

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

FACT SHEET/STATEMENT OF BASIS
DRAFT NPDES PERMIT TO DISCHARGE
INTO THE WATERS OF THE UNITED STATES

NPDES No. PR0024155 Date:

NPDES Permit Writer: Stephen Venezia - 12/06/06

Name and Address of Applicant:

Puerto Rico Aqueduct and Sewer Authority
P.O. Box 7066, Bo. Obrero Station
San Juan, Puerto Rico 00716

Name and Address of Facility
where Discharge Occurs:

Utuaedo Filter Plant
State Road No. 111, Km 5.4
Utuaedo, Puerto Rico 00641

Receiving Water: Quebrada Jordan

Classification: SD

I. LOCATION OF DISCHARGE

The above-named applicant has applied for a National Pollutant Discharge Elimination System (NPDES) permit, to the U.S. Environmental Protection Agency (EPA) to discharge into the designated receiving waters. The location of each discharge is described by the following U.S.G.S. Coordinates:

	<u>Latitude</u>	<u>Longitude</u>
Outfall 001	N 18° 14' 47"	W 66° 40' 15"

A description and/or sketch of the location of the discharges is appended as Attachment I.

II. DESCRIPTION OF FACILITY

Utuaado Water Treatment Plant is a filtration plant that treats raw water from the Viví Dam to provide potable water to the Municipality of Utuaado. This activity has a standard industrial classification (SIC) code of 4941. The treatment consists of coagulation, flocculation, sedimentation, filtration and disinfection. The pre-sedimentation tank and sedimentation tank drains with the filters backwashes which are discharged to Quebrada Jordan. A sludge treatment system was constructed, is expected to begin operating, and has been addressed in the special conditions. Puerto Rico Aqueduct & Sewer Authority (PRASA) operates and maintains this facility.

III. DESCRIPTION OF DISCHARGE

Outfall 001:

The discharge consists of a daily maximum of 0.144 million gallons per day (MGD) of wastewater from the Utuaado Water Treatment Plant.

A description of the type and quantity of pollutants which are to be discharged is listed in Table A-1 of the draft permit.

IV. DESCRIPTION OF DRAFT PERMIT CONDITIONS

The effluent limitations, monitoring requirements, schedules of compliance and other conditions of the draft permit are described in Attachment II. Also included in Attachment II is a brief summary of the basis for each effluent limitation and other conditions in the draft permit.

V. STATE CERTIFICATION REQUIREMENTS

State Certification requirements are based upon a draft Water Quality Certificate (WQC) issued on September 26, 2006, by the Environmental Quality Board (EQB) of the Commonwealth of Puerto Rico. Review and appeals of limitations and conditions attributable to this certification shall be made through the applicable procedures of the Commonwealth of Puerto Rico and may not be made through EPA procedures.

VI. PROCEDURES FOR REACHING A FINAL DECISION ON THE DRAFT PERMIT

These procedures, which are set forth in 40 CFR 124, are described in the public notice of preparation of this draft permit. Included in the public notice are requirements for the submission of comments by a specified date, procedures for requesting a hearing and the nature of the hearing, and other procedures for participation in the final agency decision.

VII. ENDANGERED SPECIES ACT

In letters dated May 27, 2003, and December 5, 2002, respectively, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service provided written concurrences that the revisions to the Puerto Rico Water Quality Standards (PRWAS) are not likely to adversely affect threatened or endangered species. As a minor facility and a renewal permit, no effects determination for Utuado Water Treatment Plant., has been made and the PRWQS approved by the services mentioned above will be adequate.

VIII. EPA CONTACT

Additional information concerning the draft permit may be obtained between the hours of 8:00 A.M. and 4:30 P.M., Monday through Friday from:

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DESCRIPTION OF DRAFT PERMIT CONDITIONS FOR OUTFALL 001

The effluent limitations, monitoring requirements, and other conditions are described in the draft permit. The effluent limitations in the permit are equivalent to the most stringent values specified in the applicable technology-based guidelines or water quality-based limitations.

I. Water Quality-based Limits

The effluent limitations listed in Table A-1 for all contaminants, unless otherwise specified, and all special conditions are as imposed in the draft Water Quality Certificate (WQC) issued by the EQB, dated September 26, 2006. The draft WQC was issued by the EQB for the purpose of assuring compliance with EQB's water quality standards and compliance with other appropriate requirements of State law as provided by Section 401(d) of the Clean Water Act.

1. Antibacksliding Parameters - All water quality-based antibacksliding decisions are made in accordance with EPA Region II Antibacksliding Policy dated August 10, 1993. Policy decisions, applicable to pollutants regulated by water quality-based effluent limitations for which antibacksliding is applicable, are provided as follows:

Outfall 001:

-WQC Limit Absent - The water quality-based effluent limitations (concentration) from the "effective permit" (permit which was effective on September 1, 2001, and expired midnight, June 30, 2006) for fecal coliform, manganese, and nitrate+nitrite are not included in the draft Water Quality Certificate (WQC) September 26, 2006.

For the above parameters EPA has determined that it is appropriate to remove the effluent limitations for these parameters without violating antibacksliding provisions of the Clean Water Act (CWA), in accordance with section 402(o), since one of the exceptions to the provisions has been satisfied. CWA §402(o)(2)(B)(i) allows backsliding if information is available which was not available at the time of permit issuance and would have justified a less stringent effluent limitation at the time of permit issuance. The reasonable potential analysis conducted by the Environmental Quality Board of Puerto Rico (EQB) in developing a new WQC and the associated background materials (i.e., NPDES application, Discharge Monitoring Report (DMR) data) can be considered new information and the absence of a limited parameter in an EQB WQC constitutes a determination that a limit is not necessary and that the water quality standard is or will be attained. Antidegradation requirements are not violated by removing all of these above parameters. Since the permittee will be discharging the pollutant at the same level, the discharge would not contribute to further degradation of the receiving water and existing uses would be maintained.

-Less Stringent WQC Limit - The water quality-based daily maximum effluent limitations from the effective permit for cadmium, cyanide, and zinc have been replaced with less stringent water quality-based limitations in the draft Water Quality Certificate (WQC) dated September 26, 2006. EPA had conducted an Existing Effluent Quality Analysis (see Attachment II Part V of this document) and has determined that it is appropriate to relax the effluent limitation for the parameters of dissolved oxygen, lead, and zinc without violating antibacksliding provisions of the Clean Water Act (CWA), in accordance with §402(o), since one of the exceptions to the provisions has been satisfied. Section 303(d)(4) of the CWA allows relaxation of water quality-based effluent limitations developed in accordance with a Total Maximum Daily Load/Waste Load Allocation (TMDL/WLA) procedure, provided that attainment of water quality standards is assured and antidegradation requirements are considered. The Environmental Quality Board of Puerto Rico (EQB) WQC constitutes a determination that the limit is sufficient to assure that the water quality standard is or will be attained.

II. Monitoring Requirements

The monitoring requirements listed in Table A-1 for all contaminants, unless otherwise specified, are as imposed in the draft Water Quality Certificate (WQC) issued by the EQB, dated September 26, 2006. The draft WQC was issued by the EQB for the purpose of assuring compliance with EQB's water quality standards and compliance with other appropriate requirements of State law as provided by Section 401(d) of the Clean Water Act.

The draft WQC does not specify an analytical method for undissociated H₂S. EPA is therefore providing a footnote requiring use of the approved EPA analytical method with the lowest possible detection limit to establish the concentration of Sulfide (undissociated H₂S). Also, EPA is providing clarifying wording in the draft permit for Special Condition number 9 in the EQB draft WQC to ensure that the permittee performs the analytical test and calculations specified by EPA for Undissociated H₂S and provides compliance with the terms of this Special Condition in the cover letter submitted with the Discharge Monitoring Report.

The draft WQC issued by the EQB includes an effluent limitation and monitoring requirements for phenolic substances. Although the WQC does not specify an analytical method for phenolic substances, Table A-1 Note "ϕ" of the WQC requires that the analytical method which achieves the lowest possible detection level must be utilized. Based on this condition, EPA has specified in Table A-1 that Method 420.1, using the chloroform extraction procedure, must be used to analyze samples for phenolic substances.

III. Special Conditions - All special conditions are as imposed in the draft WQC issued by the EQB, dated September 26, 2006.

IV. General Conditions - These conditions apply to all permits as required by 40 CFR Part 122.7.

V. Existing Effluent Quality Analysis

In accordance with EPA Region II Anti-backsliding Policy, if water quality-based effluent limits included in a WQC are less stringent than those of the existing permit, a limit may be developed based on the permittee's existing effluent quality (EEQ). An analysis of EEQ for PRASA Utuado Filer Plant was performed for Cadmium, Cyanide, and Zinc. The EEQ daily maximum limit is based on the 95th percentile of the lognormal distribution of the monitoring data. Monthly monitoring results for PRASA Utuado Water Treatment Plant from the period August 2002 to October 2006 were used in this analysis.

The 95th percentile daily maximum value of the EEQ analysis was used for comparison with both the existing limit, and the WQC limit. Where the EEQ result is less than the existing limit, the existing limit controls. Where the EEQ result is greater than the existing limit, but less than the WQC limit, the EEQ result controls. Finally, where the EEQ result is greater than the WQC limit, the WQC limit controls. The results of the EEQ analysis are presented below, along with existing and WQC limits.

Parameter	Existing daily max.	WQC daily max.	ELG daily max.	EEQ 95 th Percentile daily max.	Controlling Limit
Cadmium (ug/l)	0.9	2.01		5.7	2.01
Cyanide (ug/l)	5.2	10		21.0	10
Zinc (ug/l)	50.00	96.43		1943.8	96.43