

**RESPONSE TO COMMENTS ON DRAFT NPDES PERMIT FOR
PUERTO RICO ELECTRIC POWER AUTHORITY
PALO SECO POWER PLANT (PR0001031)**

On July 31, 2015, the United States Environmental Protection Agency (EPA) issued a draft National Pollutant Discharge Elimination System (NPDES) permit (PR0001031) to the Puerto Rico Electric Power Authority for its oil-fired steam electric power generating station in Levittown, Puerto Rico. Public notice of the draft permit was provided in the *El Vocero* newspaper on July 31, 2014. An additional public notice was subsequently published in *El Vocero* newspaper on July 31, 2015 to public notice changes to the permit as a result of the final water quality certificate (WQC) issued by the Puerto Rico Environmental Quality Board (EQB). The public comment period for the draft NPDES permit expired on August 31, 2015.

According to 40 Code of Federal Regulations (CFR) §124.17, at the time that any final permit decision is issued under §124.15, EPA shall issue a response to comments. This response shall (1) specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and (2) briefly describe and respond to all significant comments on the draft permit raised during the public comment period, or during any hearing.

Comments on behalf of PREPA were received in a letter dated August 31, 2015 from Rafael Marrero Carrasquillo, Head of the Environmental Protection and Quality Assurance Division at PREPA. All comments received have been reviewed and considered in this final permit decision. A discussion and response to the comments received are included below.

**Puerto Rico Electric Power Authority
Revised Draft NPDES Permit Comments**

The Puerto Rico Electric Power Authority (PREPA) submits the following comments on the Revised Draft National Pollutant Discharge Elimination System (NPDES) Permit for the Palo Seco Power Plant, prepared by the Environmental Protection Agency (EPA) and publically noticed on July 31, 2015. EPA included a Fact Sheet that provides principal facts and technical rationale for the requirements of the draft permit. This draft permit updates the July 2014 version of this renewal permit which PREPA submitted comments on. The revised draft Permit includes many of the revisions PREPA had requested and provided justification for. PREPA appreciates EPA's willingness to consider those comments.

Part I. Fact Sheet General Comments

1. Water Quality Certificate

On June 19, 2015, the Puerto Rico Environmental Quality Board (PREQB) issued a Final Water Quality Certificate (WQC) for the Palo Seco Power Plant (PSPP). As

discussed below, PREPA is requesting the modification of this WQC and, if that modification is granted before this permit is finalized, PREPA is requesting that the final Permit reflect his change in the WQC.

EPA Response I.1

As noted above, the WQC was finalized June 19, 2015. PREPA has not appealed this WQC or submitted such a modification request at this time. The EPA is proceeding with finalizing this long expired permit with the conditions outlined in the final WQC. PREPA may apply for a NPDES permit modification in the event that the EQB issues a final modification to this WQC.

2. Facility Description

The facility description detailed in the Fact Sheet has been corrected as requested.

EPA Response I.2

Noted. No response requested.

3. Discharge Points

The descriptions of the discharges have been changed in both documents, the Fact Sheet and the Draft Permit, as requested by PREPA.

EPA Response I.3

Noted. No response requested.

Clean Water Act § 316(b) Requirements

As discussed in Section 11.6 below, PREPA appreciates the changes made to this section since the 2014 draft Permit. The current proposed language is now largely consistent with the revised federal Cooling Water Intake Structure (CWIS) regulations for existing CWIS facilities. As discussed below, however, there are still some remaining changes that need to be made to the draft permit in order for it to be fully consistent with the revised federal regulations. In addition, PREPA is requesting some additional timing-related changes that it understands are within EPA's authority to grant.

Part II. Specific Comments to the Draft Permit -Tables of Effluent Limitations and Monitoring Requirements

1. Table A-1 -Outfall 001A

- a. Effluent description should include "fire protection system test water".

EPA Response II.1.a

EPA has revised the effluent description in response to this comment.

- b. Color -Because PSPP sometimes uses uranine to detect tube leaks, PREPA requests to add a footnote to include the following at the end of the effluent limit:

"... except when conducting tube leak tests using uranine or other visible dyes in accordance with the manufacturer's directions".

EPA Response II.1.b.

EPA cannot grant this request. The EQB has issued a final water quality certificate that includes the narrative limitation that the effluent discharge "Shall not be altered by other than natural causes." While dye tests for leaks may be useful to PREPA's operations, such a footnote would contradict the narrative limit included by the EQB. EPA's NPDES permit must be at least as stringent as the requirements included in the EQB WQC. Such tests will have to be handled as a planned event with proper notification to both the EPA and EQB, and authorized on a case-by-case basis.

- c. Oil and Grease (O&G) -As discussed by PREPA in its prior comments, the draft permit contains two different effluent limitations for this parameter; one a water quality based narrative limit taken directly from the WQC, and the other a numeric limit added by EPA. For any given parameter, NPDES Permits are to include the more stringent of either WQBEL or Technology based Limits (TBELs). The Fact Sheet does not clearly state the basis for the numeric limit. If this is a TBEI which EPA believes is more stringent than the Narrative WQBEL, the Fact Sheet should state this and the Narrative limit should be removed. If EPA believes that the proposed numeric limit (15 and 20 mg/l monthly average and daily maximum) is the measurable equivalent to the PRWQS Narrative limit, then the Fact Sheet should state this equivalency, and the Narrative limit should be deleted. As there is no objective way to judge compliance with the Narrative limit from a collected sample, if the Narrative limit is retained, there should be no monitoring requirement other than a visual inspection.

Consistent with the WQC, PREPA also requests that the monitoring frequency on this parameter be lowered to once per month. In addition to aligning this requirement with the WQC, monthly monitoring for O&G is justified based on our records which demonstrate consistent and full compliance with the current NPDES permit O&G limit for the last five years.

EPA Response II.1.c

The Fact Sheet identifies this limitation as a technology based limit, and references that technology based limits are based on the National Effluent Limitation Guideline for the Steam Electric Point Source Category (40 CFR §423). The numeric limitations for

oil and grease are included at 40 CFR §423.12, as best practicable control technology for the Steam Electric Point Source category. The narrative limitation is a water quality based effluent limitation based on the EQB WQC. Neither is an interpretation of the other, or judged to be more or less stringent. Both standards apply to this discharge. The first request is denied. EPA has agreed to revise the sampling frequency to “monthly” to match the EQB monitoring frequency. The monthly result shall be evaluated for compliance with the monthly average limit of 15 mg/L.

- d. PCBs -PREPA requests that any sample whose analytical results from the certified lab is at or below the laboratory's reported Practical Quantitation Limit (PQL -or other minimum quantitation measure), such as readings between the MOL and the quantitation level, be considered a non-detected value and, hence, in compliance.

EPA Response II.1.d

The best practicable control technology for the Steam Electric Point Source category at 40 CFR §423.12 include a prohibition on discharges of PCBs, at any level. Compliance with this limitation shall be a result of Non-Detect, using the most sensitive EPA Approved method for compliance evaluation at 40 CFR Part 136. This request is denied.

- e. Settleable Solids (SS) -As discussed by PREPA in its prior comments, due to Outfall 001A's large flow and SS compliance history, PREPA requests: that, consistent with the WQC, the SS parameter measurement frequency be reduced to a once per month basis, instead of "twice/month". (The current permit frequency for this parameter is twice/month and PREPA has demonstrated that the SS level is consistently in compliance at this frequency over the last permit term monitoring.)

EPA Response II.1.e

EPA has revised the monitoring frequency to match that required by the EQB WQC. This request is granted.

- f. Sulfates & Sulfides -PREPA requests that the measuring units be in mg/L instead of ug/L, as per the Puerto Rico WQC.

EPA Response II.1.f

The EQB WQC included the requirements for these parameters in ug/L. This request is denied.

- g. Temperature - PREPA is in the process of requesting a modification to this provision in its WQC from PREQB. The request will be that the upper annual percentile limit of 99°F (33.5°C) should be based on the 95th percentile instead of 99th percentile. PREPA is assembling data to submit to PREaB in support of this

request. If the wac modification is granted, the 001A discharge could exceed this limit up to no more than 19 days per year. If PREQB grants this modification before the NPDES permit is finalized, PREPA requests that the permit temperature limit reflect the modified permit. In the event that the WQC modification has not occurred by the time the Permit is finalized, PREPA requests that the final NPDES permit contain a note to this limit that reads "If the PREQB modifies the WQC during this Permit term to change the Annual Upper Percentile Limit to be based on the 95th percentile, then the temperature cannot exceed 99°F (33. 5°C) on more than 19 days a year."

EPA Response II.g

The EQB WQC was finalized June 19, 2015. PREPA has not appealed this WQC or submitted such a modification request at this time. The EPA is proceeding with finalizing this long expired permit with the conditions outlined in the final WQC. PREPA may apply for a NPDES permit modification in the event that the EQB issues a final modification to this WQC.

- h. Total Residual Chlorine -This parameter is not included in the WQC. PREPA requests that the sampling frequency be modified to be consistent with the current NPDES permit. Therefore, footnote 6 should be changed to include the following statement at the end of the first sentence:

"... when chlorination is occurring".

EPA Response II.1.g

EPA will include the revision to the footnote. This parameter was included based on the federal Effluent Limitation Guideline for the Steam Electric Point Source Category (40 CFR §423).

- i. Acute Whole Effluent Toxicity (WETa) -The WQC requires a quarterly WETa monitoring for a period of one year, after which the tests shall be performed annually. Under the current NPDES Permit, acute toxicity tests were performed quarterly for one year. After that, the tests were eliminated due to the favorable (lack of apparent toxicity) results. As EPA is aware, there are not distinct seasons in Puerto Rico, and hence there is no need for quarterly (roughly aligned with spring, summer, fall and winter) WETa monitoring. As mentioned above, PSPP Cooling Towers are chemical free and use a "green" cleaning technology. Therefore, consistent with the WQC, PREPA requests that WETa analysis requirement be reduced to a semiannual frequency for the first year period, and then eliminated.

EPA Response II.1.i

WET testing that was performed under the current permit is several years old. This facility discharges to an effluent dominated stream. EPA must have updated data at the time of permit renewal to determine whether there is reasonable potential to cause

or contribute to a violation of the Puerto Rico narrative water quality standard for toxicity. This request is denied.

2. Table A-2 -Outfall 001A-2 (Cooling tower blowdown intermittent Unit 3 & 4)

In order to maintain good operating conditions at Cooling Tower 3 & 4, the Palo Seco Power Plant installed an isolation valve and a pipeline to connect the tower's blowdown to the Waste Treatment Plant (WTP). This valve allows PREPA personnel to discharge the wastewater to internal waste stream 001A2 or directly to the WTP.

- a. 126 Priority Pollutants -According to 40CFR §423.13(d)(1), this parameter applies to priority pollutants contained in chemicals which are added for cooling tower maintenance. PREPA requests that: (1) any certified lab result below an analytical method's quantitation level, as reported by its certified laboratory, be considered as a compliant non-detected reading; (2) measuring units should be reported in ug/L; and (3) Footnote 3 be changed using the following language:

"(3) The first monitoring shall be performed at EDP + 180 days. For all Priority Pollutants which are not detected during this monitoring event. No further sampling and analyses will be required for the duration of this permit, unless there is a change in cooling tower chemicals or processes."

EPA Response II.2.a

This request is granted. EPA will also change the units to ug/L. 40 CFR §423.13(d)(3) allows:

"(3) At the permitting authority's discretion, instead of the monitoring specified in 40 CFR 122.11(b) compliance with the limitations for the 126 priority pollutants in paragraph (d)(1) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136."

- b. pH -The monitoring sample type for this parameter is not specified in the table. PREPA requests that the Sample Type be listed as a "Grab" sample.

EPA Response II.2.b

This request is granted. EPA has added the sample type "grab" to this limitation.

3. Table A-3 - Outfall 001A-3

Flow measurement unit should be in gallons per day (GPD) instead of millions of gallons per day (MGD).

EPA Response II.3

This request is granted. EPA has revised the flow units to gallons per day (gpd).

4. Table A-4 -Outfall 001C

- a. Flow -Compliance with a continuous flow monitoring requirement at this Outfall is neither practically feasible nor necessary. In accordance with the current NPDES Permit, all flows to this Outfall are currently monitored by estimate, and PREPA requests that the renewal permit continue to allow flow monitoring to be done using estimates. Since March 1991, the cooling towers blowdown from Units 1 and 2 has been rerouted to the Wastewater Treatment Plant (WTP). Since December 2013, cooling towers 3 & 4 blowdown was also rerouted to the WTP. The resulting intermittent flow of 70,000 GPD from the boiler blowdown can be reliably estimated by multiplying the average flow rate through the fully opened blowdown valve by the length of time this valve is open. The maximum flow from the WTP is 720,000 GPD. This leaves an estimated 5,000 GPD flow from miscellaneous waters and a calculated intermittent daily average fuel oil heater's cooling tower flow of 10,000 GPD. These latter two waste streams are less than 2% of the total maximum flow. Under these circumstances, it is not necessary to require continuous flow monitoring at Outfall 001C because these minor flows comprise less than 2% of the total flow. As stated in footnote 1 of the Table, the flow measurement must achieve accuracy within the range of plus or minus 10%. When the WTP is not discharging, a flow monitoring device at Outfall 001C would not be sufficiently accurate to comply with this requirement.

EPA Response II.4.a

This request is granted. EPA has changed the sample type and frequency to "Continuous Monitoring or Estimated, consistent with the EQB WQC.

- b. Cadmium, Nickel, Pentachlorophenol -PREPA believes that the monthly monitoring frequency for these parameters for one (1) year, using a 40 CFR § 136 approved method with a detection level lower than the water quality standard will provide sufficient data to allow EPA to make a factual determination as to whether there is a "potential to exceed" the water quality standard. PREPA is confident that the data will confirm that this Outfall does not add any material quantities of these parameters to this discharge. Therefore, PREPA requests that a note be added to each of these parameters that states:

"If no value above the certified laboratory's quantitation limit is measured during the first year of monthly testing, then no further monitoring for the remainder of the permit term is required."

EPA Response II.4.b.

This request is denied. The study frequency and period were included as required by the Final WQC. Continuing annual sampling beyond the first year of the permit term will give both the EPA and EQB an appropriate recent data set at the time of permit renewal to determine whether there is reasonable potential to cause or contribute to Puerto Rico water quality standards.

- c. Dissolved Oxygen -This request was included in PREPA's comments on the Draft WQC and was granted in the Final WQC. As explained in the comments which PREPA previously supplied to EPA, PSPP does not discharge oxygen demanding substances through this Outfall. The current monitoring frequency for this parameter is also on a monthly basis. Due to the Outfall 001C's flow and its documented history of compliance, PREPA requests that, consistent with the final WQC, the measurement frequency for Dissolved Oxygen levels in 001C should be "monthly" instead of "weekly" basis. PREPA understands that there is no basis for increasing the monitoring frequency for a parameter that is in full compliance.

EPA Response II.4.c

This request is granted. EPA has changed the monitoring frequency for dissolved oxygen to "monthly" to match the EQB final WQC.

- d. Mercury -During the current Permit term, PREPA has monitored for Mercury on a monthly basis at this outfall, as required under the Special Conditions portions of the Permit. Since 2012, samples results from 001C monitoring have been in full compliance with the current permit limit and with the new WQC limit of 0.051ug/L (ppb).Therefore, PREPA requests that this sampling be reduced to "monthly for the first year", and then reduced to "annually", consistent with Table A-2 notes ϕ and γ in the Final WQC.

EPA Response II.4.d.

EPA has included mercury in the footnote referenced in the EQB WQC. This request is granted.

- e. Nitrogen (NO₃, NO₂, NH₃) - Monitoring requirements for these parameters are typically required if reclaimed waters are subsequently discharged, or if potentially significant sources of nitrogen are added to the waste streams. PREPA's water source for effluent flowing through 001C is the PRASA potable water system. PSPP sanitary system is connected to PRASA's system and is not discharged through any Palo Seco outfall. Also, the cooling towers make-up water source is also comprised of potable water from PRASA. The WQC, which must be the source of imposed WQBELs, does not include either monitoring requirements or limits for these parameters. In addition, 40 CFR §423 (the Steam Electric Effluent Guidelines) does not include limits on these parameters.

Therefore, PREPA requests that the monitoring requirement for this parameter be eliminated.

EPA Response II.4.e.

This request is denied. The monitoring requirements for Nitrogen compounds are included in Table A-2 of the EQB final WQC.

- f. Oil & Grease - As discussed by PREPA in its prior comments, the draft permit contains two different effluent limitations for this parameter; one a water quality based narrative limit taken directly from the WQC, and the other a numeric limit added by EPA. For any given parameter, NPDES Permits are to include the more stringent of either WoBEL or Technology based Limits (TBELs). The Fact Sheet does not clearly state the basis for the numeric limit. If this is a TBEL which EPA believes is more stringent than the Narrative WQBEL, the Fact Sheet should state this and the Narrative limit should be removed. If EPA believes that the proposed numeric limit (15 and 20 mg/L monthly average and daily maximum) is the measurable equivalent to the PRWQS Narrative limit, then the Fact Sheet should state this equivalency and the Narrative limit should be deleted. As there is no objective way to judge compliance with the narrative limit from a collected sample, if the Narrative limit is retained, there should be no monitoring requirement other than a visual inspection.

EPA Response II.4.f

The Fact Sheet identifies this limitation as a technology based limit, and elsewhere references that technology based limits are based on the National Effluent Limitation Guideline for the Steam Electric Point Source Category (40 CFR §423). The numeric limitations for oil and grease are included at 40 CFR §423.12, as best practicable control technology for the Steam Electric Point Source category. The narrative limitation is a water quality based effluent limitation based on the EQB WQC. Neither is an interpretation of the other, or judged to be more or less stringent. Both standards apply to this discharge. Request is denied. EPA has agreed to revise the sampling frequency to "monthly" to match the EQB monitoring frequency. The monthly result shall be evaluated for compliance with the monthly average limit of 15 mg/L.

- g. PCBs -PREPA requests that any sample whose analytical results from the certified lab at or below the laboratory's reported Practical Quantitation Limit (PQL -or other minimum quantitation measure), such as readings between the MDL and the quantitation level, be considered a non-detected value and, hence, in compliance.

EPA Response II.4.g

The best practicable control technology for the Steam Electric Point Source category at 40 CFR §423.12 include a prohibition on discharges of PCBs, at any level. Compliance with this limitation shall be a result of Non-Detect, using the most sensitive EPA Approved method for compliance evaluation at 40 CFR Part 136. This request is denied.

- h. Sulfates & Sulfides - PREPA requests that the measurement units be in mg/L instead of ug/L, as per the Puerto Rico was. Footnote 3, which refers to the color parameter, should be eliminated.

EPA Response II.4.h

The EQB final WQC specifies mg/L for the limitation for Sulfates. This unit of measure will be revised to reflect the Final WQC. The unit of ug/L for Sulfide will remain, as it is specified in the WQC. The monitoring requirement for Color, as well as footnote 3, will also remain, as they are included in Table A-2 of the final WQC.

5. Table A-6 - Outfall 001C-1

- a. This Table should be referenced as Table A-5 instead of A-6.

EPA Response II.5.a

EPA agrees and has made the revision.

- b. Flow -The maximum limit of 0.40 MGD, specified in the Draft Permit, corresponds to the water flow used during normal operations. However, the Renewal Application, filed in 1996, documented that the daily maximum capacity of the WTP is 0.72MGD. The Final WQC establishes a non-stormwater (i.e.dryweather) flow related condition of 0.74 MGD. PREPA requests that the final Permit include 0.74 MGD as the maximum dry weather flow limit.

EPA Response II.5.b

This request is granted, EPA has revised the flow to reflect the maximum dry weather flow limit for the contribution from the wastewater treatment plant.

- c. Total Residual Chlorine (TRC) and Footnote 5 – PREPA requests that the monitoring requirement and proposed limit for TRC be eliminated. TRC is not a 40 CFR §423 parameter, nor is it included in this portion of the WQC. Cooling Tower Blowdown is the only potential source of chlorine entering the WTP. This discharge should not have significant chlorine content due to the treatment of the cooling tower blowdown in the WTP. FAC and TRC are unstable in sunlight (the Nautilus and Collection Tanks within the WTP are open). In addition, chlorine will be consumed by oxidation or substitution reactions during the mixing with other wastewater in the WTP collection tank. PREPA further requests that, because footnote 5 limits the discharge of these parameters to two hours a day, if FAC and TRC limits are retained, footnote 5 should clearly limit the discharge to the WTP of blowdown from each individual cooling tower to two hours a day. It must be clear that the two hour discharge limit does not apply to the subsequent WTP discharge.

EPA Response II.5.c.

This request is denied. Federal effluent limitation guidelines for the steam electric point source category at 40 CFR 423.13 include a maximum daily limitation for total residual chlorine, representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT) (40 CFR 423.13(b)(1). EPA has added a note to footnote (5) clarifying that the limitations on chlorine for time and concentration apply solely to the blowdown contribution.

- d. 126 Priority Pollutants -According to 40CFR §423.13(d)(1), this requirement only applies to priority pollutants contained in chemicals added for cooling tower maintenance. PREPA requests that the sampling frequency for this parameter be set at "annually/occurrence" in accordance with footnote (4). Further, PREPA requests that this footnote be revised to include the following language:

"(4) The first monitoring shall be performed at EDP + 180 days and at an annual interval thereafter. For all Priority Pollutants which are not detected during the initial monitoring event, no further sampling and analyses will be required for the duration of this permit, unless there is a change in cooling tower chemicals or processes."

EPA Response II.5.d

This request is granted. EPA will also change the units to ug/l. 40 CFR §423.13(d)(3) allows

"(3) At the permitting authority's discretion, instead of the monitoring specified in 40 CFR 122.11(b) compliance with the limitations for the 126 priority pollutants in paragraph (d)(1) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136."

6. Table A-7 -Outfall 002

- a. This Table should be entitled Table A-6 instead of A-7.

EPA Response II.6.a

EPA agrees and has made the revision.

- b. COD - PREPA requests that: (1) the Sample Type be changed to "Grab" instead of "Composite"; (2) the frequency should be WFO each month (i.e. if flow occurs twice a month, only one sample has to be collected) instead of "once a month"; and (3) the sampling frequency be reduced to "WFO each monthly" for the first year and then eliminated, unless the results provide indication of the presence of COD in the discharge above a background threshold.

EPA Response II.6.b

EPA has deleted the technology based effluent limitation. It was based on the 1991 memorandum setting EPA Region 2 Policy for discharges of industrial storm water. This policy has been replaced by the 2015 EPA NPDES Multi-Sector General Permit for Discharges of Industrial Stormwater – Subpart O: Steam Electric Generating Facilities.

- c. Mercury - This parameter is not included in the Final WQC. Footnote 1 that refers to the color parameter should be eliminated. EPA Method 1631 requires the use of Field Blanks and the analysis to be performed by a private laboratory. This is a stormwater only discharge, and the private laboratories available in Puerto Rico are not located close to the plant, making compliance with the sampling protocol for stormwater, as stated in the draft permit, not feasible. Mercury in runoff, to the extent that it is present at quantifiable levels, may be due to numerous other on and off-island sources rather than due to discharges by PREPA at this facility. Therefore, PREPA requests the elimination of the Mercury parameter from Table A-7, including the removal of footnote 2.

EPA Response II.6.c

This request is granted. EPA has removed the effluent limit for consistency with the final WQC, because it was not previously regulated at this outfall and because it is limited elsewhere at the facility.

- d. PCB's -The current NPDES permit and the Draft WQC have no monitoring requirements for this parameter. Because this is a stormwater only outfall, and, thus, is not covered by 40 CFR §423, PREPA requests that PCBs monitoring be eliminated from this outfall.

EPA Response II.6.d

EPA is aware that a remediation of PCB contaminated soils occurred at the Palo Seco Power Plant concluding in 2012. We will revise the requirement at the storm water outfall to a monitoring only requirement at this time. However, if monitoring data suggest there is reasonable potential to cause or contribute to a violation of water quality standards, we may reopen the permit to include a limit for PCBs. EPA will also research whether the prohibition on PCBs included at 40 CFR §423 applies to storm water outfalls at steam electric generating facilities.

- e. Total Suspended Solids -PREPA installed a filtered wastewater treatment system designed to collect the solids upstream of the Outfall. PREPA understands that this technology complies with the Best Conventional Pollutant Control Technology (BCT) for this parameter. Therefore, PREPA requests to delete this requirement from the permit at Table A-7. If it is still necessary to sample for this parameter, the sampling units should be in mg/L.

EPA Response II.6.e.

EPA has deleted this effluent limitation. Total Suspended Solids are addressed by the treatment described above and limited at the internal wastestream sampling station for Outfall 001C-1. The Total Suspended Solids parameter is also addressed by the Turbidity limit at Outfall 002.

7. Monitoring Locations Table

a. Outfall 001C-C1

The identification of this outfall should be 001C-1 instead of 001C-C1.

EPA Response II.7

EPA agrees and has made the revision.

Part III. Reporting Requirements and Compliance Determination

A.2 Monitoring Data Submission - The draft Permit includes a statement about the method to be followed to submit DMRs and other reports electronically. PREPA has been working diligently to submit complete DMRs electronically, but the electronic format provided by EPA in the NetDMR does not exactly match the permit's format fields. PREPA has been working with EPA and its contractors to resolve these issues, but there are some remaining programming issues that should be addressed by EPA. Until these issues are resolved, PREPA will not be able to submit DMRs and reports using the NetDMR system. Once this issue is resolved, PREPA anticipates submitting its DMRs electronically once the proposed Electronic Reporting rule goes into effect. PREPA requests that a further sentence be added to the end of condition III. A.2 which states that "If the Electronic Reporting Rule (40 CFR § 127) is finalized and goes into effect during this Permit term, permittee must submit its DMRs and NPDES-related reports in accordance with that rule as soon as is reasonably practical."

EPA Response III

The Electronic Reporting Rule was signed by the EPA Administrator on September 24, 2015. Therefore, EPA will not add this clarifying note to the permit. We agree that PREPA has been working towards electronic submission and are committed to working through the technical obstacles to facilitate the use of NetDMR.

Part IV. Specific Comments to Special Conditions

1. Special Condition IV.B.1.b - For the reasons discussed in the Comment 11.4.a (Table A-4 Outfall 001C), PREPA requests that the renewal permit continue to allow flow monitoring to be done using estimates. As explained in that comment,

PREPA requests to be required to only continuously monitor the total flow from the internal WTP discharge, because the WTP flow represents 97% of the discharge. In addition, as discussed in its Comment II.5.a above, the WQC granted flow for the WTP is 0.74 MGD. This special condition should be updated to allow a maximum dry weather flow of 0.74 MGD. As requested in Comment II.5.a above, Table A-6 of the Draft NPDES Permit must have a similar change.

EPA Response IV.1

EPA has made the revision to the applicable flow levels and added the option to provide estimated reports of flow.

2. **Special Condition IV.B.1.0** - The requirement to post the "Punto de Muestreo para la Descarga 001-A1" sign must be eliminated, because such discharge does not exist. Also, the sampling point sign required for discharge 001C-1 should read: "Punto de Muestreo para la Descarga 001C-1"

EPA Response IV.2

EPA agrees and has made the revision to the notification requirements.

3. **Special Condition IV.B.1.r** - This condition requires the filing of a semiannual report for the disposal of PSPP wastewater treatment related solids waste. The disposal methods used by the PSPP for these residues do not change often and are the same as the PSPP wastewater treatment system initial operation conditions. Because of the lack of change, the requirement for semiannual reports is necessary and burdensome. Therefore, PREPA requests that the condition (i) of this Special Condition be changed to include the following language:

"i. Disposed in compliance with the applicable requirements established in the 40 CFR §257. Within ninety (90) days of EDP, a report shall be submitted to PREQB and EPA notifying the disposal method for the solids waste (sludge, screening and grit) generated due to the operation of the treatment system. If any change of the method or methods used to dispose the solid wastes generated by the wastewater treatment system occurs, the permittee must submit an updated notice of this change, including copies of all approvals or permits applicable to the disposal method, to PREQB and EPA within 90 days of when the change first occurred."

EPA Response IV.3

EPA has revised the condition to require one report of sludge handling practices, with the requirement to modify if there are changes. This is consistent with the Final EQB WQC.

4. **Special Condition B.2 Whole Effluent Toxicity Test** - For the reasons discussed in comment II.1.i above, PREPA requests that this Special Condition

be modified consistent with any changes EPA makes in response to comment II.1.i.

EPA Response IV.4

EPA has denied the modification requested in comment II.1.i above. See EPA response II.1.i. WET testing that was performed under the current 1992 permit is several years old. This facility discharges to an effluent dominated stream. EPA must have updated data at the time of permit renewal to determine whether there is reasonable potential to cause or contribute to a violation of the Puerto Rico narrative water quality standard for toxicity. This request is denied.

- 5. Special Condition IV.B.3 - Preventive Maintenance Plan and Pollution Prevention Special Condition IV.B.4 - Stormwater Pollution Prevention Plan**
PREPA requests that the final permit clearly state that an integrated PMP, SWPP and BMP plan is acceptable. The document will be prepared in accordance with the Guidances for Manual for Developing Best Management Practices (BMPs), and the Stormwater Pollution Prevention Plans (SWPPP) and will establish the specific objectives for the control of pollutants and their release or potential release to the receiving waters.

EPA Response IV.5

This request is granted. EPA agrees that it would be more appropriate to take a holistic approach to preventing pollution of storm water through best management practices, preventive maintenance, and good housekeeping.

- 6. Special Condition IV.B.5 - Cooling Water Intake Structure Requirements**
PREPA appreciates the changes made to this section since the 2014 draft Permit. The current proposed language is now largely consistent with the revised federal Cooling Water Intake Structure (CWIS) regulations for existing CWIS facilities. As discussed below, however, there are still some remaining changes that need to be Made to the draft permit in order for it to be fully consistent with the revised federal regulations. In addition, PREPA is requesting some additional timing-related changes that it understands are within EPA's authority to grant.

a. Required Submittal Dates

PREPA requests that the final Permit clearly state that, unless specifically stated otherwise, all required submittals under IV.B.5 are due at EDP+ 4.5 years (i.e. as part of the permit renewal application package).

EPA Response IV.6.a

This request is granted. EPA has revised the due date for required submittals to be EDP + 4.5 years, the same due date for the renewal application.

b. Chosen Method of Compliance with the IM Standard

In condition IV.B.5.e of the draft permit, PREPA is required to submit a Status Report on its progress toward choosing its preferred Impingement Mortality (IM) compliance method. 40 CFR §125.94(b) states:

- (b) Compliance with BTA standards. (1) Aligning compliance deadlines for impingement mortality and entrainment requirements. After issuance of a final permit that establishes the entrainment requirements under §125.94(d), the owner or operator of an existing facility must comply with the impingement mortality standard in §125.94(c) as soon as practicable. The Director may establish interim compliance milestones in the permit. Because PREPA will not be required to comply with IM standards until at least the start of the permit term following the upcoming renewal permit (likely 2021 or later), PREPA requests that the submittal of this report be deferred until EDP + 4.5 years (i.e. as a part of the next permit renewal application) rather than at EDP + 4.0 years.

With respect to CWIS compliance, much of the next permit renewal term will be spent on the required Entrainment Characterization Study (ECS) and the other cost and resource extensive studies. PREPA anticipates having to spend significant time and money from approximately EDP + 3.5 years to EDP + 4.5 years to assemble, analyze and document the results of the required ECS and the studies requiring peer review. Not only would having to expend significant internal resources and (likely) incurring consultant expenses on this Task during this portion of the upcoming permit term put an unnecessary resource burden on PREPA, it would also prevent the results of the Entrainment Characterization Study from being factored into the Status Report. Submitting this Status Report at EDP + 4.5 years as a part of the permit renewal application package will not significantly impede PREPA's future ability to obtain compliance with the IM Standard "as soon as practicable". In fact, delaying the submittal of this report by 6 months may even expedite the eventual IM Standard compliance process because the Status Report can be written with the benefit of knowing what PREPA's proposed Entrainment requirements will be.

EPA Response IV.6.b

This request is granted. EPA has revised the due date for required submittals to be EDP + 4.5 years, the same due date for the renewal application.

c. Impingement Technology Performance Optimization Study

In condition B.5.f of the draft permit PREPA is required to submit the results of an Impingement Technology Performance Optimization Study at EDP + 4.5 years. As discussed above in the comment on condition B.5.e of this section of the draft permit, 40 CFR §122.94(b) does not require compliance with the IM Standard until (at the earliest) the beginning of the permit term that establishes the required Entrainment requirements. As the earliest that those requirements will be imposed is the beginning of the permit term subsequent to the pending renewal permit term,

submitting an IM compliance optimization study during the upcoming permit term if either Modified Traveling Screens or a "Systems of Technologies" is selected as the IM compliance method cannot be done during the upcoming permit term. Because the decision on this compliance method will likely be made early in the subsequent permit term, or, at the earliest, at the time that permit is issued, PREPA believes that submittal of the results of actual optimization studies cannot occur until sometime during that subsequent permit term. PREPA may consider an expansion of the required contents of the IM Status Report to include submittal of a proposed schedule for (i) making a final IM compliance method decision and (ii) installation or optimization (if the technologies are already installed) of the chosen technologies. Further, if the Status Report indicates that either 40 CFR 125.94(c)(5) or (6) compliance methods will likely be selected, and new technologies will need to be installed, than the proposed schedule can include a timeframe for start-up and optimization of the new 40 CFR §125.94(c)(5) or (6) technology(ies).

EPA Response IV.6.c

EPA grants this request. If the IM compliance technology has not been installed by the time of permit renewal application, the permittee may include a proposed schedule for IM compliance method decision and installation or optimization, or start-up and optimization in place of the Impingement Technology Performance Optimization Study.

d. Peer Review

In condition IV.B.5.0 of the draft permit, PREPA is required to have peer review of the items required under sections IV.B.5.d to f of the proposed permit. These required submittals are:

- d. Cooling Water System Data
- e. Chosen Method of Compliance with the IM Standard, and
- f. Impingement Technology Performance Optimization Study"

However, the Existing CWIS rules (at 40 CFR §122.21.r.13) require peer review of different studies:

"(13) Peer Review. If the applicant is required to submit studies under paragraphs (r)(10) through (12) of this section, the applicant must conduct an external peer review of each report to be submitted with the permit application."

The required studies listed under 40 CFR §122.21.r. (10) through (12) are:

- "(10) Comprehensive Technical Feasibility and Cost Evaluation Study
- (11) Benefits Valuation Study
- (12) Non-water Quality Environmental and Other Impacts Study. "

If the proposed peer review requirement is meant to mimic §122.21(r)(13), then the proposed permit condition that references the required submittals that need to undergo peer review should be changed to proposed permit condition IV.8.S (.j to .l). If EPA meant to require peer review of the (.d to .f) reports, PREPA objects to this requirement as being without a regulatory or statutory basis, and it requests the deletion of the entire peer review requirement.

Further, in condition IV.B.5.0 of the draft permit, EPA has given itself 3 months (EDP + 39) months to disapprove a proposed peer reviewer or to request additional peer reviewers. PREPA had requested to receive EPA's approval or disapproval within two months of when it had to submit the proposal (at EDP + 36 months). PREPA requests that this provision be expanded to read:

"... In the event of a disapproval or requirement for additional peer reviewers, the permittee must submit the proposed new peer reviewer's identity and qualifications by EDP + 42 months. The Director may disapprove of the identified peer reviewer/additional peer reviewer by EDP + 44 months. If not disapproved in writing by this date, the proposed peer PREPA's Revised Draft NPDES Permit Comments Palo Seco Power Plant NPDES - Permit PR0001031 reviewer(s) is approved and permittee may proceed to have the peer review performed. If the second proposed peer reviewer is disapproved by EPA, then the deadline for submittal of the Peer Reviewer's comments on the various reports is extended by one day after EDP + 4.5 years for each day after EPA has received identity and qualification information on another proposed peer reviewer from permittee until the day that EPA approves the peer reviewer or indicates that the peer review can commence. The number of days of the extension does not include any days after which EPA has informed permittee in writing of specific information it needs, as long as the requested information is reasonably required by 40 CFR §122.21.r.13."

EPA Response IV.6

EPA agrees that the citations to previous paragraphs were mislabeled. The intention was to require peer review of 40 CFR §122.21(r)

*"(10) Comprehensive Technical Feasibility and Cost Evaluation Study
(11) Benefits Valuation Study; and
(12) Non-water Quality Environmental and Other Impacts Study. "*

As stated in PREPA's comment. EPA has corrected the references to previous paragraphs.

With respect to EPA's approval or disapproval of peer reviewers, we will not be including the suggested language above. The EPA is confident the permittee will choose well credentialed peer reviewers, as required by regulation, and does not anticipate needing to disapprove a second round of peer reviewers. The purpose of the original requirement in the 2014 permit was to reserve EPA's right to disapprove a peer reviewer, as included in the final Existing Facilities §316(b) Rule. We note that the

§316(b) regulation does not set a deadline or timeframe for EPA disapproval. However, the EPA does acknowledge the permittee's need for certainty when proceeding with the required studies. EPA has revised the timeframe for EPA response on peer reviewers to two months from receipt of the proposed peer reviewer. We also note that PREPA may submit proposed peer reviewers at any time prior to the permit deadline, thus triggering the two month review period for EPA.

There will be no self implementing extension of the studies required by EDP + 4.5 years. EPA has granted the permittee as much flexibility as possible when staging and planning the required studies, acknowledging the effort required to meet this schedule and the need to plan for other facilities as well. Many of these requirements are required submissions for the renewal permit application, which is due at that time. As a result, we do not anticipate offering extensions for this regulatory deadline.

7. Special Condition IV.B.6 - Chemical and Material Usage

This Special Condition requires notification to the EPA of the optimum product dosage. PREPA, requests adding the following clause:

"The permittee is allowed to use and discharge visible quantities of uranine (sodium salt of fluorescein) or other visible tracer dyes when the dye is used in accordance with the manufacturer's directions"

EPA Response IV.7

As discussed in Response II.1.b, the EPA cannot grant authorization for dye tests that would violate the water quality based effluent limit included in the Final WQC, which states that color "shall not be altered other than natural causes." Special Condition IV.B.6, which sets requirements and authorizes Chemical and Material useage specifically states that the discharge shall meet all permit limits and shall not cause or contribute to a violation of water quality standards. Should PREPA have the need to conduct dye tests that will result in a visible color change in the receiving waters, these events must be addressed on a case-by-case basis, with notifications to both EPA and EQB.

8. Special Condition IV.B.7 - Fire Protection Foam

As EPA is aware, PREPA has performed pilot tests for all the products used for fire control. If these products change in the future, PREPA will perform the necessary tests to ensure that the new products comply with the requirements before starting routine use of the product.

EPA Response IV.8

Noted. The condition will remain in the permit for any future fire protection foam pilot tests.

9. Special Condition IV.B.12 - Hydrostatic Test Water Requirements

PREPA request to include the following procedure language for the Hydrostatic Test Water discharges; all tanks being hydrostatically tested will complete the following procedure.

- i. After construction or reconstruction of the tank, sandblasting (most common) or other technique will be used to clean the tank.
- ii. A vacuum truck or other equipment will remove all residues from the tank prior to testing.
- iii. The water source for the hydrostatic testing will be fresh (potable) water supplied by the Puerto Rico Aqueduct and Sewer Authority (PRASA) or other source of fresh water.

Permittee will generally follow ASTM hydrostatic test standard # E1003-95 or other valid procedure before the discharge. Oil and Grease analyses will be performed on the surface and the middle depth of the tank. Also, visual inspection will be performed after the test to look for oil sheen in the used hydrostatic test water. If oil sheen is observed, the discharge shall be stopped. Permittee will include a written report in the DMR- Addendum stating the date of each discharge. This test water can be discharged through Outfall 001A if the oil/grease analysis results are below 15.0 mg/L.

EPA Response IV.9

This request is granted. EPA has added the requirements for hydrostatic testing.