



## United States Environmental Protection Agency

### Region 2

Water Division

290 Broadway

New York, New York 10007

## FACT SHEET

### **DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM Bacardi Rum Distillery PERMIT No. PR0000591**

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 and 124, and the final Water Quality Certificate (WQC) issued by the Puerto Rico Department of Natural and Environmental Resources (DNER) 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 March 5, 2021, DNER provided in the final WQC 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 **final** WQC into the draft 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. ADMINISTRATIVE HISTORY**

<b>March 5, 2021</b>	Puerto Rico Department of Natural and Environmental Resources issued final Water Quality Certificate
<b>September 30, 2020</b>	PR DNER issued an Interim Water Quality Certificate, requested by EPA on December 16, 2016.
<b>September 18, 2020</b>	Permittee updated application to address new regulations for total nitrogen.
<b>June 18, 2019</b>	Permittee updated application to include more recent effluent data.
<b>December 13, 2016</b>	Application was deemed complete.
<b>July 29, 2016</b>	Permittee submitted Application for a Water Quality Certificate and Definition of Mixing Zone to PR DNER and EPA Region 2
<b>May 31, 2016</b>	Permittee submitted Application Form 1 and Form 2C
<b>May 18, 2012</b>	Permit was modified to include revised whole effluent toxicity monitoring requirements.
<b>September 27, 2011</b>	Current NPDES permit became was signed with an effective date of <b>December 1, 2011</b> with a five-year term. The current permit has an expiration date of <b>November 30, 2016</b> , and is administratively extended due to a timely submittal of the permit renewal application. This permit, along with subsequent modifications, if any as listed below, has formed the basis of this permit renewal.

## **PART II. BACKGROUND**

### **A. Permittee and Facility Description**

The Bacardi Corporation (referred to throughout as the Permittee) has applied for renewal of its National Pollutant Discharge Elimination System (NPDES) permit. The Permittee is discharging pursuant to NPDES Permit No. PR0000591. The Permittee submitted Application Forms 1 and 2C dated May 31, 2016, and applied for an NPDES permit to discharge treated wastewater from the Bacardi Rum Distillery in Cataño, Puerto Rico, 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 a rum distillation and bottling facility. Attachment A of this Fact Sheet provides a map of the area around the facility and a flow schematic of the facility.

The permittee is engaged in the production of ethyl alcohol in the form of rum (SIC No. 2085). This rum is produced by the fermentation and distillation of molasses. The facility currently operates at a maximum production rate of approximately 115,000 proof gallons per day, with an average production rate of approximately 83,600 proof gallons per day. Within the last three years the permittee has modified the production process to extract more product from the raw molasses. The operation of the plant includes periods of shutdown and start up, at intervals during the year of a few months apart.

The Bacardi Corporation Distillery is located on the coast of San Juan Bay. Waste product generated through the distillation of rum is treated by anaerobic digesters, designed to accommodate an average daily flow of 2 MGD and a maximum daily flow of 4 MGD. The permitted flow through the Bacardi outfall system is a daily maximum of 2 MGD. Bacardi has revised its operations since the issuance of the existing 2007 NPDES permit. Volume of production has decreased from previous levels, and the distillery has operated at approximately 143 days per year as opposed to year-round operation. During shutdown periods, the treatment system is kept operational with minimal feed to maintain the biomass of the anaerobic treatment system. The flow during this period is significantly reduced to less than 10% of normal flow. This results in high bacterial concentration due to increased solids retention time in the anaerobic treatment units. The permittee has made several facility modifications since the last permit issuance. The facility reuses approximately 30,000 gallons per day of water, has installed a biogas collection system, and a sulfur removal system. Additionally, the permittee has made several improvements to separate wastestreams and eliminate sources of bacterial contamination.

The flow of Bacardi discharge 001 is tied into a combined outfall which also discharges treated effluent from the Bayamón Regional Wastewater Treatment Plant (RWWTP) and the Puerto Nuevo RWWTP. The combined effluent is then discharged approximately 7,365 ft (2,246 m) from the shoreline into the Atlantic Ocean, at a location approximately 3,600 ft (1,097 m) north of Isla de Cabras, at a depth of 141 ft (43 m). The discharge is through a high-rate, Y-shaped diffuser consisting of two (2) legs that are each 1,010 ft (308 m) in length and a constant 84-inch diameter. The west leg of the diffuser has 100 bell-mouthed ports and the east leg of the diffuser has 102 bell-mouthed ports, each at 15 degrees from the horizontal. There are a total of 202 ports. On the west diffuser leg, there are 80 inshore ports that have a diameter of 6 in (15.2 cm), 19 offshore ports that have a diameter of 7 in (17.8 cm), and 1 10-inch (25.4 cm) port. On the east diffuser leg, there are 81 inshore ports that have a diameter of 6 in (15.2 cm), 20 offshore ports that have a diameter of 7 in (17.8 cm), and 1 10-inch port. The ports discharge on alternating sides of the diffuser and are evenly spaced at 10 ft (3.05 m) intervals. The diffuser is currently operated with all 202 ports open. While the facility was permitted to discharge 2 MGD in the last permit cycle, the permittee requested that DNER and EPA reduce the permitted flow to 1.7 MGD, to better reflect actual operations at the facility and allow revisions to the shutdown periods necessary for plant operations.

The outfall system is owned and operated by the Puerto Rico Aqueduct and Sewer Authority (PRASA) to dispose of treated effluents from the Bayamón and Puerto Nuevo RWWTPs. The Bayamón RWWTP (PR0023728) and Puerto Nuevo RWWTP (PR0021555) are municipal sewage treatment plants operated by the PRASA and their discharges are regulated by separate NPDES permits. The Atlantic Ocean is classified as SB water in the Puerto Rico Water Quality Standards Regulation (PRWQSR), by the Department of Natural and Environmental Resources (DNER) of the Commonwealth of Puerto Rico. A detailed description of the type and quantity of pollutants which are to be discharged is listed in the draft Permit.

The PRASA Bayamón and Puerto Nuevo RWWTPs have been granted a modification from secondary treatment requirements under Section 301(h) of the Clean Water Act. A renewal of this modification is included as part of the current renewal of the NPDES permits for those facilities. The EPA Tentative Decision Document for the modification of permits under Section 301(h) of the Clean Water Act is included as part of the administrative record for the draft permits for the PRASA Puerto Nuevo and Bayamón RWWTPs.

### Summary of Permittee and Facility Information

<b>Permittee</b>	Bacardi Corporation
<b>Facility contact, title, phone</b>	Magaly Feliciano Lozada, Global Sustainability Director, Bacardi Limited <a href="mailto:mfeliciano@bacardi.com">mfeliciano@bacardi.com</a> ; 787-275-5639
<b>Permittee (mailing) address</b>	Bacardi Corporation P.O. Box 363549 San Juan, Puerto Rico 00936
<b>Facility (location) address</b>	State Road No. 165, Km 2.6 Industrial Area Cataño, Puerto Rico 00632
<b>Type of facility</b>	Production of ethyl alcohol in the form of distilled rum (SIC No. 2085)
<b>Pretreatment program</b>	N
<b>Facility monthly average flow</b>	1.7 MGD
<b>Facility design flow</b>	2.0 MGD
<b>Facility classification</b>	Major

### B. Discharge Points and Receiving Water Information

Wastewater is discharged from Outfall 001 to a combined outfall pipe that includes wastewater from the PRASA Puerto Nuevo and Bayamón Regional Wastewater Treatment Plants. The combined effluent is discharged through a high-rate, Y-shaped diffuser consisting of two legs that include a total of 202 discharge ports.

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	Treated wastewater from anaerobic digesters and other sources on site, prior to combining with PRASA effluent	18°, 27', 5.46" N	66°, 09', 20.82" W	Atlantic Ocean, Class SB

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

1. Primary and secondary contact recreation; and
2. 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 not** been determined to have water quality impairments for one or more of the designated uses as determined by section 303(d) of the CWA.

### C. Mixing Zone/Dilution Allowance

The WQC has authorized a mixing zone or dilution allowance for this discharge in accordance with Rule 1305 of PRWQS. The mixing zone or dilution allowance is defined as a Critical Initial Dilution (CID) factor of one hundred and two (150:1). This ratio was calculated and confirmed using the modelling and data presented in the permittee's submittal of a mixing zone application on July 29, 2016 and information provided in the May 31, 2016 NPDES permit renewal application.

### D. Compliance Orders/Consent Decrees

The Permittee does not currently have any compliance order or consent decrees that affect this permit action.

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

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

1. Clean Water Act section 401 Certification
2. NPDES Regulations (40 CFR Part 122)
3. PRWQS (April 2019)
4. Technology based requirements based on best professional judgement.

## PART III. 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 PRWQSR. 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. Monitoring conditions are applied pursuant to 40 CFR 122.21(j)(4)(ii) and the WQC. The flow limitation was reduced from 2.0 MGD to 1.7 MGD to more accurately reflect operations at the plant and account for loading rates for production periods that include shutdowns.
2. The effluent limitations for **Cadmium, Color, Copper, Free Cyanide, Dissolved Oxygen, Enterococci, Lead, Mercury, Nickel, pH, Silver, Sulfide (undissociated H<sub>2</sub>S), Surfactants, Temperature, Thallium, Total Nitrogen, Turbidity, and Zinc** are included based on the mixing zone established by the PR DNER in the final WQC. These limits were calculated based on the 150:1 dilution provided by the diffuser for the combined discharge, and take into account the pollutants present and regulated in the PRASA Puerto Nuevo and Bayamón RWWTP individual discharges.
3. The effluent limitation for **5-Day Biochemical Oxygen Demand (BOD<sub>5</sub>)** is based on the mixing zone for dissolved oxygen to ensure compliance with the PRWQS of minimum level of 5.0 mg/L dissolved oxygen at the edge of the mixing zone established in the final WQC.
4. **pH:** The effluent limitation for pH is based on the water quality criterion for Class SB waters as specified in Rule 1303.2 of PRWQS, and the WQC.
5. **Discharge Outfall 002:**

The limitations for mass loading of BOD<sub>5</sub> and TSS from the previous permit have been retained. For BOD Percent Removal, EPA calculated the percentage remaining from the percentage removed (100 - % removal), and performed an EEQ analysis on those results. This resulted in a 95th Percentile EEQ value for Monthly Average Percent Removal BOD of 71.7%.

EPA has also retained the Quarterly Average Percent Removal requirement, based on weekly sampling results. The averaging over a quarter of weekly results will reduce the impact of the retention time lag in comparing influent to effluent results. EPA has retained the minimum quarterly average limit of 70%. Falling below this minimum value will trigger a requirement to demonstrate to EPA that the lower percentage removal observed was due solely to lower loading amounts flowing into the anaerobic treatment system.

**B. Effluent Limitations Summary Table**

**1. Outfall Number 001 Numeric Limitations**

Parameter	Units	Effluent limitations					
		Averaging period	Highest Reported Value <sup>▲</sup>	Existing limits		Final limits	Basis
Arsenic	µg/L	Daily Maximum				Monitor Only	WQBEL
BOD <sub>5</sub>	mg/L	Daily Maximum Monthly Average	9720	17,700		17,700	WQBEL
Cadmium	µg/L	Daily Maximum	8.4	30.9		14.6	WQBEL
Color	Pt-Co Units	Daily Maximum	240,000	84,000		140,000	WQBEL
Copper	µg/L	Daily Maximum	1840	3,293		3,756	WQBEL
Hexavalent Chromium	µg/L	Daily Maximum				Monitor Only	WQBEL
Cyanide, Free	µg/L	Daily Maximum	10	47		21.1	WQBEL
Dissolved Oxygen	mg/L	Daily Minimum	0.01 <sup>♪</sup>	Monitor Only		Monitor Only	WQBEL
Enterococci	Colonies/ 100 mL	Geometric Mean	1,600,000 maximum value reported	30,667; 382,602 following start-up	The enterococci density, in terms of geometric mean shall not exceed 564,911 colonies/mL in any 90-day interval; the 90 <sup>th</sup> Percentile of the samples taken shall not exceed 2,066,327 colonies/100 mL in the same 90-day interval.		WQBEL
Fecal Coliforms <sup>‡</sup>	Colonies/ 100 mL	Geometric Mean	11,526,788 maximum value reported	244,420		No Limit	WQBEL
Flow	m <sup>3</sup> /day (MGD)	Daily Maximum	1.25	2.0		6,435.2 (1.7)	WQBEL
Lead	µg/L	Daily Maximum	60	60.8		52.30	WQBEL
Mercury	µg/L	Daily Maximum	0.5	0.68		0.200	WQBEL
Nickel	µg/L	Daily Maximum	312	412		455.8	WQBEL
Oil and Grease	mg/L	Daily Maximum	17.6	The waters of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oil and greases.			WQBEL
Pentachlorophenol <sup>#</sup>	µg/L	Daily Maximum		No limit		0.4	WQBEL
pH	SU	Daily Maximum		Shall lie between 6.0 and 9.0			WQBEL
Radioactive Materials <sup>#</sup>	Picocuries	Daily Maximum		Monitoring Requirement		----	WQBEL
Selenium	µg/L	Daily Maximum		No limit		Monitor Only	WQBEL
Silver	µg/L	Daily Maximum	10	30.4		8.0	WQBEL

Parameter	Units	Effluent limitations					
		Averaging period	Highest Reported Value ♣	Existing limits		Final limits	Basis
Solids and Other Matter		Daily Maximum		The water of Puerto Rico shall not contain floating debris, scum or other floating materials attributable to the discharge in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the water body.			WQBEL
Sulfide (Undissociated H <sub>2</sub> S)	µg/L	Daily Maximum	28700	89,007		49,680.7	WQBEL
Surfactants (as MBAS)	µg/L	Daily Maximum	1230	1,494		1,362	WQBEL
Suspended, Colloidal or Settleable Solids	mL/L	Daily Maximum		Solids from wastewater sources shall not cause deposition in or be deleterious to the existing or designated uses of the water body.			WQBEL
Taste and Odor-producing Substances		Daily Maximum		Shall not be present in amounts that will render any undesirable taste or odor to edible aquatic life.			WQBEL
Temperature	° F (° C)	Daily Maximum	42	107.6 (42)		107.6 (42)	WQBEL
Thallium	µg/L	Daily Maximum	35.8	45.8		20.00	WQBEL
Dissolved Inorganic Nitrogen	µg/L	Daily Maximum	725	874.700		Limit replaced with Total Nitrogen	WQBEL
Total Nitrogen	µg/L	Daily Maximum				3,161,260	WQBEL
Total Suspended Solids	mg/L	Daily Maximum	11	No Limit		Monitor Only	WQBEL
		Monthly Average				Monitor Only	
Turbidity	NTU	Daily Maximum	9,300	9,244		12,902	WQBEL
Zinc	µg/L	Daily Maximum	1230	3,213.00		2,907.85	WQBEL

**Notes, Footnotes and Abbreviations**

Notes

- ♣ - Wastewater data from DMRs dated January 28, 2016 to March 19, 2021 and May 31, 2016 application.
- ♪ - Lowest reported value.
- Dashes (--) indicate there are no effluent data, no limitations, or no monitoring requirements for this parameter.
- ‡ - Fecal Coliform are no longer regulated by the PR DNER as part of PRWQSR for Class SB Waters. Bacterial monitoring in this permit and going forward will measure and regulate Enterococci in accordance with current water quality standards.
- # - Monitoring requirements for Pentachlorophenol and Radioactive Substances were not included in the current permit. They were not required by the March 5, 2021 Final WQC, as past monitoring has demonstrated they do not contribute to an exceedance of Puerto Rico Water Quality Standards.

**2. Outfall Number 001 Narrative Limitations**

- a. Solids and Other Matter.** 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, as specified in Rule 1303.1 of the PRWQS and the WQC.
- b. Color, Odor, Taste and Turbidity.** The waters of Puerto Rico shall be free from color, odor, taste and turbidity attributable to discharges in such a degree as to create a nuisance to the enjoyment of the existing or designated uses of the water body, as specified in Rule 1303.1 of the PRWQS and the WQC.

- c. **Substances in Toxic Concentrations and Synergistic Toxic Effects.** The waters of Puerto Rico shall not contain any substance, attributable to the discharge at such concentration which, either alone or as a result of synergistic effects with other substances, is toxic or produces undesirable physiological responses in humans, fish, or other fauna or flora, as specified in Rule 1303.1 of the PRWQS and the WQC.
- d. **Oil and Grease.** The waters of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oils and greases, as specified in Rule 1303.1 of the PRWQS and the WQC.
- e. **Suspended, Colloidal or Settleable Solids.** Solids from wastewater sources shall not cause deposition in or be deleterious to the existing or designated uses of the waters, as specified in Rule 1303.1 of the PRWQS and the WQC.

### 3. **Mixing Zone and Background Station Permit Conditions**

Tables A-2, A-3, A-4, and A-5 are included based on the March 5, 2021 Final Water Quality Certificate issued by the PR DNER. These tables include the requirements for the Mixing Zone and Background Station monitoring.

### 4. **Technology-Based Effluent Limitations for Outfall 002**

Technology based effluent limitations for Internal Outfall 002, which is located after the treatment system, are included as Table A-6. These limitations have been retained from the previous permit, and are based on existing effluent quality mass loading of Total Suspended Solids and BOD<sub>5</sub>, as well as the Quarterly Rolling Average of percent removal of BOD<sub>5</sub> through the treatment system.

## 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**

Influent monitoring is included for Internal Outfall 002, in order to calculate the percent removal of BOD<sub>5</sub> as a measure of treatment efficacy.

### 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 for Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act, as amended. For situation 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.

## 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 DNER'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 limitations for color, turbidity, nickel, and enterococci. The effluent limitations for these pollutants are less stringent than those in the existing permit. This relaxation of effluent limitations is consistent with the anti-backsliding requirements of CWA section 401(o), 40 CFR 122.44(l), the EPA Region 2 Anti-backsliding Policy dated August 10, 1993, and the Puerto Rico Anti-Degradation Policy Implementation Procedure established in PRWQS. The PR DNER analysis of the existing effluent data included revised estimates based on the more stringent flow limit for the renewal permit, which will further limit mass loading from all pollutants. Additionally, there have been updates to the water quality standards that removed some pollutants such as fecal coliforms. Finally, PR DNER did grant a mixing zone for enterococci based on information provided by the applicant and their analysis that compliance with water quality standards would be achieved at the edge of the mixing zone. This new information is sufficient to relax these requirements based on the R2 Anti-backsliding Policy.

## **PART IV. 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 DNER determined were necessary to meet PRWQS. The Special Conditions established in this section are only those conditions from the WQC that have not been established in other parts of the permit.

- a. The flow of discharge 001 shall not exceed the limitation of 6,435.2 m<sup>3</sup>/day (1.7 MGD) as daily maximum. No increase in flow shall be authorized without a recertification from the Department of Natural and Environmental Resources (DNER).
- b. No changes in the design or capacity of the treatment system will be permitted without the previous authorization of DNER.
- c. Prior to the construction of any additional treatment system or the modification of the existing one, the permittee shall obtain the approval from DNER 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 as 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. All sample collection, preservation, and analysis shall be carried out in accordance with the Title 40 of the Code of Federal Regulations (40 CFR), Part 136. A licensed chemist authorized to practice the profession in Puerto Rico shall certify all chemical analyses. All bacteriological tests shall be certified by a microbiologist or licensed medical technologist authorized to practice the profession in Puerto Rico.
- i. The permittee shall use the analytical method approved by the EPA, 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<sup>2</sup> F, Calculation of Un-ionized Hydrogen Sulfide, of Standards Methods 18<sup>th</sup> Edition, 1992, to determine the concentration of undissociated H<sub>2</sub>S. 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<sub>2</sub>S shall be reported as "below detection limit".
- j. The samples taken for the analysis of free cyanide and mercury shall be analyzed using the analytic method approved by the EPA with the lowest possible detection level, in accordance with Rule 1306.8 of the Puerto Rico Water Quality Standards Regulation (PRWQSR), as amended.
- 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 wastewater treatment facility, whether publicly or privately owned, must be operated by a person licensed by the Examination Board of Water and Wastewater Treatment Plant Operators of Puerto Rico.
- o. The solid wastes such as sludge, screenings and grit, generated due to the operation of the Bacardi Corporation 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 Land Pollution Control Area of the DNER and the Municipal Water Programs Branch of EPA's Region 2 Caribbean Environmental Protection 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 the DNER's Water Quality Area in writing within a term no longer than twenty-four (24) hours after the spill to the following electronic address: [bypass@jca.pr.gov](mailto:bypass@jca.pr.gov).

This notification shall include the following information:

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

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

- p. A logbook must be kept for the material removed from the Bacardi Corporation Treatment System, 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 the DNER must be attached to the logbook.

- 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 water 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.
- s. The DNER has defined and authorized a Mixing Zone (MZ) pursuant to Rule 1305 of the PRWQSR.
- 1) The MZ is delineated by the following points (See Diagram I):

**Geographic Coordinates\***

Point 1	Lat. 18° 29' 04.50" Long. 66° 08' 21.12"
Point 2	Lat. 18° 29' 10.92" Long. 66° 08' 31.26"
Point 3	Lat. 18° 29' 12.48" Long. 66° 08' 30.12"
Point 4	Lat. 18° 29' 06.36" Long. 66° 08' 20.52"
Point 5	Lat. 18° 29' 06.18" Long. 66° 08' 09.00"
Point 6	Lat. 18° 29' 04.32" Long. 66° 08' 09.00"

\* NAD 83 State Plane Coordinates

The diffuser configuration is a one hundred twenty (120) degree "Y" type consisting of two (2) legs: the western leg of one thousand twenty-eight (1,028) feet long and the eastern leg of one thousand twenty-four (1,024) feet long; and a constant diameter of eighty-four (84) inches. A total of one hundred two (102) ports along the east diffuser's leg shall be opened, distributed as follows: eighty-one (81) six (6)-inch ports, twenty (20) seven (7)-inch ports and one (1) ten (10)-inch port (on the end gate). In addition, a total of one hundred one (101) ports along the west diffuser's leg shall be opened, distributed as follows: eighty (80) six (6)-inch ports, nineteen (19) seven (7)-inch ports, one (1) ten (10)-inch port (on the end gate), and a leak simulated as a one (1)-inch port. The ports discharge in

alternate directions at a constant spacing of 12.89 feet, except for the leak which is 4.98 feet and the end gate port which is 13.22 feet.

- 2) The mixing zone sampling stations shall be located at the six (6) points described in Part "1" of this special condition.
- 3) The background sampling station shall be located one hundred (100) meters from Point 3 or Point 5 of the mixing zone, depending of the current direction at the time of sampling. The background stations shall be located at the following geographic coordinates:

**Geographic Coordinates**

BG1	Lat. 18° 29' 14.34"
	Long. 66° 08' 33.00"
BG2	Lat. 18° 29' 06.12"
	Long. 66° 08' 05.58"

\* NAD 83 State Plane Coordinates

- 4) The permittee shall maintain records of the equipment used to situate at the mixing zone boundaries. Such records shall include the date when the equipment was obtained or leased, calibration date, serial number, model, etc.

To identify the location of the sampling points of the mixing zone and the background, the permittee shall use the procedure established in the EPA-QA/QC for 301(h) Document (Table D-1 Example ZID Boundary Stations Locations).

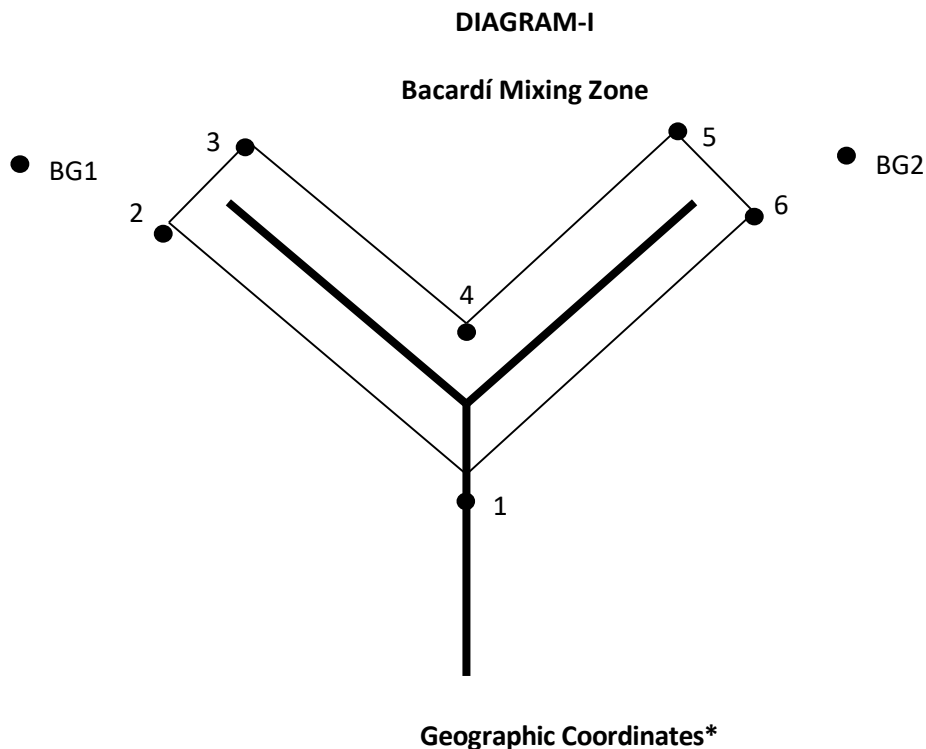
If the permittee determines to use another method to identify the sampling points of the mixing zone, the permittee shall, prior to the utilization of such method, obtain written approval from DNER.

- 5) The MZ is defined for the following parameters:

<u>Parameter</u>	<u>Daily Maximum Discharge Limitation at Outfall Serial Number 001</u>	<u>Daily Maximum Limitation at the Edge of the MZ</u>
Cadmium (Cd) (µg/L)	14.6	7.95
Color (Pt-Co)	140,000	Ω
Copper (Cu) (µg/L)	3,756	3.73
Cyanide, Free (CN)(µg/L)	21.1	1.0
Dissolved Oxygen (mg/L)	Monitoring Only	≥5.0
Enterococci (col/100 mL), Geometric Mean	564,911 <sup>+</sup>	*
Enterococci (col/100 mL), 90 <sup>th</sup> Percentile	2,066,237 <sup>+</sup>	**
Lead (Pb) (µg/L)	52.30	8.52
Mercury (Hg) (µg/L)	0.200	0.051
Nickel (Ni) (µg/L)	455.8	8.28
pH (SU)	6.0 – 9.0	7.3 – 8.5
Silver (Ag) (µg/L)	8.0	2.24
Sulfide (undissociated H <sub>2</sub> S) (µg/L)	49,680.7	2.0
Surfactants (as MBAS) (µg/L)	1,362	500
Temperature °F (°C)	107.6 (42)	86 (30.0) <sup>δ</sup>
Thallium (Tl) (µg/L)	20.00	0.47
Total Nitrogen (NO <sub>2</sub> +NO <sub>3</sub> +TKN) (µg/L)	3,161,260	5,000
Turbidity (NTU)	12,902	10
Zinc (Zn) (µg/L)	2,907.85	85.62

- Ω The color at the edge of the mixing zone shall not exceed the color of the receiving water body (background monitoring station).
- δ Except by natural phenomena, no heat which would cause the temperature of any site to exceed 86°F or 30.0°C, may be added to the waters of Puerto Rico.
- ‡ The enterococci density geometric mean and the 90<sup>th</sup> 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.
- \*
- The enterococci density in terms of geometric mean shall not exceed 35/100 mL in any 90-day interval.
- \*\*
- The 90<sup>th</sup> Percentile of the enterococci density shall not exceed 130/100 mL in any 90-day interval.
- 6) Monitoring samples for these parameters shall be taken at the sampling point for discharge 001, the background monitoring station and at the sampling stations of the MZ. The discharge shall comply with the water quality standards limitations for all the other substances at sampling point for discharge 001.
- 7) The monitoring samples at the six (6) stations in the boundaries of the MZ and the background monitoring station shall be taken at three (3) depths in each station: 10%, 50%, 90% of the depth.
- 8) Solids from wastewater sources shall not cause deposition in, or be deleterious to the existing or designated uses of the receiving water body.
- 9) The discharge shall not cause the growth or propagation of organisms that negatively disturb the ecological equilibrium in the areas adjacent to the mixing zone.
- 10) The mixing zone shall be free of debris, scum, floating oil and any other substances that produce objectionable odors.
- 11) The permittee shall maintain in good operating conditions the discharge system [discharge outfall (land and submarine), diffuser, ports, etc.]. The discharge system shall be inspected during the third year of the effectiveness of the NPDES permit. This inspection should be performed to determine if any repairs, replacements, etc. are necessary in the system. A report of such inspection shall be submitted to the DNER's Water Quality Area and the Multimedia Permits and Compliance Branch of the EPA's Region 2 Caribbean Environmental Protection Division no later than sixty (60) days after the performance of the inspection.
- 12) The DNER can require that the permittee conduct bioaccumulation studies, dye studies, water quality studies or any other pertinent studies. If the DNER require one or more of the aforementioned studies, the permittee will be notified to conduct such study(ies). One hundred and twenty (120) days after the notification of the DNER, the permittee shall submit, for evaluation and approval of the DNER, a protocol to conduct such study(ies). Sixty (60) days after the DNER approval, the permittee shall initiate such study(ies). Ninety (90) days after conducting such study(ies), the permittee shall submit a report that includes the results of such study(ies).
- 13) The permittee shall conduct a confirmatory sampling event at the MZ for the parameters included in Part "5" of this special condition except for Enterococci, to verify compliance with the applicable provisions of the PRWQSR. The confirmatory sampling event shall be conducted at the six (6) stations at the boundaries of the MZ, at the background sampling station and at the sampling point for discharge 001, during the third year of the effectiveness of the NPDES permit. For enterococci see item "15" of this special condition.

- 14) A Protocol and Quality Assurance Project Plan (QAPP) for the sampling event described in Part "13" of this special condition, shall be submitted to the Water Quality Area of the DNER, no later than eighteen (18) months after the EDP.
- 15) The permittee shall implement a monitoring program for Enterococci to verify compliance with the applicable provisions of the PRWQSR at the edge of the MZ. The monitoring program shall be conducted as follows:
  - a. Monitoring samples for this parameter shall be taken at the sampling point for discharge 001, the background monitoring station and at the sampling stations of the MZ.
  - b. The monitoring samples at the six (6) stations in the boundaries of the MZ and the background monitoring station shall be taken at three (3) depths in each station: 10%, 50%, 90% of the depth.
  - c. The permittee shall conduct three (3) sampling events within a 90-day period, in two occasions during the effectiveness of the NPDES Permit. The compliance evaluation shall be based on the geometric mean and the 90<sup>th</sup> percentile values of the three (3) values obtained during each sampling event for each depth at each monitoring station.
- 16) A QAPP for the monitoring program described in item 15) of this special condition shall be submitted no later than ninety (90) days after the EDP. The monitoring program for Enterococci shall commence after the written approval of the corresponding QAPP.
- 17) The authorization for the mixing zone will not be transferable and does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of Federal or State laws or regulations.



Point 1	Lat. 18° 29' 04.50" Long. 66° 08' 21.12"
Point 2	Lat. 18° 29' 10.92" Long. 66° 08' 31.26"
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BG1	Lat. 18° 29' 14.34" Long. 66° 08' 33.00"
BG2	Lat. 18° 29' 06.12" Long. 66° 08' 05.58"

\*NAD 83 State Plane Coordinates

## 2. Whole Effluent Toxicity

Rule 1303.1(J) of PRWQS provides that all waters of Puerto Rico shall not contain any substance at such concentration which, either alone or as result of synergistic effects with other substances is toxic or produces undesirable physiological responses in human, fish or other fauna or flora. This is generally referred to as a narrative water quality criterion "no toxics in toxic amounts". Since controls on individual pollutants may not always adequately protect water quality, toxicity testing is used to assess and control whole effluent toxicity (WET) which is necessary to reduce or eliminate the toxic impact of the effluent and meet narrative water quality criteria (54 FR 23868, June 2, 1989). NPDES regulations define WET as the whole or aggregate toxic effect of an effluent measured directly by a toxicity test.

Pursuant to the current modified permits, PRASA and the Bacardi Corporation are required to conduct acute and chronic WET testing on the combined effluent, and chronic WET testing on individual effluent samples from the Bayamón WWTP, Puerto Nuevo WWTP, and the Bacardi WWTP. PRASA and Bacardi have conducted acute WET monitoring for the combined effluent using the mysid shrimp (*Mysidopsis bahia*) and sheepshead minnow (*Cyprinodon variegatus*), and chronic WET monitoring events using these WET test species as well as purple sea urchin (*Arbacia punctulata*).

Since effluent toxicity is inversely related to the effect concentration (the lower the effect concentration, the higher the toxicity in the effluent), WET test data are sometimes expressed as toxic units (TUs) to better illustrate the magnitude of potential toxicity. Rule 1301.1 of PRWQS defines acute TU (TU<sub>a</sub>) and chronic TU (TU<sub>c</sub>) values as the Lethal Concentration (LC<sub>50</sub>) of the tested effluent at which 50 percent of the test organisms die, where TU<sub>a</sub> = 100 ÷ LC<sub>50</sub>; and the No Observed Effect Concentration (NOEC), where TU<sub>c</sub> = 100 ÷ NOEC, respectively.<sup>1</sup> To assess WET test data, PRWQS definitions at Rule 1301.1

<sup>1</sup> The NOEC is the highest tested effluent concentration (in percent effluent) that does not cause an adverse effect on the test organism (i.e., the highest effluent concentration at which the values for the observed responses are not statistically different from the control).

include a criterion maximum concentration (CMC) of 0.3 TU<sub>a</sub> and criterion continuous concentration (CCC) of 1.0 TU<sub>c</sub> be used to ensure aquatic life protection against toxicity in the receiving water, which is based on the EPA recommended national water quality criteria (EPA 1991). EPA considers these values to be the numeric interpretation of the narrative water quality standard referenced above.

EPA determined the maximum allowable level of effluent toxicity or wasteload allocation (WLA) at the edge of the mixing zone that would still ensure attainment of water quality criteria for toxicity. With consideration of dilution and CMC and CCC values, EPA calculated acute and chronic WLAs of 45.0 TU<sub>a</sub> and 150 TU<sub>c</sub>, respectively, and then compared the WLAs to effluent WET test data.

For the combined effluent, acute results were below the WLA of 45.0 TU<sub>a</sub>. Most chronic WET tests reported TU<sub>c</sub> values based on the NOEC that were below the chronic WLA of 150.0 TU<sub>c</sub>. In March 2019, chronic test results for growth of *Mysidopsis bahia* were observed at levels above the chronic WLA of 150.0 TU<sub>c</sub>, calculated using the inverse of the NOEC concentration. This level of chronic effects triggered accelerated monitoring, as required by the current permit. Subsequent chronic results were within permit limits and below the chronic WLA.

Based on review of WET data, in accordance with 40 CFR 122.44(d)(v), EPA has determined that the combined discharge will cause, has the reasonable potential to cause, or contributes to an excursion above the narrative criterion for chronic toxicity and has proposed effluent limitation for the combined discharge. With consideration of dilution, EPA has proposed a maximum daily effluent limitation of 122.53 TU<sub>c</sub>, expressed as any combined discharge chronic test result greater than or equal to 0.81% effluent in the draft modified permits for the Bayamón RWWTP, Puerto Nuevo RWWTP, and Bacardi WWTP. EPA believes that the combined discharge will meet this effluent limitation upon permit issuance.

EPA has required in the past that all three dischargers develop plans for a toxicity reduction evaluation (TRE). The three dischargers may coordinate and develop one plan to meet the permit requirement in each NPDES permit. Violation of the limitation for chronic toxicity using the combined discharge would trigger accelerated monitoring of the combined discharge. During the accelerated testing period an additional violation of the limitation on the combined discharge would require these three permittees to activate their TRE workplans, and implement their strategy to identify and abate the source of toxicity.

### **Calculation of Waste Load Allocation (WLA)**

The WLA is used to determine the level of effluent concentration that will comply with water quality standards in receiving waters. Using the information available for dilution, WLAs were calculated for WET using the complete mix equation, which simplifies to

$$WLA = C_r \times \text{Dilution Ratio}$$

where  $C_r$  = the water quality criterion concentration. In Puerto Rico, a criterion continuous concentration of 1.0 TU<sub>c</sub>, and a criterion maximum concentration (CMC) of 0.3 TU<sub>a</sub> is used as the numeric interpretation of the water quality standard for toxicity.

Using a critical initial dilution (CID) ratio of 102:1, the chronic WLA would be

$$WLA_c = C_r \times 102 = 1.0 \times 150 = 150.0 \text{ TU}_c$$

$$WLA_a = 0.3 \times 150 = 45.0 \text{ TU}_a$$

$$WLA_{a,c} = WLA_a \times ACR = 45.0 \times 10 = 450 \text{ TU}_{a,c}$$

### **Calculate Long-term Averages (LTAs).**

To calculate the long term average (LTA):

$$LTA = WLA \times e^{[0.05F^2 \cdot zF]}$$

$$LTA_{a,c} = 450 \times 0.321 = 144.45 \text{ TU where:}$$

0.321 is the acute WLA multiplier for  $C_v = 0.6$  at the 99<sup>th</sup> percentile (from Table 5-1, pg. 102 of the TSD)

$$LTA_c = WLA_c \times e^{[0.5\sigma_4^2 - z\sigma_4]}$$

$$LTA_c = 150 \times 0.527 = 79.05 \text{ where:}$$

0.527 is the chronic WLA multiplier at the 99<sup>th</sup> percentile (from Table 5-1, pg. 102 of the TSD)

#### Select the minimum LTA.

The LTA based on the chronic WLA more limiting and will be used to develop permit limits.

#### Limit Calculation:

Using the 95<sup>th</sup> percentile and monthly sampling, the effluent limit is calculated as:

$$LTA \times e^{[zF_n - 0.5F_n^2]} \text{ where } e^{[zF_n - 0.5F_n^2]} = \text{AML LTA multiplier}$$

$z = 1.645$  for the 95<sup>th</sup> percentile occurrence probability for the AML is recommended

$n =$  number of samples/month (the TSD recommends that a minimum  $n$  of 4 be used, even if monitoring is less frequent).

From Table 5-2, on pg. 102 of the TSD, for  $C_v = 0.6$  and  $n=4$ ,

$$\text{AML} = 79.05 \times 1.55 = \mathbf{122.53 \text{ TUc}}$$

$$100/83.32 = \mathbf{0.81 \% \text{ Effluent}}$$

In order to simplify DMR reporting the exact result indicated on the laboratory results, EPA has begun expressing WET limits as minimum percentages in Table A-1. The limit will be expressed as any chronic whole effluent toxicity test result on the combined discharge with a NOEC result of greater than or equal to **0.81%**.

### 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 V. 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 that the outfall is in a coastal area managed by the Commonwealth's Coastal Zone Management Program. On February 11, 2015, the Puerto Rico Planning Board issued a consistency certification for the discharge that provides that the combined discharge complies with its Coastal Zone Management Plan. As



this activity has been consistent in the past, a reopener clause has been established in that allows the permit to be modified or revoked based on a consistency determination requested by the permittee as part of this renewal process.

## **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.

No federally listed endangered or threatened species, or critical habitat, are in the vicinity of the discharge. Therefore, EPA has determined that the discharge is not likely to affect species or habitat listed under the ESA. The EPA entered into a consultation with the National Marine Fisheries Service at the time of time of the last issuance of the NPDES permits for the combined discharge from Bacardi, Puerto Nuevo RWWTP, and Bayamón RWWTP. In a letter dated October 14, 2016, NMFS concluded that the proposed action was not likely to affect species that fell under the purview of NMFS, and closed the ESA consultation.

The giant manta ray (*Manta birostris*) and oceanic whitetip shark (*Carcharhinus longimanus*) were listed since conclusion of the consultation and may be present in the action area of the PRASA Puerto Nuevo and Bayamón RWWTPs. Critical habitat has been proposed for rough cactus coral (*Mycetophyllia ferox*), pillar coral (*Dendrogyra cylindrus*), lobed star coral (*Orbicella annularis*), mountainous star coral (*Orbicella faveolata*), and boulder star coral (*Orbicella franksi*).

The Biological Evaluation for the Bayamón and Puerto Nuevo RWWTP contained information regarding the species listed since conclusion of the 2016 ESA section 7 consultation and concluded that the proposed 301(h) waivers for the National Pollutant Discharge Elimination System (NPDES) permit renewals were not likely to adversely affect these ESA-listed species. Based on this analysis, in a letter dated January 15, 2021, NMFS concurred with PRASA that the effects of the proposed action are not likely to adversely affect the subject ESA-listed species. The letter indicated that reinitiation of consultation would be required if there were new information, such as a change in activities, affected area, or listed species.

## **G. Clean Water Act, Section 403 Ocean Discharge**

CWA Section 403 requires EPA to consider guidelines determining potential degradation of the marine environment when issuing NPDES permits. These Ocean Discharge Criteria (40 CFR 125, Subpart M) are intended to “prevent unreasonable degradation of the marine environment and to authorize imposition of effluent limitations, including a prohibition on discharge, if necessary, to ensure this goal.” While this discharge is in the coastal zone, it is not in the territorial sea, contiguous zone, or ocean. Clean Water Act Section 403 is not applicable. Nevertheless, based on the available information, the EPA has determined that the discharge will not cause unreasonable degradation of the marine environment.

## **PART VI. PUBLIC PARTICIPATION**

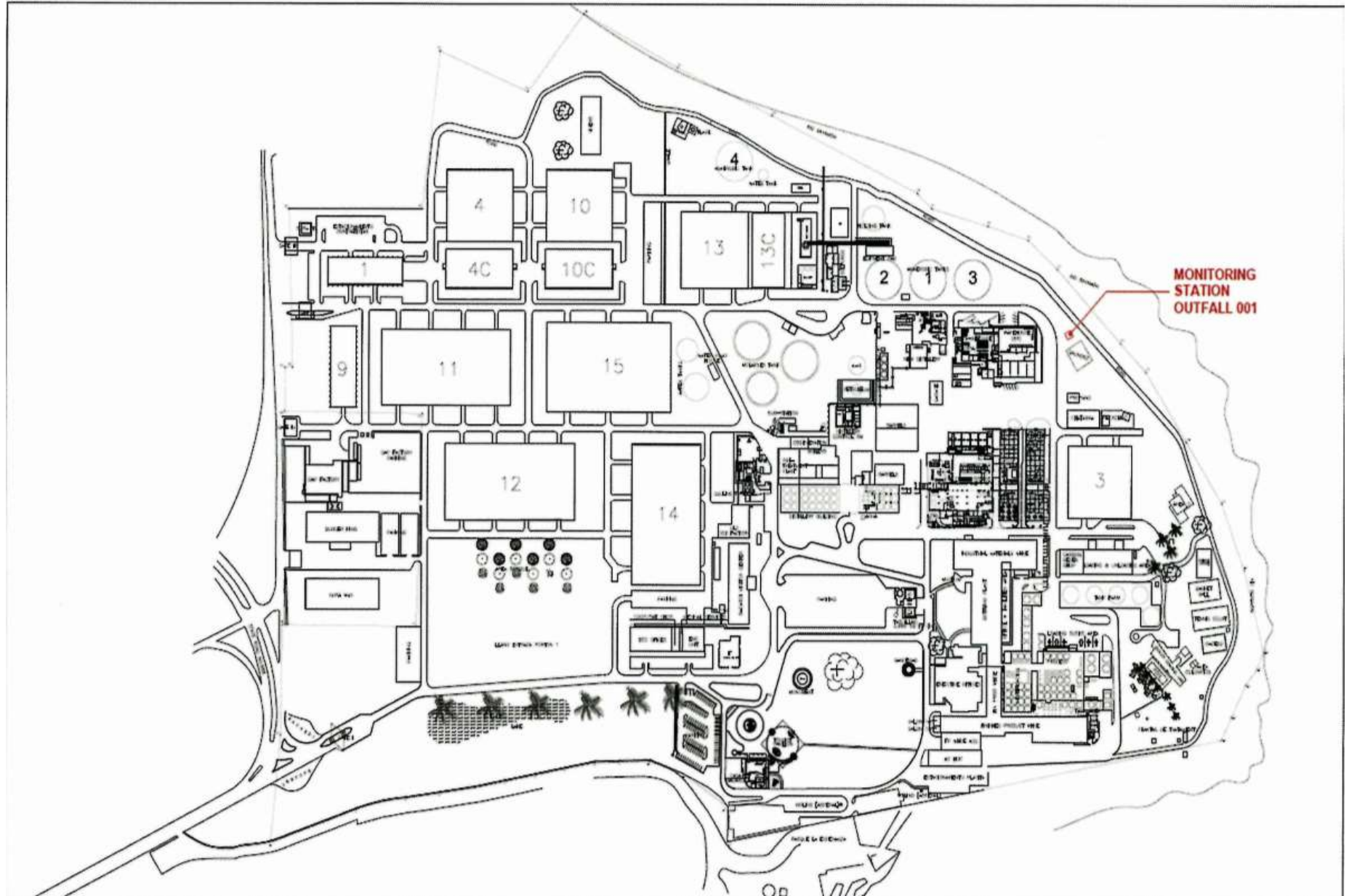
The procedures for reaching a final decision on the draft permit are set forth in 40 CFR Part 124 and are described in the public notice for the draft permit, which is published on EPA’s website at <https://www.epa.gov/npdes-permits/puerto-rico-npdes-permits>. Included in the public notice are requirements 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



**Karen O’Brien**  
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**Permit Writer Phone:** 212-637-3717  
**Permit Writer Email:** [obrien.karen@epa.gov](mailto:obrien.karen@epa.gov)



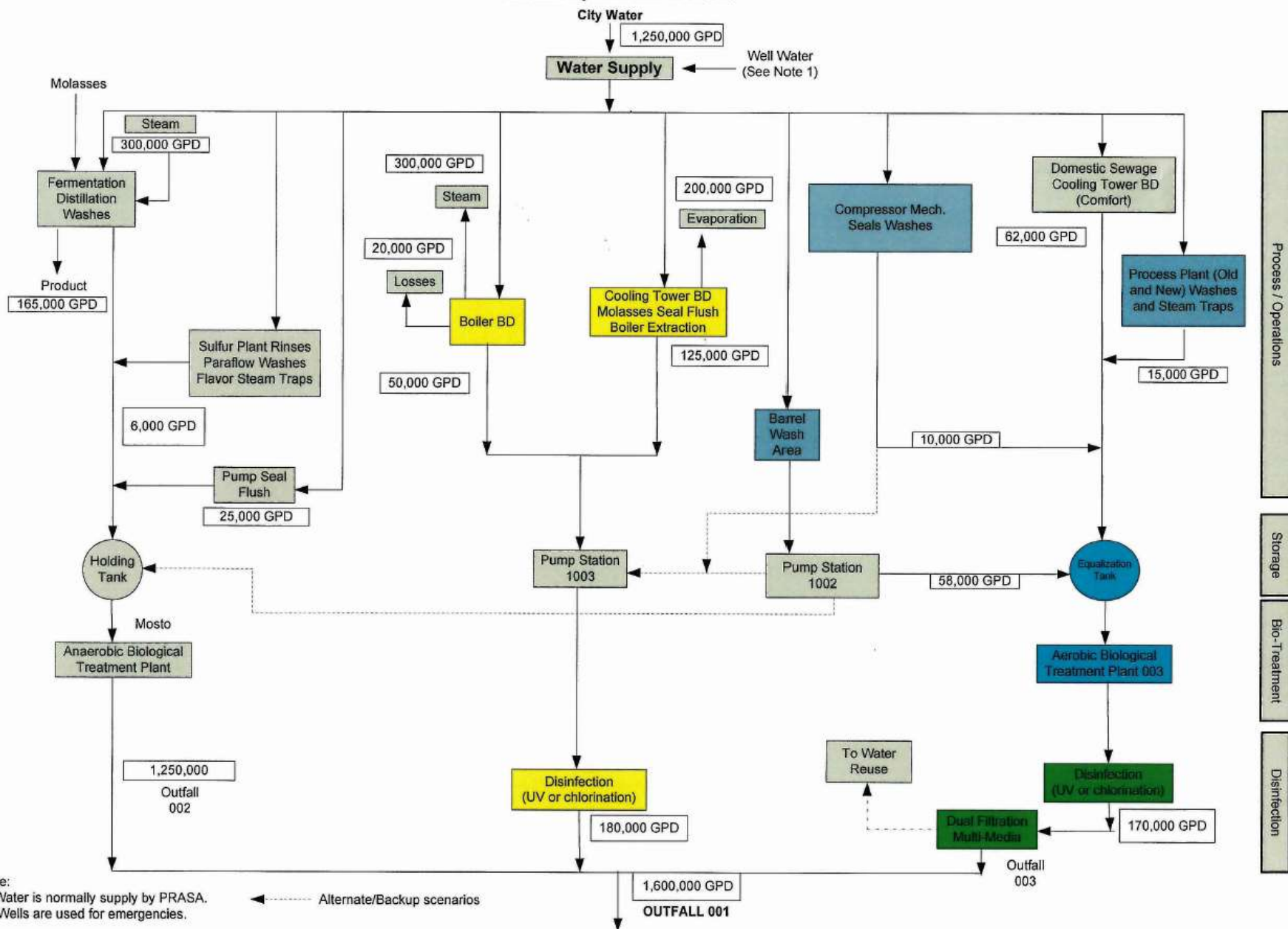
## **ATTACHMENT A — FACILITY MAP AND FLOW SCHEMATIC**

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



				SITE BACARDI DATE: 05/20/2014		PROJECT NAME: -- DRAWING NUMBER: BC-D-DR-EN-05-001	
NPDES NO. PR0000591		DATE: 05/20/2014		DATE: 05/20/2014		SHEET NO.: 1-1	

### Normal Operational Scenario



### Distillery Shutdown Operational Scenario

