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COMMONWEALTH OF PUERTO RICO
Office of the Governor
Environmental Quality Board

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INFORMATION

Pedro J. Nieves Miranda, Esq.
President

February 4, 2009

Mr. George Pavlou
Deputy Regional Administrator
USEPA Region 2
290 Broadway
New York, NY 10007-1866

Pavlou
Finazzo
cc: Borsellino
Soderberg

RE: NAAQS – 8-HOUR OZONE (O₃) ATTAINMENT

Dear Mr. Pavlou:

The Puerto Rico Environmental Quality Board (PREQB) is submitting the recommendations and designation of Puerto Rico as attainment of the National Ambient Air Quality Standards (NAAQS) for the revised 8-hour Ozone (O₃). This designation is made in accordance with the Section 107(d) (1) (A) of the Clean Air Act.

PREQB evaluated the air monitoring data for the most recent three years, which includes the years 2005-2007, and determined that Puerto Rico is in attainment with the revised O₃ standard promulgated on March 2008.

If you have any questions, please contact me at (787) 767-8056 or Mrs. Lucía Fernández, Chief of Data Validation and Air Modeling Division, at (787) 767-8181 extension 3255.

Cordially,

Pedro J. Nieves Miranda, Esq.
President

LFF/mec

Enclosure: Puerto Rico Area Designation for the Revised 8-Hour Ozone

Cc: Carl A. Soderberg
Richard Ruvo

EPA REGION 2
CORRESPONDENCE
CONTROL OFFICE
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**Commonwealth of Puerto Rico
Puerto Rico Environmental Quality Board**

**Puerto Rico Area Designation for the Revised 8-Hour Ozone
National Ambient Air Quality Standard**



January 9, 2009

Area Designation for the Revised 8-Hour Ozone National Ambient Air Quality Standard

The Environmental Protection Agency (EPA) is replacing the existing (1997) standards with revised primary Ozone (O₃) standard. The new primary ozone standard was lowered from 0.080 parts per million (ppm) to 0.075 ppm based on health epidemiological studies. These studies found health effects associated with ozone exposure at and below the level of the 0.080 ppm standard, which was promulgated in 1997.

Section 107(d) (1) (A) of the Clean Air Act (CAA) establish the process for area designations following the establishment of a new revised National Ambient Air Quality Standard (NAAQS). Under this section, States are required to submit recommendations to EPA for each area as *attainment, nonattainment, or unclassifiable* with respect to the new or revised standard. The recommendations must be submitted to EPA by March 12, 2009.

As required by section 107(d), the Commonwealth of Puerto Rico (CPR) is submitting the designations and recommendations for the revised 8-hour O₃ for EPA approval. The Environmental Quality Board (EQB) is responsible for developing and implementing emission control programs for attaining and maintaining the standard.

As a result of this change, EQB includes the designations and recommendations for the new revised 8-hour O₃ NAAQS. The resulting average of the design values is compared to the standard. The EQB evaluated the monitoring data for the most recent three-year period that include the years 2005-2007, and determined that the monitors do not exceed the revised O₃ NAAQS.

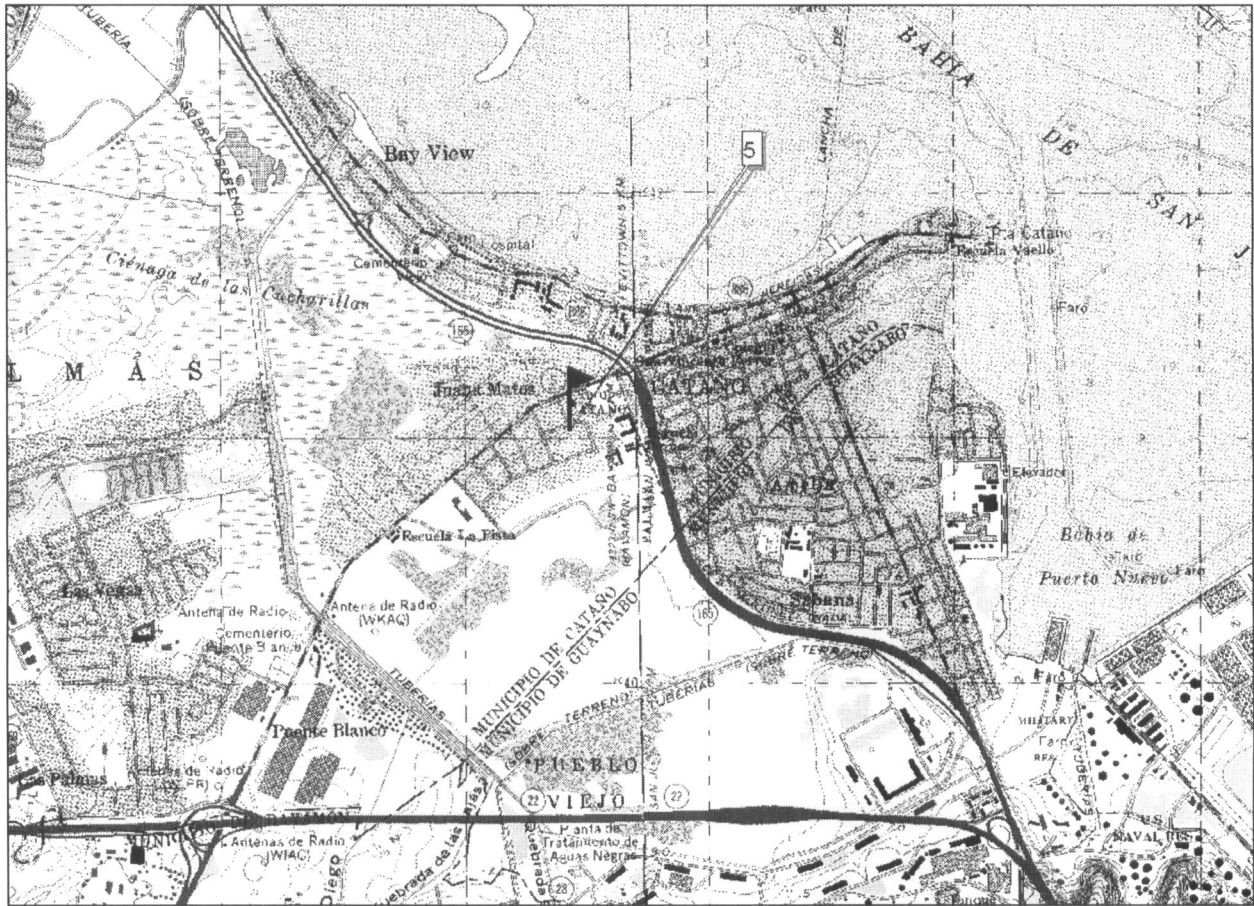
EQB used to design the O₃ Monitoring Network¹ the statistical definition for Metropolitan Area provided by the Office of Management and Budget and the Census Bureau. The criteria are in accordance to 40 CFR Part 58. According to these criteria CPR shall have one site in the Metropolitan Area of San Juan.²

The monitor used for the designation is located in the Cataño municipality. It must be designed to record the maximum concentration for that particular metropolitan area. The O₃ air monitoring station site was designed to record the maximum concentration for the metropolitan area. The site was designed to account for geographic size, population density, complexity of terrain, meteorology, and to measured air quality to compare with the primary and secondary NAAQS for ozone.

¹ ***PR Environmental Quality Board Annual Monitoring Network Plan 2007***

² ***San Juan:*** Bayamón, Carolina, Cataño, Corozal, Dorado, Guaynabo, Naranjito, San Juan, Toa Alta, Toa Baja, Trujillo Alto, Vega Alta, Vega Baja

Figure 1- O₃ Monitoring Network



Procedure to Determine Attainment

The standard-related summary statistic is the annual fourth-highest daily maximum 8-hour O₃ concentration, expressed in parts per million, averaged over three years. The 3-year average shall be computed using the three most recent, consecutive calendar years of monitoring data meeting the data 75% completeness requirements.

The primary and secondary O₃ ambient air quality standards are met at an ambient air quality-monitoring site when the 3-year average of the annual fourth-highest daily maximum 8-hour average O₃ concentration is less or equal to 0.075 ppm. The comparison is based on three consecutive, complete calendar years of air quality monitoring data. The computed 3-year average of the annual fourth-highest daily maximum 8-hour average O₃ concentration is reported in three decimal places.

The air quality data was used from the EPA Air Quality System (AQS) to calculate the 3-year average of the annual fourth-highest daily maximum 8-hour O₃. The design value shown is calculated in accordance with the 40 CFR Part 50 Appendix P.

Table 1 – Three Year Design Value for Ozone

Year	Data Capture %	2nd	3rd	4th
2005	83	0.031	0.030	0.034
2006	86	0.031	0.027	0.026
2007	96	0.035	0.035	0.029
Average	88.67			0.029

As shown in the table 1, Puerto Rico meets the primary and secondary O₃ standards. The 3-year average of the annual fourth-highest daily maximum 8-hour O₃ concentration is 0.029 ppm that is less than 0.075 ppm. The average percent of days within the required monitoring with valid ambient monitoring data is greater than 75% data completeness. Therefore, the data completeness requirement is also met.

Conclusion

Based on the technical documents and to the most recent data presented above, the design value is under the 0.075 ppm. Therefore, Commonwealth of Puerto Rico is in attainment with the revised O₃ standard NAAQS.