United States Environmental Protection Agency
Region 2
Caribbean Environmental Protection Division
City View Plaza II–Suite 7000, #48 Rd. 165 km 1.2
Villalba (Toa Vaca), Puerto Rico 00968-8069

NPDES NO. PR0026590

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

The following Permittee is authorized to discharge subject to the requirements set forth in this permit:

Permittee (mailing address)	Facility (location address)
Puerto Rico Aqueduct and Sewer Authority (PRASA)	Villalba (Toa Vaca) WTP
P. O. Box 7066	PR 150, Km. 5.2 Hato Puerco Abajo Ward
San Juan, PR 00916-7066	Villalba, PR 00968
EPA has classified this discharge as a major discharge.	

The Permittee may discharge from the discharge points identified below:

Outfall	Effluent description	Outfall latitude	Outfall longitude	Receiving water name and classification
001	filters backwasher and sedimentation tanks drains, treated in a STS	18°, 5', 48" N	66°, 29', 9.1" W	Intermittent Creek tributary to Guayabal Lake, SD

Issuance date	Effective date (EDP)	Expiration date	Renewal application date
	February 1, 2016	January 31, 2021	July 30, 2020

To meet the provisions of the Clean Water Act (CWA) as amended, 33 *United States Code* (U.S.C.) 1251 *et seq.* and its implementing regulations, the Permittee must comply with the requirements in this permit.

I, **José C. Font**, **Director**, do hereby certify that this permit with all attachments is a full, true, and correct copy of the permit issued by EPA and certified by the Puerto Rico Environmental Quality Board, on Oct 16, 2015

Jose C. Font, Director
Caribbean Environmental Protection Division
U.S. Environmental Protection Agency Region 2

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PART I. BACKGROUND

A. **Rationale for Permit Requirements**. This permit is issued pursuant to CWA section 402 and implementing regulations adopted by EPA. EPA developed the requirements in this permit on the basis of information submitted as part of the complete application and monitoring and reporting requirements, and other available information. This permit contains Technology Based Effluent Limitations (TBELS) based on a case-by-case determination using Best Professional Judgment (BPJ) in accordance with 40 CFR 125 and (Water Quality Based Effluent Limitations (WQBELs) based on the Puerto Rico Water Quality Standards Regulation (PRWQSR), as amended. The accompanying Fact Sheet contains detailed information and rationale for permit requirements.

B. **Water Quality Certificate**. Pursuant to CWA section 401(a)(1), after due consideration of the applicable provisions established in the PRWQS and CWA sections 208(e), 301, 302, 303, 304(e), 306 and 307, on **September 29, 2015** the Puerto Rico Environmental Quality Board (EQB) certified that reasonable assurance was determined that the allowed discharge will not cause violations to the applicable water quality standards for the receiving water body if the limitations and monitoring requirements in the Water Quality Certificate are met. Additional requirements could be required to comply with other sections of the CWA.

C. **Impaired Waters and Total Maximum Daily Loads (TMDLs)**. This facility discharges to an impaired water. **A** TMDL have been developed and approved by EPA for the following parameter: Fecal Coliforms. The effluent limitations in this permit are consistent with the assumptions and requirements of any WLA assigned to the Permittee [40 CFR 122.44(d)(1)(vii)(B)].

D. **Antidegradation and Anti-backsliding Requirements**. The discharge is consistent with the federal anti-degradation provisions at 40 CFR 131.12, 72 Federal Register 238 (December 12, 2007, pages 70517-70526), and EQB's *Anti-Degradation Policy Implementation Procedure* in Attachment A of PRWQS. Some effluent limitations in this permit are less stringent that those in the previous permit and the rationale for these limitations are provided in the Fact Sheet for this permit. An anti-backsliding analysis has been conducted and EPA has determined that these limitations are consistent with the anti-backsliding requirements at 40 CFR 122.44(l).

E. **Public Participation**. Federal regulations at 40 CFR 124 require EPA to consider all significant comments on the draft permit received during the public comment period in the development of the final permit. Any comments received will be provided in a Responsiveness Summary issued with the final permit. **EPA has considered and responded in writing to all significant comments submitted during the public comment period.**

PART II. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Final Effluent Limitations—Outfall Number 001

The Permittee must maintain compliance with the following effluent limitations at Outfall 001. The discharge at Outfall 001 is composed filters and settling tanks washwater.

Effluent Limitations Table

Parameter	Units	Effluent limitations			Monitoring requirements		Footnotes
		Average monthly	Average weekly	Maximum daily	Sample type	Minimum sampling frequency	
BOD_5	mg/L	--	--	5.0	Grab	1/Month	(5)
Color	Pt-Co Units	--	--	15	Grab	1/Month	
Copper	µg/L	--	--	9.3	Grab	1/Quarter	(5)
Dissolved Oxygen	mg/L	--	--	≥5	Grab	Daily	(4)
Flow	MGD	--	--	1.144	Metered	Continuous	(1)
pH	SU	Minimum 6 Maximum 9			Grab	1/Day	
Residual Chlorine	µg/L	--	--	7.5	Grab	1/Day	(2)
Sulfates	mg/l	--	--	Monitor	Grab	1/Month	(3)
Suspended, Colloidal or Settleable Solids	mL/L	--	--	Monitor	Grab	1/Day	
Temperature	°C	--	--	32.2	Grab	1/Daily	
Total Ammonia	mg/L	--	--	Monitor	Grab	1/Month	
Total Nitrogen (TKN, NO_2, NO_3)	µg/L	--	--	Monitor	Grab	1/Month	(3)
Total Phosphorus	µg/L	--	--	160	Grab	1/Month	(5)
Turbidity	NTU	--	--	50	Grab	1/Month	

Notes, Footnotes and Abbreviations

Dashes (--) indicate there are no effluent limitations or monitoring requirements for this parameter.
All limitations expressed in mass calculated from concentration-based limitations are calculated according to: mass (kg/day) = Flow (MGD) x concentration (mg/L) x 3.78 (kg/L)/(mg)(mgd)

(1) All flow measurements must achieve accuracy within the range of plus or minus (±) 10%.
(2) The Permittee must at all times operate the plant to achieve the lowest possible residual chlorine. See Special Conditions 6 and 7.
(3) The permittee shall implement a monthly monitoring program using the EPA approved analytical method with the lowest possible detection level, in accordance with Rule 1306.2 (C) of the PRWQSR as amended, for one (1) year period, after which they will be conducted annually. The monitoring program shall commence no later than thirty (30) days after the EDP. The results of the monitoring program shall be submitted to EQB and EPA-Region 2 no later than sixty (60) days of completion of the one (1) year monitoring program. Based on the evaluation of the results obtained, EQB will determine if an effluent limitation is necessary for this parameter. In such case the WQC will be reopened to include the applicable effluent limitation.

(4) The Dissolved Oxygen limit is an instantaneous minimum.

(5) No Net Addition Limitation

- If the applicable water quality standard is not exceeded in the inlet, the established effluent limitation shall not be exceeded at the discharge point 001.

- If the applicable water quality standard is exceeded in the inlet, the same measurement shall be achieved at the discharge point 001.

In order to demonstrate compliance with the No Net Addition Limitation, influent (raw water from Lago Toa Vaca) and effluent (filters backwash and sedimentation tanks drains) monitoring must be conducted at the frequency specified herein. The permittee shall take into consideration the residence time of the influent when scheduling influent and effluent monitoring. The permittee shall report the results of these measurements in the Discharge Monitoring Reports. Alternately, the permittee may forego influent monitoring and comply with the applicable water quality standard as effluent limitation at the end of the pipe of the discharge.

B. Narrative Limitations

In accordance with 40 CFR 122.44(d), the permit establishes the following narrative limitations.

1. Except by natural causes, no heat may be added to the waters of Puerto Rico, which would cause the temperature of any site to exceed 90 °F (32.2 °C).
2. The waters of Puerto Rico must not contain floating debris, scum, or other floating materials attributable to discharges in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the water body.
3. Solids from wastewater sources must not cause deposition in or be deleterious to the existing or designated uses of the waters.
4. Taste and odor-producing substances must not be present in amounts that will interfere with primary contact recreation, or will render any undesirable taste or odor to edible aquatic life.

C. Monitoring Requirements

1. Effluent monitoring and analyses must be conducted in accordance with EPA test procedures approved under 40 CFR Part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act,* as amended. For situations where there may be interference, refer to *Solutions to Analytical Chemistry Problems with Clean Water Act Methods* (EPA 821-R-07-002). For effluent analyses, the Permittee must use a *Minimum Level (ML)* that is lower than the effluent limitations described in Effluent Limitations Table of this permit. If all published MLs are higher than the effluent limitations, the Permittee must use the test method procedure with the lowest ML. The Permittee must ensure that the laboratory uses a standard calibration where the lowest standard point is equal to or less than the ML. Priority pollutant analysis for metals must measure *total metal*, except as provided under 40 CFR 122.45(c). EPA method 1631E must be used for mercury analysis. Priority pollutant analysis for benzene, ethylbenzene, toluene and xylene must employ either EPA Method 602 or 624. Effluent analysis for xylene must measure *total xylene*.
2. The regulations at 40 CFR 122.48 require that all NPDES permits specify monitoring and reporting requirements. All monitoring must be in accordance with Standard Condition *10. Monitoring and records* in Attachment B of this permit.
3. Sampling point for Outfall **001** must be located immediately after the primary flow measuring device of the effluent of the treatment system.
4. The Permittee must develop and implement a quality assurance (QA) plan for laboratory analyses for effluent and/or receiving water monitoring.

D. Monitoring Locations

The Permittee must establish the following monitoring locations to demonstrate compliance with the effluent limitations and other requirements in this permit:

Monitoring Locations Table

Outfall	Monitoring location	Monitoring location description
001	EFF-001	The sampling point for discharge 001 shall be located immediately after the primary flow-measuring device of the effluent of the treatment system.

PART III. REPORTING REQUIREMENTS AND COMPLIANCE DETERMINATION

A. Reporting Requirements

1. **Standard Conditions**. The Permittee must comply with all Standard Conditions in section IV.A below and Attachment B of this permit related to monitoring, reporting, and recordkeeping.

2. **Monitoring data submission**. The Permittee must either submit monitoring data and other reports to EPA in hard copy form, or report electronically using NetDMR, a web-based tool that allows Permittees to electronically submit discharge monitoring reports (DMRs) and other required reports via a secure internet connection. Specific requirements regarding submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

   a. **Submittal of Reports in Hard Copy Form**. Hard copy DMR submittals must be submitted in accordance with Standard Condition *12.d. Monitoring reports* in Attachment B of this permit. The Permittee will report the results for all monitoring specified in this permit. The Permittee must submit monthly DMRs including the results of all required monitoring using EPA-approved test methods or other test methods specified in this permit as required by III.A.3. below. If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by EPA.

   b. **Submittal of Reports Using NetDMR**. DMRs and reports submitted electronically to EPA must be done using NetDMR at http://www.epa.gov/netdmr. All reports required under the permit must be submitted to EPA as an electronic attachment to the DMR. Once a Permittee submits DMRs and reports using NetDMR, it is not required to submit hard copies of DMRs or other reports to EPA and the EQB. However, Permittees must continue to send hard copies of reports other than DMRs to the EQB until further notice from the EQB.

   c. **Timing of submissions**. DMRs must be submitted to EPA no later than the 28th day of the month following the completed reporting period. Monitoring results must be summarized and reported on EPA DMR Form No. 3320-1, postmarked no later than the 28th day of the month following the completed monitoring period. The first report is due the **March 28, 2016.**

3. **Submission Requirements**. If submitting reports in hard copy form, DMRs must be signed and certified as required by Standard Condition *11. Signatory requirements* in Attachment B of this permit. The Permittee must submit the original signed DMR to 3.a below and duplicate signed copies and all other reports required in this permit to 3.b below:

   a. U.S. Environmental Protection Agency, Region 2
      290 Broadway, 21st Floor
      New York, NY 10007-1866
      Attention: Compliance Assistance and Program Support Branch

   b. Puerto Rico Environmental Quality Board
      P.O. Box 11488
      Santurce, PR 00910
      Attention: Water Quality Bureau

4. **Analytical Determinations**. The Permittee must report the results on the DMR of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

   a. Sample results greater than or equal to the ML must be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

   b. Sample results less than the ML must be reported as <ML, where the ML equals the ML reported by the laboratory.

   c. Permittees are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Permittee to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. **Bacterial Monitoring**. For bacterial monitoring, the Permittee must report on the DMR the calculated geometric mean and the percentage of individual samples that exceeded the single-sample maximum criterion. The geometric mean must be calculated on the basis of five grab samples taken within the calendar month and as described in Attachment A. *Definitions* of this permit. The Permittee must report on an attachment to the DMR the analytical results of each of the five individual sample measurements, the calculated geometric means using these individual samples, and the percentage of individual samples that exceed the single sample maximum criterion.

B. Compliance Determination

Compliance with effluent limitations contained in this permit will be determined as specified below:

1. **General**. Compliance with effluent limitations for priority pollutants must be determined using sample reporting protocols defined in section III. A and Attachment A. *Definitions*.

2. **Average Monthly Discharge Limitation (AML)**. If the average or, when applicable, the median of daily discharges that were measured in a calendar month exceeds the AML for a given parameter, this will represent a single violation, though the Permittee will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of noncompliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AML, the Permittee will be considered out of compliance for that calendar month. The Permittee will be considered out of compliance for only the days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken yet sampling is required, the Permittee will be considered out of compliance for that calendar month.

3. **Average Weekly Discharge Limitation (AWL)**. If the average or, when applicable, the median of daily discharges over a calendar week exceeds the AWL for a given parameter, this will represent a single violation, though the Permittee will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of noncompliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWL, the Permittee will be considered out of compliance for that calendar week. The Permittee will be considered out of compliance for only the days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken yet sampling is required, the Permittee will be considered out of compliance for that calendar week.

4. **Maximum Daily Discharge Limitation (MDL)**. If a daily discharge exceeds the MDL for a given parameter, the Permittee will be considered out of compliance for that parameter for that 1 day only in the reporting period. For any one day during which no sample is taken yet a sampling is required, the Permittee will be considered out of compliance for that day.

PART IV. STANDARD AND SPECIAL CONDITIONS

A. Standard Conditions

1. Standard Conditions Applicable to All Facilities

a. The Permittee must comply with all Standard Conditions that apply to all NPDES permits in accordance with 40 CFR 122.41 (Attachment B of this permit), and additional conditions applicable to specific categories of facilities in accordance with 40 CFR 122.42.

b. The Permittee must comply with the Reopener Clause in Standard Condition *17. Reopener clause for toxic effluent limitations*, in Attachment B of this permit, which applies to all NPDES permits in accordance with 40 CFR 122.44(b). EPA reserves the right to revoke and reissue or modify this permit to establish effluent limitations, additional monitoring, schedules of compliance or other permit conditions based on new information, including any changes to the final Water Quality Certificate from EQB.

2. Standard Conditions Applicable to Specific Facilities—Notification Levels

Existing manufacturing, commercial, mining, and silvicultural dischargers must notify EPA as soon as they know or have reason to believe [40 CFR 122.42(a)]:

a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of any one of the following *notification levels* [40 CFR 122.42(a)(1)]:

1) 100 micrograms per liter (µg/L) [40 CFR 122.42(a)(1)(i)].

2) 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4 dinitrophenol and 2 methyl 4,6 dinitrophenol; and 1 milligrams per liter (mg/L) for antimony [40 CFR 122.42(a)(1)(ii)].

3) Five times the maximum concentration value reported for that pollutant in the DMR [40 CFR 122.42(a)(1)(iii)].

4) The level established by EPA in accordance with 40 CFR 122.44(f) [40 CFR 122.42(a)(1)(iv)].

b. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of any one of the following *notification levels* [40 CFR 122.42(a)(2)]:

1) 500 µg/L [40 CFR 122.42(a)(2)(i)].

2) 1 mg/L for antimony [40 CFR 122.42(a)(2)(ii)].

3) Ten times the maximum concentration value reported for that pollutant in the DMR [40 CFR 122.42(a)(2)(iii)].

4) The level established by EPA in accordance with 40 CFR 122.44(f) [40 CFR 122.42(a)(2)(iv)].

B. Special Conditions

1. Special Conditions from the Water Quality Certificate

1. The flow of discharge 001 shall not exceed the limitation of 4,330.512 m^3/day (1.144 MGD) as daily maximum. No increase in flow of discharge 001 shall be authorized without a recertification from the Environmental Quality Board (EQB). [1,4]

2. The discharge 001 will consist of rejected water from the microfiltration process and washwaters coming from the membranes system treated in the Sludge Treatment System (STS) constructed for these purposes.

3. No changes in the design or capacity of the STS will be permitted without the previous authorization of EQB. [4]

4. Prior to the construction of any additional treatment system, or the modification of the existing one, the permitee shall obtain the approval from EQB of the engineering report, plans and specifications. [4]

5. The permittee shall install, maintain and operate all water pollution control equipment in such manner as to be in compliance with the applicable Rules and Regulations. [1,3]

6. No toxic substances shall be discharged, in toxic concentrations, other than those allowed as specified in the NPDES permit. Those toxic substances included in the permit renewal application, but not regulated by the NPDES permit, shall not exceed the concentrations specified in the applicable regulatory limitations. [2,3]

7. The waters of Puerto Rico shall not contain any substance attributable to discharge 001, 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. [2]

8. The discharge 001 shall not cause the presence of oil sheen in the receiving water body. [2]

9. All sample collection, preservation, and analysis shall be carried out in accordance with the Title 40 of the Code of Federal Regulations (40 CFR), Part 136. A licensed chemist authorized to practice the profession in Puerto Rico shall certify all chemical analyses. All bacteriological tests shall be certified by a microbiologist or licensed medical technologist authorized to practice the profession in Puerto Rico. [1,3]

10. The flow-measuring device for the discharge 001, shall be periodically calibrated and properly maintained. Calibration and maintenance records must be kept in compliance with the applicable Rules and Regulations. [3,4]

11. The sampling point for discharge 001 shall be located immediately after the flow-measuring device of the effluent of the facility.

12. The sampling point for discharge 001 shall be labeled with an 18 inches per 12 inches (minimum dimensions) sign that reads as follow:

    <u>"Punto de Muestreo para la Descarga 001"</u>

13. All water or wastewaters treatment facilities, whether publicly or privately owned, must be operated by a person licensed by the Potable Water and Wastewaters Treatment Plants Operators Examining Board of the Commonwealth of Puerto Rico.[3]

14. The solid wastes (sludge, screenings and grit) generated due to the operation of the STS shall be:

    a. Disposed in compliance with the applicable requirements established in the 40 CFR, Part 257. A semiannual report shall be submitted to the Water Quality Area and to the Land Pollution Control Area

of EQB and to EPA Region 2 Clean Water Division, notifying the method or methods used to dispose the solid waste generated in the facility. Also, copy of the approval or permit applicable to the disposal method used shall be submitted, if any.

b. Transported adequately in such way that access is not gained to any water body or soil. In the event of a spill of solid wastes on land or into a water body, the permittee shall notify the Point Sources Permits Division of EQB's Water Quality Area in the following manners:

1. By telephone communication within a term no longer than twenty-four (24) hours after the spill (787-767-8073).

2. By letter, within a term no longer than five (5) days after the spill.

These notifications shall include the following information:

a. spill material,
b. spill volume,
c. measures taken to prevent the spill material to gain access to any water body.

This special condition does not relieve the permittee from its responsibility to obtain the corresponding permits from the EQB's Land Pollution Control Area and other state and federal agencies, if any. [4]

15. A log book must be kept for the material removed from the STS detailing the following items:

a. removed material, date and source of it;
b. approximate volume and weight;
c. method by which it is removed and transported;
d. final disposal and location;
e. person that performs the service.

A copy of the Non-Hazardous Solid Wastes Collection and Transportation Services Permit issued by the authorized official from EQB must be attached to the log book.[3]

16. For the septic tank used to dispose the sanitary wastewaters coming from the facility, the permittee must request and obtain from the EQB the corresponding permit for the operation of the septic tanks used to dispose the sanitary wastewaters coming from the facility, according to the Underground Injection Control Regulation and the Regulation for the Certification of Plans and Documents under Consideration of the Environmental Quality Board. [4]

2. Whole Effluent Toxicity Testing

a. Acute Whole Effluent Toxicity Testing

1) **Monitoring Frequency and Sample Type**. Not later than **180 days after the EDP**, the Permittee must conduct **Semiannually acute toxicity tests** on a 24-hour composite effluent sample. Acute toxicity test samples must be collected for each point of discharge at the designated monitoring location for the effluent (i.e., downstream from the last treatment process and any in-plant flow return flows where a representative effluent sample can be obtained).

2) **Methods**. The acute toxicity tests must be conducted in accordance with the EPA document, *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA-821-R-02-012, Fifth Edition, 2002) and Table IA of 40 CFR Part 136. Tests must provide a measure of the acute toxicity as determined by the effluent concentration that causes 50 percent mortality of the test organisms over a 48-hour period.

The tests must be static renewal tests. The acute toxicity tests must provide a measure of the acute toxicity as determined by the effluent concentration that represents the LC_{50}. Test results must be expressed in terms of the LC_{50} and reported in TU_a on the monthly DMR, where $TU_a = 100 / LC_{50}$.

If the acute WET test does not meet all test acceptability criteria as specified in the test method, the Permittee must re-sample and re-test as soon possible, not to exceed 14 days following notification of invalid test results. Data from invalid and valid tests must be submitted in the Permittee's DMR.

3) **Test Species**. The test species must be *Fathead Minnow* (Pimephales promelas) and *Cladocera* (Daphnia magna). The test should be static renewal type.

4) **Dilution Allowance**. For this discharge, EQB has **not** authorized a mixing zone or dilution allowance for acute toxicity.

c. **Toxicity Reduction Evaluation (TRE) Workplan**. Within 90 days after the effective date of this permit, the Permittee must prepare and submit a TRE Workplan to EPA, which must include steps the Permittee intends to follow if toxicity is measured in the effluent. The workplan must include, at a minimum:

1) A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

2) A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.

3) Potential actions to be undertaken by the Permittee to investigate, identify, and correct the causes, and prevent the recurrence of toxicity.

4) Identification of responsible persons/parties for conducting the TRE.

5) Possible source reduction measures and pollution prevention measures opportunities to reduce toxicity.

e. **Accelerated Toxicity Testing and TRE Initiation**. If the discharge displays an acute or chronic toxicity result that exceeds the effluent limitation or trigger, the Permittee must conduct six additional toxicity tests of the discharge using the same species and test method as that of the observed toxicity, every two weeks, over a 12 week period.

1) Accelerated testing must begin within 14 days of the Permittee's receipt of the test result exceeding the effluent limit or trigger. If none of the six additional toxicity tests exceeds the effluent limit or trigger, then the Permittee may return to its regular testing frequency. All accelerated laboratory test results must be submitted to EPA and EQB within 30 days of receipt by the Permittee, as required in the Reporting of Toxicity Monitoring Results section below.

2) If the result of any accelerated toxicity test for the discharge exceeds the effluent limit or trigger, the Permittee is in violation of this permit and must cease accelerated monitoring and initiate a TRE within 14 days of receipt of this test result to investigate the cause(s) of, and identify corrective actions to reduce or eliminate effluent toxicity. The TRE must use the same species and test method as that of the observed toxicity. The Permittee must use the following EPA guidance manual to conduct the TRE: *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA-600-2-88-070, 1989).

3) The Permittee may also use the following manuals for Toxicity Identification Evaluation (TIE) to identify and abate the causes of toxicity:

a) *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I* (EPA-600-6-91-005F, 1992).

b) *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA-600-R-92-080, 1993).

c) *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA-600-R-92-081, 1993).

d) *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA-600-R-96-054, 1996).

4) The Permittee must submit accelerated test results within 30 days after the Permittee's receipt of the laboratory reports for accelerated monitoring. Test results that were conducted because of accelerated monitoring may be used to satisfy the normal acute AND/OR chronic Toxicity Testing requirements above, provided that all requirements (including species, test type, frequency, timing, and sample requirements) are met.

f. **Reporting of Toxicity Monitoring Results**. For any WET testing event, the Permittee must report the WET results in TU_a or TU_c on the DMR for the month in which the toxicity test was conducted. In addition, a full laboratory report must be submitted to the addresses in Part III.A.3 of this permit as an attachment to the DMR, reported according to the test methods manual chapter on report preparation and test review, and must include, at a minimum, the following:

1) The acute WET toxicity results expressed in LC_{50} and TU_a. For tests where the IWC is 100 percent effluent that does not result in a toxic response, the result must be reported at <0.3 TU_a.

2) The dates of sample collection and initiation of each toxicity test.

3) The statistical methods used to calculate endpoints.

4) The statistical output page, which includes the calculation of the percent minimum significant difference (PMSD).

5) All results for effluent parameters monitored concurrently with the toxicity test(s).

6) The results compared to the numeric toxicity effluent limitation or trigger.

7) Progress reports on any TRE/TIE investigations.

Toxicity Reporting Table

Task	Due Date
Submit a TRE Workplan	**<Enter EDP+90 days>**
Submit WET Report for quarterly monitoring	**28th** of every month
Submit WET Report for annual monitoring	**28th** of every month
Notify Toxicity in Effluent	<48 hours of receipt of test results that exceed limit or trigger
Conduct Accelerated Monitoring	≤ 14 days of exceedance of limit or trigger
Submit Accelerated Monitoring Report	≤ 30 days of receipt of test results
Initiate a TRE	≤ 14 days of accelerated test results that exceed limit or trigger

g. **Reopener Clause for Toxicity**. In accordance with 40 CFR Parts 122 and 124, this permit may be reopened to establish additional toxicity requirements to address toxicity in the effluent or receiving water, including other toxicity/treatability studies, effluent limitations or monitoring requirements.

3. **Best Management Practices and Pollution Prevention**

a. **Preventive Maintenance Plan (PMP) and Pollution Prevention**

1) **The Permittee must during the term of this permit operate the facility in accordance with the PMP approved by Federal Consent Decree Civil Action No 10-1365 (sec) for Sludge Treatment System and in accordance with subsequent amendments to the plan.**

2) **Purpose**. Through implementation of the PMP, the Permittee must prevent or minimize the generation and the potential for the release of pollutants from the facility to the waters of the United States through normal operations and ancillary activities.

3) **Requirements**. The PMP must be consistent with the the general guidance contained in the publication titled *Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004, 1993) or any subsequent revisions to the guidance document, and the approved Preventive Maintenance Program on Civil Actions No. 10-1365 (sec).

a) The PMP must establish specific BMPs to meet the objectives identified in the Objectives section above, addressing each component or system capable of generating or causing a release of significant amounts of pollutants, and identifying specific preventive or remedial measures to be implemented.

b) The PMP must establish specific BMPs or other measures that ensure that the following specific requirements are met:

   i. Ensure proper management of solid and hazardous waste in accordance with regulations promulgated under the Resource Conservation and Recovery Act (RCRA). Management practices required under RCRA regulations must be referenced in the BMP plan.

   ii. Reflect requirements for Spill Prevention, Control, and Countermeasure (SPCC) plans under CWA section 311 and 40 CFR Part 112 and may incorporate any part of such plans into the PMP by reference.

   iii. Reflect requirements for stormwater control under CWA section 402(p) and the regulations at 40 CFR 122.26 and 122.44, and otherwise eliminate to the extent practicable, contamination of stormwater runoff.

4) **Documentation**. The Permittee must maintain a copy of the PMP at the facility and must make the plan available to EPA upon request. The copy of the PMP could be electronic.

5) **PMP Modification**. The Permittee must amend the PMP whenever there is a change in the facility or in the operation of the facility that materially increases the generation of pollutants or their release or potential release to the receiving waters. The Permittee must also amend the plan, as appropriate, when plant operations covered by the PMP change. Any such changes to the PMP must be consistent with the objectives and specific requirements listed above. All changes in the PMP must be reported to EPA in writing.

6) **Modification for Ineffectiveness**. If at any time the PMP proves to be ineffective in achieving the general objective of preventing and minimizing the generation of pollutants and their release and potential release to the receiving waters and/or the specific requirements above, the permit and/or the PMP must be subject to modification to incorporate revised BMP requirements.

4. **Compliance Schedules**

This permit does not authorize any compliance schedules.

ATTACHMENT A: DEFINITIONS

Acute Toxicity Test means any toxicity test designed to determine the concentration in which a response to a stimulus, such as a total effluent, specific substance or combinations of these, has sufficient severity to induce an adverse effect on a group of test organisms during a period of 96 hours or less; even if said effect is not necessarily the death of the organisms.

Acute Toxicity Unit (TU_a) means the reciprocal of the effluent concentration that causes 50 percent of the organisms to die in an acute toxicity test or induce a response halfway between the base line and maximum as defined by the following equation:

$$TU_a = 100 / (LC_{50})$$

(The LC_{50} should be expressed in terms of the percent of effluent in the dilution water.)

Average Monthly Discharge Limitation (AML) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. [40 CFR 122.2]

Average Weekly Discharge Limitation (AWL) means the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. [40 CFR 122.2]

Best Management Practices (BMP) means the most effective practicable means of preventing or reducing the amount of pollution generated by nonpoint and point sources to a level more compatible to the water quality goals, including, but not limited to, structural and non-structural controls and operating and maintenance procedures. [40 CFR 122.2]

Biosolids means non-hazardous sewage sludge, as defined in 40 CFR Part 503.9. Sewage sludge that is hazardous, as defined in 40 CFR Part 261, must be disposed of in accordance with Resource Conservation and Recovery Act.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility as discussed in 13. Bypass of Attachment B of this permit. [40 CFR 122.41(m)]

Composite means a combination of individual (or continuously taken) samples of at least 100 milliliters, collected at periodic intervals over the entire discharge day. The composite must be flow proportional; either the time interval between each sample must be proportional to the discharge flow (i.e. samples of equal volume taken every "X" gallons of flow) or the volume of each sample must be proportional to the discharge flow (i.e. a proportional volume sample taken at constant time intervals). Samples may be collected manually or automatically. For a continuous discharge, a minimum of 24 individual samples shall be collected and combined to constitute a 24-hour composite sample. For intermittent discharges of less than four (4) hours duration, samples shall be taken at a minimum of 15 minute intervals. For intermittent discharges of more than four (4) hours duration, samples shall be taken at a minimum of 30 minute intervals.

Chronic Toxicity Test means any toxicity test designed to determine the concentration in which a response to a stimulus, such as a total effluent, a specific substance, or combination of these, has sufficient severity to induce a long-term adverse effect on a group of test organisms. A chronic effect could be lethality, reduction of growth rate, reduction of reproduction rate, etc.

Chronic Toxicity Unit (TU_c) means 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:

$$TU_c = 100 / NOEC$$

(The NOEC value should be expressed in terms of the percent of effluent in the dilution water.)

Critical Initial Dilution means the minimum dilution to be determined by means of the sue of a mathematical model to be approved by EQB, and according to the procedures described in the *Mixing Zone and Bioassay Guidelines*, approved by EQB.

Daily Discharge is defined as either (1) the total mass of the constituent discharged over the calendar day (12:00 a.m. through 11:59 p.m.) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass; or (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day. For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends. [40 CFR 122.2]

Director means the *Regional Administrator* or the *State Director*, as the context requires, or an authorized representative. Until Puerto Rico has an approved state program authorized by EPA under 40 CFR Part 123, *Director* means the Regional Administrator. Following authorization, *Director* means the State Director. Even in such circumstances, EPA may retain authority to take certain action (see, for example, 40 CFR 123.1(d), 45 *Federal Register* 14178, April 1, 1983, on the retention of jurisdiction over permits EPA issued before program approval). If any condition of this permit requires the reporting of information or other actions to both the Regional Administrator and the State Director, regardless of who has permit issuing authority, the terms *Regional Administrator* and *State Director* will be used in place of *Director*. [40 CFR 122.2]

Discharge Monitoring Report (DMR) means EPA uniform national form, including any subsequent additions, revisions, or modifications, for the reporting of self-monitoring results by the Permittee. [40 CFR 122.2]

Geometric Mean means the *n*th root of the product of *n* numbers.

Grab means an individual sample collected in less than 15 minutes.

ICIS means EPA's Integrated Compliance Information System that provides web access to enforcement and compliance assurance data to EPA and state agencies.

Inhibition Concentration 25 (IC_{25}) means a point estimate of the effluent concentration that would cause a 25-percent reduction in a non-lethal (e.g., reproduction, growth) or lethal (mortality) biological measurement.

Lethal Concentration (LC_{50}) means the concentration of effluent, specific substances or combination of these that is lethal to 50 percent of test organisms exposed during a specific period in a toxicity test.

Lowest Observable Effects Concentration (LOEC) means the lowest concentration of an effluent or toxicant that results in adverse effects on the test organisms. That is, where the values for the observed endpoints are statistically different from the control.

Maximum Daily Discharge Limitation (MDL) means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, the median = $X_{(n+1)/2}$. If n is even, the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Minimum Level (ML) is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes, and processing steps have been followed.

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects on the overall water body.

Monthly means one day each month (the same day each month) and a normal operating day (e.g., the 2nd Tuesday of each month).

No Observed Effect Concentration (NOEC) means the highest tested concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specific time of observation.

Not Detected (ND) are those sample results less than the ML.

Regional Administrator means the Regional Administrator of EPA Region 2 or the authorized representative of the Regional Administrator.

Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Toxic pollutant means any of the pollutants listed in 40 CFR 401.15 (45 *Federal Register* 44503, July 30, 1979) and any modification to that list in accordance with CWA section 307(a)(1). [40 CFR 122.2]

Toxicity Reduction Evaluation (TRE) is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of collecting data relevant to the toxicity, including additional toxicity testing, and evaluating facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Total Maximum Daily Loads (TMDLs) are calculations of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards. TMDLs are the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background. [40 CFR 130.2(i)]

Upset is an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation as discussed in 14. Upset of Attachment B of this permit. [40 CFR 122.41(n)]

Waters of Puerto Rico means all coastal waters, surface waters, estuarine waters, ground waters and wetland as defined in Puerto Rico Water Quality Standards Regulations, as amended.

Weekly means every seventh day (the same day of each week) and a normal operating day

ATTACHMENT B: STANDARD CONDITIONS

General Condition's language in this attachment for sections 1 through 14, and 17 is based on the *Code of Federal Regulations* (CFR) published on **July 1, 2015**. Reference to provisions in the *United States Code* (U.S.C.) is based on the date of permit issuance.

Table of Regulatory References for General Conditions

Section	Section Title	Reference
1.	Duty to comply	40 CFR 122.41(a)
2.	Duty to reapply	40 CFR 122.41(b)
3.	Need to halt or reduce not a defense	40 CFR 122.41(c)
4.	Duty to mitigate	40 CFR 122.41(d)
5.	Proper operation and maintenance	40 CFR 122.41(e)
6.	Permit actions	40 CFR 122.41(f)
7.	Property rights	40 CFR 122.41(g)
8.	Duty to provide information	40 CFR 122.41(h)
9.	Inspection and entry	40 CFR 122.41(i)
10.	Monitoring and records	40 CFR 122.41(j)
11.	Signatory requirements	40 CFR 122.41(k)
12.	Reporting requirements	40 CFR 122.41(l)
13.	Bypass	40 CFR 122.41(m)
14.	Upset	40 CFR 122.41(n)
15.	Removed substances	33 U.S.C. 1311
16.	Oil and hazardous substance liability	33 U.S.C. 1321
17.	Reopener clause for toxic effluent limitations	40 CFR 122.44(b)(1)
18.	State laws	33 U.S.C. 1370
19.	Availability of information	33 U.S.C. 1318
20.	Severability	-

1. Duty to Comply [40 CFR 122.41(a)].

   a. The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

   b. The Permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

   c. The Clean Water Act provides that any person who violates sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Clean Water Act, is subject to a civil penalty not to exceed $25,000 per day for each violation ($37,500 as adjusted by 40 CFR Part 19).

   d. The Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402 of the Clean Water Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Clean Water Act, is subject to criminal penalties of not less than $2,500 nor more than $25,000 per day of violation, or imprisonment of

not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation of the Clean Water Act, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

e. The Clean Water Act provides that any person who knowingly violates sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Clean Water Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Clean Water Act, is subject to criminal penalties of not less than $5,000 nor more than $50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation of the Clean Water Act, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

f. Any person who knowingly violates sections 301, 302, 303, 306, 307, 308, 318 or 405 of the Clean Water Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Clean Water Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. A person which is an organization, as defined at 33 U.S.C. 309(c)(3)(B)(iii), shall, upon conviction be subject to a fine of not more than $1,000,000. In the case of a second or subsequent conviction for a knowing endangerment violation of the Clean Water Act, the maximum punishment shall be doubled with respect to both fine and imprisonment.

g. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Clean Water Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this chapter, shall upon conviction, be punished by a fine of not more than $10,000, or imprisonment for not more than 2 years, or both. In the case of a second or subsequent conviction, under this paragraph, punishment shall be by a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

h. Any person may be assessed an administrative penalty by the Administrator for violating sections 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation ($16,000 as adjusted by 40 CFR Part 19), with the maximum amount of any Class I penalty assessed not to exceed $25,000 ($37,500 as adjusted by 40 CFR Part 19). Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues ($16,000 as adjusted by 40 CFR Part 19), with the maximum amount of any Class II penalty not to exceed $125,000 ($177,500 as adjusted by 40 CFR Part 19).

2. Duty to Reapply [40 CFR 122.41(b)]. This permit and the authorization to discharge shall terminate on the expiration date indicated on the first page. In order to receive authorization to discharge after the expiration date of this permit, the Permittee shall apply for and obtain a new permit. If the permit issuing authority remains the EPA, the Permittee shall complete, sign, and submit an application to the Director no later than 180 days before the expiration date. All applications must be submitted to:

   Joan Leary Matthews, Director
   Clean Water Division
   U.S. Environmental Protection Agency, Region 2
   290 Broadway, 24th Floor
   New York, NY 10007-1866
   Attention: Clean Water Regulatory Branch

3. Need to Halt or Reduce not a Defense [40 CFR 122.41(c)]. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to Mitigate [40 CFR 122.41(d)]. The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Proper operation and maintenance [40 CFR 122.41(e)]. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back up or auxiliary facilities or similar systems which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

6. Permit actions [40 CFR 122.41(f)]. This permit may be modified, revoked and reissued, or terminated during its term pursuant to 40 CFR Part 122, Subpart D. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property rights [40 CFR 122.41(g)]. This permit does not convey any property rights of any sort, or any exclusive privileges.

8. Duty to provide information [40 CFR 122.41(h)]. The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

9. Inspection and Entry [40 CFR 122.41(i)]. The Permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

   a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

   d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

10. Monitoring and records [40 CFR 122.41(j)].

    a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

    b. Except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement report or application. This period may be extended by request of the Director at any time.

    c. Records of monitoring information shall include:

       1) The date, exact place, and time of sampling or measurements;

       2) The individual(s) who performed the sampling or measurements;

       3) The date(s) analyses were performed;

       4) The individual(s) who performed the analyses;

       5) The analytical techniques or methods used; and

       6) The results of such analyses.

    d. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 and any subsequent changes to the methods contained therein unless another method is required under 40 CFR subchapters N or O.

e. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both. [See U.S.C. 1319(c)(4)].

11. Signatory requirements [40 CFR 122.41(k)]. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22)

a. Applications. All permit applications shall be signed as follows:

1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in 40 CFR 122.22(a)(1)(i). EPA will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under 40 CFR 122.22(a)(1)(ii) rather than to specific individuals.

2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or

3) For a municipality, state, federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: a) The chief executive officer of the agency, or b) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

b. All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph 11.a of Part II.B, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1) The authorization is made in writing by a person described in paragraph 11.a;

2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,

3) The written authorization is submitted to the Regional Administrator, U.S. Environmental Protection Agency, Region 2, 290 Broadway, New York, NY 10007-1866, Attention: Compliance Assistance Program Support Branch, and to EQB.

c. Changes to authorization. If an authorization under paragraph 11.b of Part II.B is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph 11.b of Part II.B must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Certification. Any person signing a document under paragraph 11.a or 11.b of Part II.B shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

e. The Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by imprisonment for not more than 6 months per violation, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both. (See CWA section 309.c.4).

12. Reporting Requirements [40 CFR 122.41(l)].

a. Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b);

2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under paragraph 4.a of Part I.B (40 CFR 122.42(a)(1)); or

3) The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

b. Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

c. Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory.)

d. Monitoring reports. Monitoring results shall be reported at the intervals specified in Part III of this permit.

1) Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.

2) If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.

3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

e. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

f. Twenty four hour reporting.

1) The Permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances to EPA Region 2, Caribbean Environmental Protection Division at (787) 977-5870 and State Director. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2) The following shall be included as information which must be reported within 24 hours under this paragraph.

a) Any unanticipated bypass (see 13 below) which exceeds any effluent limitation in the permit. [See 40 CFR 122.41(g)].

b) Any upset (see 14 below) which exceeds any effluent limitation in the permit.

c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g)).

3) The Director may waive the written report on a case by case basis for reports under paragraph 12.f.(2) of Part II.B if the oral report has been received within 24 hours.

g. Other noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs 12.d, e, and f of Part II.B, at the time the monitoring reports are submitted. The reports shall contain the information listed in paragraph 12.f of Part II.B.

h. Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

13. Bypass [40 CFR 122.41(m)].

a. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 13.b. and 13.c of Part II.B.

b. Notice.

1) Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

2) Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in paragraph 12.f of Part II.B (24-hour notice).

c. Prohibition of bypass.

1) Bypass is prohibited, and the Director may take enforcement action against a Permittee for bypass, unless:

a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c) The Permittee submitted notices as required under paragraph 13.b of Part II.B.

2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 13.b.(1) of Part II.B.

14. Upset [40 CFR 122.41(n)].

a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph 14.(b) of Part II.B

are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

b. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

1) An upset occurred and that the Permittee can identify the cause(s) of the upset;

2) The permitted facility was at the time being properly operated;

3) The Permittee submitted notice of the upset as required in paragraph 12.f.(2)(b) of Part II.B (24 hour notice); and

4) The Permittee complied with any remedial measures required under paragraph 4 of Part II.B (duty to mitigate).

c. Burden of proof. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

15. Removed substances (33 U.S.C. 1311). Pursuant to section 301 of the Clean Water Act, solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters and/or the treatment of intake waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters. The following data shall be reported together with the monitoring data required in paragraph 2 of Part I.B:

a. The sources of the materials to be disposed of;

b. The approximate volumes and weights;

c. The method by which they were removed and transported; and

d. Their final disposal locations.

16. Oil and hazardous substance liability (33 U.S.C. 1321). The imposition of responsibilities upon, or the institution of any legal action against the Permittee under CWA section 311 shall be in conformance with regulations promulgated pursuant to Section 311 to discharges from facilities with NPDES permits.

17. Reopener clause for toxic effluent limitations [40 CFR 122.44(B)(1)]. Other effluent limitations and standards under CWA sections 301, 302, 303, 307, 318 and 405. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA section 307(a) for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in the permit, the Director shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition. See also 40 CFR 122.41(a).

18. State laws (33 U.S.C. 1370). Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by CWA section 510. The issuance of this permit does not preempt any duty to obtain state or local assent required by law for the discharge.

19. Availability of information (33 U.S.C. 1318). (CWA section 308)

a. NPDES permits, effluent data, and information required by NPDES application forms provided by the Director under 40 CFR 122.21 (including information submitted on the forms themselves and any attachments used to supply information required by the forms) shall be available for public inspection at the offices of the Regional Administrator and State Director.

b. In addition to the information set forth in subsection a., any other information submitted to EPA in accordance with the conditions of this permit shall be made available to the public without further notice unless a claim of business confidentiality is asserted at the time of submission in accordance with the procedures in 40 CFR Part 2 (Public Information).

c. If a claim of confidentiality is made for information other than that enumerated in subsection a., that information shall be treated in accordance with the procedures in 40 CFR Part 2. Only information

determined to be confidential under those procedures shall not be made available by EPA for public inspection.

20. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

ATTACHMENT C

RESPONSIVENESS SUMMARY
IN THE FOLLOWING FINAL PERMITS

Villalba WTP (PR0026590)

On **July 31, 2015**, the United States Environmental Protection Agency (EPA) issued draft National Pollutant Discharge Elimination System (NPDES) permit for the Villalba Water Treatments Plant (WTP), owned by the Puerto Rico Aqueduct and Sewer Authority (PRASA).

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 were received from the following addresses:

Puerto Rico Aqueduct and Sewer Authority
PO Box 7066
Barrio Obrero Station
San Juan, PR 00916

All the comments received have been reviewed and considered in this final permit decision. A summary of and response to the comments received follows:

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 i 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 WQSs, 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. VILLALBA TP COMMENTS

1) **Comment, Rationale for Permit Requirements:** The acronyms TBEL, WQBEL and CFR must be defined before they are used. Also the acronym TBELS does not require to have the "S" at the end.
   Response: The referenced item has been modified according to PRASA's comment.

2) **Comment, Water Quality Certificate:** The date used ("June 30, 2015") for the Environmental Quality Board's (EQB's) certification corresponds to the Draft Water Quality Certificate (DWQC). Therefore, this section must be modified accordingly. In other instances, when the EPA's Final NPDES permit be issued, this section must make reference to the issuance date of the EQB's Final WQC.

Response: The final permit has been revised to read as the final WQC.

3) **Comment, Background, Impaired Waters and Total maximum Daily Loads (TMDLs)**: The acronym WLA (Waste Load Allocation must be defined. Also, this section makes reference to "any WLA assigned to the Permittee". However, this permit does not include any dilution allowance approved by EQB. EPA must clarify.

   Response: EPA has revised the language to state that even though the water body is impaired and has a TMDL approved for Fecal Coliform it does not affect this final permit.

4) **Comment, Effluent Limitations Table, BOD_5**: PRASA does not understand why EPA is requiring "24 Hr. Composite" samples type. This is a filtration facility not a publicly owned treatment work. Therefore, PRASA requests that "Grab" samples be required, as established in EQBs Final WQC.
   Response: This was a typographical error, the final permit has been revised according to PRASA's comments.

5) **Comment, Effluent Limitations Table, Copper**: The WQC requires quarterly monitoring. PRASA request that this requirement be changes from 1/Month to 1/Quarter as stated in the WQC.

   Response: This was a typographical error, the final permit has been revised according to PRASA's comments.

6) **Comment, Effluent Limitations Table, Dissolved Oxygen:** In order to avoid confusion, the following footnote must be added to clarify the dissolved oxygen limitation:

   "The Dissolved Oxygen limit is an instantaneous minimum."

   Response: The requested footnote for Dissolved Oxygen was added to the final permit.

7) **Comment, Effluent Limitations Table, Total Nitrogen**: EPA must explain if this parameter refers to "NH_3, $NO_2$2, NO3".

   Response: EPA has clarified in the final permit that Total Nitrogen refers to TKN, NO_2, NO_3.

8) **Comment, Footnote (2)** – It must be modified. As written it makes reference to comply "with permit limits for bacterial indicator(s)". However, the permit does not include limitations for bacterial parameters. EPA must clarify or in the alternative, delete it.

Response: The final permit has been revised to read as the final WQC.

9) **Comment, No Net Addition Limitations:** PRASA requests that a footnote condition, similar be added for the parameters indicated below. This footnote will allow credits for those substances already in the intake and for parameters that the plant does not have any control. The presence of these parameters in the discharge is merely due to the incoming river water. Following are the parameters that PRASA is requesting such limitation: BOD_5, Cu, NH3, P, and Total Nitrogen.

   Response: The final permit has been revised to read as the final WQC. The No Net Addition Limitation was approved for BOD_5, Copper and Total Phosphorus.

10) **Comment: Special Condition 14** – It indicates that "a semiannual report shall be submitted to EQB and EPA". However, it does not indicate either the person or the specific office from both agencies that PRASA must report. EPA must be more specific.

   Response: The referenced item has been modified according to PRASA's comment