOs..."

Response: EPA has decided to keep the permit language as "Proper Operation and regular maintenance program…" This is standard language that EPA uses in our regulations.

21) Comment 35: III. B: first sentence

The proposed permit language states: "The permittee shall develop and implement a plan that will result in a comprehensive characterization of the CSS developed through records review, monitoring, modeling and other means as appropriate to establish the existing baseline condition, evaluate the efficacy of the CSO technology-based controls, and determine the baseline conditions upon which the long-term control plan will be based." This is too generic in relation to supporting the LTCP goals. Therefore, PRASA requested to edit first sentence of Item III.B to read as follows: "The permittee shall develop and implement a plan based on the information collected as a result of implementing the EPA-approved QAPP that will result in a comprehensive characterization of the CSS developed through records review, monitoring, modeling and other means as appropriate to establish the existing baseline condition, evaluate the efficacy of the CSO technology-base controls, and determine the baseline conditions upon which the long-term control plan will be based."

Response: The permittee is referred to key EPA guidance documents for developing the Combined Sewer System Characterization and Long Term Control Plans, which can be at found at http://cfpub.epa.gov/npdes/cso/guidedocs.cfm?program_id=5.

- Guidance for Long-Term Control Plan (EPA 832-B-95-002)
- Guidance for Monitoring and Modeling (EPA 832-B-99-002)

EPA agrees with the usefulness of a CSO data collection QAPP to support monitoring plans and to help characterize the Combined Sewer System (CSS) and the water quality impacts that result from CSOs. Since this activity builds upon the CSO data collection activities started in Section I.A.9, an additional sentence should be added at the end of this paragraph to ensure all CSO data collection requirements are identified early on in the process. A sentence has been added to the paragraph of CSS Characterization as follows: "The data collection activities required in this section shall be incorporated into the CSO data collection QAPP developed under Section I.A.9, for review and approval by EPA in the timeframes identified in Section I.A.9."

22) Comment 36: III. B

The second paragraph of section III.B is too prescriptive. Therefore, PRASA requested to edit the second paragraph of Item III.B to read as follows: "To complete the characterization, the permittee shall employ methods such as the following:"

Response: EPA has kept the language in the final permit since this information is required by the CWA/CSO Control Policy and needed for developing CSO control plans.

23) Comment 37: III. B.1

The CSO outfall receiving water bodies include the Martín Peña Channel and San Juan Bay. Flow variation evaluations, as required by the draft permit, cannot be determined in these receiving water bodies. (That concept is more appropriate for rivers than for marine embayments and tidal channels.) Therefore, PRASA requested to edit Item III.B.1 to read as follows: "Rainfall Records Review. The permittee shall examine rainfall records from the USGS, NOAA, and the FAA to characterize the rain event intensities within the geographic areas of the CSS. Additional rain fall monitoring may be required to more accurately model the CSS."

Response: This information is specifically required by the CWA/CSO Control Policy. If the permittee is certain there are no flow variations in the receiving water, this information must be documented in the CSS Characterization and LTCP.

24) Comment 38: III. B.3

The proposed permit language states: "CSO and Water Quality Monitoring. The permittee shall develop and submit a monitoring program that measures the frequency, duration, flow rate, volume, and pollutant concentration of CSOs and assesses the impact of the CSOs on receiving waters. Monitoring shall be performed

at a representative number of CSOs for a representative number of events. The monitoring program shall include CSOs and ambient receiving water body monitoring and, where appropriate, other monitoring protocols, such as biological assessments, toxicity testing, and sediment sampling." This is too generic in relation to supporting LTCP goals. Therefore, PRASA requested to edit Item III.B.3 to read as follows: "CSO and Water Quality Monitoring. The permittee shall develop and submit a data collection QAPP for EPA review and approval that supports achieving Long Term Control Plan goals. The data collection QAPP will be submitted to EPA for review and comment within 90 days of EDP. Implementation of QAPP activities will begin no later than 180 days after receipt by PRASA of formal approval of the QAPP by EPA. Reporting frequency will occur as established I the QAPP, but will occur on no less than an annual basis."

Response: The permittee is referred to key EPA guidance documents for developing the monitoring program for CSOs and for assessing the impact on receiving waters, which can be at found at http://cfpub.epa.gov/npdes/cso/guidedocs.cfm?program_id=5.

- Guidance for Long-Term Control Plan (EPA 832-B-95-002)
- Guidance for Monitoring and Modeling (EPA 832-B-99-002)

EPA agrees a QAPP is needed, and the CSO data collection QAPP should be updated to support the monitoring plans outlined in this section. A sentence has been added to paragraph B.3, CSO and Water Quality Monitoring: "The data collection and monitoring activities identified in this section shall be incorporated into the CSO data collection QAPP developed under Section I.A.9, for review and approval by EPA in the timeframes identified in Section I.A.9."

25) Comment 39: III. C.2

The proposed permit language does not take practicability into account. CSO control alternatives considered must be practicable for them to be implemented. Therefore, PRASA requested to edit Item III.C.2 to read as follows: "The permittee shall evaluate each of the alternatives developed in accordance with Section III.C.1 to select the practicable CSO controls that will improve compliance with CWA requirements; and . . ."

Response: EPA expects the long-term CSO control plan to consider a reasonable range of alternatives as identified in Section III.C.1 of the permit and in EPA's CSO Control Policy. The permittee should develop appropriate cost/performance curves to demonstrate the relationships among a comprehensive set of reasonable control alternatives that correspond to the different ranges specified in Section III.C.1. This should include an analysis to determine where the increment of pollution reduction achieved in the receiving water diminishes compared to the increased costs. This

analysis, often known as "knee of the curve", should be among the considerations used to help guide selection of controls.

26) Comment 40: III. D.3

"Post-Construction Compliance Monitoring Program. The permittee shall develop and submit a port-construction monitoring program that (a) is adequate to ascertain the effectiveness of the CSO controls and (b) can be used to verify attainment of water quality standards. The program shall include a plan that details the monitoring protocols to be followed, including CSO and ambient monitoring and, where appropriate, other monitoring protocols, such as biological assessments, whole effluent toxicity testing, and sediment sampling." This is too generic in relation to supporting LTCP goals. Therefore, PRASA requested to edit Item III.D.3 to read as follows: "The permittee shall develop and submit a data collection QAPP for EPA review and approval that supports achieving Long Term Control Plan goals. The data collection QAPP will be submitted to EPA for review and comment within 90 days of EDP. Implementation of QAPP activities will begin no later than 180 days after receipt by PRASA of formal approval of the QAPP by EPA. Reporting frequency will occur as established I the QAPP, but will occur on no less than an annual basis."

Response: The permittee is referred to the several EPA guidance documents for developing the Post-Construction Compliance Monitoring Plan, including the Draft CSO Post Construction Compliance Monitoring Guidance document (http://cfpub.epa.gov/npdes/whatsnew.cfm?program_id=5,) and the following CSO LTCP guidance documents that are available on EPA's website at http://cfpub.epa.gov/npdes/cso/guidedocs.cfm?program_id=5:

- Guidance for Long-Term Control Plan (EPA 832-B-95-002)
- Guidance for Monitoring and Modeling (EPA 832-B-99-002)

EPA agrees the CSO data collection QAPP should be updated to support the Post-Construction Compliance Monitoring Plan. However, it is unlikely all of the selected CSO control specifications will be available in the early timeframe identified by the permittee. Therefore, the CSO data collection QAPP should be updated as the Post Construction Compliance Monitoring Plan is developed.

27) Comment 41: III. E.2

Development of a monitoring and modeling plan requires thorough knowledge of the sanitary sewer system and the combined sewer system. Initial site assessment of the service area associated with each CSO outfall location will have to be completed, and a clear understanding of the extent of the service area are required to effectively develop a monitoring and modeling plan. A period of 2 years from EDP will be necessary to complete the CSS Characterization Monitoring and modeling Plan. Therefore, PRASA requests to change the period of time to complete the CSS

Characterization Monitoring and Modeling Plan that is required to comply with Item III.E.2 to EDP +2 years.

Response: EPA has added a paragraph to Item III.E.2, clarifying the timeframes conditions. The paragraph reads as follows: "The dates provided are for submittal of complete draft documents and the permittee will be required to provide an updated, final document in response to comments provided by EPA. The updated final document shall adequately address all comments provided by EPA in order to receive formal approval by EPA and shall be submitted to EPA within 60 days of receiving comments from EPA."

28) Comment 42: III. E.3

The proposed permit language states: "The permittee shall develop, in accordance with the requirements specified in Section III.A through III.D, and submit the following items no later than the dates set forth below:…." And goes on to list a number of activities specifically those set forth in items 4 through 8 – that cannot be completed within the allotted time or even within the permit period. Activities such as developing a thorough understanding of the sewer system, selection of monitoring sites, and monitoring of the sewer system and water quality require a significant amount of time to complete. These activities are required for the development of a sewer model and running the model afterwards to obtain useful result. A total of 4 years will be necessary to comply with Item III.E.3. Therefore, PRASA requested to Change the period time to complete the characterization and modeling results required to comply with Item III.E.3 to EDP + 4 years. Therefore, PRASA requested to Change the period time to complete the characterization and modeling results required to comply with Item III.E.3 to EDP + 4 years.

Response: Please refer to the response to Comment 41 in item number 27 above.

29) Comment 43: III. E-8

Items III.E.4 through III.E.8 in the proposed permit cannot be completed until after Item III.E.3 is completed; therefore, they cannot be completed within this permit cycle. Therefore, PRASA requested to include reference to a separate compliance plan to be developed between PRASA and EPA for completion of tasks that follow Item III.E.3.

Response: EPA has decided to maintain the language of the permit as it was established in the draft permit. Should PRASA determine that it is unable to comply with this condition it must inform EPA of this determination. We are available to discuss this item as needed to make sure PRASA is in compliance with the requirement or is under an enforceable order containing a schedule that will bring it into compliance.

30) Comment 44: General

Although the 2008 AO against CSOs (CWA-02-2008-3155) names the two pinch valves referred to as the Plaza Las Américas and Constitution Bridge pinch valves as individual CSO locations, the draft NPDES permit is silent with respect to these structures. Therefore, PRASA requests that EPA include the Plaza Las Américas and Constitution Bridge pinch valves in the final NPDES permit as "Emergency Waste Water Exits" (EWWEs), a precedent for which exists in the current Milwaukee Metropolitan Sewer District NPDES permit. This request is discussed in more detail in Attachment 5 to this comment document, which includes requested permit language.

Response: EPA did not originally include the two pinch valves in the draft permit because EPA understood that PRASA had plans to eliminate them in the future. However, since public notice of the draft permit, PRASA has indicated that it intends to retain the two pinch valves in the collection system. Therefore, EPA will identify the two locations in the CSO table as CSO Outfall Number 007 "Plaza Las Américas" and CSO Outfall Number 008 "Constitution Bridge"; and these two points are subject to all the CSO requirements contained in the final permit.