APPENDIX F

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

AUTHORIZATION TO DISCHARGE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES)

PERMIT NUMBER
PR0021555

In compliance with the provisions of the Clean Water Act, as amended, 33 U.S.C. 1251 et seq. (the "Act"),

Puerto Rico Aqueduct and Sewer Authority (PRASA)
P.O. Box 7066
Barrio Obrero Station
Santurce, Puerto Rico 00916

hereinafter referred to as "the Permittee" is authorized to discharge from a facility located at

Puerto Nuevo Regional Wastewater Treatment Plant
Road #2 km 2, John F. Kennedy Avenue
San Juan, Puerto Rico 00916

to receiving waters named **Atlantic Ocean** in accordance with effluent limitations, monitoring requirements and other conditions set forth herein (29 pages) and in Attachments #1 (16 pages), #2 (7 pages), #3 (3 pages), and #4 (1 page) which are a part hereof.

This permit shall become effective on **December 1, 2011**, which is the effective date of the permit (EDP).

This permit and the authorization to discharge shall expire on **November 30, 2016.**

Signed this _____ day of _____ .

_____

Judith A. Enck
Region 2, Regional Administrator
Environmental Protection Agency

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Required Effluent Limitations

During the period beginning on the effective date and lasting until the expiration date of this permit, discharges from outfall 001* shall be limited and monitored by the Permittee as specified below:

a. Permittee shall comply with the U.S. Environmental Protection Agency's (EPA's) technology based requirements established in Table I (page #3) of the permit.

b. Permittee shall achieve water quality requirements as determined by the Commonwealth of Puerto Rico. See the Environmental Quality Board's (EQB's) water quality certificate (WQC) requirements from page 5 through 22 of the permit.

c. Permittee shall comply with EPA's Prohibited Discharge Standards Requirements established in page 23 of the permit.

d. Permittee shall comply with EPA's Pretreatment Program Requirements included from page 23 through page 27 of the permit.

e. Permittee shall comply with EPA's Sewage Sludge Requirements established in pages 27 and 29 of the permit.

f. Permittee shall comply with EPA's Monitoring and Reporting Requirements and General Conditions established in Attachment #1.

g. Permittee shall comply with EPA's Combined Sewer Overflow Permit Conditions established in Attachment #2.

h. Permittee shall conduct the EPA's Waiver Monitoring Program included in Attachment #3; however, the Mixing Zone Validation Study shall be done in accordance with the EQB requirements established in Table A-1 and the Special Conditions of the permit.

i. Permittee shall conduct a Non-industrial Source Control Program as established in Attachment #4 by EPA.

* The location of outfall 001 is as follows:

Latitude 18° 29' 13" North
Longitude 66° 08' 21" West

TABLE I
TECHNOLOGY-BASED EFFLUENT LIMITATIONS

EFFLUENT CHARACTERISTICS	DISCHARGE LOAD ALLOCATIONS		DISCHARGE CONCENTRATION LIMITATIONS		MINIMUM PERCENT REMOVAL LIMITATIONS
	Average Monthly	Average Weekly	Average Monthly	Average Weekly	Average Monthly
	(kg/day)	(kg/day)	(mg/l)	(mg/l)	
5-Day-20°C Biochemical Oxygen Demand[1,2]	35,465	70,930	117*	Report	30%
Total Suspended Solids[1,2]	24,460	40,920	68	Report	60%
Permittee shall comply with the technology based effluent limits for BOD_5 and TSS Flow shall be reported as a monthly average and a daily maximum. Measurement frequency shall be continuous.					

1 - Measurement frequency shall be twice a week using composite samples

2 - The permittee shall continue the use of flow proportional chemical addition to enhance solids sedimentation.

* According to EQB's Final WQC.

2. Environmental Quality Board Certification Requirements

As required by the Puerto Rico Environmental Quality Board (EQB) Water Quality Certification of **June 3, 2010**, for the purpose of assuring compliance with EPA's marine criteria as specified in Section 304 (a)(1) and EQB's water quality standards and other appropriate requirements of Commonwealth law as provided by Section 401(d) of the Act, the permittee shall comply with the following effluent limitations and other limitations:

See pages 5 through 23.

TABLE A-1 **EFFLUENT LIMITATIONS**

AND MONITORING REQUIREMENTS

During the period beginning on EDP and lasting through 5 years, the permittee is authorized to discharge from outfall serial number 001 (treated wastewaters). Such discharge shall be limited and monitored by the permittee as specified below:

Receiving Water Classification: SC

Effluent Characteristics	**Gross Discharge Limitations**		**Monitoring Requirements**	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
BOD_5 (mg/l) [1,2,3,4] α	See Table 1, (page 3)		Twice per Week	Composite
Cadmium (Cd) (µg/l) [2,3,4]		----	Monthly	Grab
Color (Pt-Co Units) [2,3,4]		70	Monthly	Grab
Copper (Cu) (µg/l) [2,3,4]		207.7	Monthly	Grab
Cyanide, Free (CN) (µg/l) [2,3,4] γ Δ		32.2	Monthly	Grab
Dissolved Oxygen (mg/l) [1,2,3,4]		----	Daily	Grab
Enterococci (colonies/100 ml) [1,2,4,8]	The Enterococci density in terms of geometric mean of at least 5 representative samples taken sequentially shall not exceed 35/100 ml. No single sample should exceed the upper confidence limit of 75% using 0.7 as the log standard deviation until sufficient site data exist to establish a site-specific log standard deviation.		Monthly	Grab
Fecal Coliforms	The coliform geometric mean of a		Monthly	Grab

Effluent Characteristics	Gross Discharge Limitations		Monitoring Requirements	
(colonies/100 ml) [1,2,4,8]	series of representative samples (at least five samples) of the waters taken sequentially in a given instance shall not exceed 200 colonies/100 ml. Not more than 20% of the samples shall exceed 400 colonies/100 ml.			
Flow m^3/day (MGD) [4,5]	302,832.96 (80.0)	545,205.96 (144.0)	Continuous Recording	
Lead (Pb) (µg/l) [2,3,4]		15.1	Monthly	Grab
Mercury (Hg) (µg/l) [2,3,4] γ		0.29	Monthly	Grab
Nickel (Ni) (µg/l) [2,3,4]		12.5	Monthly	Grab
Nitrogen (NO_3, NO_2, NH_3) (mg/l) [2,3,4]		21.190	Monthly	Grab
Oil and Grease (mg/l) [2,4]	The waters of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oil and greases.		Twice per Month	Grab
pH (SU) [2,3,4]	Shall always lie between 6.0 and 9.0		Daily	Grab
Residual Chlorine (mg/l) [2,4]		0.50	Daily	Grab
Silver (Ag) (µg/l) [2,3,4]		3.3	Monthly	Grab
Solids and Other Matter [2,4]	The water 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.		----	----

Effluent Characteristics	Gross Discharge Limitations	Monitoring Requirements	
Sulfide (undissociated H_2S) (µg/l) [2,3,4] δ	84	Monthly	Grab
Surfactants (as Methylene Blue Activate Substances) (µg/l) [1,2,3,4]	7,020	Monthly	Grab
Suspended, Colloidal or Settleable Solids (ml/l) [1,2,4]	Solids from wastewater sources shall not cause deposition in, or be deleterious to, the existing or designated uses of the waters.	Daily	Grab
Taste and Odor-producing Substances [2,4]	Shall not be present in amounts that will render any undesirable taste or odor to edible aquatic life.	----	----
Temperature °F (°C) [2,4]	No heat may be added to the waters of Puerto Rico which would cause the temperature of any site to exceed 90°F (32.2°C).	Daily	Grab
Thallium (Tl) (µg/l) [2,3,4]	4.3	Monthly	Grab
Toxicity, Chronic (TUc)	83.32	Quarterly	Grab
Turbidity (NTU) [2,3,4]	119	Monthly	Grab
TSS	See Table 1, (page 3)	Twice per Week	Composite
Zinc (Zn) (µg/l) [2,3,4]	129.20	Monthly	Grab

Notes:
To comply with the monitoring requirements specified above, samples shall be taken at the outfall of discharge serial number 001.

All flow measurements shall achieve accuracy within the range of plus or minus 10%.

α The effluent limitation for BOD_5 is based on the PRASA Mixing Zone Application for the Puerto Nuevo Regional Wastewater Treatment Plant, after determining that there is a reasonable assurance that this limit will not cause violations to the water quality standard for Dissolved Oxygen for Class SC.

γ See Special Condition 5.

δ See Special Condition 6.

Δ The samples shall be analyzed using the method approved by EPA in a letter dated February 20, 2007.

See the notes 1, 2, 3, 4, 5, 6 and 7 on page 22 of Special Conditions.

B. SPECIAL CONDITIONS

1. The flow of discharge 001 shall not exceed the limitation of 545,205.96 m^3/day (144.0 MGD) as maximum daily. No increase in flow shall be authorized without a recertification from the Puerto Rico Environmental Quality Board (EQB) and modification or revocation/reissuance of this permit by Environmental Protection Agency (EPA). [1,4,5]

2. The permittee will provide to the EQB an inventory of all industries connected to the treatment system with its corresponding waste characteristics, in a term not greater than eighteen (18) months after the Effective Date of the Permit (EDP).

   The permittee shall require any industrial user of the treatment system to comply with the requirements of Section 307 and 308 of the Federal Clean Water Act as amended (33 U.S.C. 466 et. seq.) by requiring each user to provide pretreatment to all industrial wastewater prior to the discharge to such system as determined by the EPA and EQB. The permittee shall require each industrial user to comply with Section 308 of the Federal Clean Water Act by requiring each user to perform the necessary monitoring to verify compliance with the level of pretreatment required. Each industrial user shall establish and maintain good records in relation to their pretreatment and shall allow the entry to their facilities to EPA and EQB personnel at any time for any appropriate inspection. [7]

3. The permittee shall provide written notice to the EQB and EPA of the following changes that may 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 significant industrial user, the permittee shall notify only when the new introduction of pollutants exceeds 1,000 gallons/day.

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

   Such notice shall 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. [7]

4. 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 permit, shall not exceed those concentrations as specified in the applicable regulatory limitations. [1,2]

5. The samples taken for the analysis of cyanide and mercury shall be analyzed using the analytic method approved by the EPA with the lowest possible detection level, in accordance with Section 6.2.3 of the Puerto Rico Water Quality Standard Regulation (PRWQSR). [4]

6. The permittee shall use the approved EPA 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 approved EPA method established in the 40 CFR Part 136, then, the concentration of undissociated H_2S should be reported as "below detection limit". [2,3]

7. All sample collection, preservation, and analysis shall be carried out in accordance with the 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 a medical technician licensed to practice the profession in Puerto Rico. [1,3]

8. The solid wastes (sludge, screenings and grit) generated due to the treatment system operation shall be:

   a. Disposed in compliance with the applicable requirements established in the 40 CFR Part 257. A semiannual report shall be submitted to EQB and EPA notifying the methods used to dispose the solid wastes generated in the facility. Also, a copy of the approval or permit applicable to the disposal method used shall be submitted, if any.

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

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

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

      These notifications shall include the following information:

      a) Spill material
      b) Spill volume
      c) Measures taken to prevent the spill material to gain access to any body of water.

   This special condition does not relieve the permittee from its responsibility to obtain the corresponding permits from the EQB's Solid Wastes Program and other state and federal agencies, if any. [4,6]

9. A log book should be kept for the material removed from the treatment system, such as sludge, screenings and grit, detailing the following items:

a. Removed material, date and source of it.
b. Approximate volume and weight.
c. Method by which it is removed and transported.
d. Final disposal and location.
e. Person that offers the service.

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

10. The sludge produced within the facility due to the operation of the 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. [4,6]

11. 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 permit, such permit shall be modified accordingly or revoked and reissued to be adjusted with regard to such prohibition or standard. [6]

12. No changes in the design or capacity of the treatment system will be permitted without the previous authorization of EQB and EPA. [5]

13. Prior to the construction of any additional treatment system or prior to the modification of the existing one, the permittee shall obtain the approval of the engineering report, plans and specifications from EQB. [5]

14. The permittee shall install, maintain and operate all water pollution control equipment in such manner as to be in compliance with the applicable Rules and Regulations. [1, 4]

15. The flow measurement 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. [4,5]

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

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

"PUNTO DE MUESTREO PARA LA DESCARGA 001"

18. All water or wastewater 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. [4]

19. The EQB has defined and authorized a Mixing Zone (MZ) pursuant to Article 5 of the PRWQSR. [3]

a. The MZ is delineated by the following points (See Diagram I):

	Geographic Coordinates* New WQC
Point 1	Lat. 18° 29.181' Long. 66° 08.518'
Point 2	Lat. 18° 29.202' Long. 66° 08.503'
Point 3	Lat. 18° 29.100 Long. 66° 08.340'
Point 4	Lat. 18° 29.097' Long. 66° 08.150'
Point 5	Lat. 18° 29.072' Long. 66° 08.150'
Point 6	Lat. 18° 29.075' Long. 66° 08.348'

* NAD 83 State Plane Coordinates

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.

b. The MZ is defined for the following parameters:

Parameter	Daily Maximum Discharge Limitation at Outfall Serial Number 001	Daily Maximum Limitation at the Edge of the MZ
Cadmium (Cd) (µg/l)	Monitoring Only	8.85
Color (Pt-Co Units)	70	Ω
Copper (Cu) (µg/l)	207.7	3.73
Cyanide, Free (CN) (µg/l)	32.2	1.0
Dissolved Oxygen (mg/l)	Monitoring Only	≥4.0
Lead (Pb) (µg/l)	15.1	8.52
Mercury (Hg) (µg/l)	0.29	0.051
Niquel (Ni) (µg/l)	12.5	8.28
Nitrogen (NO_2, NO_3, NH_3) (mg/l)	21.190	5.000
pH (SU)	6.0 – 9.0	7.3 – 8.5
Silver (Ag) (µg/l)	3.3	2.24
Sulfide (undissociated H_2S) (µg/l)	84	2
Surfactants (MBAS) (µg/l)	7,020	500
Temperature °F (°C)	**	**1
Thallium (Tl) (µg/l)	4.3	0.47
Turbidity (NTU)	119	10
Zinc (Zn) (µg/l)	129.20	85.62

c. The permittee shall conduct annually definitive acute and chronic toxicity tests using the organisms *Mysidopsis bahia*, *Cyprinodon variegatus* and chronic toxicity tests using *Arbacia punctulata* for the wastewater discharge identified as 001.

d. The toxicity tests shall be conducted according to the most recent editions of the following publications of EPA:

1) "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" EPA-821-R-02-012 (Fifth Edition), October 2002.

2) "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms" EPA-821-R-02-013 (Fourth Edition), October 2002.

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Ω The color at the edge of the mixing zone shall not exceed the color of the receiving water body (background sampling point).

** No heat may be added to the waters of Puerto Rico, which would cause the temperature of any site to exceed 90°F (32.2 °C)

e. The procedures, methods, techniques, conditions, etc., included in the above mentioned publications shall be followed at all times. If the permittee determines to use other procedures, methods, etc., because the permittee understands that:

1) by the nature or conditions of this case is impossible to follow such publications;

2) other procedures, methods, etc., are adequate, then the permittee shall, prior to the utilization of other procedures, methods, etc., obtain the written approval from the EPA and EQB.

f. The effluent samples for the toxicity tests shall be used in or before 36 hours after being collected.

g. A report on the toxicity tests conducted shall be submitted to the EQB and EPA, during the sixty (60) days period after the tests were conducted. This report shall be prepared according to the aforementioned publications of EPA.

h. Based on the review of the test results, the EQB can require additional toxicity tests, including toxicity/treatability studies and can revoke the final mixing zone authorization according with Section 5.14 of the PRWQSR.

i. Solids from wastewater sources shall not cause deposition in, or be deleterious to, the existing or designated uses of the waters.

j. 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.

k. The mixing zone shall be free of debris, scum, floating oil and any other substances that produce objectionable odors.

l. The permittee shall maintain in good operating conditions the discharge system (discharge outfall [land and submarine], diffuser, ports, etc.). At least once a year, the discharge system shall be inspected to determine if some repairs, replacing, etc., on the discharge system is required. A report of such inspections shall be submitted to EPA and EQB not later than sixty (60) days after the performance of the inspection.

m. The EQB can require that the permittee conduct bioaccumulation studies, dye studies, water quality studies or any other pertinent studies. If the EQB requires one or more of the aforementioned studies, the permittee will be notified to conduct such study(ies). One hundred twenty (120) days after the notification of the EQB, the permittee shall submit, for evaluation and approval of the EQB, a protocol to conduct such study(ies). Sixty (60) days after the EQB 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) to EQB and EPA.

n. The permittee shall conduct a dye study to verify the Critical Initial Dilution and the plume behavior within the mixing zone. The dye study shall be conducted ninety (90) days after the written approval of the corresponding Protocol and Quality Assurance Project Plan (QAPP). Such Protocol and QAPP shall be submitted to EQB ninety (90) days after the EDP. This study shall consist of at least one set of the required samples, as established in the QAPP for a complete sampling event.

o. 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.

20. Whole Effluent Toxicity Requirements

a. Monitoring Frequency

The permittee shall conduct quarterly chronic toxicity tests on flow-weighted 24-hour composite effluent samples of the combined Bacardi, PRASA Puerto Nuevo, and PRASA Bayamón discharges (referred herein as "combined discharge") for fertilization of *Arbacia Punctulata*. Once each calendar year, the permittee shall split a 24-hour composite effluent sample and concurrently conduct acute and chronic toxicity tests using *Mysidopsis bahia* and *Cyprinodon variegatus* in addition to *Arbacia punctulata* fertilization test. The testing on this split sample, in addition to the *Arbacia Punculata* test for that quarter would satisfy the annual toxicity monitoring requirement of Special Condition 19.c.

The permittee shall also conduct quarterly chronic toxicity tests on 24-hour composite effluent samples of solely the Puerto Nuevo effluent, taken at Puerto Nuevo Discharge Point 001, for fertilization of *Arbacia Punctulata*. During years 1, 3, and 5 of the permit, a split of each quarterly composite sample shall be also analyzed for all other monitored parameters for Puerto Nuevo effluent from Puerto Nuevo Discharge Point 001.

b. Effluent Limitation:

No test result for any species or effect in the combined discharge shall be greater than 83.32 TUc.
This permit requires additional toxicity testing if a chronic toxicity effluent limit is violated. The permittee shall notify EPA in writing within fourteen days of the permittee's receipt of results violating this effluent limitation.

c. TRE Workplan

No later than EDP + 90 Days, the permittee shall prepare and submit a Toxicity Reduction Evaluation (TRE) Workplan to EPA Region 2. This plan shall include steps the permittee intends to follow if the toxicity effluent limitation is violated and 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.

d. Accelerated Toxicity Testing and Commencement of TRE

1) If the combined discharge displays a chronic toxicity result violating the effluent limitation, then the permittee shall conduct six additional toxicity tests of the combined discharge for all three plants using the same species and test method, every two weeks, over a 12 week period. The permittee shall also split the sample and perform testing for the species in question on solely the Puerto Nuevo RWWTP effluent taken from Outfall 001, for each of these six test results.

2) Accelerated testing shall begin within 14 days of the permittee's receipt of test results violating the effluent limit. If none of the additional toxicity tests exceeds a chronic toxicity effluent limit, then the permittee may return to its regular testing frequency for both the combined discharge and solely Puerto Nuevo RWWTP effluent. All laboratory test results shall be submitted to EPA and EQB within 30 days of receipt by the permittee, as required in item f.3 of this Special Condition.

3) If one of the additional toxicity tests for the combined discharge (in paragraph d.1 of this condition) exceeds a toxicity effluent limit, then, within 14 days of receipt of this test result, the permittee shall initiate the TRE workplan prepared in compliance with paragraph c of this special condition. The TRE shall use the same species and test method as that of the observed exceedance. The TRE may be performed in conjunction with the PRASA Bayamón and Bacardi facilities. The permittee shall use the following guidance manuals:

A) *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA 833-B-99-002, 1999)

B) *Generalized Methodology for Conducting Industrial Toxicity*

Reduction Evaluations (EPA/600/2-88/070, 1989).

4) The permittee may also use the following manuals for Toxicity Identification Evaluation to identify 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); and

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

5) The trigger or performance of a TRE shall not relieve the permittee of its responsibilities to conduct WET monitoring in compliance with Section a. of this Special Condition. The permittee must also continue to comply with the reporting requirements of item f.3 of this Special Condition for all test results in compliance with this permit and progress reports on the TRE process.

6) The trigger or performance of accelerated monitoring shall not relieve the permittee of its responsibilities to conduct WET monitoring in compliance with Section a. of this Special Condition. The permittee must also submit test results within 30 days after the permittee's receipt of the laboratory reports for accelerated monitoring in order to comply with the reporting requirements of item f.3 of this Special Condition. Test results that were received by the permittee due to accelerated monitoring may be used to satisfy the requirements of Section a of this Special Condition, provided that all requirements of Section a (including species, test type, frequency, timing, and sample requirements) are met.

e. Test Methods

1) Acute Toxicity Testing

A) The acute toxicity tests shall be conducted in accordance with the EPA publication, EPA-821-R-02-012 Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Edition), October 2002, or the most recent edition of this publication, if such edition is available.

B) The tests shall provide a measure of the acute toxicity as determined by the wastewater concentration, which cause 50 percent mortality of the organisms over a 48 hour period. Test results shall be expressed in terms of Lethal Concentration (LC) and reported as 48 hour LC50.

C) The test species shall be the *Mysidopsis Bahia* (mysid shrimp) and *Cyprinidon Variegatus* (sheepshead minnow). The tests shall be static renewal type.

2) Chronic Toxicity Testing

A) The chronic toxicity tests shall be conducted in accordance with EPA publication, EPA-821-R-02-013 Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Fourth Edition, October 2002.

B) The tests shall report the No Observable Effects Concentration (NOEC), the Low Observable Effects Concentration (LOEC), the calculated inhibition concentration of 25% (IC25), and the effects reported at each concentration tested in the dilution series. The dilution series concentrations shall be chosen to bracket the approximate expected IC25 results, in order to accurately depict the toxic effects of the sample.

C) The chronic toxicity tests shall be survival, growth, and fecundity the *Mysidopsis Bahia* (mysid shrimp), survival and growth for the *Cyprinidon Variegatus* (sheepshead minnow), and fertilization of *Arbacia Punctulata* (sea urchin). The tests shall be static renewal type.

D) If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in the test methods manual, then the permittee must resample and retest within 14 days.

f. Reporting of Chronic Toxicity Monitoring Results

1) A procedure report shall be to EPA and EQB by EDP plus ninety (90) days. The following information shall be included in the procedure report:

A) An identification of the organizations responsible for conducting the test and the species to be tested.

B) A detailed description of the methodology to be utilized in the conduct of the tests, including equipment, sample collection,

dilution water and source of test organisms.

C) A schematic diagram which depicts the effluent sampling location. The diagram shall indicate the location of effluent sampling in relation to wastewaters treatment facility and discharge monitoring point.

2) For any toxicity testing event, a full laboratory report shall be submitted and shall include: the toxicity test results in NOEC, LOEC, IC25, and the results reported at each effluent dilution. The results shall be reported according to the test methods manual chapter on report preparation and test review; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

3) Full laboratory reports of analytical results shall be submitted to EPA Region II and EQB within thirty (30) days of completion of each test. Based on a review of the test results, EPA or the EQB may require additional toxicity tests, including chronic toxicity analyses. In addition to submitting the procedures report and test results to the addresses listed in Part I.B. of this permit, results shall be submitted to:

CHIEF, CLEAN WATER REGULATORY BRANCH
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II
290 BROADWAY - 24th FLOOR
NEW YORK, NEW YORK 10007-1866

4) The permittee shall notify the permitting authority in writing within 14 days of any violation of the chronic toxicity limitation. This notification shall describe actions the permittee has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed; or reason(s) that no action has been taken.

g. Reopener Clause for Toxicity Requirements

In accordance with 40 CFR Parts 122 and 124, this permit may be reopened by EPA to include toxicity/treatability studies, additional effluent limitations, or other special conditions to address toxicity in the effluent or receiving water body.

21. The permittee must provide a written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1). The schedule for the providing written reports documenting the local limits technical evaluation shall not exceed:

a. EDP + 3 months - Analysis of the maximum allowable headworks (MAHL) to the plant based on final permit limits for pollutants listed in Tables A-1. The

headworks analysis must include an explanation of the removal capabilities of plant. If the removal efficiencies vary from those provided in the November 27, 2002 Local Limits report, a full justification of the rates and revised calculations for additional pass through requirements (water quality standards & sludge requirements) must also be provided;

b. EDP + 6 months - Local limits technical evaluation based on MAHL, domestic loading, and proposed allocation to non-domestic sources;

c. EDP + 9 months - Proposed revisions to local limits (if indicated by technical evaluation) & implementation plan not to exceed EDP + 12 months; and

d. EDP + 12 months - Include revised local limits (if indicated by technical evaluation) in permits issued to non-domestic users of the sewerage system.

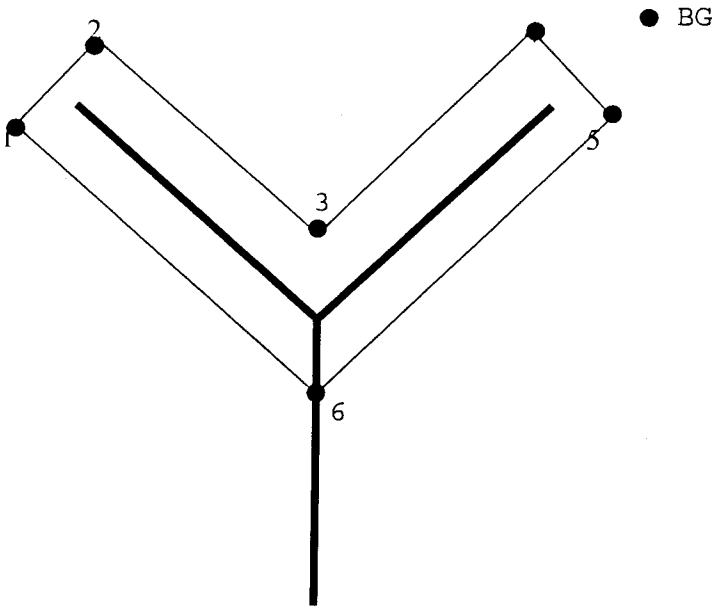
As to a toxic pollutant introduced into the applicant's treatment works by an industrial discharger for which there is no applicable categorical pretreatment standard for the toxic pollutant, and the 40 CFR Part 403 analysis on the toxic pollutant shows that no local limit is necessary, the applicant shall demonstrate to EPA on an annual basis during the term of the permit through continued monitoring and appropriate technical review that a local limit is not necessary, and, where appropriate, require industrial management practices plans and other pollution prevention activities to reduce or control the discharge of each such pollutant by industrial dischargers to the POTW. Such annual analysis shall be submitted by December 1. If such monitoring and technical review of data indicates that a local limit is needed, the POTW shall establish and implement a local limit by March 31 of the year following the analysis.

22. The permittee shall continue to implement its Non-Industrial Control Program.

For 1, 2, 3, 4, 5, 6, 7 and 8 see page 22.

DIAGRAM-I

Puerto Nuevo RWWTP Mixing Zone



Geographic Coordinates*

Point 1	Lat. 18° 29.181' Long. 66° 08.518'
Point 2	Lat. 18° 29.202' Long. 66° 08.503'
Point 3	Lat. 18° 29.100 Long. 66° 08.340'
Point 4	Lat. 18° 29.097' Long. 66° 08.150'
Point 5	Lat. 18° 29.072' Long. 66° 08.150'
Point 6	Lat. 18° 29.075' Long. 66° 08.348'

* NAD 83 State Plane Coordinates

1. According to Article 1, Puerto Rico Water Quality Standards Regulation as Amended.

2. According to Article 3, Puerto Rico Water Quality Standards Regulation as Amended.

3. According to Article 5, Puerto Rico Water Quality Standards Regulation as Amended.

4. According to Article 6, Puerto Rico Water Quality Standards Regulation as Amended.

5. According to the Environmental Public Policy Act of September 22, 2004, Act No. 416, effective since March 22, 2005.

6. According to the Section 405 (d)(4) of the Federal Clean Water Act as Amended (33 U.S.C. 466 et seq.).

7. According to Environmental Protection Agency Pretreatment Standard (40 CFR 403, June 26, 1978, and effective August 25, 1978, as Amended.

8. According to the Code of Federal Regulation Number 40 (40 CFR), Part 131.40, as amended (Federal Register/Volume 69, No. 16/Monday, January 26, 2004).

C. PROHIBITED DISCHARGE STANDARDS

Pursuant to section 307 of the Act and regulations promulgated thereafter at 40 CFR 403.5, the permittee shall under no circumstances allow the introduction of the following pollutants into the POTW (publicly-owned treatment works):

1. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit (°F) or 60 degrees Centigrade (°C) using the test methods specified in 40 CFR 261.21;

2. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the work is specifically designed to accommodate such discharges;

3. Solid or viscous pollutants in amounts which will cause obstruction to the flow in sewers, or other interference with the operation of the POTW;

4. Any pollutant, including oxygen demanding pollutants (BOD_5, etc.), released in a discharge of such volume or strength as to cause interference in the POTW;

5. Heat in amounts which will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities that the temperature at the treatment works influent exceeds 104°F (40°C);

6. Petroleum oil, non biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;

8. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

D. PRETREATMENT PROGRAM

1. Pretreatment Program Requirements

The permittee shall implement the approved Industrial Pretreatment Program in accordance with section 402(b)(8) of the Act, the General Pretreatment Regulations (40 CFR Part 403), and the legal authorities, policies, procedures, and financial provisions described in the permittee's approved pretreatment program. The pretreatment program submission entitled "Puerto Rico Aqueduct and Sewer Authority Pretreatment Program", dated August 1985 was approved on September 26, 1985; the enforcement response plan was approved on May 30, 1995; and revised local limits were approved on November 27, 2002. The permittee's pretreatment program is hereby incorporated by reference and shall be implemented in a manner consistent with the following requirements:

(a) The permittee shall develop and enforce specific limits to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b). Each POTW with an approved pretreatment program shall continue to develop these limits as necessary and effectively enforce such limits.

(b) The permittee shall control through permit, order or similar means, the contribution to the POTW by each industrial user to ensure compliance with applicable Pretreatment Standards and Requirements. In the case of industrial users identified as significant, this control shall be achieved through permits or equivalent individual control mechanisms issued to each such user. Such control mechanisms must be enforceable and contain at a minimum a statement of duration (not to exceed 5 years), effluent limitations, sampling protocols, compliance schedule if appropriate, reporting requirements, and appropriate standard conditions.

(c) The permittee shall maintain and update industrial user information at a frequency adequate to ensure proper identification of industrial users subject to pretreatment standards, appropriate characterization of the nature of their discharges, and correct designation of industrial users.

(d) The permittee shall evaluate whether each significant industrial user needs a plan to control slug discharges. For Industrial Users identified as significant prior to November 14, 2005, this evaluation must have been conducted at least once by October 14, 2006; additional Significant Industrial Users must be evaluated within 1 year of being designated a Significant Industrial User. If a slug control plan is needed, it shall contain at least the minimum elements required in 40 CFR 403.8(f)(2)(vi) and the requirement to control slug discharges must be included in the user's permit.

(e) The permittee shall enforce and obtain remedies for noncompliance by any industrial users with applicable pretreatment standards and requirements.

(f) The permittee must inspect and sample the effluent from each significant industrial user at least once per year. This is in addition to any industrial self-monitoring activities.

2. Pursuant to 40 CFR 403.5(e), whenever, on the basis of information provided to the Director, Caribbean Environmental Protection Division of EPA Region 2, it has been determined that any source contributes pollutants in the permittee's treatment works in violation of subsection (d) of section 307 of the Act, notification shall be provided to the permittee. Failure by the permittee to commence an appropriate enforcement action within 30 days of this notification may result in appropriate enforcement action against the source and permittee.

3. <u>Sampling</u>

The permittee shall conduct all sampling specified in this permit and the approved pretreatment program.

4. Pretreatment Report

The permittee shall provide an annual report to the EPA that describes the permittee's program activities over the previous twelve months. The permittee must also report on the pretreatment program activities of all participating agencies. This report shall be submitted to the address cited in section E.7 in Part I of this permit no later than December 1st of each year for the period covering September 1st through August 31st of the preceding year and shall include:

(a) An updated industrial survey, as appropriate.

(b) Results of any wastewater sampling conducted in accordance with the approved Pretreatment Program and General Pretreatment Regulations. At a minimum, the permittee shall annually monitor (alternating wet & dry seasons) the influent to the treatment plant for: Flow, BOD_5, Total Suspended Solids, Oil and Grease, pH, Total Phosphorus, Ammonia Nitrogen, NO_2 & NO_3, Nitrogen, Settleable Solids, Temperature, parameters listed in section 3.1.9 of the Puerto Rico Water Quality Standards Regulation as amended on March 2003, parameters listed at 40 CFR 131.36(b)(1), and six section 301(h) Pesticides.

In addition, the permittee shall provide an analysis and discussion as to whether the existing local limitations specified in section 5.02 and Appendix A of the Puerto Rico Aqueduct & Sewer Authority Rules and Regulations for the Supply of Water and Sewer Service continue to be appropriate to prevent treatment plant interference, pass through of pollutants that could affect water quality, and sludge contamination. Such an analysis should be based on an updated industrial user inventory and any headwork priority pollutant scan.

(c) Status of Program implementation to include:

i. Any proposed substantial modifications to the pretreatment program as originally approved by the EPA to include but not limited to; local limitations, special agreements, and staffing and funding updates;

ii. Any interference, upset or permit violations experienced at any of the POTW directly attributable to industrial users;

iii. Listing of significant industrial users issued Industrial Discharge Permits;

iv. Listing of significant industrial users inspected and/or monitored during the previous reporting period and summary of results;

v. Listing of significant industrial users planned for inspection and/or monitoring for the next reporting period along with inspection frequencies;

vi. Listing of significant industrial users notified of promulgated pretreatment standards, local standards or any applicable requirements under section 405 of the Act and Subtitle C and D of the Resource Conservation and Recovery Act, as required in 40 CFR Part 403.8(f)(2)(iii);

vii. Listing of significant industrial users notified of promulgated pretreatment standards or applicable local standards that are on compliance schedules. The listing should include for each facility the final date of compliance; and

viii. Planned changes in the implementation program.

(d) Status of enforcement activities to include:

i. Listing of categorical industrial users, who failed to submit baseline reports or any other reports as specified in 40 CFR 403.12 and in section 5.05 of the Puerto Rico Aqueduct & Sewer Authority Rules and Regulations for the Supply of Water and Sewer Service;

ii. Listing of significant industrial users not complying with federal or local pretreatment standards as of the final compliance date; and

iii. Summary of enforcement activities taken or planned against non-complying industrial users. The permittee shall publish, at least annually in the largest daily newspaper within the permittee's service area, a list of significant industrial users which, during the previous twelve months were in significant noncompliance with the applicable pretreatment standards or requirements. Significant noncompliance shall be determined based upon the more stringent of either criteria established at 40 CFR Part 403.8(f)(2)(viii) or criteria established in the permittee's approved pretreatment program.

5. The permittee shall notify the EPA no more than 60 days prior to any major proposed changes in its existing sludge disposal practices.

6. The permittee shall provide adequate staff, equipment, and support capabilities to carry out the elements of the pretreatment program.

7. The permittee shall provide notice to the EPA of the following:

(a) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the Act if it were directly discharging those pollutants; and

(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 the permit.

(c) For purposes of this paragraph, adequate notice shall include information on:

i. the quality and quantity of effluent introduced into the POTW, and

ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

E. SEWAGE SLUDGE REQUIREMENTS

1. Reopener: If an applicable "acceptable management practice" or numerical limitation for pollutants in sewage sludge promulgated under section 405(d)(2) of the Act as amended by the Water Quality Act of 1987 is more stringent than the sludge pollutant limit or acceptable management practice in this permit, or controls a pollutant not limited in this permit, this permit shall be promptly modified or revoked and reissued to conform to the requirements promulgated under section 405(d)(2). The permittee shall comply with limitations by no later than the compliance deadline specified in the applicable regulations as required by section 405(d)(2)(D) of the Act.

2. Cause for modification. 40 CFR 122.62 (a)(1) provides that the permit may be modified (but not revoked and reissued except when the permittee requests or agrees) where there are material and substantial changes or additions to the permitted facility or activity, including a change or changes in the permittee's sludge use or disposal practice, which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.

3. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a Municipal Solid Waste Landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.

4. The permittee shall comply with 40 CFR Part 503. In accordance with 40 CFR 503.4, treatment works sending sewage sludge to a MSWLF shall meet the requirements of Part 258, that is, ensure that the sewage sludge is non-hazardous and non-liquid (i.e., it passes the Paint Filter Liquids Test).

5. Sewage sludge shall be evaluated (*See below) for hazardous waste characteristics specified at 40 CFR Part 261, Subpart C. Sludge shall be tested after final treatment prior to leaving the POTW site. Sewage sludge determined to be a hazardous waste in accordance with 40 CFR Part 261, shall be handled according to RCRA standards for the disposal of hazardous waste in accordance with 40 CFR Part 262. The disposal of sewage sludge determined to be a hazardous waste, in other than a certified hazardous waste disposal facility shall be prohibited. If the sludge is determined to be a

hazardous waste, the RCRA Compliance Branch (telephone no. (212) 637-4144) and EQB shall be notified within twenty four (24) hours. In addition, a written report shall be provided to EPA within seven (7) days of such determination. The report shall contain test results, certification that unauthorized disposal has not occurred and a summary of alternative disposal plans that comply with RCRA standards for the disposal of hazardous waste. The report shall be addressed to: Branch Chief, RCRA Compliance Branch, Division of Enforcement and Compliance Assistance, EPA Region 2, 290 Broadway, New York, New York 10007-1866. A copy of this report shall be sent to the Chief, Enforcement and Superfund Branch, Caribbean Environmental Protection Division, Centro Europa Building - Suite 417, 1492 Ponce de León Ave., San Juan, Puerto Rico 00907-4127. After the sewage sludge has been monitored for two years and if it has not been determined to be a hazardous waste, the monitoring frequency shall be once per year.

6. Sewage sludge shall be tested (*See below) in accordance with EPA method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846). After the sewage sludge has been monitored for two years and has passed the paint filter tests, the monitoring frequency shall be once per year.

7. The permittee shall comply with 40 CFR Part 503, which requires preparers of sewage sludge to submit annual reports no later than February 19 of every year. The annual report shall include the following information:

   a. Amount of sludge generated, in dry metric tons;

   b. Use or disposal practices;

   c. Amount of sludge that goes to each use or disposal practice;

   d. The name and address of the Municipal Solid Waste Landfill;.

   e. Results of the hazardous waste determination (per 40 CFR Part 261) conducted on the sludge to be disposed; and

   f. Results of the Paint Filter Liquids Test conducted on the sludge to be disposed.

   The report shall be submitted to the Chief, Caribbean Section, Water Compliance Branch, 290 Broadway, 20th Floor, New York, New York 10007-1866 and to the Director, Caribbean Environmental Protection Division, Centro Europa Building - Suite 417, 1492 Ponce de León Avenue, Santurce, Puerto Rico 00907-4127.

* **Monitoring Requirements**

Amount of Sludge (Metric Tons per 365-day Period)	Monitoring Frequency
Less than 290	Once per year
Equal to or greater than 290 but less than 1,500	Twice per year
Equal to or greater than 1,500	Once per quarter

ATTACHMENT 1

A. DEFINITIONS

1. "Average monthly discharge limitation" 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.

2. "Average weekly discharge limitations" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

3. "Bypass" means the intentional diversion of wastes from any portion of a treatment facility.

4. "Combined Sewer Overflow (CSO)" means a discharge from combined sewer system to a receiving water of the United States prior to reaching the publicly owned treatment works treatment plant.

5. "Combined Sewer System (CSS)" means a wastewater collection system owned by a State or one or more municipalities (as defined by Section 502(4) of the Clean Water Act) which conveys sanitary wastewaters (domestic, commercial and industrial wastewaters) and storm water through a single pipe system to a publicly owned treatment works treatment plant (as defined in 40 DFR 403.3(p)).

6. "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.

7. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharge over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of pollutant over the day. For purposes of sampling, "daily" means an operating day or 24-hour period.

8. "Director" means the "Regional Administrator" or the "State Director", as the context requires, or an authorized representative. Until the State has an approved State program authorized by EPA in accordance with 40 CFR Part 123, "Director" means the Regional Administrator. When there is an approved State program, "Director" normally means the

State Director. Even in such circumstances, EPA may retain authority to take certain action (see, for example, 40 C.F.R. 123.1(d), 45 FR 14178, April 1, 1983, on the retention of jurisdiction over permits the 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".

9. "Discharge Monitoring Report" or "DMR" means the EPA uniform national form, including any subsequent additions, revisions, or modifications, for the reporting of self monitoring results by permittees.

10. "Dry Weather Flow Conditions' means hydraulic flow conditions within the combined sewer system from one or more of the following: flows of domestic sewage, ground water infiltration, commercial and industrial wastewaters, and any other non-precipitation event related flows (e.g., tidal infiltration under certain circumstances). Other non-precipitation event related flows that are included in dry weather flow conditions will be decided by the permit writer based on site specific-conditions.

11. "Dry Weather Overflow" means a combined sewer overflow that occurs during dry weather flow conditions.

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

13. "Gross" means the weight or the concentration contained in the discharge. (Unless a limitation is specified as a net limitation, the limitation contained in this permit is a gross limitation).

14. "Maximum daily discharge limitation" means the highest allowable "daily discharge".

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

16. "Net" means the amount of a pollutant contained in the discharge measured in appropriate units as specified herein, less the amount of a pollutant contained in the surface water body intake source, measured in the same units, over the same period of time, provided:

    a. The intake water source must be drawn for the same body of water into which the discharge is made; and

    b. In cases where the surface water body intake source is pretreated for the removal of pollutants, the intake level of a pollutant to be used in calculating the net is that level contained after the pretreatment steps.

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

18. "Severe property damage" means that substantial physical damage to the treatment facilities which would cause 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.

19. "State Director" means the chief administrative officer of the State water pollution control agency, or the authorized representative of the State Director.

20. "Toxic pollutant" means any of the pollutants listed in 40 CFR 401.15 (45 FR 44503, July 30, 1979) and any modification to that list in accordance with section 307 (a)(1) of the Act.

21. "Upset" means 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 non-compliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

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

B. MONITORING AND REPORTING REQUIREMENTS

1. Monitoring and Records. See Section B.10.

2. Discharge Monitoring Reports.

   a. See Section B.12.d.

   b. Monitoring results shall be obtained and recorded monthly on Discharge Monitoring Report Form (EPA-No. 3320-1). The monthly Discharge Monitoring Report Form shall be postmarked no later than the 28th day of the month following the completed reporting period. Signed copies of these, and all other reports required herein, shall be submitted to the Chief of the Compliance Assistance and Program Support Branch and State Director at the following addresses:

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

Environmental Quality Board of Puerto Rico
P.O. Box 11488
San Juan, Puerto Rico 00910
ATTN: Water Quality Bureau

3. Quality Assurance Practices. The permittee is required to show the validity of all data by requiring its laboratory to adhere to the following minimum quality assurance practices:

a. Duplicate[2] and spiked[3] samples must be run for each constituent analyzed for permit compliance on 5% of the samples, or at least on one sample per month, whichever is greater. If the analysis frequency is less than one sample per month, duplicate and spiked samples must be run for each analysis.

b. For spiked samples, a known amount of each constituent is to be added to the discharge sample. The amount of constituent added should be approximately the same amount present in the unspiked sample, or must be approximately that stated as maximum or average in the discharge permit.

c. The data obtained in a. shall be summarized in an annual report submitted at the end of the fourth quarter of reporting in terms of precision, percent recovery, and the number of duplicate and spiked samples runs.

d. Precision for each parameter shall be calculated by the formula, standard deviation $s = (\sum d^2/2k)^{1/2}$, where d is the difference between duplicate results, and k is the number of duplicate pairs used in the calculation.

e. Percent recovery for each parameter shall be calculated by the formula $R = 100(F-I)/A$, where F is the analytical result of the spiked sample, I is the result before spiking of the sample, and A is the amount of constituent added to the sample.

f. The percent recovery, R, for each parameter in e. above shall be summarized yearly in terms of mean percent recovery and standard deviation from the mean. The formula, $s = ((X-x)^2/(n-1))^{1/2}$, where s is the standard deviation around the mean X, x is an individual recovery value, and n is the number of data points, shall be applied.

g. The permittee and/or the permitees contract laboratory is required to annually analyze an external quality control reference sample for each pollutant. These are available through an approved performance test provider at http://www.a2la.org/dirsearchnew/nelacptproviders.cfm.

h. The permittee and/or his contract laboratory is required to maintain records of the specific analytical methods used, including options employed, if any, within a particular method, and of reagent standardization and equipment calibration operations.

i. If a contract laboratory is utilized, the permittee shall submit the name and address of the laboratory and the parameters analyzed at the time it submits its discharge monitoring reports (see Section 2.b. above). Any change in the contract laboratory

[2] Duplicate samples are not required for the following parameters: Color, Temperature, and Turbidity.

[3] Spiked samples are not required for the following parameters listed in Table 1 of 40 C.F.R. 136: Acidity, Alkalinity, Bacteriological, Benzidine, Chlorine, Color, Dissolved Oxygen, Hardness, pH, Oil and Grease, Radiological, Residues, Temperature, Turbidity. Procedures for spiking samples and spiked sample requirements for parameters not listed on the above-referenced table are available through EPA's Regional Quality Assurance Coordinator.

being used or the parameters analyzed shall be reported prior to or together with the monitoring report covering the period during which the change was made.

C. GENERAL CONDITIONS

TABLE OF REGULATORY REFERENCES FOR GENERAL CONDITIONS

Note: General Condition language in Part II, Sections B.1 through B.14, and B.17 is based on the July 1, 2010, Code of Federal Regulations (CFR). Reference to language in the U.S.C. (United States Code) is based on the date of permit issuance.

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

1. Duty to Comply

   a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the 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 Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the 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 Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the 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 Act, is subject to a civil penalty not to exceed $37,500 per day for each violation (as adjusted by 40 CFR Part 19).

d. The Act provides that any person who negligently violates Sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the 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 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 Act provides that any person who knowingly violates Sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the 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 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 Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the 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 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 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 section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act. Administrative penalties for Class I violations are not to exceed $16,000 per violation (as adjusted by 40 CFR Part 19), with the maximum amount of any Class I penalty assessed not to exceed $37,500 (as adjusted by 40 CFR Part 19). Penalties for Class II violations are not to exceed $16,000 per day for each day during which the violation continues (as adjusted by 40 C.F.R. Part 19), with the maximum amount of any Class II penalty not to exceed $177,500 (as adjusted by 40 CFR Part 19).

2. Duty to Reapply

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 must 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 Regional Administrator no later than 180 days before the expiration date.

3. Need to Halt or Reduce not a Defense

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

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

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

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

This permit does not convey any property rights of any sort, or any exclusive privileges.

8. Duty to Provide Information

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

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 Act, any substances or parameters at any location.

10. Monitoring and records.

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 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. 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). The Agency 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 C.F.R. 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: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

a. 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 of Part II.B;

(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 II, 290 Broadway, New York, New York, 10007-1866, Attention: Compliance Assistance Program Support Branch, and to the State Director.

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 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 section 309.c.4 of the Act).

12. Reporting Requirements.

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 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 I 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 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 the Regional Administrator at (732) 548-8730 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

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

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 preceding the permittee seeking to establish the occurrence of an upset has the burden of proof.

15. Removed substances

Pursuant to section 301 of the 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

The imposition of responsibilities upon or the institution of any legal action against the permittee under section 311 of the Act 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

Other effluent limitations and standards under sections 301, 302, 303, 307, 318 and 405 of the Act. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the Act 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

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 section 510 of the Act. 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. (section 308 of the Act)

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.

D. EFFECTIVENESS OF PERMIT

1. This permit shall become effective in its entirety on the date indicated on the first page of this permit unless a petition has been filed with the Environmental Appeals Board to review any condition of the permit decision pursuant to the provisions of 40 CFR Part 124.19. All contested conditions and any uncontested condition(s) that are inseverable from the contested conditions shall be stayed. All other conditions shall become effective thirty (30) days after the date of the notification specified in 40 CFR 124.16(a)(2)(ii).

2. For purposes of judicial review under section 509(b) of the Act, final agency action on a permit does not occur unless and until a party has exhausted its administrative remedies under 40 CFR 124. Any party which neglects or fails to seek review under 40 CFR 124.19, thereby waives its opportunity to exhaust available agency administrative remedies.

ATTACHMENT 2

COMBINED SEWER OVERFLOW (CSO) PERMIT CONDITIONS

The permittee is authorized to discharge from the CSO outfalls listed below. The permittee shall ensure that all CSOs from the Combined Sewer System (CSS) comply with the requirements of Attachment 2, Combined Sewer Overflow (CSO) Permit Conditions, and other pertinent portions of this permit.

Outfall Number	Overflow Outfall Location	Receiving Water Body
002 Mercantil Plaza Building	18°26'05.6" 66°03'36.2"	Caño Martin Peña
003 Barriada Figueroa (near the intersection of San Juan Natatorium)	18°26'38.2" 66°04'38.3"	Caño Martin Peña
004 Puerta de San Juan	18°27'53.524" 66°07'11.538"	San Juan Bay
005 Paseo La Princesa Pier	18°27'54.383" 66°07'10.887"	San Juan Bay
006 Miramar (behind Cortes Industrial)	18°26'50.060" 66°05'7.551"	San Juan Bay
007 Plaza Las Américas	18°26'23.17" 66°04'54.17	Puerto Nuevo River
008 Constitution Bridge	18°26'33.09" 66°04'43.04	Puerto Nuevo River

If additional CSO outfalls are identified and confirmed during the effectiveness of this permit, this attachment shall be modified to include such outfalls and the permittee must comply with the conditions herein.

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

I. Effluent Limits

A. Technology-based requirements for CSOs

The permittee shall comply with the following technology-based requirements:

1. The permittee shall implement proper operation and maintenance programs for the sewer system and all CSO outfalls to reduce the magnitude, frequency, and duration of CSOs. The program shall consider regular sewer inspections; sewer, catch basin, and regulator cleaning; equipment and sewer collection system repair or replacement, where necessary; and disconnection of illegal connections;

2. The permittee shall implement procedures that will maximize use of the collection system for wastewater storage that can be accommodated by the storage capacity of the collection system in order to reduce the magnitude, frequency, and duration of CSOs;

3. The permittee shall review and modify, as appropriate, its existing pretreatment program to minimize CSO impacts from the discharges from nondomestic users;

4. The permittee shall operate the POTW treatment plant at maximum treatable flow during all wet weather flow conditions to reduce the magnitude, frequency, and duration of CSOs. The permittee shall maximize flows to the treatment plant within the constraints of the current treatment capacity of the POTW and the existing conveyance capacity of the collection system. The permittee is responsible for properly operating and maintaining the POTW and the collection system, to ensure that the maximum permissible flows, which do not pose a threat to human health and/or the environment, are properly diverted to the facility;

5. Dry weather overflows from CSO outfalls are prohibited. Each dry weather overflow must be reported to the permitting authority as soon as the permittee becomes aware of the overflow. When the permittee detects a dry weather overflow, the permittee shall begin corrective action immediately. The permittee shall inspect the dry weather overflow each subsequent day until the overflow has been eliminated;

6. The permittee shall implement measures to control solid and floatable materials in CSOs;

7. The permittee shall implement a pollution prevention program, consistent with the permittee's authorities, focused on reducing the impact of CSOs on receiving waters and working with other state agencies to identify ways to prevent pollution;

8. The permittee shall implement a public notification process to inform citizens of when and where CSOs occur. The process must include (a) a mechanism to alert persons of the occurrence of CSOs and (b) a system to determine the nature and duration of conditions that are potentially harmful for users of receiving waters due to CSOs; and

9. The permittee shall monitor CSO outfalls to characterize CSO impacts and the efficacy of CSO controls. This shall include collection of data according to an EPA-approved data collection Quality Assurance Project Plan (QAPP) based on EPA's principal guidance for Combined Sewer Overflows, which can be found on EPA's website at http://cfpub.epa.gov/npdes/cso/guidedocs.cfm?program_id=5.
   - Guidance for Nine Minimum Control Measures (EPA 832-B-95-003)

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

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

These data shall include:

a. Characteristics of combined sewer system including the population served by the combined portion of the system and locations of all CSO outfalls in the CSS;
b. Total number of CSO events and the frequency and duration of CSOs for a representative number of events;
c. Locations and designated uses of receiving water bodies;
d. Water quality data for receiving water bodies; and
e. Water quality impacts or use impairments related to CSOs (eg. Beach closings or postings, shoreline wash-up of floatables, fish kills, street/basement flooding etc.).

B. Water Quality-based Requirements for CSOs

The permittee shall not discharge any pollutant at a level that causes or contributes to an in-stream excursion above numeric or narrative criteria developed and adopted as part of Puerto Rico's water quality standards.

1. The permittee shall not discharge any 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.

2. Solids from wastewater sources shall not cause deposition in, or be deleterious to, the exiting or designated uses of the waters.
3. The permittee shall not discharge in amounts that will render any undesirable taste or odor to edible aquatic life.

4. The waters of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oil and greases.

5. No heat may be added to the waters of Puerto Rico, which would cause the temperature of any site to exceed 90°F (32.2°C).

II. Reporting Requirements

A. Reporting implementation of nine minimum controls

The permittee shall submit documentation that demonstrates implementation of each of the nine minimum controls that includes the elements below and shall include a schedule showing complete implementation of each of the controls. With the exception of number nine (9) below, the permittee shall submit this documentation to the permitting authority no later than EDP + 6 months. The permittee shall submit such documentation for number nine (9) below no later than EDP + one year.

1. Proper operation and regular maintenance programs for the sewer system and the CSOs;
2. Maximum use of the collection system for storage;
3. Review and modification of pretreatment requirements to assure CSO impacts are minimized;
4. Maximization of flow to the POTW for treatment;
5. Prohibition of CSOs during dry weather;
6. Control of solid and floatable materials in CSOs;
7. Pollution prevention:
8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts; and
9. Monitoring to effectively characterize CSO impacts and efficacy of CSO controls

III. Long-Term Control Plan

The permittee shall develop a long-term control plan that will include the elements in Sections III.A through III.D below and shall submit the plan elements in accordance with the schedule contained in Section III.E:

A. Public Participation

The permittee shall prepare and implement a public participation plan that outlines how the permittee will ensure participation of the public throughout the long-term control plan development process.

B. CSS Characterization

The permittee shall develop and implement a plan that will result in a comprehensive characterization of the CSS developed through records review, monitoring, modeling, and other means as appropriate to establish the existing baseline conditions, evaluate the efficacy of the CSO technology-based controls, and determine the baseline conditions upon which the long-term control plan will be based. The data collection activities required in this section shall be incorporated into the CSO data collection QAPP developed under Section I.A.9, for review and approval by EPA in the timeframes identified in Section I.A.9." The characterization shall

adequately address the response of the CSS to various precipitation events; identify the number, location, frequency, and characteristics of CSOs; and identify water quality impacts that result from CSOs.

To complete the characterization, the permittee shall employ the following methods:

1. Rainfall Records Review. The permittee shall examine the complete rainfall records for the geographic areas of the CSS and evaluate the flow variations in the receiving water body to correlate between the CSOs and receiving water conditions.

2. CSS Records Review. The permittee shall review and evaluate all available CSS records and undertake field inspections and other necessary activities to identify the number, location, and frequency of CSOs and their location relative to sensitive areas (as identified in III.B.4) and to pollution sources, such as significant industrial users, in the collection system.

3. CSO and Water Quality Monitoring The permittee shall develop and submit a data collection QAPP for EPA review and approval that supports achieving Long Term Control Plan goals. The data collection QAPP will be submitted to EPA for review and comment within 90 days of EDP. Implementation of QAPP activities will begin no later than 180 days after receipt by PRASA of formal approval of the QAPP by EPA. Reporting frequency will occur as established I the QAPP, but will occur on no less than an annual basis. The data collection and monitoring activities identified in this section shall be incorporated into the CSO data collection QAPP developed under Section I.A.9, for review and approval by EPA in the timeframes identified in Section I.A.9.

4. Identification of Sensitive Areas. The permittee shall identify sensitive areas to which its CSOs occur. These areas shall include Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their designated critical habitat, waters with primary contact recreation, public drinking water intakes or their designated protection areas, shellfish beds, and any other areas identified by the permittee or permitting authority, in coordination with appropriate state or federal agencies.

5. CSS and Receiving Water Modeling. The permittee may employ models, which include appropriate calibration and verification with field measurements, to aid in the characterization. If models are used, they shall be identified by the permittee along with an explanation of why the model was selected and used in the characterization.

C. CSO Control Alternatives

1. Development of CSO Control Alternatives. The permittee shall develop a range of CSO control alternatives that would be necessary to achieve zero overflow events per year, an average of 1 to 3, 4 to 7, and 8 to 12 overflow events per year. The permittee shall consider expansion of the POTW treatment plant capacity as an alternative. Alternatives presented must give the highest priority to controlling CSOs to the sensitive areas identified in Section III.B.4 above. For such areas, the alternatives included in the

plan must (1) prohibit new or significantly increased CSOs, (2) eliminate or relocate CSOs from such areas wherever physically possible and economically achievable, except where elimination or relocation would provide less environmental protection than additional treatment, (3) where elimination or relocation is not physically possible or economically achievable or would provide less environmental protection than additional treatment, provide the level of treatment for remaining CSOs deemed necessary to meet water quality standards for full protection of existing and designated uses;

2. Evaluation of CSO Control Alternatives. The permittee shall evaluate each of the alternatives developed in accordance with Section III.C.1 to select the CSO controls that will ensure compliance with CWA requirements[4]; and

3. Cost/Performance Considerations. The permittee shall develop and submit cost/performance curves that demonstrate the relationship among the set of CSO control alternatives that correspond to the ranges identified in Section III.C.I above.

D. Selected CSO Controls

Once the permittee has selected the CSO controls in consultation with the permitting authority, the permittee shall submit the following:

1. Implementation Schedule. The permittee shall submit a construction schedule for the selected CSO controls as part of the implementation schedule. Such schedules may be phased based on the relative importance of the adverse impacts on water quality standards and on the permittee's financial capability;

2. Operational Plan. The permittee shall submit a revised operation and maintenance plan that addresses implementation of the selected CSO controls. The revised operation and maintenance plan shall maximize the removal of pollutants during and after each precipitation event using all available facilities within the collection and treatment system; and

3. Post-Construction Compliance Monitoring Program. The permittee shall develop and submit a post-construction monitoring program that (a) is adequate to ascertain the effectiveness of the CSO controls and (b) can be used to verify attainment of water quality standards. The program shall include a plan that details the monitoring protocols to be followed, including CSO and ambient monitoring and, where appropriate, other monitoring protocols, such as biological assessments, whole effluent toxicity testing, and sediment sampling.

E. Schedule and Interim Deliverables

Within nine months (9) months of EDP, the permittee shall meet with EPA to discuss the development of the Long Term Control Plan. The permittee shall develop, in accordance with the

[4] The analysis of the alternatives shall be performed pursuant to the procedures described in EPA's CSO Policy.

requirements specified in Sections III.A through III.D, and submit the following items no later than the dates set forth below:

1. Public Participation Plan, as required in Section III.A, EDP + one year;

2. CSS Characterization Monitoring and Modeling Plan, as required in Section III.B, EDP + one year;

3. CSS Characterization Monitoring and Modeling Results, including identification of sensitive areas, as required in Section III.B, in EDP + 2 years;

4. CSO Control Alternatives Identification, as required in Section III.C.1, in EDP + 3 years;

5. CSO Controls Evaluation and Cost Performance Curves for the selected CSO controls, as required in Sections III.C.2 and 3, in EDP + 3 years;

6. Implementation Schedule, as required in Section III.D.1, including any supporting analyses, in EDP + 3 years;

7. Operational Plan revised to reflect selected CSO controls, as required in Section III.D.2, in EDP + 3 years; and

8. Post-Construction Compliance Monitoring Plan, as required in Section III.D.3, in EDP + 3 years.

The dates provided are for submittal of complete draft documents and that the permittee will be required to provide an updated, final document in response to comments provided by EPA. The updated final document shall adequately address all comments provided by EPA in order to receive formal approval by EPA and shall be submitted to EPA within 60 days of receiving comments from EPA.

IV. Special Conditions

A. This permit may be modified or revoked and reissued, as provided pursuant to 40 CFR 122.62 and 124.5, for the following reasons:

1. To include new or revised conditions developed to comply with any state or federal law or regulation that addresses CSOs that is adopted or promulgated subsequent to the effective date of this permit;

2. To include new or revised conditions if new information, not available at the time of permit issuance, indicates that CSO controls imposed under the permit have failed to ensure the attainment of State water quality standards; and

3. To include new or revised conditions based on new information generated from the Long Term Control Plan.

In addition, this permit may be modified or revoked and reissued for any reason specified in 40 CPR 122.62.

ATTACHMENT 3

General section 301(h) Monitoring and Reporting Requirements

The Puerto Nuevo RWWTP shares an outfall with the Bayamón RWWTP and the Bacardi WWTP. Since wastewater discharged from the joint outfall consists of effluent from these three facilities, characterizing the discharge from the Bayamón RWWTP and Puerto Nuevo RWWTP individually, and combined with the Bacardi WWTP, is necessary to assess compliance with criteria set forth in section 301(h) of the Act and all applicable Puerto Rico water quality standards (PRWQS). The section 301(h) monitoring program, herein referred to as the Bayamón and Puerto Nuevo RWWTPs section 301(h) Waiver Demonstration Studies, is designed for the shared outfall and shall be implemented upon the effective date of this permit by PRASA as described below.

Pursuant to 40 CFR 125.63 and 125.68, each section 301(h) modified permit shall contain, in addition to the terms and conditions required by 40 CFR Part 122, monitoring program requirements that include:

- Effluent monitoring to ensure that the discharge has received at least primary treatment, to determine the effectiveness of the toxic control program, and to demonstrate the attainment or maintenance of water quality which assures protection and propagation of a balanced indigenous population of shellfish, fish and wildlife, and allows for recreational activities;

- Water quality monitoring to assess compliance with water quality standards or water quality criteria, and measure the presence of toxic pollutants which have been identified or reasonably may be expected to be present in the modified discharge; and

- Biomonitoring to evaluate the impact of the modified discharge on the marine biota.

As part of the Bayamón and Puerto Nuevo RWWTPs section 301(h) Waiver Demonstration Studies, the permittee shall comply with the following general monitoring and reporting requirements:

1. The permittee shall conduct an annual inspection of the Bayamón and Puerto Nuevo RWWTPs joint outfall and diffuser system to assess the condition of the system. The permittee shall submit an inspection report to the EQB and EPA no later than 60 days after inspection. The inspection report shall include an analysis of the outfall and diffuser condition (e.g., leaks, port blockage, etc.), flow distribution, and describe any corrective measures taken or planned; and

2. The permittee shall conduct Bayamón and Puerto Nuevo RWWTPs section 301(h) Waiver Demonstration Studies that include annual monitoring of effluent and water quality, and biomonitoring. Annual monitoring shall be conducted in alternating wet (August through November) and dry (January through March) seasons. Table 1 provides a

Table 1. Section 301(h) monitoring program for the Bayamón and Puerto Nuevo RWWTPs

Monitoring Type	**Pollutants/Substrate**	**Monitoring Frequency**
Effluent Monitoring	Conventional and non-conventional pollutants (DO, TSS, oil and grease, nitrogen species, bacteria, etc.)	Annual
	Metals, Pesticides, and PCBs	Annual *
	Dioxins, volatile and semi-volatile organic pollutants	Once per permit term
Receiving Water Monitoring	Conventional and non-conventional pollutants (DO, TSS, oil and grease, nitrogen species, bacteria, etc.)	Annual
	Metals and Pesticides	Annual
	Dioxins, volatile and semi-volatile organic pollutants	Once per permit term
Biomonitoring	Benthic Invertebrate Monitoring	Annual
	Sediment Quality Monitoring	Annual
	Fish Tissue Bioaccumulation	Once per permit term

*Alternating Wet and Dry Seasons

Table 2. Monitoring station locations and monitoring type

Monitoring Station	**Location**	**Latitude**	**Longitude**	**Monitoring Type**
B2	Within ZID	18°29.048'	66°08.341'	Water, Sediment, Benthic Invertebrate Fish Tissue
B3	Edge of ZID	18°29.687'	66°08.162'	Water, Sediment, Benthic Invertebrate
B5	East Farfield	18°29.078'	66°08.092'	Water, Sediment, Benthic Invertebrate, Fish Tissue
B9	West Farfield	18°29.280'	66°10.977'	Water, Sediment, Benthic Invertebrate, Fish Tissue
B12	Edge of ZID	18°29.176'	66°08.513'	Water, Sediment, Benthic Invertebrate,
B13	Reference	18°29.680'	66°13.177'	Water, Sediment, Benthic Invertebrate, Fish Tissue
B14	In shore	18°28.210'	66°08.677'	Water
B15	In shore	18°28.649'	65°10.616'	Water, Fish Tissue

summary of monitoring type and frequency, and pollutants to be assessed as part of the Bayamón and Puerto Nuevo RWWTPs section 301(h) Waiver Demonstration Studies.

3. The permittee shall conduct monitoring at the monitoring locations listed Table 2. For each monitoring station, the permittee shall conduct water, sediment, benthic, and/or fish tissue monitoring as summarized in Table 2.

4. The permittee shall implement the section 301(h) waiver monitoring program as described in the EPA-approved April 2008 Quality Assurance Project Plan and Sampling and Analysis Protocols (QAPP/SAP) for the Bayamón and Puerto Nuevo RWWTPs section 301(h) Waiver Demonstration Studies (CH2MHill, Document No. CP-BM-00012-08, Revision No. 3). Any modifications to the section 301(h) waiver monitoring program for the Bayamón and Puerto Nuevo RWWTPs described herein will be made through revisions to the 2008 QAPP/SAP and shall be implemented by the permittee upon approval of the revision by EPA.

ATTACHMENT 4

Non-Industrial Source Control Program

1) No later than fourteen months from EDP, the permittee shall submit to EPA a report assessing the effectiveness of its nonindustrial source control program. Such assessment shall be based on information obtained during the most recent headworks analysis and shall include identification of any modifications to the program required to address non-industrial sources of toxic pollutants and pesticides.

2) A schedule for the development and implementation of modifications to the nonindustrial source control program shall be included in the report. Such schedule shall not exceed eighteen months from EDP.

3) All modifications to the nonindustrial source control program shall be implemented no later than eighteen months from EDP.

4) The nonindustrial source control program shall be subject to revision as determined by the Administrator during the term of this permit.