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

NPDES NO. PR0020711

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)	Morovis WWTP
P. O. Box 7066	State Road No. 155, Km. 5.0
San Juan, PR 00916-7066	Morovis, PR 00687
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	Secondary municipal wastewater.	18°, 20', 11" N	66°, 25', 14" W	Morovis River, Class SD waters

Issuance date	Effective date (EDP)	Expiration date	Renewal application date
SEP 1 1 2018	January 1, 2019	December 31, 2024	June 30, 2024

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, **Carmen R. Guerrero-Pérez**, **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 SEP 1 1 2018.

Carmen R. Guerrero-Pérez
Caribbean Environmental Protection Division
U.S. Environmental Protection Agency Region 2

CONTENTS

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 (TBEL) based on Secondary Treatment Standards at 40 CFR Part 133 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 PRWQSR and CWA sections 208(e), 301, 302, 303, 304(e), 306 and 307, on **August 1, 2018** 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. TMDLs 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 Waste Load Allocation (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. 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 of secondary treated wastewater.

Effluent Limitations Table

Parameter	Units	Effluent limitations			Monitoring requirements		Footnotes
		Average monthly	Average weekly	Maximum daily	Sample type	Minimum sampling frequency	
Influent BOD, 5-day (20°C)	mg/L	Monitor only	Monitor only	--	24-Hr Composite	1/Week	
Effluent BOD, 5-day (20°C)	mg/L	30	45	--	24-Hr Composite	1/Week	
	kg/day	193	289	--			
	minimum % removal	85	--	--	Calculated	1/Month	
Influent TSS	mg/L	Monitor only	Monitor only	--	24-Hr Composite	1/Week	
Effluent TSS	mg/L	30	45	--	24-Hr Composite	1/Week	
	kg/day	193	289	--			
	minimum % removal	85	--	--	Calculated	1/Month	
Color	Pt-Co	--	--	15	Grab	1/Month	
Copper (Cu)	ug/L	--	--	13.95	Grab	1/Month	
Dissolved Oxygen	mg/L	--	--	$\geq$ 5.0	Grab	1/Day	(4)
Enterococci	(colonies/ 100 ml)	35	--	--	Grab	2/Month	(2)
	90th Percentile of the samples	130	--	--	Calculated	2/Month	(2)

Parameter	Units	Effluent limitations			Monitoring requirements		Footnotes
		Average monthly	Average weekly	Maximum daily	Sample type	Minimum sampling frequency	
Effluent Flow	MGD	Monitor only	Monitor only	1.7	Metered	Continuous	(1)
Oil and Grease	mg/L	--	--	Monitor	Grab	1/Month	
pH	standard units	Minimum 6.0 Maximum 9.0			Grab	1/Day	
Residual Chlorine	µg/L	--	--	11	Grab	1/Day	(3)(5)
Sulfates	mg/L	--	--	Monitor	Grab	1/Month	(7)
Sulfide (undissociated H_2S)	µg/L	--	--	2	Grab	1/Quarter	
Surfactants as MBAS	µg/L	--	--	100	Grab	1/Quarter	
Suspended, Colloidal or Settleable Solids	mL/L	--	--	Monitor	Grab	1/Day	
Temperature	°C	--	--	32.2	Grab	1/Day	
Total Ammonia Nitrogen (NH_4^+, NH_3)	µg/L	--	--	Monitor	Grab	1/Month	
Total Dissolved Solids	mg/L	--	--	500	Grab	1/Annual	
Total Nitrogen (TKN, NO_2, NO_3)	ug/L	--	--	1,700	Grab	1/Month	
Total Phosphorus (P)	µg/L			160	Grab	1/Month	
Turbidity	NTU	--	--	50	Grab	1/Quarter	
Whole Effluent Toxicity	TU_a	--	--	Monitor	24-hr Composite	1/Quarter	(8)

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 3.7845 (kg/L)/(mg)(mgd)

(1) All flow measurements must achieve accuracy within the range of plus or minus (±) 10%.

(2) The enterococci density geometric mean and the 90th Percentile shall be calculated on a monthly basis beginning on EDP+90 days, using the 6-points data set obtained during the previous 90-day interval. A monthly report with the calculations and the data set shall be submitted to EQB's Water Quality Area and the Municipal Water Programs Branch at the EPA's Region 2 Caribbean environmental Protection Division, beginning on **May 15, 2018** and during the effectiveness of the permit.

(3) The Permittee must at all times operate the plant to achieve the lowest possible residual chlorine while still complying with permit limits for bacterial indicator(s).

(4) The Dissolved Oxygen limit is an instantaneous minimum

(5) See Part IV. B. Special Conditions e and f of this permit.

(6) See Part IV. B. Special Condition h of this permit.

(7) The permittee shall implement a monthly monitoring program using the analytical method approved by EPA 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 not later than thirty (30) days after the EDP. The results of the monitoring program shall be submitted to EQB's Water Quality Area and EPA-Region 2 Clean Water Division, 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.

(8) See Part IV.B.2. *Whole Effluent Toxicity Testing* for monitoring and reporting requirements for acute WET.

B. Narrative Limitations

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

1. The waters of Puerto Rico shall be substantially free from floating non-petroleum oils as well as petroleum derived oil and greases.
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
--	INF-001	The sampling point for influent 001 shall be located at a point representative of the municipal water supply influent prior to mixing with sanitary wastewater from the facility.
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 on **February 28, 2019.**

3. **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.

4. **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**

All POTWs must provide adequate notice to EPA of all of the following [40 CFR 122.42(b)]:

a. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA sections 301 or 306 if it were directly discharging those pollutants [40 CFR 122.42(b)(1)].

b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of this permit [40 CFR 122.42(b)(2)].

c. Adequate notice must include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW [40 CFR 122.42(b)(3)].

B. Special Conditions

1. **Special Conditions from the Water Quality Certificate**

a. The flow of discharge 001 shall not exceed the limitation of 6,435.2 m^3/day (1.7 MGD) as daily maximum. No increase in flow of discharge 001 shall be authorized without a recertification from the Puerto Rico Environmental Quality Board (EQB).

b. No changes in the design or capacity of the treatment system will be permitted without the previous authorization of EQB.

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

d. 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.

e. 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.

f. 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.

g. The discharge 001 shall not cause the presence of oil sheen in the receiving water body.

h. The permittee shall use the Environmental Protection Agency (EPA) approved analytical method, with the lowest possible detection limit, in accordance with the 40 CFR, Part 136 for Sulfide (as S). Also, the permittee shall complete the calculations specified in Method 4500-S^{-2} F, Calculation of Un-ionized Hydrogen Sulfide, of Standards Methods 18th Edition, 1992, to determine the concentration of undissociated H_2S. If the sample results of Dissolved Sulfide are below the detection limit of the EPA approved method established in the 40 CFR, Part 136, then, the concentration of undissociated H_2S shall be reported as "below detection limit".

k. 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.

l. The sampling point for discharge 001 shall be located immediately after the primary flow-measuring device of the effluent of the treatment system.

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

"Punto de Muestreo para la Descarga 001"

n. 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.

o. The solid waste such as sludge, screenings and grit, generated due to the operation of the treatment system shall be:

1) 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 the Land Pollution Control Area of EQB and 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.

2) Transported adequately in such way that access is not gained to any water body or soil. In the event of a spill of solid waste 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:

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

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

These notifications shall include the following information:

c) spill material,
d) spill volume,
e) 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.

p. A log book must be kept for the material removed from the Morovis Wastewater Treatment Plant, such as sludge, screenings and grit, detailing the following items:

1. removed material, date and source of it;
2. approximate volume and weight;
3. method by which it is removed and transported;
4. final disposal and location;
5. person that performs the service.

A copy of the Non-Hazardous Solid Waste Collection or Transportation Services Permit issued by the authorized official from EQB must be attached to the log book.

q. The sludge produced within the facility due to the operation of the treatment system shall be analyzed and all constituents shall be identified as required by "Standards for the Use or Disposal of Sewage Sludge" (40 CFR, Part 503). The sludge shall be disposed properly in such manner that water pollution or other adverse effects to surface waters or to ground waters do not occur.

r. If any standard or prohibition to the sanitary sludge disposal is promulgated and said prohibition or standard is more stringent than any condition, restriction, prohibition or standard contained in the NPDES permit, such permit shall be modified accordingly or revoked and reissued to be adjusted with regard to such prohibition or standard.

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 shall conduct quarterly acute toxicity tests on a 24-hour composite effluent sample for a period of one year, after which the tests shall be performed annually. Acute toxicity test samples must be collected for each point of discharge at the designated monitoring location for the effluent (i.e., Point 001, 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	**April 1, 2019**
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 3:15-CV-02283(JAG) 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 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 Case 3:15-cv-02283(JAG).

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.

b. **Stormwater Pollution Prevention Plan**

The Permittee must develop and implement a stormwater pollution prevention (SWPP) plan in accordance with EPA Guidance Documents: Developing Your Stormwater Pollution Prevention Plan, June 2015 (EPA 833-B-09-002) and Industrial Stormwater Fact Sheet Series – Sector T: Treatment Works, December 2006, (EPA 833-F-06-035). These documents can be found

at: https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf and https://www.epa.gov/sites/production/files/2015-10/documents/sector_t_treatmentworks.pdf.

4. **Compliance Schedules.**

This permit does not authorize any compliance schedules.

5. Additional Special Conditions

a. **Pretreatment Requirements**

1) **Pretreatment Implementation**. If a Significant Industrial User (SIU) as defined at 40 CFR 403.3(v) is identified, the Permittee must perform a technical evaluation of local limits for the Morovis WWTP. The evaluation must, at a minimum, include the following activities:

a) Review plant operations, NPDES limits and discharge monitoring reports to determine the need for local limits.

b) Determine the sources, character and volume of industrial user pollutant contributions to the treatment plant.

c) Select and implement technical approach for limit development.

2) **Pretreatment Evaluation**. No later than 240 days after identifying an SIU, the Permittee must have completed the evaluation and development process, and have in place in the industrial users' final permits technically sound and defensible local limits.

3) **Pretreatment Report**. No later than 256 days after identifying an SIU, the Permittee must submit a progress report and a written notice of compliance or noncompliance with Part IV(B)(5)(a)(2) *Pretreatment Evaluation* above to:

U.S. Environmental Protection Agency, Region 2
290 Broadway, 20th Floor
New York, NY 10007-1866
Attention: Clean Water Division, NPDES Section

In the case of noncompliance, the notice must include the cause of noncompliance and any remedial actions taken.

4) **Pretreatment Additional Notification**. The Permittee must provide written notice to the EPA the following changes that could affect the treatment system:

a) Any new introduction of pollutants, not exclusively sanitary, coming from an industrial facility. If the industrial facility is an existing SIU, the Permittee must notify only when the new introduction of pollutants exceeds 1,000 gallons/day.

b) Any significant change in volume or character of pollutants being introduced into the treatment system by an existing source that could cause a variation in the quality of the effluent to be discharged.

c) Such notice must include information of the quality and quantity of the effluent to be introduced into such treatment system and the anticipated impact of such change in quantity and/or quality of the effluent to be discharged from the system.

b. **Biosolids (Sewage Sludge) Requirements**

1) **General Biosolids Requirements**

a) All biosolids generated by the Permittee must be used or disposed of in compliance with the applicable portions of the following:

i. 40 CFR Part 503—for biosolids that are land applied, placed in a surface disposal site (dedicated land disposal site, monofill, or sludge-only parcel at a municipal landfill), or incinerated.

ii. 40 CFR Part 258—for biosolids disposed of in a municipal solid waste landfill (with other material).

iii. 40 CFR Part 257—for all biosolids use and disposal practices not covered under 40 CFR Parts 258 or 503.

b) The regulation at 40 CFR Part 503, Subpart B (land application) sets requirements for biosolids that are applied for the purpose of enhancing plant growth or for land reclamation. The regulation at 40 CFR Part 503, Subpart C (surface disposal) sets requirements for biosolids that are placed on the land for the purpose of disposal, and 40 CFR Part 503, Subpart E, sets requirements for biosolids incinerated in a biosolids incinerator.

c) The Permittee must be responsible for assuring that all biosolids produced at its facility are used or disposed of in accordance with these rules, whether the Permittee uses or disposes of the biosolids itself or transfers the biosolids to another party for further treatment, use, or disposal. The Permittee must be responsible for informing subsequent preparers, appliers, and disposers of the requirements that they must meet under these rules.

d) The Permittee must assure that haulers transporting biosolids off site for treatment, storage, use, or disposal take all necessary measures to keep the biosolids contained. All haulers must have spill cleanup procedures. If a spill of biosolids on land or into a body of water occurs, the Permittee must notify the Point Sources Permits Division of the EQB's Water Quality Area in the following manner:

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

ii. By letter, within a term no longer than 5 days after the spill, which must include the spill material, spill volume, and measures taken to prevent the spill material to gain access to any body of water. This special condition does not relieve the Permittee from its responsibility to obtain the corresponding permits from EQB's Solid Wastes Program and other state and federal agencies, if any.

2) **Biosolids Monitoring Requirements**

a) The 40 CFR Part 503 requirements apply differently depending on the use or disposal practice followed by the Permittee and depends on the quality of the biosolids produced by the facility.

b) Biosolids must be monitored for pollutant concentrations, pathogen reduction and vector attraction (land application and surface disposal) at the following frequency. This frequency is based on the volume of biosolids generated at the facility in dry metric tons per year:

i.	less than 290	1/year
ii.	290 to less than 1,500	1/quarter (4/year)
iii.	1,500 to less than 15,000	1/60 days (6/year)
iv.	equal to or greater than 15,000	1/month (12/year)

3) **Biosolids Reporting Requirements**

a) **Annual Biosolids Report**. By February 19 of each year, the Permittee must submit an annual report covering information and data collected during the previous calendar year to EPA and EQB at the address in Part d) of this section below. This report must contain the following:

i. Amount of sludge generated, in dry metric tons.

ii. Use or disposal practices.

iii. Amount of sludge that goes to each use or disposal practice (amount of sludge that goes to each use or disposal site, in dry metric tons).

iv. Name and address of the preparer or the person who receives sludge next (name and address of each preparer or person who receives sludge next), if applicable.

v. Name and address of the land applier and owner/operator of the surface disposal site, if different from the generator.

vi. Analytical results from monitoring pollutant concentrations in sewage sludge which should include results of all analyses performed during the reporting period using the prescribed method(s) in milligrams per kilograms (mg/kg) dry weight. Reports should also indicate which analytical methods were used, how frequently sludge was monitored, and the types of samples collected. Preparers may have to report additional information regarding pollutants if they beneficially use or dispose of the sludge themselves.

vii. A certification and description of how the pathogen reduction requirements were met, including a detailed description of the pathogen treatment process that specifies the type of process used, standard operating procedures, and a schematic diagram. All pathogen density laboratory results (such as fecal coliform or salmonella), if monitored for must comply with pathogen reduction requirements.

viii. A description of how one of the vector attraction reduction requirements was met if one of the sludge processing options was used (Options 1-8, 40 CFR 503.33(b)(1) - (b)(8)) and a certification that the vector attraction reduction requirements were met.

ix. A listing of all relevant environmental (federal, state, or local) permits or construction approvals applied for or received.

b) **Certification Statement**. The incinerator owner/operator of the sewage sludge incinerator should submit the signed certification statement (described in section H, page 17 of the *THC Continuous Emission Monitoring Guidance for Part 503 Sewage Sludge Incinerators*) as part of the Annual Biosolids Report. Specifically, the owner/operator in conjunction with the CEM manufacturer, if appropriate, should certify that the THC/CO CEM system is installed, operated, and maintained pursuant to the manufacturer's written instructions and recommendations, meets performance specification criteria, and is suitable for compliance evaluation purposes. The report must include the information in 40 CFR 503.47(b) through 40 CFR 503.47(h). The incinerator owner/operator of the sewage sludge incinerator should submit the 40 CFR Part 503 site-specific metals limits that are required to be determined as per 40 CFR 503.43.

c) **MSW Landfill Disposal**. Preparers who send their sludge to a Municipal Solid Waste (MSW) landfill are required to submit the information indicated in 1) through 3) above, the name and address of each MSW landfill, in addition to submitting documentation that sludge quality is in compliance with 40 CFR Part 258 requirements (sludge is non-hazardous and passes the paint filter test).

d) **Biosolids Reporting**. All reports must be submitted to:

i. U.S. Environmental Protection Agency, Region 2
290 Broadway, 20th Floor
New York, NY 10007-1866
Attention: Water Compliance Branch

ii. U.S. Environmental Protection Agency, Region 2
Caribbean Environmental Protection Division
City view Plaza II – Suite 7000
48, 165 RD. Km 1.2
Guaynabo, PR 00968-8069

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

e) **Biosolids Reporting Schedule.** All reports must be submitted according to the following table:

Biosolids Reporting Table

Task	Due date
If a spill of biosolids on land or into a body of water occurs	Telephone <24 hours after the spill and Letter <5 days after the spill
Annual Biosolids Report	February 19th of each year

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, 2018**. 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:

   Javier Laureano, 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.

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

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
Morovis WWTP
PERMIT No. PR0020711

This Fact Sheet sets forth the principle facts and technical rationale that serve as the legal basis for the requirements of the accompanying draft permit. The draft permit has been prepared in accordance with Clean Water Act (CWA) section 402 and its implementing regulations at Title 40 of the *Code of Federal Regulations* (CFR), Parts 122 through 124, and the Water Quality Certificate (WQC) issued by the Puerto Rico Environmental Quality Board (EQB) pursuant to CWA section 401 requirements.

Pursuant to 40 CFR 124.53, the Commonwealth of Puerto Rico must either grant a certification pursuant to CWA section 401 or waive this certification before the U.S. Environmental Protection Agency (EPA) may issue a final permit. On **August 1, 2018,** EQB provided in the Water Quality Certificate (IWQC) that the allowed discharge will not cause violations to the applicable water quality standards at the receiving water body if the limitations and monitoring requirements in the WQC are met. In accordance with CWA section 401, EPA has incorporated the conditions of the WQC into the draft permit. Any changes to the WQC will be incorporated into the final issuance of the permit. The WQC conditions are discussed in this Fact Sheet and are no less stringent than allowed by federal requirements. Additional requirements might apply to comply with other sections of the CWA. Review and appeals of limitations and conditions attributable to the WQC were made through the applicable procedures of the Commonwealth of Puerto Rico and not through EPA procedures.

PART I. BACKGROUND

A. Permittee and Facility Description

The Puerto Rico Aqueduct and Sewer Authority (PRASA) (referred to throughout as the Permittee) has applied for renewal on its **Morovis WWTP** National Pollutant Discharge Elimination System (NPDES) permit. The Permittee is discharging pursuant to NPDES Permit No**. PR0020711.** The Permittee submitted Application Form 1, and 2A dated **May 31, 2017,** and applied for an NPDES permit to discharge treated wastewater from Morovis WWTP, Morovis, called the facility. The facility is classified as a major discharger by EPA in accordance with the EPA rating criteria.

The Permittee owns and operates the wastewater treatment plant which provides secondary treatment. Attachment A of this Fact Sheet provides a map of the area around the facility and a flow schematic of the facility.

The treatment system consists of the following:

The Morovis WWTP is a publicly owned treatment work (POTW) that treats sanitary wastewater through secondary treatment of the domestic sewage from the Municipality of Morovis. It has a capacity of 1.5 MGD (design flow rate), and provides secondary treatment and discharge its effluent to Morovis River.

Sanitary wastewater is processed through the following units, see Attachment A (Schematic Flow Diagram for more details:

- Grit Removal System
- 2 Sequencing Batch Reactors
- Tertiary Filter
- Chlorine Contact Chamber
- Aerobic Digester

- Belt Filter Press
- Sludge Drying Beds

Sludge is thickened, dewatered and disposed in a landfill.

Summary of Permittee and Facility Information

Permittee	Puerto Rico Aqueduct and Sewer Authority (PRASA)
Facility contact, title, phone	Mrs. Irma M. López-Santos, Executive Director Environmental Compliance and Quality Control (787) 620-2277, ext. 2893 and 2427
Permittee (mailing) address	Puerto Rico Aqueduct and Sewer Authority P.O. Box 7066 Barrio Obrero Station Santurce, Puerto Rico 00916-7066
Facility (location) address	PR 155 Km 50 Morovis, P.R. 00687
Type of facility	Publically-owned Treatment Works
Pretreatment program	Yes
Facility daily average flow	0.603 MGD (in million gallons per day)
Facility design flow	1.7 MGD (in million gallons per day)
Facility classification	Major

B. Discharge Points and Receiving Water Information

Wastewater is discharged from Outfall 001 to the **Morovis River,** a water of the United States.

The draft permit authorizes the discharge from the following discharge point(s):

Outfall	Effluent description	Outfall latitude	Outfall longitude	Receiving water name and classification
001	Secondary treated municipal wastewater.	18°, 20', 11" N	66°, 25', 14" W	Morovis River, Class SD waters

As indicated in the Puerto Rico Water Quality Standards (PRWQS) Regulations, the designated uses for Class SD receiving waters include:

- Primary and secondary recreation; and
- Propagation and preservation of desirable species, including threatened and endangered species.

CWA section 303(d) requires the Commonwealth of Puerto Rico to develop a list of impaired waters, establish priority rankings for waters on the list, and develop TMDLs for those waters. The receiving water has been determined to have water quality impairments for one or more of the designated uses as determined by section 303(d) of the CWA. Total maximum daily loads (TMDLs) has been developed and approved by EPA for the following parameter: **Fecal Coliforms.**

C. Compliance Orders/Consent Decrees

The Permittee has a Consent Decree with the Agency (Civil Action No 3:15-cv-02283(JAG)) in which the facility is included. This consent decree does not affect this permit action.

E. Summary of Basis for Effluent Limitations and Permit Conditions - General

The effluent limitations and permit conditions in the permit have been developed to ensure compliance with the following, as applicable:

- Clean Water Act section 401 certification requirements;
- NPDES regulations (40 CFR Part 122); and
- PRWQS (August 2016).

PART II. RATIONALE FOR EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CWA section 301(b) and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable technology-based requirements where necessary to achieve applicable water quality standards. In addition, 40 CFR 122.44(d)(1)(i) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that cause, have the reasonable potential to cause, or contribute to an exceedance of a water quality criterion, including a narrative criterion. The process for determining reasonable potential and calculating water quality-based effluent limits (WQBELs) is intended to protect the designated uses of the receiving water, and achieve applicable water quality criteria. Where reasonable potential has been established for a pollutant, but there is no numeric criterion for the pollutant, WQBELs must be established using (1) EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

The effluent limitations and permit conditions in the permit have been developed to ensure compliance with all federal and state regulations, including PRWQS. The basis for each limitation or condition is discussed below.

A. Effluent Limitations

The permit establishes both Technology-based Effluent Limitations (TBELs) and WQBELs for several pollutants and the basis for these limitations are discussed below.

1. **Flow:** An effluent limitation for flow has been established in the permit for 1.7 MGD as a Daily Maximum. Monitoring conditions are applied pursuant to 40 CFR 122.21(j)(4)(ii) and EQB's Water Quality Certificate. The frequency monitoring for flow shall be continuous with a flow meter.
2. **5-Day Biochemical Oxygen Demand (BOD_5):** The effluent concentration and percent removal limitations are based on technology-based secondary treatment standards for publicly owned treatment works (POTWs) specified in 40 CFR 133.102(a). The permit also requires influent monitoring and reporting in accordance with 40 CFR 122.44(i) to meet the requirement of the percent removal limitation (see section C.1.—Monitoring Requirements— of this Part).
3. **Total Suspended Solids (TSS):** The effluent concentration and percent removal limitations are based on technology-based secondary treatment standards for POTWs specified in 40 CFR 133.102(b). The permit also requires influent monitoring and reporting in accordance with 40 CFR 122.44(i) to meet the requirement of the percent removal limitation (see section C.1.—Monitoring Requirements— of this Fact Sheet).
4. **pH:** The effluent limitation for pH is based on technology-based secondary treatment standards for POTWs specified for Class SD D 2.d. of PRWQS, and the WQC. In no case the pH will lie outside of 6.0 to 9.0, standard pH units, except when it is altered by natural causes.
5. **Temperature:** The effluent limitation for temperature is based on the water quality criterion for all waters in Puerto Rico as specified in Rule 1303.1 D of PRWQS, and the WQC.
6. **Enterococci**: The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2 D.2.c of PRWQS, and the WQC.
7. **Dissolved Oxygen (DO):** The effluent limitation is based on the water quality criterion for Class SD waters as specified in Rule 1303.2 D.2.a of PRWQS, and the WQC.
8. **Whole Effluent Toxicity (WET):** The permit establishes a requirement for the Permittee to conduct accelerated testing and develop a Toxicity Reduction Evaluation (TRE) Workplan as Special Conditions. These requirements are necessary to ensure that the Permittee has a process for addressing effluent toxicity if toxicity is observed.

9. **Color:** The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2.D 2.e of PRWQS, and the WQC.
10. **Copper, Residual Chlorine, and Sulfide (undissociated H_2S):** The effluent limitations is based on water quality criteria established in PRWQS Rule 1303.1.1.1 of PRWQS and the WQC.
11. **Sulfates**: The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2.D 2.j of PRWQS, and the WQC.
12. **Surfactants**: The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2.D 2.i of PRWQS, and the WQC.
13. **Turbidity:** The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2 D.2.f of PRWQS, and the WQC.
14. **Taste or Odor Producing Substances**: The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2.D.2.h of PRWQS, and the WQC.
15. **Total Phosphorus:** The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2 D.2.n of PRWQS, and the WQC.
16. **Total Ammonia Nitrogen**: The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2 D.2.l of PRWQS, and the WQC.
17. **Total Nitrogen**: The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2 D.2.m of PRWQS, and the WQC.
18. **Total Dissolved Solids:** The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2 D.2.g of PRWQS, and the WQC.
19. **Oil and Grease:** The effluent limitation is based on the water quality standards as specified in Rule 1303.1.H of PRWQS, and the WQC.
20. **Suspended, Colloidal or Settleable Solids**: The effluent limitation is based on the water quality standards as specified in Rule 1303.1.E of PRWQS, and the WQC.
21. **Solids and Other Matter:** The effluent limitation is based on the water quality standards as specified in Rule 1303.1.A of PRWQS, and the WQC.

B. Effluent Limitations Summary Table

1. Outfall Number 001

Parameter	Units	Effluent limitations					
		Averaging period	Highest Reported Value (1)	Existing limits	Interim limits	Final limits	Basis
2,4,6-Trichlorophenol	µg/L	Daily Maximum	1	Monitor	n/a	--	
2,4-Dichlorophenol	µg/L	Daily Maximum	1	Monitor	n/a	--	
2,4-Dimetylphenol	µg/L	Daily Maximum	1	Monitor	n/a	--	
2,4- Dinitrophenol	µg/L	Daily Maximum	10	Monitor	n/a	--	
2-Chloorphenol	µg/L	Daily Maximum	0	Monitor	n/a	--	
2-Methyl-4,6-Diitrophenol	µg/L	Daily Maximum	10	Monitor	n/a	--	
BOD_5	mg/L	Average monthly Average weekly	8.0 13.0	30.0 45.0	n/a	30.0 45.0	TBEL
BOD_5 percent removal	%	Daily minimum	64	85	n/a	85	TBEL
Color	Pt-Co	Daily Maximum	30	15	n/a	15	WQBEL
Copper	µg/L	Daily Maximum	31	9.5	n/a	13.95	WQBEL

Parameter	Units	Effluent limitations					
		Averaging period	Highest Reported Value (1)	Existing limits	Interim limits	Final limits	Basis
Dissolved Oxygen	mg/L	Daily Minimum	3.2	≥ 5	n/a	≥ 5	WQBEL
Enterococci	col/100 mL	Average monthly	--	--	n/a	35 col / 100 mL	WQBEL
	90th Percentile of the samples	Average monthly	--	--	n/a	130	WQBEL
Fecal Coliform	Col/100 ml	Daily Maximum	1831	200	n/a	--	
	% Sample Exceedance	Daily maximum	100	20	n/a	--	
Flow	MGD	Daily maximum	2.1	1.7	n/a	1.7	WQBEL
Oil and Grease	mg/L	Daily maximum	3.2	Monitor	n/a	Monitor	WQBEL
Nitrite + Nitrate	µg/L	Daily maximum	1680	10,000	n/a	--	
Pentachlorophenol	µg/L	Daily maximum	10	Monitor	n/a	--	
pH	SU	Daily maximum	8.11	6.0-9.0	n/a	6.0-9.0	WQBEL
Residual Chlorine	µg/L	Daily maximum	0.5(mg/L)	0.5 (mg/L)	n/a	11	WQBEL
Sulfide (undissociated H_2S)	µg/L	Daily maximum	0	2	n/a	2	WQBEL
Sulfate	Mg/L	Daily maximum	--	--	n/a	Monitor	WQBEL
Surfactants	µ/L	Daily maximum	0	117	n/a	100	
Temperature	°C	Daily maximum	30	32.2	n/a	32.2	WQBEL
Total Ammonia	mg/L	Daily maximum	25.9	25.000	n/a	--	
Total Ammonia Nitrogen (NH_4^+, NH_3)	mg/L	Daily maximum	--	--	n/a	Monitor	WQBEL
Total Coliform	Col/100 mL	Daily Maximum	1831	10,000	n/a	--	
Total Dissolved Solids	mg/L	Daily maximum	340	500	n/a	500	WQBEL
Total Nitrogen (NO_2, NO_3, TKN)	µg/L	Daily maximum	--	--	n/a	1,700	WQBEL
Total Phosphorus	mg/L	Daily maximum	7.55	1.06	n/a	0.160	WQBEL
TSS	mg/L	Average monthly Average weekly	191.0 191.0	30.0 45.0	n/a	30.0 45.0	TBEL
TSS percent removal	%	Daily minimum	62	85	n/a	85	TBEL
Turbidity	NTU	Daily maximum	14	50	n/a	50	WQBEL

Notes, Footnotes and Abbreviations

Note: Dashes (--) indicate there are no effluent data, no limitations, or no monitoring requirements for this parameter.
(1) Wastewater data from DMRs dated May 31, 2016 to May 31, 2018.

2. Outfall 001 Narrative Limitations

a. The waters of Puerto Rico shall be substantially free from floating non petroleum oils and greases as well as petroleum derived oils and greases.
b. The waters of Puerto Rico shall 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.
c. Solids from wastewater sources shall not cause deposition in or be deleterious to the existing or designated uses of the waters.
d. Taste and odor-producing substances shall 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

NPDES regulations at 40 CFR 122.48 require that all permits specify requirements for recording and reporting monitoring results. The Part III of the Permit establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements for this facility.

1. **Influent Monitoring Requirements**

   To calculate percent removal values, influent monitoring is required for BOD_5 and TSS in accordance with 40 CFR 133.102. Influent monitoring must be conducted before any treatment, other than de-gritting, and before any addition of any internal waste stream.

2. **Effluent Monitoring Requirements**

   Effluent monitoring frequency and sample type have been established in accordance with the requirements of 40 CFR 122.44(i) and recommendations in EPA's TSD. Consistent with 40 CFR Part 136 monitoring data for toxic metals must be expressed as total recoverable metal. Effluent monitoring and analyses shall 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).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.

   The sampling point for Outfall 001 shall be located immediately after the primary flow measuring device of the effluent of the treatment system.

D. Compliance with Federal Anti-Backsliding Requirements and Puerto Rico's Anti-Degradation Policy

Federal regulations at 40 CFR 131.12 require that state water quality standards include an anti-degradation policy consistent with the federal policy. The discharge is consistent with the anti-degradation provision of 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. In addition, CWA sections 402(o)(2) and 303(d)(4) and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. Further, the Region 2 Antibacksliding Policy provides guidance regarding relaxation of effluent limitations based on water quality for Puerto Rico NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit with some exceptions where limitations may be relaxed.

- The effluent limitations in the permit are at least as stringent as the effluent limitations in the existing permit, with the exception of effluent limitation for **Copper.** The effluent limitation for this pollutant is less stringent that those in the existing permit. This relaxation of effluent limitation is consistent with the anti-backsliding requirements of CWA section 401(o), 40 CFR 122.44(l), EPA Region 2's Anti-backsliding Policy dated August 10, 1993, and Puerto Rico's Anti-Degradation Policy Implementation Procedure established in PRWQS. CWA Sec. 402(o)(2)(B)(i) allows backsliding if information is available which was not available at the time of permit issuance and would have justified a less

stringent effluent limitation at the time of permit issuance. EPA has determined that it is appropriate to relax the effluent limitation for these parameters without violating anti-backsliding provisions of the CWA, in accordance with section 402(o)(2), since one of the exceptions to the provisions has been satisfied; and section 402(o)(3) since it complies with EQB's WQS which include antidegradation requirements. The EQB WQC constitutes a determination that the limit is sufficient to assure that the water quality standards are or will be attained.

- Existing effluent limitations for 2,4,-6 Trichlorophenol, 2,4- Dichlorophenol, 2,4- Dimethylphenol, 2,4-Dinitrophenol, 2-Chlorophenol, 2-Methyl-4,6-Dinitrophenol, Cadmium, Fecal Coliforms, Fecal Coliform % Samples Exceeding Limit, Nitrate + Nitrite (as N), Pentachlorophenol, Phenol, Total Ammonia, and Total Coliform have been removed based on CWA section 402(o)(2)(B)(i). CWA section 402(o)(2)(B)(i) authorizes the backsliding of effluent limitations if information is available which was not available at the time of permit issuance that would have justified the application of a less stringent effluent limitation at the time of permit issuance. Based on review of effluent data since issuance of the existing permit, the modified discharge does not show a reasonable potential for the exceedance of water quality criteria for these parameters.

PART III. RATIONALE FOR STANDARD AND SPECIAL CONDITIONS

A. Standard Conditions

In accordance with 40 CFR 122.41, standard conditions that apply to all NPDES permits have been incorporated by reference in Part IV.A.1 of the permit and expressly in Attachment B of the permit. The Permittee must comply with all standard conditions and with those additional conditions that are applicable to specified categories of permits under 40 CFR 122.42 and specified in Part IV.A.2 of the Permit.

B. Special Conditions

In accordance with 40 CFR 122.42 and other regulations cited below, special conditions have been incorporated into the permit. This section addresses the justification for special studies, additional monitoring requirements, Best Management Practices, Compliance Schedules, and/or special provisions for POTWs as needed. The special conditions for this facility are as follows:

1. **Special Conditions from the Water Quality Certificate**

   In accordance with 40 CFR 124.55, EPA has established Special Conditions from the WQC in the permit that EQB determined were necessary to meet PRWQS. The Special Conditions established in this section are only those conditions from the IWQC that have not been established in other parts of the permit.

2. **Whole Effluent Toxicity Testing**
   EPA has imposed the quarterly testing requirement to collect data necessary to determine whether this discharge has the reasonable potential to cause or contribute to an exceedance of Puerto Rico's water quality standards for toxicity, pursuant to water quality based permitting requirements at 40 CFR 122.44(d)(1), which requires EPA and 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 federal 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.

3. **Best Management Practices (BMP) Plan**

   In accordance with 40 CFR 122.2 and 122.44(k), BMPs are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution to waters of the United States. The Permittee is required to develop a BMP Plan in Part IV.B.3.a of the permit to control or abate the discharge of pollutants.

4. **Compliance Schedules**

   A compliance schedule has not been authorized for any pollutant or parameter in the permit on the basis of 40 CFR 122.47.

PART IV. COMPLIANCE WITH APPLICABLE PROVISIONS OF OTHER FEDERAL LAWS OR EXECUTIVE ORDERS

A. Coastal Zone Management Act

Under 40 CFR 122.49(d), and in accordance with the Coastal Zone Management Act of 1972, as amended, 16 *United States Code* (U.S.C.) 1451 *et seq.* section 307(c) of the act and its implementing regulations (15 CFR Part 930), EPA may not issue an NPDES permit that affects land or water use in the coastal zone until the Permittee certifies that the proposed activity complies with the Coastal Zone Management Program in Puerto Rico, and that the discharge is certified by the Commonwealth of Puerto Rico to be consistent with the Commonwealth's Coastal Zone Management Program. The Permittee has indicated the outfall is not in a coastal area managed by the Commonwealth's Coastal Zone Management Program and, although nearby, EPA has determined it will not affect the coastal area. Therefore, the requirements of 40 CFR 122.49(d) do not apply to this discharge.

B. Endangered Species Act

Under 40 CFR 122.49(c), EPA is required pursuant to section 7 of the Endangered Species Act (ESA), 16 U.S.C. 1531 *et seq.* and its implementing regulations (50 CFR Part 402) to ensure, in consultation with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) that the discharge authorized by the permit is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat. On April 16, 2009, EPA designated PRASA (a non-Federal representative) to conduct informal consultations or prepare a biological assessment for Section 7 Consultations, according to 50 CFR 402.8. In the past, no federally listed endangered or threatened species, or critical habitat, are in the vicinity of the discharge. Therefore, it has been determined that the discharge is not likely to affect species or habitat listed under the ESA.

C. Environmental Justice - Not Applicable

D. Coral Reef Protection - Not Applicable

E. Climate Change

EPA has considered climate change when developing the conditions of the permit. This is in accordance with the draft *National Water Program 2012 Strategy: Response to Climate Change* that identifies ways to address climate change impacts by NPDES permitting authorities (77 Federal Register 63, April 2, 2012, 19661-19662). Climate change is expected to affect surface waters in several ways, affecting both human health and ecological endpoints. As outlined in the draft National Water Program 2012 Strategy, EPA is committed to protecting surface water, drinking water, and ground water quality, and diminishing the risks of climate change to human health and the environment, through a variety of adaptation and mitigation strategies. These strategies include encouraging communities and NPDES permitting authorities to incorporate climate change strategies into their water quality planning, encouraging green infrastructure and recommending that water quality authorities consider climate change impacts when developing water load and load allocations for new TMDLs, identifying and protecting designated uses at risk from climate change impacts. The 2010 *NPDES Permit Writers' Manual* also identifies climate change considerations for establishing low-flow conditions that account for possible climatic changes to stream flow. The conditions established in the permit are consistent with the draft National Water Program 2012 Strategy.

F. National Historic Preservation Act

Under 40 CFR 122.49(b), EPA is required to assess the impact of the discharge authorized by the permit on any properties listed or eligible for listing in the National Register of Historic Places (NRHP) and mitigate any adverse effects when necessary in accordance with the National Historic Preservation Act, 16 U.S.C. 470 et seq. EPA's analysis indicates that no soil disturbing or construction-related activities are being authorized by approval of this permit; accordingly, adverse effects to resources on or eligible for inclusion in the NHRP are not anticipated as part of this permitted action.

G. Magnuson-Stevens Fishery Conservation and Management Act

Under 40 CFR 122.49, EPA is required to ensure that the discharge authorized by the permit will not adversely affect Essential Fish Habitat (EFH) as specified in section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), 16 U.S.C. 1801 *et seq*. The Morovis River does not contain EFH.

PART V. PUBLIC PARTICIPATION

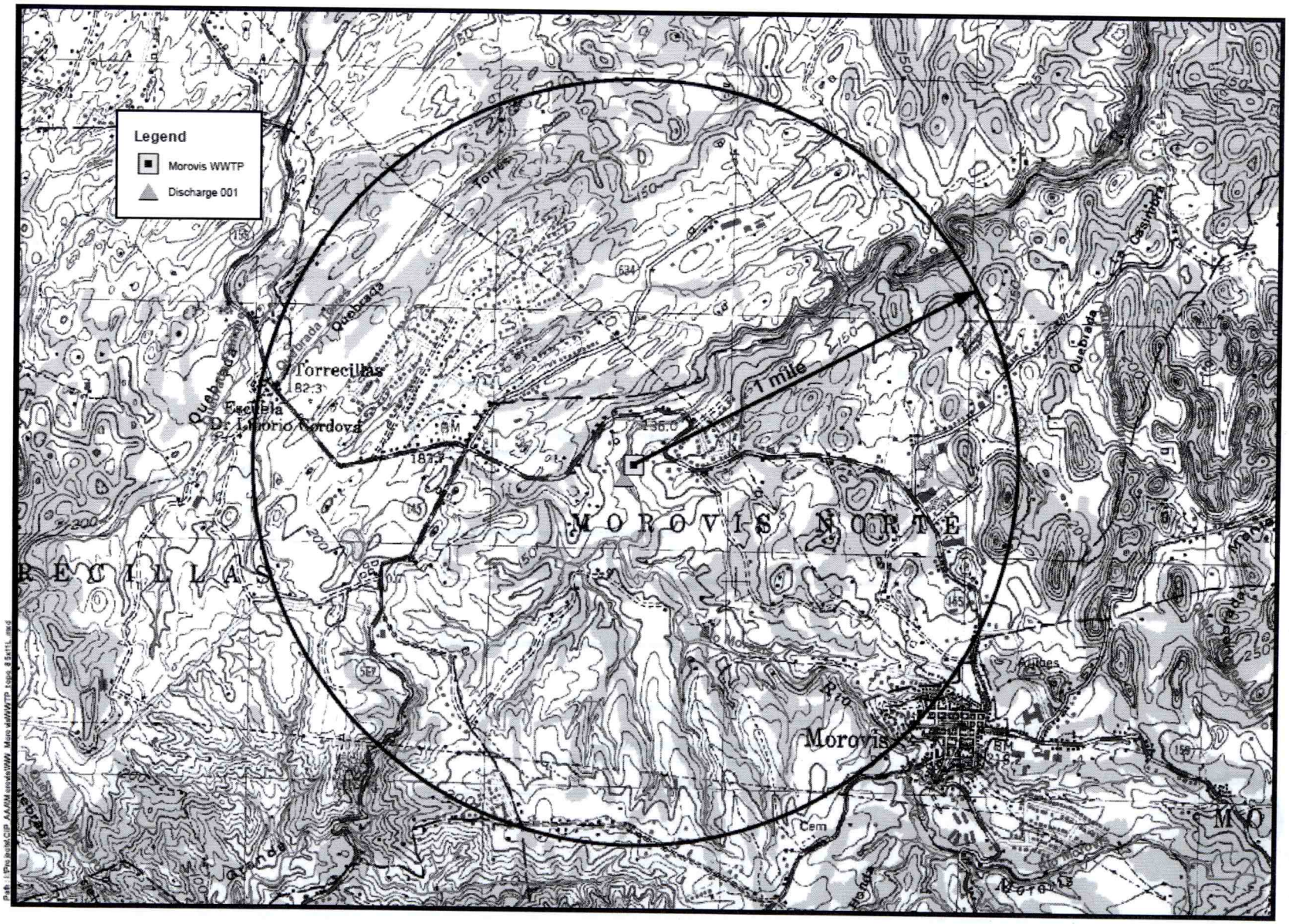
The procedures for reaching a final decision on the draft permit are set forth in 40 CFR Part 124 and are described in the public notice for the draft permit, which is published in **El Vocero**. Included in the public notice are requirements for the submission of comments by a specified date, procedures for requesting a hearing and the nature of the hearing, and other procedures for participation in the final agency decision. EPA will consider and respond in writing to all significant comments received during the public comment period in reaching a final decision on the draft permit. Requests for information or questions regarding the draft permit should be directed to

Yasmin Laguer
EPA Region 2, Caribbean Environmental Protection Division
Permit Writer Phone: 787-977-5848
Permit Writer Email: laguer.yasmin@epa.gov

A copy of the draft permit is also available on EPA's website at https://www.epa.gov/npdes-permits/puerto-rico-npdes-permits .

ATTACHMENT A — FLOW SCHEMATIC AND FACILITY MAP

The facility map and flow schematic are attached as provided by the discharger in the application.



FLOW DIAGRAM
MOROVIS WWTP
NPDES PR0020711