

ATTACHMENT C

RESPONSIVENESS SUMMARY IN THE FOLLOWING FINAL PERMITS

PRASA CAROLINA WWTP (PR0023752)

On **May 25, 2020**, the United States Environmental Protection Agency (EPA) issued draft National Pollutant Discharge Elimination System (NPDES) permits for Water Treatment Plants (WTP's) and Wastewater Treatment Plants (WWTPs) owned by the Puerto Rico Aqueduct and Sewer Authority (PRASA) listed above.

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 on behalf of PRASA was received from the following addresses:

Municipality of Loiza
PO Box 508
Loiza, PR 00702

JACOBS, on behalf of PRASA
Metro Office Park 17 Calle 2,
Suite 400 Guaynabo, PR 00968

All the comments received have been reviewed and considered in this final permit decision. The letter submitted by the Municipality of Loiza dated June 23, 2020, is endorsing the reissuance of the Carolina RWWTP NPDES permit because it won't adversely impact the Marine Biota in the area and it should comply with Clean Water Act Regulations. A summary of and response to the comments received by Jacobs on behalf of PRASA are below:

A. **GENERAL COMMENT**

In its comment letter PRASA has raised a number of issues, many of which address inclusion in the permit of conditions contained in the Water Quality Certificate (WQC) issued by EQB.

Response: EPA is providing a generalized response to PRASA's comments which relate to requirements in EQB's WQCs.

Section 301(b)(1)(C) of the Clean Water Act (CWA) requires that there be achieved effluent limitations necessary to assure that a discharge will meet Water Quality Standards (WQS) of the applicable State and Federal laws and regulations where those effluent

limitations are more stringent than the technology-based effluent limitations required by Section 301(b)(1)(A) of the CWA. Section 401(a)(1) of the CWA requires that the State certify that the discharge will comply with the applicable provisions of sections 301, 302, 303, 306 and 307 of the CWA. Pursuant to Section 401(d) of the CWA any certification shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal permit will comply with any applicable effluent limitations and other limitations under section 301 or 302 of the CWA, and with any other appropriate requirement of State law set forth in such certification. Also, 40 C.F.R. 122.44(d) requires that each NPDES permit shall include requirements which conform to the conditions of a State Certification under Section 401 of the CWA that meets the requirements of 40 C.F.R. 124.53. Similarly, 40 C.F.R. 124.55 requires that no final NPDES permit shall be issued unless the final permit incorporates the requirements specified in the certification under ' 124.53. Concerning the certification requirements in 40 C.F.R. 124.53(e)(1), they specify that all Section 401(a)(1) State certifications must contain conditions which are necessary to assure compliance with the applicable provisions of CWA sections 208(e), 301, 302, 303, 306, and 307 and with appropriate requirements of State law.

EQB issued final WQCs certifying that pursuant to Section 401(a)(1) of the CWA, after due consideration of the applicable provisions established under Sections 208(e), 301, 302, 303, 304(e), 306 and 307 of the CWA concerning water quality requirements, there is reasonable assurance that the discharge will not cause violations to the applicable WQs, provided that the effluent limitations set forth in the WQCs are met by the above facility.

The effluent limitations (where more stringent than technology-based effluent limitations), monitoring requirements and other appropriate requirements of State law (including footnotes, Special Conditions, etc.) specified in the final WQC issued by the EQB were incorporated by EPA into the NPDES permit as required by Section 301(b)(1)(C) and 401(d) of the CWA and the applicable regulations. Therefore, concerns and comments regarding the WQC must be directed to EQB or to the Superior Court.

Also, in the event that EPA receives a revised or modified WQC, we would consider modification of this permit, subject to all applicable federal requirements, to include revised WQC requirements and conditions.

B. Comments to the Carolina RWWTP Draft Permit

1) Numerical limitations for Whole Effluent Toxicity (WET).

Comment: Numerical limitations for whole effluent toxicity (WET) are applied only to *Arbacia punctulata*. There are two other species, *Mysidopsis bahia* and *Cyprinodon variegatus*, that are to be tested, but the limitation is only “monitored”. The *Arbacia* limitation is based on the no observed effect concentration (NOEC), rather than the EC50, which is the suggested measure according to the U.S. Environmental Protection Agency

(EPA) literature and practices. PRASA requests that compliance for *Arbacia punctulata* be based on the more appropriate EC50 test results.

Response: The Clean Water Act (CWA) states that "...it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited." (CWA §101(3)). Federal regulations at 40 CFR §122.44(d)(1) require EPA and the delegated states to evaluate each National Pollutant Discharge Elimination System (NPDES) permit for the potential to exceed state numeric or narrative water quality standards, including those for toxics, and to establish effluent limitations for those facilities with the "reasonable potential" to exceed those standards. These regulations require both chemical specific limits, based on the state numeric water quality standards or other criteria developed by EPA, and whole effluent toxicity effluent limits.

The Puerto Rico Water Quality Standards Regulation (PRWQSR), as amended by the Environmental Quality Board of Puerto Rico (EQB) on June 11, 2019, includes the criterion that "The waters of Puerto Rico shall not contain any substance at such concentration which, either alone or as a result of synergistic effects with other substances is toxic or produces undesirable physiological responses in human, fish, or other fauna or flora." (Section 1303.1(J)). The PRWQSR further defines the numeric interpretation of this narrative standard as not causing an exceedance of either 0.3 acute toxicity units (TUa) or 1.0 chronic toxicity units (TUc). The definitions section of the PRWQSR defines chronic toxicity units as calculated using the inverse of the No Effects Observed Concentration (NOEC).

In this case, the monitoring results from the discharge point have demonstrated reasonable potential to cause or contribute to an exceedance of the Puerto Rico water quality standard for chronic toxicity for the species *Arbacia Punctulata* (purple sea urchin), at the edge of the approved mixing zone. Where reasonable potential is demonstrated, EPA must include an effluent limitation for whole effluent toxicity that is protective of the applicable water quality standard. Because the water quality standards are explicitly expressed in terms of the NOEC, and not the 25% Inhibition or Effects Concentration (IC25 or EC25), this limitation must be expressed and evaluated based on the NOEC endpoint.

2) **WET Testing**

Comment: The effluent limitations table indicates quarterly sampling for WET testing. However, the table includes a footnote (7), which references Part IV.B.2 for monitoring and reporting requirements. The referenced provision requires "quarterly sampling for one year, after which the test shall be performed annually." PRASA intends to follow the footnoted process; that is, quarterly sampling for the first year of the permit, followed by annual sampling for the life of the permit.

Response: The WET sampling will be conducting on a quarterly basis for the first year followed by annually as stated.

3) **PART IV. STANDARD AND SPECIAL CONDITIONS**
B. Special Conditions; 5. Additional Special Conditions; a. Pretreatment Requirements

1) Pretreatment Implementation.

Comment: PRASA requests that the term “SIU” be defined previous to its use (e.g., Significant Industrial User (SIU)).

Response: The above-mentioned acronym was first explained on Page 23 Section b of the permit.

2) Pretreatment Evaluation.

Comment: The due date of 120 days after identifying an SIU is not sufficient to complete the entire evaluation to develop specific local limits and have them in place in the industrial user’s final discharge permit. PRASA has previously confronted many difficulties with local limits implementation due to the lack of adequate time to comply with the due process requirements of Law No. 170 of the Commonwealth of Puerto Rico. PRASA’s experience is that 120 days is not an adequate time frame to complete the technical analysis and comply with all the legal and public participation requirements to establish enforceable local limits. The 365 days is in compliance with the requirement established in the previous format of NPDES permits. PRASA requests a modification of this condition to provide a schedule of twelve (12) months (365 days) after identifying an SIU to adequately complete the local limits process.

3) Pretreatment Report.

Comment: In the same terms as the previous comment, PRASA requests a modification of this condition to change the due date from 134 days to 380 days to submit a progress report and a written notice of compliance or noncompliance with Part IV(B)(5)(a)(2).

Response 2 & 3: After careful consideration, EPA has decided to modify in the final the time needed to evaluate specific local limits as well as the timeframe to submit a progress report with the written notice of compliance or non-compliance. Final permit has been modified to give **240** days for the Pretreatment Evaluation and **256** for the Pretreatment Report.

4) **Part IV.B.U.13.a addresses the frequency of MZVS events and requires that (emphasis added):**

a) *Comment:* The permittee shall conduct two (2) sampling events at the four (4) stations at the boundaries of the IMZ, at the background sampling station and at the sampling point for discharge 001, during two seasons (summer and winter). Two sampling events shall be conducted during each season.

- b) The dye study shall be conducted once, at the same time as one of the sampling events. The requirement for two sampling events for each season is inconsistent with current practice and should be removed. The MZVS requirements in other recent PRASA NPDES permits call for only one dye study and two WQ sampling events. For example, the Ponce RWWTP NPDES permit issued in June 2019 states “one sampling event shall be conducted during each season.” PRASA requests that the text in the final permit be modified to reference a single dye release and two water quality sampling events; one in each season.

Response: These comments (4.a & 4.b) should have been submitted to DNER for their review. EPA, in this occasion, understood the relevance of the concern and decided to consult with the Chief on the Point Source at DNER’s Water Quality Area. On an email dated July 20, 2020, EPA received confirmation from DNER that special condition 21 t. a. in the WQC should have read as stated in the comment above. **“One sampling event shall be conducted during each season”**. The language was revised in the final permit. After this language modification, Special Condition Part IV.B.U.13.b should remain the same in the final NPDES permit.

Please, remember, it is not EPA’s responsibility in this process to respond to comments that should have been submitted to DNER during their WQC comment period. PRASA and its consultant must participate during the comment period of any WQC of their facilities, as stated above in General Comment A.

5) **Typographical Errors** - There are several errors in the draft permit concerning permit page numbering that should be corrected:

- a) **Comment:** Page 1 of 25, paragraph G.3 references the wrong permit pages for the Pretreatment Program Requirements. The paragraph should reference pages 22–23. PRASA requests that the text be modified.
- b) **Comment:** Page 1 of 25, paragraph G.4 references the wrong permit pages for the Biosolids Requirements. The paragraph should reference pages 23–25. PRASA requests that the text be modified.

Response: Page numbers in **Section G of the Background and Required Limitations** was revised to read according to the final Carolina RWWTP.

C. **Comments on the Draft Fact Sheet**

1) **General**

Comment: EQB is now DNER.

Response: The reference for EQB has been replaced by DNER on the Draft Fact Sheet.

2) **PRWQSR reference**

Comment: Page A-3, last line; PRWQSR reference should be updated to April 2019.

Response: The typographical error on the Draft Fact Sheet has been corrected. The reference for PRWQSR was updated as the most recent PRWQSR.

3) **Reference to NH₃ / TKN**

Comment: Page A-6, item number 18: reference to NH₃ in the following draft fact sheet quotation should be to TKN and reference to 1303.2 should instead be to 1303.2.b.2.k. “18. Nitrogen, Total (as NO₃, NO₂, NH₃): An effluent limitation has been established for total nitrogen based on the water quality criterion of 5.00 mg/l for Class SB waters as specified in Rule 1303.2 of PRWQS. Effluent data show that total nitrogen concentrations exceed the water quality criterion.”

Response: As requested, the NH₃ reference was replaced by TKN. Reference to Rule 1303.2 of PRWQS was also replaced by Rule 1303.2.b.2.k of PRWQSR.

4) **Whole Effluent Toxicity**

Comment: Page A-6 Item 19, second paragraph: Article 1 should be Rule 1301.1.

Response: Reference to Article 1301.1 was replaced by Rule 1301.1, as stated in the PRWQSR.

5) **BOD and TSS**

Comment: Page A-7 Table 1: The BOD Final Limits should be 130 for consistency with the permit and the TSS listing appears to be incomplete.

Response: The BOD final limit was updated and the TSS parameter was completed as the final permit.

6) **Nitrogen Silver**

Comment: Page A-9. Bullet under Part D: the reference to “Nitrogen Silver” should reference only nitrogen, not silver.

Response: Parameter was revised to read Nitrogen as the final WQC.

7) Page numbering was revised on the final Fact Sheet.

D. EDP has been modified to read November 1, 2020.