



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2

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NEW YORK, NY 10007-1866

SEP 27 2010

Pedro J. Nieves Miranda, Esq.
Executive Director
Puerto Rico Environmental Quality Board
PO Box 11488
San Juan, PR 00910-2588

Dear Mr. Miranda:

On September 13, 2010, the U.S. Environmental Protection Agency (EPA) received the final documentation for the Commonwealth of Puerto Rico's (the "Commonwealth") 2010 Water Quality Inventory and List of Impaired Waters Report (the "2010 Integrated Report"). EPA action is only required on Category 5 in the 2010 Integrated Report. Category 5 of the 2010 Integrated Report constitutes the Commonwealth's 2010 Clean Water Act (the "Act") Section 303(d) List (the "2010 Section 303(d) List"). EPA has conducted a complete review of the Commonwealth's 2010 Section 303(d) List as well as all supporting documentation and information. Based on this review, EPA has determined that the Commonwealth's 2010 Section 303(d) List meets the requirements of Section 303(d) of the Act and EPA's implementing regulations under 40 CFR Part 130.7. The statutory and regulatory requirements, and EPA's review of the Commonwealth's compliance with each requirement, are described in the support documentation enclosed.

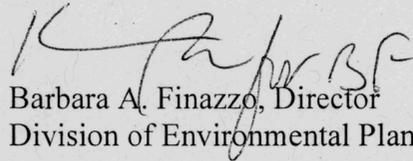
Section 303(d) of the Act and EPA's implementing regulations at 40 CFR Part 130.7 require the Commonwealth to identify those waters within its boundaries for which technology-based and other controls are not stringent enough to implement any water quality standards applicable to such waters. Under EPA's regulations, 40 CFR Part 130.7(b)(4), the Commonwealth is required to identify the pollutants causing the impairment of these waters. Section 303(d) further requires the Commonwealth to establish a priority ranking for such waters, taking into account the severity of the pollution and the designated uses of the listed waters. Finally, the Commonwealth is required to identify the waters targeted for Total Maximum Daily Load ("TMDL") development over the next two years.

The Commonwealth's 2010 Section 303(d) List identifies five hundred and ninety-three (593) assessment unit/pollutant combinations three hundred and forty six (346) of which are located in high priority basins and are considered high priority for TMDL development. One hundred and thirteen (113) of these assessment unit/pollutant combinations have been targeted for TMDL development over the next two years.

The Commonwealth announced the availability of the 2010 Section 303(d) List in Primera Hora and El Vocero newspapers on January, 15 2010, and provided a 30-day comment period which ended on February 15, 2010. In addition, a public hearing was held on February 16, 2010 concerning the 2010 Section 303(d) List.

EPA hereby approves the Commonwealth's 2010 303(d) List pursuant to 40 CFR 130.7(d). Should you have any questions concerning this approval, please do not hesitate to contact me at (212) 637-5000, or have your staff contact Nesmarie Negrón at (212) 637-3883.

Sincerely,

A handwritten signature in black ink, appearing to read 'Barbara A. Finazzo', with a large 'BF' monogram to the right.

Barbara A. Finazzo, Director
Division of Environmental Planning and Protection

Enclosure

cc: Carmelo Vazquez, Director, The Evaluation and Strategic Planning Area
(w/enclosure)
Angel Melendez, Chief, The Evaluation and Strategic Planning Area

Supporting Documentation for Review and Approval of Puerto Rico's 2010 Section 303(d) List

On September 13, 2010, the Commonwealth of Puerto Rico (the "Commonwealth" or "Puerto Rico") submitted to the U.S. Environmental Protection Agency ("EPA"), its 2010 Water Quality Inventory and List of Impaired Waters Report (the "2010 Integrated Report"). Contained within the 2010 Integrated Report is the Commonwealth's 2010 Clean Water Act (the "Act") Section 303(d) List ("2010 303(d) List").

EPA has reviewed the Commonwealth's 2010 303(d) List and all supporting documentation and information. EPA has concluded that Puerto Rico developed its 2010 303(d) list in compliance with Section 303(d) of the Act and 40 CFR 130.7. EPA's review is based on its analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed. For the reasons set forth below, EPA approves Puerto Rico's 2010 303(d) List.

Identification of Water Quality Limited Segments for Inclusion on Section 303(d) List

Section 303(d)(1) of the Act directs States (Section 502 of the Act defines "State" to include the Commonwealth of Puerto Rico) to identify those waters within its jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standard and to establish a priority ranking for such waters, which considers the severity of the pollution and the designated uses of such waters. The Section 303(d) listing requirement applies to waters impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of Section 303(d).

EPA regulations provide that States do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the Act, (2) more stringent effluent limitations required by State or local authority, and (3) other pollution control requirements required by State, local, or federal authority. See 40 CFR 130.7(b)(1).

Consideration of Existing and Readily Available Water Quality-Related Data and Information

In developing Section 303(d) lists, States are required to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified in the Commonwealth's most recent report, prepared pursuant to Section 305(b) of the Act, as partially meeting or not meeting designated uses, or as threatened; (2) waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA. See 40 CFR 130.7(b)(5). In addition to these categories, States are required to consider any other data and information that is existing and readily available. EPA guidance describes categories of water quality-related data and information that may be existing and readily available. See Guidance for Water Quality-Based Decisions: The TMDL Process - EPA 440/4-91-001, EPA Office of Water, 1991, Appendix C ("EPA's 1991 Guidance"). While States are required to evaluate all existing and readily available water quality-related data and

information, States may decide to rely or not rely on particular data or information in determining whether to list particular waters.

In addition to requiring States to assemble and evaluate all existing and readily available water quality-related data and information, EPA regulations at 40 CFR 130.7(b)(6) require States to include, as part of its submissions to EPA, documentation in support of determinations to rely or not rely on particular data and information for listing decisions. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; and (3) any other reasonable information requested by EPA.

Consistent with EPA's guidance, Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates - EPA841-B-97-002A and EPA841-B-97-002B, 1997, and Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act, July 29, 2005 ("EPA's 2006 Integrated Report Guidance"), the Puerto Rico Environmental Quality Board ("PREQB") developed a Consolidated Assessment and Listing Methodology ("CALM") in order to integrate the monitoring and assessment activities under Sections 305(b) and 303(d). PREQB's CALM describes the process for the evaluation and consolidation of monitoring data and information to determine the levels of water quality and use support. PREQB incorporates its CALM into its Integrated Report. PREQB's Integrated Report consists of five, distinct parts: 1) Segmentation Criteria and Waterbody Segment Definition 2) Category Determination 3) Water Quality Assessment by Designated Use, 4) Listing Criteria, and 5) Priority Ranking of the 2010 303(d) List. Each section builds on the previous components to provide a comprehensive methodology. PREQB segments waters under the jurisdiction of the Commonwealth, into "assessment units" and assesses water quality standards attainment as specified by PREQB's CALM. The CALM was submitted to EPA as part of the 2010 Integrated Report and is the background document for the 2010 303(d) List. EPA notes that Puerto Rico assessed its waters based on the applicable Water Quality Standards at the time of the assessment. These Water Quality Standards were in place at the time of Puerto Rico's initial submission to EPA on April 14, 2010. Select Water Quality Standards were revised and approved on August 4, 2010. The revised standards will be applicable for assessments in the 2012 listing cycle.

For the 2010 Integrated Report and 2010 303(d) List, PREQB introduced a new segmentation system for coastal waters assessments. PREQB condensed the total number of assessment units from one hundred and fifty-eight (158) to sixty-four (64), all within five, distinct geographic regions: North, South, East, West and Offshore Islands.

PREQB has established six (6) monitoring networks from which it collects water quality data and information. These include the Surface water, Clean Lakes, Non Point Sources, Groundwater, Coastal, and Beach Monitoring Networks. These networks provide physical, chemical and biological water quality data for each type of water. PREQB also receives water quality data and information from local governmental agencies and organizations pursuant to Puerto Rico Law No. 416 (September 22, 2004) which requires any agency, office, instrumentality, public corporation, or municipality of Puerto Rico that receives or generates scientific research, work or studies regarding the environment and natural resources to submit a copy of such research, work, or study to PREQB. In addition, for the 2010 303(d) listing cycle, PREQB sent letters on August 13, 2009 soliciting chemical and biological data (three years or less) on water bodies, along with information pertaining to the quality control procedure and protocols that were used to generate the data, from a wide variety of organizations including academic institutions, government agencies, and environmental

organizations. Once received, PREQB assembles all existing and readily available data and evaluates this data in accordance with its CALM.

After it has evaluated all existing and readily available data and information, PREQB, in accordance with its CALM and based on designated use support, places assessment units in one of the following 5 categories in its Integrated Report:

- Category 5: impaired and requiring a Total Maximum Daily Load (“TMDL”);
- Category 4: impaired or threatened but not requiring TMDL;
- Category 3: insufficient data for determining use attainment;
- Category 2: attaining some designated uses and insufficient data to determine attainment for other uses; and
- Category 1: waters attaining water quality standards for all designated uses.

Assessment units placed in Category 5 of the Integrated Report require a TMDL. Category 5, therefore, is the Commonwealth’s 303(d) List.

Assessment units on the 303(d) List are grouped by basin. Each listing contains the assessment unit name, the assessment unit identification number, the impairment type and the impairment source. In addition, PREQB’s 2010 303(d) List crosswalks the new coastal assessment units with the 2008 coastal assessments units and the associated 2008 303(d) List information. The 2010 303(d) List contains five hundred and ninety three (593) assessment unit/pollutant combinations.

To ensure that all impaired waters are listed, EPA reviewed the Commonwealth’s description of the data and information considered for the 2010 Integrated Report and the methodology employed for identifying and categorizing assessment unit/pollutant combinations and compared the assessment unit/pollutant combinations listed in 2010 with those listed in 2008.

EPA concludes that the Commonwealth properly assembled and evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 CFR 130.7(b)(5).

Delisting

The Commonwealth delisted 66 assessment unit/pollutant combinations from the 2008 303(d) List. As per 40 CFR 130.7(b)(6)(iv), Puerto Rico has shown good cause to delist these 66 waterbody/pollutant combinations based on one of the following reasons:

1. Approval or establishment by EPA of a TMDL since the last Section 303(d) list.

8 waterbody/pollutant combinations have been delisted due to completion of new TMDLs in Rio Grande de Loiza. These include: Rio Cagüitas (PRER14I) for ammonia, copper, and low dissolved oxygen; Rio Bairoa (PRER14H) for ammonia, copper, and low dissolved oxygen; Rio Grande de Loiza (PRER14A2) for low dissolved oxygen; and Rio Gurabo (PRER14G1) for low dissolved oxygen.

2. The original listing was made in error and a correction is necessary.

PREQB has identified 1 waterbody/pollutant pair previously listed in error. Rio Maunabo (PRER37A) was delisted for Ammonia. The ammonia standard is not applicable for this segment.

3. The assessment and interpretation of more recent or more accurate data demonstrate that an applicable water quality standard (“WQS”) is being met.

The Commonwealth is delisting a total of 57 waterbody/pollutant combinations because the applicable WQS is being met. These delistings include:

Rio Guajataca Basin: Rio Guajataca (PRNR3A2) copper, lead, surfactants

Rio Cibuco Basin: Rio Cibuco (PRNR9A) copper, low dissolved oxygen

Rio Espiritu Santo Basin: Rio Espiritu Santo (PRER16A) lead, selenium

Rio Fajardo Basin: Rio Fajardo (PRER22A) lead, low dissolved oxygen, surfactants

Rio Maunabo Basin: Rio Maunabo (PRER37A) copper

Rio Grande de Patillas Basin: Rio Grande de Patillas (PRSR43A2) turbidity

Rio Coamo Basin: Rio Coamo (PRSR57A2) turbidity

Rio Portugues Basin: Rio Portugues (PRSR63A) copper

Rio Yagüez Basin: Rio Yagüez (PRWR79A) surfactants

Rio Grande de Añasco Basin: Rio Grande de Añasco (PRWR83A) cadmium, copper, lead, low dissolved oxygen, surfactants

Rio Guayanes Basin: Rio Guayanes (PREE35A) cadmium, low dissolved oxygen

Rio Grande de Añasco Basin: Lago Guayo Lago Guayo (PRWL83H) pH

Quebrada Melania Basin: Lago Melania (PRSL50A) low dissolved oxygen

San Juan Bay Estuary System: San Juan Bay Estuary (PREE13A3) cadmium, copper, lead, mercury

Coastal Shoreline: Punta Ballena to Punta Brea (PRSC40 or old AU ID: PRSS0003Z5_00) enterococcus

Rio Grande de Arecibo Basin:

Rio Grande de Arecibo (PRNR7A1) copper, lead, surfactants

Rio Grande de Arecibo (PRN7A2) copper, lead, surfactants

Rio Tanama (PRNR7B2) mercury, copper

Rio Caonillas (PRNR7C1) copper, surfactants

Rio Limon (PRNR7C2) fecal coliform

Rio Yunes (PRNR7C3) fecal coliform

Lago dos Bocas (PRNL17A1) fecal coliform

Rio Grande de Manati Basin:

Rio Grande de Manati (PRNR8A2) mercury

Rio Orocovis (PRNR8E1) mercury, surfactants

Rio de la Plata Basin:

Rio de la Plata (PRER10A1) surfactants

Rio de la Plata (PRER10A3) copper, selenium

Lago de la Plata (PREL110A1) pH

Rio Bayamon Basin:

Rio Bayamon (PRER12A2) surfactants

Rio Bayamon (PRER12B) low dissolved oxygen

Rio Grande de Loiza Basin:

Rio Gurabo (PRER14G1) lead, surfactants

Rio Bairoa (PRER14H) lead, turbidity

Rio Guanajibo Basin:

Rio Rosario (PRWR77C) copper, lead

EPA notes the following corrections for Table 39: "Assessment Unit Parameter Combination to be delisting from 2010 Cycle 303(d) List" beginning on page 125 of the 2010 303(d)/305(b) Integrated Report: Reason for delisting changed from "water quality improvement" to "TMDL" for Rio Bairoa (PRER14H) ammonia and low dissolved oxygen; Rio Caguaitas (PRER14I) copper and ammonia and Rio Grande de Loiza (PRER14A2) low dissolved oxygen were added to the delisting table due to TMDL approval; Rio Orocovis (PRNR8E1), Rio de la Plata (PRER10A3), Rio Guanajibo (PRWR77A), and Laguna Tortuguero (PRNN0006) were added to the 303(d) List and removed from the "Delisting Table" for cyanide.

Priority Ranking

EPA regulations also codify the requirement in Section 303(d)(1)(A) of the Act, that States establish a priority ranking for listed waters. The regulations at 40 CFR 130.7(b)(4) require States to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those waterbody segments targeted for TMDL development in the next two years. In prioritizing and targeting waters, States must, at a minimum, take into account the severity of the pollution and the uses to be made of such waters. See Section 303(d)(1)(A) of the Act. States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters as aquatic habitats, recreational, economic, and aesthetic importance of particular waters, degree of public interest and support, and State or national policies and priorities. See 57 FR 33040, 33045 (July 24, 1992), and EPA's 1991 Guidance.

PREQB prioritizes assessment units for TMDL development in accordance with its CALM and the Puerto Rico Unified Watershed Assessment and Restoration Activities report (1998) (the "PRUWA"). The PRUWA includes monitoring and assessment methodologies conducted and developed through the cooperative efforts of PREQB, the United States Department of Agriculture's Natural Resources Conservation Service, the United States Geological Survey, and EPA. The PRUWA also identifies priority watersheds for restoration activities. The PRUWA established eighteen (18) priority watersheds for targeted restoration activities. The following criteria are used under the PRUWA to prioritize watersheds: 1) the population size that the watershed serves as a source of drinking water, 2) the overall water quality conditions of the watershed, and 3) the number of pollution sources threatening waters throughout the watershed. The eighteen (18) priority watersheds targeted for restoration activities are identified under Restoration Priority Category I of the PRUWA and include:

Río Grande de Arecibo; Río La Plata; Río Cibuco; Río Grande de Loíza; Río Grande de Añasco; Río Guajataca; Río Yagüez; Río Bayamón; Río Piedras; Río Guanajibo; Quebrada Blasina; Río Grande de Manatí; Río Culebrinas; Río Hondo; Río Grande de Patillas; Río Coamo; Río Guayanilla; and Río Blanco.

PREQB's CALM adopts the priority watersheds identified in the PRUWA as high priority basins.

PREQB's CALM considers all assessment unit/pollutant combinations on its 303(d) List located within the priority watersheds identified in the PRUWA, as high priority for TMDL development.

The Commonwealth's 2010 Section 303(d) list identifies five hundred and ninety-three (593) assessment unit/pollutant combinations still requiring TMDLs. Three hundred and forty six (346) of these assessment unit/pollutant combinations are located in high priority basins and are therefore considered high priority for TMDL development. PREQB has targeted one hundred and thirteen (113) of these assessment unit/pollutant combinations for TMDL development over the next two years.

In addition to the assessment unit/pollutant combinations on Puerto Rico's 2010 303(d) list that are located within high priority basins, PREQB established protocols to designate the remaining assessment unit/pollutant combinations on the 2010 303(d) list as medium or low priority for TMDL development. Medium and low priority assessment unit/pollutant combinations are located in medium or low priority basins respectively. Medium priority basins are watersheds in which fifty percent or more of the waters are identified as impaired. Low priority basins are watersheds in which less than fifty percent of the waters are identified as impaired. PREQB identified 34 medium priority basins. Ninety-seven (97) assessment unit/pollutant combinations are located within these medium priority basins, as such, they are considered medium priority for TMDL development.

EPA has reviewed the Commonwealth's priority ranking of listed waters for TMDL development, and concludes that the Commonwealth properly took into account the severity of pollution and the uses of such waters. EPA-believes that the 113 unit/pollutant combinations selected by the Commonwealth for completion over the next two years are appropriate waters to target for near-term TMDL development.

Public Participation

On January 15, 2010, the Commonwealth published the availability of the 2010 303(d) List in two local newspapers, Primera Hora and El Vocero. The thirty-day public comment period ended on February 15, 2008. A public hearing was held on February 16, 2008, as part of the Commonwealth's public participation process. Aside from EPA's comments on the draft 2010 303(d) List, PREQB only received comments from the Center of Biological Diversity (CBD) during the public comment period. PREQB sufficiently addressed EPA concerns and responded to comments received. Following is a summary of PREQB's response to CBD and EPA's clarification of the Agency's efforts to address ocean acidification.

Center for Biological Diversity Comments

The Center for Biological Diversity (CBD) provided information and comments suggesting that Puerto Rico designate as impaired, coastal waters that are classified as SA because water quality standards for those waters have been violated by ocean acidification due to human sources of carbon dioxide. In addition, CBD indicated that Puerto Rico's water quality criterion for pH for the coastal waters classified as SB and SC is entirely insufficient to protect the designated use of aquatic life.

Puerto Rico reviewed CBD's information and comments and responded by indicating that the studies that CBD submitted with its comments did not include water quality monitoring data for specific coastal waters segments in Puerto Rico. Pursuant to its Assessment Methodology, data showing

exceedances of the applicable pH water quality standard is needed to support listing waters on its 303(d) List.

Puerto Rico, however, has segment specific pH data for the assessment units PRSC34 Punta Ola Grande to Punta Petrona and PRWC48 Punta Guanajibo to Punta Algarrobo indicating that the pH standard in these segments are not being met and has included these segments on its 2010 303(d) List.

PREQB noted in its response that it is in the process of reviewing the applicable environmental regulations and standards regarding coastal segments as well as working on relocating the Permanent Coastal Monitoring Network Stations. Also, PREQB noted that EPA will be working to address ocean acidification at a national level.

EPA wishes to clarify that the Agency has not come to a conclusion on the utility of TMDLs to address ocean acidification. In addition, the Agency has issued a Federal Register (FR) notice seeking comments on how to address ocean acidification under the CWA Section 303(d) program, including whether EPA should issue guidance regarding the listing of waters as threatened or impaired for ocean acidification, and what that potential guidance might entail. EPA expects to make a decision by November 15, 2010, about how to proceed with regard to the interplay between ocean acidification and the 303(d) program based on information received from the FR notice as well as information from other ongoing Federal efforts that are taking place on issues related to ocean acidification.