

COMMONWEALTH OF PUERTO RICO | OFFICE OF THE GOVERNOR

*TITLE V FINAL OPERATING PERMIT
AIR QUALITY AREA
ENVIRONMENTAL QUALITY BOARD*



Permit Number:	PFE-TV-4911-65-1196-0016
Permit Application Received:	November 15, 1996
Issue and/or Effectiveness Date:	May 31, 2005 ¹
Expiration Date:	May 31, 2010

In accordance with the provisions of Part VI of the Regulation for the Control of Atmospheric Pollution (RCAP) and the Code of Federal Regulations, Title 40, Part 70

**PUERTO RICO ELECTRIC POWER AUTHORITY
PREPA SAN JUAN STEAM POWER PLANT**

hereinafter referred to as **PREPA San Juan** or **the permittee**, is authorized to operate a stationary source of air pollutants limited to the emission units and conditions described in this permit. Until such time as this permit expires, is modified or revoked, PREPA San Juan is allowed to discharge air pollutants from those processes and activities directly related to or associated with air pollutant sources in accordance with the requirements, limitations and conditions of this permit.

The conditions in this permit are federally and state enforceable. Requirements, which are only state enforceable are identified as such in the permit. A copy of this permit shall be kept on-site at the above-mentioned facility at all times.

¹ The conditions and descriptions underlined were revised or added by a reconsideration process. The effectiveness date of these underlined conditions and descriptions is **June 7, 2006**.

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Section I – General Information

A. Facility Information

Name of the Company: Puerto Rico Electric Power Authority

Mailing Address: PO Box 364267

City: San Juan

State: Puerto Rico

Zip Code: 00936-4267

Plant Name: PREPA San Juan Steam Power Plant

Plant Physical Address: Mercado Central Avenue
Zona Portuaria Road PR-28
Puerto Nuevo, San Juan, P.R.

Responsible: Carlos J. Castro Montalvo
Director - Electric System

Phone: 787-772-5037

Facility Contact Person: Luis Ramírez
Division Head San Juan Steam Plant

Phone: 787-277-7407

Fax: 787-277-7409

Primary SIC Code: 4911

B. Process Description

The San Juan Steam Power Plant (SJSPP) is located on the north of Puerto Rico coast in San Juan. The facility consists of four oil fired steam electric generating units: four boilers provided with steam generators. The operations of these units have a direct impact in the PM-10 non-attainment area of Guaynabo.

The boiler units SJ7, SJ8, SJ9, and SJ10 consume residual fuel. The propane is used for the ignition of the fuel burners in boilers units SJ7, SJ8, SJ9, and SJ10 by means of a system known as flame ignitor. This ignition process is used mainly during the ignition of the boilers.

SJSPP receives No. 6 and No. 2 fuel oil from ships and barges unloaded at the plant's oil discharge docks in San Juan Bay. The fuel oils are stored in large on-site tanks prior to being burned to generate power. Other emission sources such as No.6 and No.2 fuel oils tanks, small diesel tanks, emergency generators and compressors have insignificant emissions.

A Prevention of Significant Deterioration (PSD) permit was approved by the U.S. Environmental Protection Agency on April 1, 2004. The Project pursuant to this PSD permit is included as an alternate operating scenario. This PSD Permit allows the construction of two new combustion turbines and further institutes operating restrictions on Emission Units SJ7 through SJ10.

As a result of operating at the allowable limit, SJSPP has the potential to emit all the criteria pollutants (PM10, SOx, NOx, CO) over 100 tons per year, and more than 10 tons per year of nickel compounds.

Section II – Emission Units Description

A. The emission units regulated by this permit are the following:

Emission Unit	Description	Control Device
SJ7	Residual oil-fired boiler with steam/turbo generator with a capacity of 1007.3 MMBtu/hr. <u>This boiler uses propane for the ignition process of the fuel burners.</u>	None
SJ8	Residual oil-fired boiler with steam/turbo generator with a capacity of 1007.3 MMBtu/hr. <u>This boiler uses propane for the ignition process of the fuel burners.</u>	None
SJ9	Residual oil-fired boiler with steam/turbo generator with a capacity of 1007.3 MMBtu/hr. <u>This boiler uses propane for the ignition process of the fuel burners.</u>	None
SJ10	Residual oil-fired boiler with steam/turbo generator with a capacity of 1007.3 MMBtu/hr. <u>This boiler uses propane for the ignition process of the fuel burners.</u> Residual oil-fired boiler with steam/turbo generator with a capacity of 1007.3 MMBtu/hr. <u>This boiler uses propane for the ignition process of the fuel burners.</u>	None

Section III - General Permit Conditions

1. **Sanctions and Penalties:** PREPA San Juan is obligated to comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Any violation of the terms of this permit will be subject to administrative, civil or criminal penalties as established in the Puerto Rico Environmental Public Policy Act, Article 16 (Act Number 416, September 22, 2004).

2. **Right of Entry:** As specified under Rules 103 and 603(c)(2) of the RCAP, PREPA San Juan shall allow the Board or an authorized representative, upon presentation of credentials and other documents as may be required by law, to perform the following activities:
 - a) Enter upon PREPA San Juan premises where an emission source is located or where emissions related activities are conducted, or where records must be kept under the conditions of this permit, under the RCAP, or under the Clean Air Act;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit, under the RCAP, or under the Clean Air Act;
 - c) Inspect and examine any facility, equipment (including monitoring and air pollution control equipment), practices or operations (including QA/QC methods) regulated or required under this permit; as well as sampling emissions of air quality and fuels; and
 - d) As authorized by the Clean Air Act and the RCAP, to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements.
3. **Data Availability:** As specified under Rule 104 of the RCAP, all emission data obtained by or submitted to the Board, including data reported pursuant to Rule 103 of the RCAP, as well as that obtained in any other way, shall be available for public inspection and may also be made available to the public in any additional manner that the Board may deem appropriate.
4. **Emergency Plan:** As specified under Rule 107 of the RCAP, PREPA San Juan shall have available an Emergency Plan which must be consistent with adequate safety practices, and provides for the reduction or retention of the emissions from the plant during periods classified by the Board as air pollution alerts, warnings or emergencies. These plans shall identify the emission sources, include the reduction to be accomplished for each source, and the means by which such reduction will be accomplished. These plans will be available for any representative of the Board at any time.
5. **Compliance Certification:** As specified under Rule 602(c)(2)(ix)(c) of the RCAP, PREPA San Juan shall submit each year a Compliance Certification. This certification must be submitted to both the Board and the EPA² no later than the 1st of April of every year, covering the previous natural year. The compliance certification shall include, but is not limited to, the information required under Rule 603(c) of the RCAP.
6. **Regulation Compliance:** As specified under Rule 115 of the RCAP, any violation to the RCAP, or to any other applicable rule or regulation, shall be grounds for the EQB to suspend, modify, or revoke any relevant permit, approval, variance or other authorization issued by the Board according to the Law of Uniform Administrative Procedures.

² The certification to the EQB shall be mailed to: Manager, Air Quality Area, P.O. Box 11488, San Juan , PR 00910. The certification to the EPA shall be mailed to: Chief, Enforcement and Superfund Branch, CEPD, US EPA Region II, Centro Europa Building, 1492 Ponce de León Ave., Stop 22, Santurce, PR 00909..

7. **Location Approval:** As specified under Rule 201 of the RCAP, nothing in this permit shall be interpreted as authorizing the location or construction of a major stationary source, or the modification of a major stationary source, or a major modification of a significant source, without obtaining first a location approval from the Board and without first demonstrating compliance with the National Ambient Air Quality Standards (NAAQS). This permit does not allow the construction of new minor sources without the required permit under Rule 203 of the RCAP.
8. **Open Burning:** As specified under Rule 402 of the RCAP, PREPA San Juan shall not cause or permit the open burning of refuse in their premises except as established under Rule 402 (E) of the RCAP to conduct training or research of fire fighting techniques.
9. **Objectionable Odors:** As specified under Rule 420 of the RCAP, PREPA San Juan shall not cause or permit emissions to the atmosphere of any matter which produces an *objectionable* odor that can be perceived in an area other than that designated for industrial purposes. [This condition is enforceable only by the State].
10. **Permit Renewal Applications:** As established under Rule 602 (a)(1)(iv) of the RCAP, PREPA San Juan's application for permit renewal shall be submitted at least 12 months prior to the date of permit expiration. A responsible official must certify all required applications consistent with paragraph (c)(3) of Rule 602.
11. **Permit Duration:** As specified under Rule 603 of the RCAP, the following terms will apply during the duration of this permit:
 - a) **Expiration:** This authorization shall have a fixed term of 5 years. The expiration date will be automatically extended until the Board approves or denies a renewal application (Rule 605(c)(4)(ii) of the RCAP) but only in those cases where PREPA San Juan submits a complete renewal application at least 12 months before the expiration date. [Rules 603 (a)(2), 605 (c)(2), and 605(c)(4) of the RCAP]
 - b) **Permit Shield:** As specified under Rule 605 (c)(4)(i) of the RCAP, the permit shield may be extended until the time the permit is renewed if a timely and complete renewal application is submitted.
 - c) In case that this permit is subject to any challenge by third parties, the permit shall remain in effect until the time it is revoked by a court of law with jurisdiction in the matter.
12. **Recordkeeping Requirement:** As established under Rule 603(a)(4) of the RCAP, PREPA San Juan shall retain records of all required monitoring data and support information for a period of 5 years from the date of the monitoring sample, measurement, report, or application. The permittee shall maintain readily accessible at the facility, copies of all records of required monitoring information that include the following:
 - i. The date, place as defined in the permit, and time of sampling or measurements;

- ii. The date(s) analyses were performed;
 - iii. The company or entity that performed the analysis;
 - iv. The analytical techniques or methods used;
 - v. The results of such analysis; and
 - vi. The operating conditions as existing at the time of sampling or measurement.
13. **Reporting Requirement:** As established under Rule 603(a)(5)(i) of the RCAP, PREPA San Juan shall submit the semi-annual reports of all required monitoring on October 1st and April 1st of every year, respectively, or more frequently if required by the Board or any other underlying applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as established under Rule 602(c)(3) of the RCAP.
14. **Deviations Reporting due to Emergencies:** As specified under Rule 603(a)(5)(ii)(a) of the RCAP, any deviation resulting from an upset, malfunction or break-down or emergency conditions, as defined in Rule 603(e) of the RCAP, must be reported within the next 2 working days. Such notification may be used to assert an affirmative defense upon an enforcement action against PREPA San Juan. If PREPA San Juan raises the emergency defense upon an enforcement action, PREPA San Juan shall demonstrate that such deviation happens due to an emergency and that the Board was adequately notified. If such emergency deviation last for more than 24 hours, the affected units may be operated until the end of the cycle or 48 hours, what occurs first. The Board may only extend the operation of an emission source in excess of 48 hours, if the source demonstrates to the Board's satisfaction that the National Air Quality Standards have not been exceeded and that there is no risk to the public health.
15. **Deviation Reporting (Hazardous Air Pollutants):** Pursuant to Rule 603 (a)(5)(ii)(b), a notification will be required if a deviation occurs that results in the release of emissions of hazardous air pollutants for more than an hour in excess of the applicable limit. PREPA San Juan shall notify the Board within 24 hours of the deviation. For the discharge of any regulated air pollutant that continues for more than 2 hours in excess of the applicable limit, PREPA San Juan shall notify the Board within 24 hours of the deviation. PREPA San Juan shall also submit to the Board, within 7 days of the deviation, a detailed written report, which includes probable causes, time and duration of the deviation, remedial action taken, and steps, which are being taken to prevent a reoccurrence.
16. **Severability Clause:** As established under Rule 603(a)(6) of the RCAP, the clauses in this permit are severable. In the event of a successful challenge to any portion of the permit in an administrative or judicial forum, or in the event any of its clauses is held to be invalid, all other portions of the permit shall remain valid and effective, including those related to emission limits, terms and conditions, be they specific or general, as well as monitoring, record keeping and reporting requirements.
17. **Permit Noncompliance:** As established under Rule 603(a)(7)(i) of the RCAP, PREPA San Juan must comply with all conditions of this permit. Permit noncompliance constitutes a violation of the RCAP and will be grounds for taking the appropriate enforcement action,

impose sanctions, revoke, terminate, modify, and/or reissue the permit, or to deny a permit renewal application.

18. **Defense not Allowed:** As specified under Rule 603(a)(7)(ii) of the RCAP, 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.
19. **Permit Modification and Revocation:** As specified under Rule 603(a)(7)(iii) of the RCAP, the permit may be modified, revoked, reopened, reissued, or terminated for cause. The filing of a request by PREPA San Juan for a permit modification, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
20. **Property Rights:** As specified under Rule 603(a)(7)(iv) of the RCAP, this permit does not convey any property rights of any sort, nor does it grant any exclusive privilege.
21. **Obligation to Furnish Information:** As specified under Rule 603(a)(7)(v) of the RCAP, PREPA San Juan shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, PREPA San Juan shall also furnish to the Board copies of records required to be kept by the permit.
22. **Changes in Operating Scenarios:** As specified under Rule 603(a)(10) of the RCAP, PREPA San Juan shall record in a registry (record book), contemporaneously with making a change from one operating scenario to another authorized under Section VI of this permit, the scenario under which it is operating. This registry must be kept at PREPA San Juan's facility at all times.
23. **Prohibition on Default Issuance:** As specified under Rule 605(d) of the RCAP, it shall never be considered that a permit has been issued by default as a result of the Board's failure to take final action on a permit application within 18 months as of the application completeness date. The Board's failure to issue a final permit within 18 months should be treated as a final action solely for the purpose of obtaining judicial review in a state court.
24. **Administrative Permit Amendments and Permit Modifications:** As specified under Rule 606 of the RCAP, the permit shall not be amended nor modified unless PREPA San Juan complies with the requirements for administrative permit amendments and permit modifications as described in the RCAP.
25. **Permit Revisions or Reopenings:** As specified under Rule 608(a)(1), this permit shall be reopened and revised under the following circumstances:
 - a) Whenever additional applicable requirements under any law or regulation become applicable to PREPA San Juan, when the remaining permit term is of 3 or more years. Such reopening shall be completed 18 months after promulgation of said applicable

requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to Rule 605(c)(4)(i) or Rule 605(c)(4)(ii) of the RCAP.

- b) Whenever the Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
- c) Whenever the Board or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

26. **Changes in Name and/or Ownership:** This permit is issued to **Puerto Rico Electric Power Authority** and/or **PREPA San Juan Steam Power Plant** in the event that the company and/or installation changes its name or is transferred to a different owner, the new responsible official must submit a sworn statement in which he/she accepts and promises to comply with all the conditions of this permit.

27. **Renovation/Demolition Work:** PREPA San Juan shall comply with the provisions set forth in 40 CFR §61.145 and §61.150, and Rule 422 of the RCAP when conducting any renovation or demolition activities of asbestos containing materials at the facility.

28. **Compliance Clause:** Under no circumstances does compliance with this permit exempt PREPA San Juan from complying with all other applicable state or federal laws, regulations, permits, administrative orders or applicable court orders.

29. **Requirements for Refrigerants (Climatologic and Stratospheric Ozone Protection):**

- a) In the event that PREPA San Juan has equipment or appliances, including air conditioning units, which use Class I or II refrigerants as defined in 40 CFR part 82, subpart A, Appendices A and B, he/she shall take the necessary measures to ensure that all maintenance, service or repair services performed are done so according to the practices, certification and personnel requirements, disposition requirements, and recycling and/or recovery equipment certification requirements specified under 40 CFR part 82, subpart F.
- b) Owners/ operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- c) **Service on Motor Vehicles:** If PREPA San Juan performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), PREPA San Juan is subject to all the applicable requirements as specified in 40 CFR part 82, subpart B, Servicing of Motor Vehicle Air Conditioners. The term motor vehicle as used in subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term MVAC as used in subpart B does not include the

air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.

30. **Labeling of Products Using Ozone-Depleting Substances:** PREPA San Juan shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR part 82, subpart E.
- a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
31. **Risk Management Plan:** If during the effectiveness of this permit, PREPA San Juan is subject to the 40 CFR part 68, PREPA San Juan shall submit a Risk Management Plan according with the compliance schedule in the 40 CFR part 68.10. If during the effectiveness of this permit PREPA San Juan is subject to the 40 CFR part 68, PREPA San Juan shall submit a compliance certification with the requirements of part 68 as part of the annual compliance certification required under 40 CFR part 70, including the recordkeeping and the Risk Management Plan.
32. **General Duty Requirements:** PREPA San Juan has the general obligation of identifying hazards which may result from accidental releases of any controlled substance under section 112(r) of the Clean Air Act or any other extremely hazardous substance in a process, using appropriate hazard assessment techniques, designing, maintaining, and operating a safe facility and minimizing the consequences of accidental releases if they occur as required in section 112(r)(1) of the Act and Rule 107(D) of the RCAP.
33. **Emergency Electric Generators:** The operation for each emergency electric generator identified as insignificant activities in Section IX of this permit are limited to 500 hours per year. PREPA San Juan shall keep a record of the hours of operation and fuel consumption for each emergency electric generator. This record shall be kept available at any time for inspection by EQB and EPA personnel.
34. **Roof Surface Coating:** This is a state-only requirement. PREPA San Juan shall not cause or permit the roof surface coating by applying hot tar or any other coating material containing organic compounds without previous notification to the Board. The use of used oil or hazardous waste for roof surface coating is prohibited.

35. **Storage Tanks:** PREPA San Juan shall keep records of all fuel oil storage tanks at the facility showing the dimensions of each tank and an analysis showing the capacity of each tank pursuant to the 40 CFR §60.116b. This documentation shall be readily available at any time for inspection of EQB personnel and shall be kept onsite for the life of the tank.
36. **Emissions Calculations:** PREPA San Juan shall submit, on the first day of April each year or before, the actual or permissible emissions calculations for the previous natural year. The emissions calculations shall be submitted on the forms prepared by the Board for this purpose and the responsible official must certify all the information submitted as true, correct and representative of the permitted activity.
37. **Annual fee:** The Puerto Rico Electric Power Authority shall pay an annual fee of \$1,000,000 for all the facilities included in the agreement between the Environmental Quality Board and Puerto Rico Electric Power Authority. This annual fee may be submitted in two payments of \$500,000. The first payment must be submitted on or before June 30 of each year and the second payment on or before January 1st of each year.
38. **Combustion Turbines:** Any existing, new or reconstructed source that have or operate stationary combustion turbines is subject to the National Emission Standards for Hazardous Air Pollutants for combustion turbines contained in the 40 CFR part 63, subpart YYYY. Unless it is determined that this regulation is not applicable to PREPA San Juan, the affected source must comply with the applicable emission limitations and/or operating limitations of this subpart upon startup if your new or reconstructed affected source startup after March 4, 2004 or by the date specified in an extension of compliance granted according to 40 CFR §63.6(i). Unless it is determined that this regulation does not apply, PREPA San Juan shall comply with the applicable notification requirements of 40 CFR §63.6145 and in 40 CFR part 63, subpart A by the dates specified.
39. **Reciprocating Internal Combustion Engines:** Any existing, new or reconstructed source that operates a stationary Reciprocating Internal Combustion Engines (RICE)³ with a site-rating of more than 500 brake horsepower (HP) is subject to the National Emission Standards for Hazardous Air Pollutants for stationary Reciprocating Internal Combustion Engines contained in the 40 CFR part 63, subpart ZZZZ. Unless it is determined that this regulation is not applicable to PREPA San Juan or the source is exempted, the affected source must comply with the applicable emission limitations and/or operating limitations of this subpart; on or before June 15, 2007 for an existing stationary RICE, no later than August 16, 2004 if you start up your new or reconstructed stationary RICE before August 16, 2004, upon startup if your new or reconstructed RICE start up after August 16, 2004, or by the date specified in an extension of compliance granted according to 40 CFR §63.6(i). Unless it is determined that this regulation is not applicable, PREPA San Juan shall comply with the applicable notification requirements of 40 CFR §63.6645 and in 40 CFR part 63, subpart A by the dates specified.
40. **Boilers and Process Heaters:** Any existent source that have or operate industrial, commercial and institutional boilers and process heaters will be subject to the National Emission Standards for Hazardous Air Pollutants for industrial, commercial and institutional

³ As defined on 40 CFR §63.6585(a).
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boilers and process heaters contained in the 40 CFR part 63, subpart DDDDD. The affected source shall comply with all applicable requirements of this subpart no later than 3 years after the date of publication of the final rule in the Federal Register unless it is determined that this regulation is not applicable to PREPA San Juan or PREPA San Juan had obtained an extension of compliance with the emission standards according to 40 CFR §63.6(i) in which case PREPA San Juan shall comply by the date specified in the extension of compliance granted. PREPA San Juan shall comply with the applicable notification requirements by the dates specified.

41. **Reports:** Any requirement of information submittal to the Board shall be addressed to: Director, Air Quality Area, PO Box 11488, Santurce, P.R. 00910.
42. **New or Amended Regulation:** Whether a federal or state regulation is promulgated or amended and the facility is affected by it, the owner or operator shall comply with the requirements of the new or amended regulation. The Board will provide a determined and reasonable period of time so that PREPA San Juan reaches compliance with the amendments or new regulations.
43. **Sworn Statement:** All reports required pursuant Rule 103(D) of the RCAP (i.e., semiannual monitoring reports and annual compliance certification) shall be submitted together with a sworn statement or affidavit by the Responsible Official or a duly authorized representative. Such sworn statement shall attest to the truth, correctness and completeness of such records and reports.
44. **Particulate Fugitive Emissions:** As specified in Rule 404 of the RCAP, PREPA San Juan shall not cause or permit:
 - a) any materials to be handled, transported, or stored in a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished, without taking reasonable precautions to prevent particulate matter from becoming airborne.
 - b) the discharge of visible emissions of fugitive dust beyond the boundary line of the property on which the emissions originate.
45. **Reservation of Rights:** Except as expressly provided in this Title V permit:
 - a) Nothing herein shall prevent EPA or the Board from taking administrative enforcement measures or seeking legal or equitable relief to enforce the terms of the Title V permit, including but not limited to the right to seek injunctive relief, and imposition of statutory penalties, and fines.
 - b) Nothing herein shall be construed to limit the rights of EPA or the Board to undertake any criminal enforcement activity against PREPA San Juan or any person.
 - c) Nothing herein shall be construed to limit the authority of EPA or the Board to undertake any actions in response to conditions that present an imminent and substantial endangerment to public health or welfare, or the environment.

- d) Nothing herein shall be construed to limit PREPA San Juan's rights to administrative hearing and judicial appeal of termination/ revocation/ disputes over modification/ denial actions in accordance with regulations and the Environmental Public Policy Act.

Section IV – Allowable Emissions

The allowable emissions authorized under this permit are mentioned in the table below. PREPA San Juan shall certify annually that its actual emissions do not exceed the allowable emissions. This certification shall be based on the actual operation of the calendar previous year using the methodology approved by EPA and/or EQB in their respective construction permits.

Pollutant	Allowable Emissions (Tons/year)
PM	<u>2946.22</u>
PM ₁₀	<u>1430.51</u>
SO ₂	<u>7619.76</u>
NO _x	<u>6739.20</u>
CO	<u>1654.73</u>
VOC	<u>190.70</u>
Pb	<u>3.54</u>
Cobalt compounds	1.36
Nickel compounds	14.77
Formaldehyde	2.82
TOTAL HAP's	21.67

Section V – Permit specific conditions

A. Requirements per Emission Unit for the Normal Operating Scenario: SJ7, SJ8, SJ9 and SJ10

Condition	Parameter	Value	Units	Test Method	Frequency	Record-Keeping	Reporting Frequency
PM Emission Limit	PM	<u>0.199</u>	Lbs/MM Btu	<u>Method 5 or other Method approved by EPA.</u>	<u>See condition V(A)(7)(E)</u>	Test results	<u>See condition V(A)(7)(E)</u>
Sulfur content limit	Sulfur content in fuel	<u>0.50</u>	Percent by weight	Fuel analysis	With every fuel receipt	Analysis results	Monthly
Asphaltene content limit	Asphaltene content in fuel	<u>8</u>	Percent by weight	Fuel analysis	With every fuel receipt	Analysis results	Monthly
Vanadium content limit	Vanadium content in fuel	150	ppm	Fuel analysis	With every fuel receipt	Analysis results	Monthly
Combined fuel consumption limit	Fuel Oil No. 6 combined consumption for units SJ7, SJ8, SJ9 and SJ10	<u>173.1</u>	<u>Millions of Gallons per 365 days rolling period</u>	<u>Measurement of tank levels</u> CMS	<u>Daily.</u> Continuous	Record book	Monthly
Opacity Limit	Opacity	20	Percent	COMS Method 9	Continuous or no less frequent than every 15 sec <u>Weekly</u>	Record book <u>See Conditions V(A)(6)(D), (E), and (F).</u>	<u>See Conditions V(A)(6)(D), (E), and (F).</u> <u>See Conditions V(A)(6)(D), (E), and (F).</u>

1- PARTICULATE MATTER EMISSION LIMITS:

- (A) The permittee shall not cause nor permit the emission of particulate matter, from any equipment burning solid or liquid fuel, in excess of 0.199lb/MMBtu in any boiler, units SJ7, SJ8, SJ9 and SJ10. The PM₁₀ emissions shall not exceed 0.0753 lbs/MMBtu of heat input. [PSD Permit, April 1, 2004]
- (B) In order to verify compliance with the established limit in the table above, the permittee shall perform a performance test using the Method 5 of the

CFR Part 60 Appendix A as specified in condition V(A)(7)(E) of this permit. PREPA San Juan may use another test method that is applicable at the moment of the test and developed in the protocol of sampling approved by EPA. [PSD permit April 1, 2004]

- (C) Operations during periods of startup, shutdown, malfunction and fuel switching or transfer shall not constitute representative conditions for the purpose of a performance test.
- (D) The permittee must submit to the EQB 30 days prior to the start of the test, a detailed test protocol describing all test equipment, procedures, and Quality Assurance (QA) measures to be used. The protocol must be specific to the test, facility, operating conditions and parameters to be measured. [Rule 106(C) of the RCAP]
- (E) The permittee must submit a written notification 15 days prior of the performance test in order to allow the EQB to assign an observer. [Rule 106 (D) of the RCAP]
- (F) PREPA San Juan shall submit one copy to EPA and two copies to EQB of all emission test reports within 60 days after performance of the emission test. [Rule 106(E) of the RCAP]
- (G) As specified in Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain all records for required monitoring and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report or application.

2- SULFUR CONTENT LIMITS:

- (A) The permittee shall not burn or allow the use of any no. 6 fuel oil or lighter⁴ in each boiler, units SJ7, SJ8, SJ9, and SJ10., with a sulfur content which exceeds 0.50% by weight. [PSD permit, April 1, 2004.]
- (B) PREPA San Juan, a service contractor retained by PREPA San Juan or any other qualified agency shall sample the fuel and/or verify sulfur content from supplier's invoice upon every delivery at the site for transfer to the storage tanks at the facility from any other source. The fuel sampling shall include but not be limited to determining the fuel's sulfur content (% by weight). The compliance with the standard of sulfur content shall have to be determined using the methods established in the 40 CFR 60.335(d)
- (C) For units SJ7, SJ8, SJ9 and SJ10 subjected to Rule 410 of the RCAP, PREPA San Juan shall submit a monthly report indicating on a daily basis the sulfur content (percent by weight) in the fuels burned or combusted and the amount of fuel burned at each unit. This report shall be submitted

⁴ Understanding by lighter fuel no. 1, 2, 4 or 5.
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to EQB to the attention of the Chief of the Validation and Data Management Division during the first 30days of the following month of the month for which the report is representative.

- (D) As specified under Rule 603(a)(4)(ii) of the RCAP, the permittee shall keep all records of required monitoring data and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report or application. This includes a record of monthly fuel consumption and sulfur content of consumed fuels.
- (E) The permittee shall submit, with each annual compliance certification, a summary of the reports for that year indicating the sulfur content by weight for the fuels consumed monthly.

3- ASPHALTENE CONTENT LIMITS:

- (A) The permittee shall not burn or allow the use of any fuel, in any fuel burning equipment, with an asphaltene content which exceeds 8% by weight. [Agreement between EQB and PREPA of February 3, 1994]
- (B) PREPA San Juan, a service contractor retained by PREPA San Juan or any other qualified agency shall sample the fuel and/or verify asphaltene content from supplier's invoice upon every delivery at the site for transfer to the storage tanks at the facility from any other source. The fuel sampling shall include but not be limited to determining the fuel's asphaltene content (% by weight).
- (C) For units SJ7, SJ8, SJ9 and SJ10, PREPA San Juan shall submit a monthly report indicating on a daily basis the asphaltene content (percent by weight) in the fuels burned or combusted and the amount of fuel burned at each unit. This report shall be submitted to EQB to the attention of the Chief of the Validation and Data Management Division during the first 15 days of the following month of the month for which the report is representative.
- (D) As specified under Rule 603(a)(4)(ii) of the RCAP, the permittee shall keep all records of required monitoring data and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report or application. This includes a record of monthly fuel consumption and asphaltene content of consumed fuels.
- (E) The permittee shall submit, with each annual compliance certification, a summary of the reports for that year indicating the asphaltene content by weight for the fuels consumed monthly.

4- VANADIUM CONTENT LIMITS:

- (A) The permittee shall not burn or allow the use of any fuel, in any fuel burning equipment, with a vanadium content which exceeds 150 ppm. [Agreement between EQB and PREPA of February 3, 1994]
- (B) PREPA San Juan, a service contractor retained by PREPA San Juan or any other qualified agency shall sample the fuel and/or verify vanadium content from supplier's invoice upon every delivery at the site for transfer to the storage tanks at the facility from any other source. The fuel sampling shall include but not be limited to determining the fuel's vanadium content (ppmw).
- (C) For units SJ7, SJ8, SJ9 and SJ10, PREPA San Juan shall submit a monthly report indicating on a daily basis the vanadium content (ppmw) in the fuels burned or combusted and the amount of fuel burned at each unit. This report shall be submitted to EQB to the attention of the Chief of the Validation and Data Management Division during the first 15 days of the following month of the month for which the report is representative.
- (D) As specified under Rule 603(a)(4)(ii) of the RCAP, the permittee shall keep all records of required monitoring data and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report or application. This includes a record of monthly fuel consumption and vanadium content of consumed fuels.
- (E) The permittee shall submit, with each annual compliance certification, a summary of the reports for that year indicating the vanadium content by weight for the fuels consumed monthly.

5- COMBINED FUEL CONSUMPTION LIMIT:

- (A) According to the PSD Permit of April 1, 2004, the permittee shall not exceed the combined fuel consumption limit of 173.1 millions of gallons per year of Fuel Oil No. 6 in the units SJ7, SJ8, SJ9 and SJ10 for any period of 365 consecutive days. According to Resolution R-PA-05-0016-7 of February 17, 2006, the daily fuel consumption shall be determined using the system of measurement for tanks levels established by the American Petroleum Institute in the Manual of Petroleum Measurements Standards Chapter 3 – Tank Gauging Section 1A – Standard Practice for the Manual Gauging of Petroleum and Petroleum Products.
- (B) The permittee must maintain and operate fuel flow meters for each unit (SJ7, SJ8, SJ9, and SJ10). The permittee shall calibrate each fuel flow meter every 12 months or according to manufacturing recommendations, whichever is smaller, and maintain readily accessible records at the site for review of technical personnel from EQB or EPA.

- (C) The permittee shall install, calibrate, and operate continuous monitoring systems to record the fuel flow rates at each boiler. [PSD Permit, April 1, 2004.]
- (D) As specified under Rule 603(a)(4)(ii) of the RCAP, the permittee shall keep all records of required monitoring data and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report or application. This includes a record with the results of the fuel performance test, a record of monthly fuel consumption and sulfur content of consumed fuels.
- (E) The permittee shall submit, with each annual compliance certification, an annual report summary indicating the fuel consumption of each boiler in terms of the monthly and annual consumption.

6- OPACITY LIMITS:

- (A) The permittee shall not exceed the opacity limit of 20% (6-minutes average), except for one period of not more than four minutes in any consecutive 30 minutes interval when the opacity shall not exceed 60%. [Rule 403(A) of the RCAP]
- (B) PREPA San Juan shall calibrate, maintain, and operate a continuous opacity monitoring system (COMS) to measure and record stack opacity levels in each boiler exhaust stack.
- (C) PREPA San Juan shall perform weekly readings in each emission point (SJ7, SJ8, SJ9 and SJ10) according to the 40 CFR Part 60, Method 9. The opacity readings shall be made at the point of greatest opacity, in that portion of the plume where condensed water vapor is not present. The opacity measured with Method 9 and the measurement with the continuous monitor of opacity shall not exceed 20%. All the possible corrective actions shall be made as soon as visible emissions are observed in the stacks of the boilers SJ7, SJ8, SJ9, and SJ10 [PSD Permit April 1, 2004].
- (D) According to the PSD Permit dated April 1, 2004 PREPA San Juan shall submit a written report of all excess emissions to EQB for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each quarter and shall include the information specified bellow:
 - a. The magnitude of excess emissions computed in accordance with 40 CFR Part 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions.

- b. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

In addition, PREPA shall submit every three months to the EQB, copies of reading reports for visible emissions using Method 9 of the 40 CFR part 60, showing exceedance or not exceedance of emissions according to Rule 403 of the RCAP every six months. The notification to be sent to EQB shall read as follows:

During the period of [day and month] of [year], PREPA San Juan performed weekly readings of opacity to each one of the units SJ7, SJ8, SJ9, and SJ10 using Method 9 of the 40 CFR part 60. For this period the readings of opacity did not showed exceedances to the limits established in PSD permit of 1st of April of 2004 nor to Rule 403 of the RCAP.

1. For this period of time the opacity readings made under Method 9 did not show to excedences to the limits established in Rule 403 of the RCAP.
2. For this period of time the deviations to the limits established in Rule 403 of the RCAP were reported in the quartely report of deviations as required in condition 13 of the Title V permit of the Electrical Energy Authority for the San Juan Steam Power Plant.

(E) Accordingly to paragraph (d) of the 40 CFR section 60.7, the summary report form shall contain the information and be in the format shown in figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

- a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and COMS downtime for the reporting period is less than 5% of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in Section 60.7(c) need not be submitted unless requested by the Administrator.
- b. If the total duration of excess emissions for the reporting period is 1% or greater of the total operating time for the reporting period, or the total COMS downtime for the reporting period is 5% or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in Section 60.7(c) shall both be submitted.

- (F) As specified under Rule 603(A)(4)(ii) of the RCAP, the permittee shall keep all records of required monitoring data and supporting information for a period of five (5) years from the date of the monitoring sample, measurement, report or application. This includes a record of visible emissions which contains the dates and times of inspections, as well as information about any corrective measures taken.

7- Applicable Requirements PSD Permit April 1 of 2004 for Boilers, Units SJ7, SJ8, SJ9, and SJ107 through 10

(A) Emissions limits (based on the PSD netting analyses)

1. PREPA San Juan shall not cause or permit the emission of sulfuric acid emissions in excess of 0.0405 lbs/MMBtu from any of the units SJ7, SJ8, SJ9, and SJ10.

(B) Nitrogen Oxides (NO_x) Emission limits (based on the PSD netting analyses)

1. The total NO_x emissions calculated as NO₂ from all four-boilers units SJ7, SJ8, SJ9, and SJ10, shall not exceed 1571 pounds per hour (lbs/hr) on a rolling 8-hour average basis. The potential to emit NO_x emissions from all four units shall be limited to 5078 ton/year. PREPA San Juan shall meet these emission limits irrespective of nitrogen content of the no. 6 fuel oil.
2. PREPA San Juan shall install and operate at each existing boiler, units SJ7, SJ8, SJ9, and SJ10, a modified burner system. These burner systems shall be installed and operated at least four months prior to the startup of the combustion turbines. The modifications of these burners shall consist of replacing swirler assemblies, oil nozzles and plug assemblies or any technology that meets the expected reduction levels for this equipment and that meets the NO_x emission limit established in this permit. PREPA San Juanshall notify EPA 60 days prior to installing equivalent technology.

(C) Fuel Sampling Requirements (based on PSD netting analyses)

1. PREPA shall receive/sample fuel oil for the boiler, units SJ7, SJ8, SJ9, and SJ10 as follows:
 - a. Upon each delivery, PREPA San Juan shall sample no. 6 fuel oil for boiler units SJ7, SJ8, SJ9, and SJ10 to determinethe sulfur content.
2. Compliance with the sulfur content standard shall be determined using the testing methods established in 40 CFR section 60.335(d).

(D) Continuous Emission Monitoring (CEM) Requirements (based on PSD netting analyses)

1. At least four months prior to the date of startup of any combustion turbine under the Alternative Operating Scenario 4 and thereafter, PREPA shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEM) to measure and record stack gas NO_x (as measured as NO₂) concentrations in each of the boiler units SJ7, SJ8, SJ9, and SJ10 exhaust stack. The system shall meet all applicable EPA monitoring performance specifications (including but not limited to 40 CFR section 60.13 and 40 CFR Part 60, Appendix B, Performance Specification 2, and Appendix F). PREPA shall also continuously measure and record fuel flow rate in lb per hour. The CEMs shall be on line and in operation 95% of the time when the boilers are operating.
2. Not less than 90 days prior to the date of startup of each combustion turbine under the Alternative Operating Scenario 4 /burner modifications in the existing boiler units SJ7, SJ8, SJ9, and SJ10, PREPA San Juan shall submit a written report to EPA of a Quality Assurance Project Plan for the certification of the monitoring system of the turbines under the Alternative Operating Scenario 4. Performance evaluation of the monitoring systems may not begin until EPA has approved the Quality Assurance Project Plan.
3. PREPA San Juan shall conduct performance evaluations of the COMS's, CEM's and continuous monitoring systems during the initial performance testing required under this permit or within 30 days thereafter in accordance with the applicable performance specifications in 40 CFR, Part 60, Appendix B, and 40 CFR, Part 52, Appendix E. PREPA San Juan shall notify EQB 15 days in advance of the date upon which demonstration of the monitoring system(s) performance will commence.
4. PREPA San Juan shall submit a copy of the written report submitted to EPA of the results of all monitor performance specification evaluations conducted on the monitoring system(s) within 60 days of the completion of the tests. The monitoring systems must meet all the requirements of the applicable performance specification test in order for the monitors to be certified.

(E) Performance Testing Requirements (based on PSD netting analyses)

1. PREPA shall conduct performance test for each boiler, units SJ7, SJ8, SJ9, and SJ10 according to the following:

- a. Each boiler (Units SJ7, SJ8, SJ9, and SJ10) – PREPA San Juan shall conduct performance tests for NO_x, PM, PM₁₀, and H₂SO₄ at each boiler unit exhaust stack within 60 days after modifying burners, but no later than 180 days after the modified burners' startup as defined in 40 CFR section 60.2, and at such other times as specified by the EQB or EPA. All performance tests shall be conducted at maximum load conditions, 60% load conditions and/or other loads specified by EQB or EPA.
2. Three test runs shall be conducted for each load condition and compliance for each operating mode shall be based on the average emission rate of these runs.
3. At least 60 days prior to actual testing, PREPA San Juan shall submit to the EQB a copy of the Quality Assurance Project Plan detailing methods and procedures to be used during the performance stack testing. A Quality Assurance Project Plan that does not have EPA approval may be ground to invalidate any test and require a re-test.
4. PREPA San Juan shall use the following test methods, or a test method which would be applicable at the time of the test and detailed in a test protocol approved by EPA:
 - a. Performance test to determine the stack gas velocity, sample area, volumetric flow rate, molecular composition, excess air of flue gases, and moisture content of flue gas shall be conducted using 40 CFR Part 60, Appendix A, Methods 1,2,3 and 4.
 - b. Performance test for the emissions of NO_x shall be conducted using 40 CFR Part 60, Appendix A, Method 20.
 - c. Performance test for the emissions of SO₂ shall be conducted using 40 CFR Part 60, Appendix A, Method 8.
 - d. Performance tests for the emissions of H₂SO₄ shall be conducted using 40 CFR Part 60, Appendix A, Method 8.
 - e. Performance test for the emissions of PM shall be conducted using 40 CFR, Part 60, Appendix A, Method 5.
 - f. Performance test for the emissions of PM₁₀ shall be conducted using 40 CFR Part 51, Appendix M, Method 201 (exhaust gas recycle) or Method 201 A (constant flow rate), and Method 202. PM₁₀ emissions shall be the sum of noncondensable emissions determined using Method 201 or

201A and condensable emissions determined using Method 202.

- g. Performance test for the emissions of Pb (lead) shall be conducted using 40 CFR Part 60, Appendix A, Method 12.
5. Text results indicating that emissions are below the limits of detection shall be deemed to be in compliance.
6. Additional performance test may be required at the discretion of the EQB or EPA for any or all of the above pollutants.
7. PREPA San Juan shall submit to EQB a copy of the written report submitted to EPA of the results of all emission testing within 60 days of the completion of the performance test.
8. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

(F) Record keeping Requirements (based on PSD netting analyses)

1. Logs shall be kept and updated daily to record the following:
 - a. Any adjustment and maintenance performed on monitoring systems;
 - b. The gallons of fuel oil fired on an hourly basis at each existing boilers, units SJ7, SJ8, SJ9, and SJ10.;
 - c. The hours of operation of each existing boiler, units SJ7, SJ8, SJ9, and SJ10;
 - d. All calculations and information related to emission determinations.
2. All monitoring records, fuel sampling test results, calibration test results and logs must be maintained for a period of five years after the date of record, and made available upon request. All rolling averages shall be computed on an hourly basis.

(G) Compliance Assurance

1. Maximum fuel use restriction

The maximum total fuel use in these four boiler, units SJ7, SJ8, SJ9, and SJ10, shall be limited to 173.1 million gallons per year. Daily

compliance with the annual maximum fuel usage shall be determined by adding the total amount of gallons of fuel usage by four boiler units during each calendar day to the total gallons of fuel use by those boiler units in the preceding 364 calendar days.

2. Emission limit in lbs/MMBtu and tons/year

Nitrogen Oxides – PREPA San Juan shall continuously measure and record stack gas NO_x concentrations in ppmvd using a CEM. Monitored Oxygen concentrations (vol % dry) will be used to convert NO_x concentrations to emission rates (lbs/MMBtu) pursuant to equation 19.1 in EPA Method 19 (40 CFR Part 60 Appendix A). NO_x emission rates will be calculated and recorded every hour as an 8-hour rolling average, and every day as a 365-day rolling average (ton/yr). Emission for all four units will be summed. PREPA San Juan will comply with this condition in addition to the requirement to conduct a performance test.

PREPA San Juan shall use a computerized data logger to record all emissions and emission rates.

3. Sulfur content of no. 6 fuel oil

For boilers, units SJ7, SJ8, SJ9, and SJ10– PREPA San Juan shall sample no. 6 fuel oil upon delivery and analyze for the sulfur content.

4. PM/PM₁₀

In addition to initial stack tests, PREPA San Juan shall conduct subsequent stack test every 60-month. PREPA San Juan shall conduct weekly opacity observations at each emission point in accordance with 40 CFR Part 60, Method 9. The opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Opacity as measured by Method 9 and by a Continuous Opacity Monitor shall not exceed 20%. All possible corrective actions shall be taken as soon as visible emissions are observed from the boilers, units SJ7, SJ8, SJ9, and SJ10 stacks. PREPA San Juan shall maintain records of all corrective actions and the duration of visible emissions to verify compliance with PM₁₀ emissions.

Certification-Boilers, units SJ7, SJ8, SJ9, and SJ10

A responsible official from PREPA San Juan as defined under the title V of the Clean Air Act, shall submit a yearly compliance certification to EQB and EPA as follows:

“I certify under penalty of law that I have personally examined and am familiar with the information contained in or accompanying this compliance certification submission; I certify that, based on my inquiry of those individuals immediately responsible for obtaining the information, the information is true, accurate and complete”.

(H) Reporting Requirements

1. PREPA San Juan shall submit a written report of all excess emissions to EQB for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each quarter and shall include the information specified below:
 - a. The magnitude of excess emissions computed in accordance with 40 CFR section 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions.
 - b. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - c. In addition to the reporting of Quality Assurance Project Plans (Protocol) specified in this permit, all reports related to boilers, units SJ7, SJ8, SJ9, and SJ10, shall be submitted to:
Chief, Compliance Division
Air Quality Area
Puerto Rico Environmental Quality Board
PO Box 11488, San Juan, Puerto Rico 00910

(I) Other Requirements

1. PREPA San Juan shall meet all other applicable federal, state and local requirements, including but not limited to those contained in the Puerto Rico State Implementation Plan (SIP), the General Provisions of the New Source Performance Standards (NSPS) (40 CFR Part 60, Subpart A).
2. All reports and Quality Assurance Project Plans required by this permit shall be submitted to:
Chief, Compliance Division
Air Quality Area
Puerto Rico, Environmental Quality Board
PO Box 11488, San Juan, PR 00910.

Section VI – Requirements per Emission Unit for the Alternative Operating Scenarios

- A. Each alternative operating scenarios shall meet all applicable requirements and the requirements of Puerto Rico’s Part VI rules of the RCAP.
- B. Alternative Operating Scenarios 1 (Units SJ7, SJ8, SJ9 and SJ10)**
1. PREPA San Juan is allowed to fire natural gas or propane as a primary or natural gas as an igniter fuel in Units SJ7, SJ8, SJ9, and SJ10 after a new source review process under Rule 203 of the RCAP is approved.
 2. For the Alternative Operating Scenario 1, PREPA San Juan shall comply with all the applicable requirements (monitoring, test methods, recordkeeping, and reporting) of the Normal Operating Scenario in Section V of this permit.
- C. Alternative Operating Scenarios 2 (Units SJ7, SJ8, SJ9 and SJ10)**
1. PREPA San Juan is allowed to use non-toxic additives injection (AI) only to control visible emissions and particulate matter in Units SJ7, SJ8, SJ9, and SJ10 if the use of these additives does not cause the emission of any pollutant (subject to an standard) not previously emitted and after a new source review process under Rule 203 of the RCAP is approved. PREPA San Juan shall prepare, maintain and update a registry to record the type and amount of additive added to the fuel and submit it to the EQB with the monthly sulfur in fuel reports required in Section V.A.2.(C) of this permit.
 2. For the Alternative Operating Scenario 2, PREPA San Juan shall comply with all the applicable requirements (monitoring, test methods, recordkeeping, and reporting) of the Normal Operating Scenario in Section V of this permit.
- D. Alternate Operating Scenarios 4 (PSD Permit for the Combined Cycle Project of Units 5 and 6; the two new combustion turbines, and the permit conditions for the Units SJ7, SJ8, SJ9, and SJ10)**
1. PREPA San Juan shall obtain from this Board, a location approval for any location or construction of a new major source, or major modification or significant source, as specified under Rule 201 of RCAP, and a permit to construct a source as specified under Rule 203 of RCAP, for the SJR5 and SJR6 oil fired combustion turbines. Once the administrative process is completed and the Board grants the permit to construct, the EQB will incorporate the terms and conditions of the PSD permit using applicable procedures. To comply with these requirements, the PSD permit shall become part of this Title V operating permit using applicable procedures established under Part VI of the RCAP.

2. New Source Performance Standards for Stationary Gas Turbines

- a. Combustion Turbines SJR5 and SJR6 will be subjected to the Standards of Performance for Stationary Gas Turbines established under 40 CFR part 60, subpart GG.

3. Regulatory Overlap

- a. In case of conflict, PREPA San Juan shall comply with the most stringent limit or more stringent monitoring, recordkeeping, and reporting requirement of either the limits provided herein or provided in the PSD permit or other subsequent applicable requirement(s). This condition shall apply to Combustion Turbines SJR5 and SJR6 that are regulated by both 40 CFR part 60, subpart GG and PSD and the Units SJ7 through SJ10.

Section VII – Recordkeeping Requirements

- A. PREPA San Juan shall keep and update monthly the record of hours of operation and amount of fuel consumed by the combustion equipments included in Section IX of this permit.
- B. PREPA San Juan shall keep available at any time a copy of the Emergency Plan required in Rule 107 of the RCAP.
- C. PREPA San Juan shall keep readily accessible records of fire fighting activities related to research or training.
- D. PREPA San Juan must keep records of refrigerant purchased and added to appliances normally containing 50 or more pounds of refrigerant, if PREPA San Juan owns or operates such appliances. [40 CFR §82.166]
- E. PREPA San Juan shall keep readily accessible records showing the dimension of the storage tanks and an analysis showing the capacity of the storage tank pursuant to 40 CFR §60.116b. The required record shall be kept for the life of the source.
- F. All monitoring records, fuel sampling test results and logs must be maintained for a period of five years after the date of record, and made available upon request. All rolling averages shall be computed on a daily basis.
- G. PREPA San Juan shall record in a registry (record book), contemporaneously with making a change from one operating scenario to another authorized under Section VI of this permit, the scenario under which it is operating. This registry must be kept at PREPA San Juan’s facility at all times.

Section VIII – Reporting Requirements

- A. Compliance Certification: As specified under Rule 602(c)(2)(ix)(c) of the RCAP, PREPA San Juan shall submit a compliance certification annually. This certification shall be submitted to both EPA⁵ and EQB not later than the 1st of April of every year, covering previous natural year. It shall include, but is not limited to the information required in Rule 603(c) of the RCAP.
- B. Emissions Inventory: PREPA San Juan shall submit, on the first day of April each year, the actual or permissible emissions calculations for the previous natural year. The emissions calculations shall be submitted on the forms prepared by the Board for this purpose and the responsible official must certify all the information submitted as true, correct and representative of the permitted activity. The emissions inventory must include, but not limited to, PM/PM10, NOx, VOC, CO, SOx, and HAP emissions.
- C. As part of the annual compliance certification required under 40 CFR Part 70, PREPA San Juan shall include, if applicable, the requirements of 40 CFR Part 68, including the recordkeeping and the Risk Management Plan, and a certification supporting the adequate implementation of the Plan according to 107(D) of the RCAP. PREPA San Juan shall submit a revised registration to EPA and EQB within six months indicating that the stationary source is no longer covered if PREPA San Juan is no longer subject to this part. PREPA San Juan shall maintain all records supporting the implementation of this part for five years unless otherwise provided 40 CFR Part 68, Subpart G. PREPA San Juan shall review and update de RMP as specified in 40 CFR §68.150.
- D. As established under Rule 603(a)(5)(i) of the RCAP, PREPA San Juan shall submit semi-annual reports of all required monitoring or all deviation on October 1st and April 1st of every year, respectively or more frequently if required by the Board or any other applicable requirement. The emissions calculation shall be submitted on the forms prepared by EQB for this purpose and the responsible officer must certify all the information submitted as true, correct, and representative of the permitted activity. The emissions inventory must included but not limited to PM/PM₁₀, NOx, VOC, CO, SOx, and HAP emissions. .
- E. Fuel Consumption Monthly Report: For units SJ7, SJ8, SJ9 and SJ10 subjected to Rule 410 of the RCAP, PREPA San Juan shall submit a monthly report indicating on a daily basis the sulfur content (percent by weight) in the fuels burned or combusted and the amount of fuel burned at each unit. This report shall be submitted to EQB to the attention of the Chief of the Validation and Data Management Division during the first 30 days of the following month of the month for which the report is representative. PREPA San Juan shall also include the content of asphaltenes and vanadium in the fuel, and the type and amount of additive added to the fuel, if any.

⁵The certification to the EQB shall be mailed to: Manager, Air Quality Area, P.O. Box 11488, San Juan 00910. The certification to the EPA shall be mailed to: Chief Enforcement and Superfund Branch CEPD, US EPA-Region LL, Centro Europa Building, 1492 Ponce de Leon Ave. Stop 22, Santurce, PR 00909.

- F. Pursuant Rule 603(a)(5)(ii) of the RCAP, any deviation resulting from emergency or upset conditions (such as sudden malfunction or breakdown) as defined in Rule 603(e) of the RCAP shall be reported within two working days.
- G. Pursuant to Rule 603 (a)(5)(ii)(b) of the RCAP, a notification will be required if a deviation occurs that results in the release of emissions of hazardous air pollutants for more than an hour in excess of the applicable limit. PREPA San Juan shall notify EQB within 24 hours of the deviation for the discharge of any regulated air pollutant that continues for more than 2 hours in excess of the applicable limit. PREPA San Juan shall also submit to the Board, within 7 days of the deviation, a detailed written report, which includes probable causes, time and duration of the deviation, remedial action taken, and steps, which are being taken to prevent a reoccurrence. [This condition is enforceable only by the State]
- H. PREPA San Juan shall submit one copy to EPA and two copies to EQB of all emission test reports within 60 days after performance of the emission test. [Rule 106(E) of the RCAP]
- I. PREPA San Juan shall comply with the applicable notification requirements of 40 CFR §63.6145 and in 40 CFR part 63, subpart A by the dates specified unless it is determined that this regulation does not apply.
- J. PREPA San Juan shall comply with the applicable notification requirements of 40 CFR §63.6645 and in 40 CFR part 63, subpart A by the dates specified.

Section IX– Insignificant Emission Units

- A. PREPA San Juan provided the following list of insignificant activities for a better understanding of its operations and layout. Since there is no requirement to update this list, activities may have changed since this filing; however, PREPA must include the list for insignificant activities, which are exempted because of size or production rate, and some may need a construction permit under Rule 203 of the RCAP.

Insignificant Emission Units and Base of Its Exemption.

Emission Source Identification	Description (Base for exemption)
Tanks R1, R2, R3, R4, S6, S7, S8, S9, S10, LD1	Appendix B 3 ii (P) of the RCAP Emissions less than 1 ton/yr of VOC (each).
Sulfuric acid (H ₂ SO ₄) storage tank (11,200 gallons)	Appendix B 2 of the RCAP
Emergency Electric Generators	Appendix B 3 ii (O) of the RCAP Emergency generators operating less than 500 hrs/yr and with construction permits under Rule 203 of the RCAP.

Emission Source Identification	Description (Base for exemption)
Internal combustion engines	Appendix B 3 vi of the RCAP Capacity less than 50 hp and operating hours less than 500 hrs/yr.
Facility support storage tanks (used oil, lube oil, hydrazine, ammonia, cyclohexylamine, propane, acid, caustic)	Appendix B 3 ii (N) of the RCAP Capacity less than 10,000 gallons.
Water treatment equipment	Appendix B 3 ii (L) of the RCAP VOC concentration in water less than 3,500 ppb by weight.
Fuel oil and light oil discharge docks	Appendix B 3 ii (P) of the RCAP
Controlled substances	Appendix B 2 of the RCAP. Less than significance levels of Appendix E of the RCAP for lead, chromium, chlorine, arsenic, cadmium, manganese, mercury, nickel, and selenium.
Oil absorbent material (pads/rags)	Appendix B 2 of the RCAP. Less than significance levels of Appendix E of the RCAP for lead, chromium, chlorine, arsenic, cadmium, cobalt, manganese, and nickel.
Water cooling towers	Appendix B 3 xxxiii of the RCAP Systems with no chromium-based chemicals.

Section X – Permit Shield

- A. As specified under Rule 603(d) of the RCAP, compliance with the conditions of the permit shall be deemed compliance with any applicable requirement as of the date of permit issuance, but only if such applicable requirement is included and specifically identified in the permit. Moreover, PREPA San Juan shall be deemed in compliance with any other requirement specifically identified in the permit as Non Applicable.

1. Non-Applicable Requirements for units SJ7, SJ8, SJ9, and SJ10

Non Applicable Requirements		
State	Federal	Reason
Non applicable	Standards of Performance for Fossil-Fuel-Fired Steam Generators (40 CFR Part 60 Subpart D)	See Section X, Part 2 of this Permit

2. Reasons for Non Applicability

Coding for Non Applicability	
Code	Reason
40 CFR Part 60 Subpart D	It is not applicable to boilers constructed before August 17, 1971.

- B. The permit shield covers any alternative operating scenario as long as it is defined and allowed under the conditions of this permit.

Section XI – Permit Approval

By virtue of the authority conferred upon the Environmental Quality Board by the Public Policy Environmental Act, Law No. 416, September 22, 2004, and after verifying the administrative record and compliance with the Uniform Administrative Procedure Act, Law No. 170, August 12, 1988, as amended, the Clean Air Act, the Public Policy Environmental Act and the Regulation for the Control of Atmospheric Pollution, the Environmental Quality Board approves this permit subject to all the terms and conditions herein established.

In San Juan, Puerto Rico, **May 19, 2006.**

ENVIRONMENTAL QUALITY BOARD

/s/
Eugene Scott Amy, Esq.
Vice President

/s/
Julio I. Rodríguez Colón
Alternate Member

/s/
Carlos W. López Freytes, Esq.
President

APPENDIX

Appendix I-Definitions and Abbreviations

A. Definitions:

1. Law- Federal Law of Clean Air
 2. Regulation - Regulation for the Control of Atmospheric Pollution for the Environmental Quality Board.
 3. Responsible Officer - As defined in the Regulation for the Control of Atmospheric Pollution of the Environmental Quality Board.
 4. Title V - Title V of the Clean Air Act (42 U.S.C. 7661)
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B. Abbreviations:

API	American Petroleum Institute
AP-42	Compilation of Air Pollutant Emission Factors
ASTM	American Standard Testing Methods
Btu	British thermal unit
CFR	Code of Federal Regulations
CO	Carbon monoxide
COMS	Continuous Opacity Monitoring System
EPA	Environmental Protection Agency
EQB	Environmental Quality Board of Puerto Rico
°F	Fahrenheit degrees
HAP	Hazardous Air Pollutant
HP	horsepower
H ₂ SO ₄	Sulfuric acid
IP	Institute of Petroleum
Lbs	Pounds
MMBtu	Million Btu

NAAQS	National Ambient Air Quality Standards
NO _x	Oxides of nitrogen
O ₂	Oxygen
OPM	Operations and Preventive Maintenance
QA	Quality Assurance
PM	Particulate matter
PM ₁₀	Particulate matter with particulate which diameter has an aerodynamic mass equal or less than 10 microns.
ppb	parts per billion
ppm	parts per million
ppmw	parts per million by weight
Pb	Lead
PREPA	Puerto Rico Electric Power Authority
PSD	Prevention of Significant Deterioration
psid	pound per square inch, differential
psig	pound per square inch, gauge
RCAP	Regulations for the Control of Atmospheric Pollution of the Environmental Quality Board
RMP	Risk Management Plan
sec	seconds
SIC	Standard Industrial Classification
SO _x	Sulfur oxides
SO ₂	Sulfur dioxide
ssu	Saybolt Universal Seconds
VOC	Volatile Organic Compounds
wt%	weight percent