UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 Broadway
New York, New York 10007-1866

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

NPDES No. /Application No. PR0000345 Date:

Name and Address of Applicant: Commonwealth Oil Refining Company, Inc.
Firm Delivery
600 State Road No. 127
Peñuelas, Puerto Rico 00624

Name and Address of Facility where Discharge Occurs:

Commonwealth Oil Refining Company, Inc.
600 State Road No. 127
Peñuelas, Puerto Rico 00624

Receiving Waters:
Outfall 001: Tallaboa Bay
Outfall 002: Tallaboa Bay
Outfall 003: Tallaboa Bay

Classification: "SC" for Tallaboa Bay

I. LOCATION OF DISCHARGE

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

	Latitude	Longitude
Outfall 001	N 17E 59' 54"	W 66E 44' 54"
Outfall 002	N 18E 00' 12"	W 66E 44' 24"
Outfall 003	N 18E 00' 00"	W 66E 44' 54"

A description and/or sketch of the location of the discharges is included as the following attachments:

- Attachment I.A: taken from Chapter 5, Figure 1 – Form 1, Site Topo Map of the January 31, 2004 application for Outfall 001,

- Attachment I.B: taken from Chapter 5, Figure 2 – Form 1, Wastewater Effluent Pathways of the January 31, 2004 application for Outfall 001,

- Attachment I.C: taken from Chapter 5, Figure 4 – Form 1, Site Drainage Map of the January 31, 2004 application for Outfall 001,

- Attachment I.D: taken from Figure 1 – Form 1, Site Topo Map of the April 17, 2007 application for Outfalls 002 and 003,

- Attachment I.E: taken from Figure 2 – Form 1, Stormwater Pathways of the April 17, 2007 application for Outfalls 002 and 003,

- Attachment I.F: taken from Figure 3, Form 1, Site Drainage Map of the April 17, 2007 application for Outfalls 002 and 003.

II. DESCRIPTION OF FACILITY

The applicant, Commonwealth Oil Refining Company, Inc. (CORCO), operates a bulk petroleum warehouse leasing facility in Peñuelas, Puerto Rico. Petroleum commodities are brought into the facility through the marine shipping terminal and pipelines from CORCO clients. These commodities are subsequently shipped by CORCO clients through the marine terminal, by tank trucks and by pipelines to CORCO client's facilities. The facility is located at State Road Number 127, Km. 17.3, Barrio Tallaboa, Peñuelas, Puerto Rico 00624. This activity has a Standard Industrial Classification (SIC) code of 4226. The permittee is applying for a discharge into Tallaboa Bay from Outfalls 001, 002 and 003. Tallaboa Bay is classified "SC" by the Puerto Rico Environmental Quality Board (EQB). The applicant is proposing to discharge treated wastewater through Outfall 001 consisting of operations wastewater (tank and line product displacement water, groundwater from product recovery, lab sink drain water, oily sewer/dock sump water, RCRA unit closure water, tank and line testing water, tank and line cleaning water, wastewater from maintenance jobs, and ballast water) and Kuwait water (wastewater that was generated from the separation from weathered Kuwaiti crude oil, generated during post-Persian Gulf War fighting). The treatment for Outfall 001 is proposed and, as reported in the complete application, will include aeration, equalization, oil/water separation, biological treatment, flocculation, and filtration using the following equipment: corrugate plate separator, trickling filter biological treatment, flocculator, continuous backwash filter, sand dry bed, pre-aeration (if surfactant limit is less than 1 ppm), and post-aeration (step aerator). The applicant is proposing to discharge wastewater

comprised of stormwater through Outfalls 002 and 003. The stormwater in Outfall 002 is normally not associated with industrial activity but during emergencies the applicant is proposing to divert part of the discharge from Outfall 003 through Outfall 002. Outfall 003 is comprised of stormwater associated with industrial activity. The treatment and other controls (structural and non-structural) for Outfall 003 (and for that portion of Outfall 003 that is diverted through Outfall 002 during emergencies) is as follows (according to the application):

- Stormwater that is stored in the former wastewater treatment lagoons (east, west, aeration, and oxidation) and that does not evaporate drains through the oil separator box (formerly the API separator but without skimmers (dismantled)), and then drains through the main stormwater ditch to the effluent channel (after drain valve is opened, but only after inspection for and removal of any oil that may be present).

- For the pipelines and pump stations transporting hydrocarbon products to/from the tank farm north of highway 127 (in the Outfall 003 basin), they drain to the main stormwater ditch or former cooling water ditch. Both ditches have oil trap boxes to separate out hydrocarbon products. Collected oil is removed from boxes by vacuum truck and returned to tanks.

- For the pipelines and pump stations transporting hydrocarbon products to/from the marine terminal and truck loading racks south of highway 127, the pump stations are contained within dikes and the main pipeline and associated pump stations are hydraulically isolated. Any spilled or leaked material is routed through underground piping to an oil trap box before discharge to the effluent channel. Guillotine valves are immediately downstream of the oil trap box discharge point in the effluent channel.

- For the truck loading terminals (located south of highway 127 in the south tank farm) which transport hydrocarbon products into tanker trucks, stormwater is hydraulically isolated from the remainder of the tank farm. Each of the truck loading racks has curbing around the base to collect any spills. Curbing directs the spilled material to an oil trap box (former API separator) where it is contained and transferred to tanks.

- Implementation of the Storm Water Pollution Prevention Plan (SWPPP).

- For the non-operational production units areas, there is a plan for routine cleanup of loose debris and spill materials under the SWPPP to reduce risk of Stormwater (SW) pollution, and diversion of “runon” away from these areas.

- For the Facility Operations and Maintenance area in the portion of the maintenance area exposed to SW there are plans to implement good housekeeping practices (keep all oil products in sealed containers, store all oil products and batteries inside the shop in designated areas, remove out of service equipment and vehicles) as part of

improvement of the SWPPP.

- For the operational bulk storage tanks used to store hydrocarbon products, they have secondary containment dikes that would prevent any spilled or leaked material from entering the stormwater ditches.

III. DESCRIPTION OF DISCHARGE

The permittee is applying for a renewal permit for the three discharges indicated below.

Outfall 001:

The discharge consists of a daily maximum of 0.288 MGD of treated (proposed) wastewater. A description of the type and quantity of pollutants which are to be discharged is listed in Table A-1 of the draft permit.

Outfall 002:

The discharge consists solely of stormwater. The stormwater flow will depend on precipitation. A description of the type and quantity of pollutants which are to be discharged is listed in Table A-2 of the draft permit.

Outfall 003:

The discharge consists solely of treated stormwater. The stormwater flow will depend on precipitation. A description of the type and quantity of pollutants which are to be discharged is listed in Table A-2 of the draft permit.

IV. DESCRIPTION OF DRAFT PERMIT CONDITIONS

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

V. STATE CERTIFICATION REQUIREMENTS

State Certification requirements based upon a final Water Quality Certificate (WQC) issued on December 16, 2011 by the Puerto Rico Environmental Quality Board (EQB) are described in Attachment V. Review and appeals of limitations and conditions attributable to this certification shall be made through the applicable procedures of the Commonwealth of Puerto Rico and may not be made through EPA procedures. No appeals were received by EQB on the WQC.

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

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

VII. ENDANGERED SPECIES ACT

The Endangered Species Act (ESA) consultation requirements, as set forth in 40 CFR 122.49(c), are described in Attachment II.

VIII. COASTAL ZONE MANAGEMENT ACT

The Coastal Zone Management Act (CZMA) requirements are described in Attachment II.

IX. ESSENTIAL FISH HABITAT REQUIREMENTS

The Essential Fish Habitat (EFH) consultation requirements are described in Attachment II.

X. NATIONAL HISTORIC PRESERVATION ACT REQUIREMENTS

The National Historic Preservation Act (NHPA) requirements are described in Attachment II.

XI. ENVIRONMENTAL JUSTICE

The Environmental Justice (EJ) requirements are described in Attachment II.

XII. EPA CONTACT

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

Mr. Edward Schlueter
NPDES Section
U.S. Environmental Protection Agency, Region 2
290 Broadway, 24th Floor
New York, New York 10007-1866
(212) 637-3834

ATTACHMENT I.A
(showing Outfalls 001, 002 and 003)

PR00000345

ATTACHMENT I.B PR00000345
(showing Outfalls 001, 002 and 003)

ATTACHMENT I.C PR00000345
(showing Outfalls 001, 002 and 003)

ATTACHMENT I.D PR00000345
(showing Outfalls 002 and 003)

ATTACHMENT I.E
(showing Outfalls 002 and 003)

PR00000345

ATTACHMENT I.F PR00000345
(showing Outfalls 002 and 003)

DESCRIPTION OF DRAFT PERMIT CONDITIONS

The effluent limitations, monitoring requirements, and other conditions are described in the draft National Pollutant Discharge Elimination System (NPDES) permit. The effluent limitations in the permit are equivalent to the most stringent values specified in the applicable technology-based guidelines or water quality-based limitations. When both technology-based mass limits and water quality-based concentration limits are imposed in the draft permit, they are both imposed since either limit can be more stringent depending on flow which is variable.

I. Technology-based Limitations (Outfalls 001, 002 and 003) - The basis for technology-based effluent limitations in Outfalls 001, 002 and 003 is provided as follows:

Outfall 001:

Basis for Determining that Limits Based on Effluent Limitation Guidelines (ELGs) in 40 Code of Federal Regulations (CFR) §419 Are No Longer Applicable - The currently effective, administratively extended NPDES permit (expired April 30, 2007) does not authorize the discharge through Outfall 001. The discharge through Outfall 001 in the previously effective NPDES permit (effective December 1, 1986 with modification effective July 1, 1991 and expired November 30, 1991) was covered under the ELGs in 40 CFR §419 (Petroleum Refining Point Source Category). The U.S. Environmental Protection Agency (EPA) has determined that the Outfall 001 discharge is no longer covered under 40 CFR §419 based on the current operations as described in the renewal NPDES permit application (and in the application for the effective permit). Specifically, application Form 1, Item XII (under January 31, 2004 cover letter) describes the operation as "a bulk petroleum warehouse leasing facility". Also, Item III.A in application Form 2C (under June 10, 2004 cover letter) specifies that an effluent limitation does not apply to this facility. Based on this information, EPA has not developed such technology-based effluent limitations for Outfall 001 in the draft permit. Therefore, the mass-based effluent limitations are no longer included in the draft permit for **Chromium (total), Chromium (hexavalent)**, and **Total Organic Carbon (TOC)** (see anti-backsliding considerations in next paragraph).

Basis for Anti-backsliding Considerations for Removed Technology-based Limits based on ELGs in 40 CFR §419 - EPA's current regulations in 40 CFR §122.44(l), which address the issue of anti-backsliding, reflect the prohibition for reissued permits imposed by Section 402(o)(1) against revision of existing technology-based permit limitations unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under 40 CFR §122.62. EPA has determined that 40 CFR §122.44(l)(1) has been met (i.e., the facility is no longer covered under an ELG for these parameters) thereby allowing removal of the technology-based limits for the parameters shown above. Also, anti-backsliding criteria in 40 CFR

§122.44(l)(2) allows backsliding from technology-based limits based on Best Professional Judgment (BPJ) to technology-based limits based on subsequently promulgated ELGs only if certain exemptions are met. EPA has determined that 40 CFR §122.44(l)(2) is not applicable since the currently effective permit (expired April 30, 2007, administratively extended) does not authorize the discharge through Outfall 001 and the technology-based effluent limitations in the prior permit (expired November 30, 1991), which included Outfall 001, were based on ELGs in 40 CFR §419 not BPJ. EPA used the prior NPDES permit (expired November 30, 1991) to compare against the draft NPDES permit for determining the applicability of anti-backsliding.

Basis for Determining that Limit Based on ELGs in 40 CFR §133 Is No Longer Applicable – The discharge through Outfall 001 in the previously effective NPDES permit was covered under the ELGs for Equivalent Secondary Treatment, 40 CFR §133.105, using BPJ. EPA has determined that the Outfall 001 discharge is no longer covered under 40 CFR §133.105. There is no sanitary wastewater reported in the application for Outfall 001. Based on this information, EPA has not developed such technology-based effluent limitation for Outfall 001 in the draft permit. Therefore, the effluent limitation is no longer included in the draft permit for **Total Suspended Solids (TSS)** (see anti-backsliding considerations in next paragraph).

Basis for Anti-backsliding Considerations for Removed Technology-based Limits based on ELGs in 40 CFR §133 - Again, similar to the anti-backsliding discussion in the above paragraph, EPA has determined that 40 CFR §122.44(l)(1) has been met (i.e., the facility is no longer covered under an ELG for this parameter) thereby allowing removal of the technology-based limits for TSS. Also, EPA has determined that 40 CFR §122.44(l)(2) is not applicable since the technology-based effluent limitation in the prior permit (expired November 30, 1991), which included Outfall 001, was based on the ELGs in 40 CFR §133.105 not BPJ.

<u>Outfalls 002 and 003</u>:

The "EPA Region II Revised Guidance for Cooling Water and Storm Water Runoff" (CW/SW guidance) dated September 5, 1991 provides a guidance limit in stormwater of 50 mg/l for TOC and 50 mg/l for TSS. EPA Region 2 would not establish limits based on CW/SW guidance if the permittee is implementing control measures to meet these limits (i.e., Best Management Practices Plans (BMPs), etc.) and still has not met them (pursuant to anti-backsliding requirements). Also, the EPA Region 2 guidance memo “Calculating Effluent Limitations Based on Existing Effluent Quality” dated July 29, 1994 provides procedures for calculating permit effluent limitations based on Existing Effluent Quality (EEQ) and the EPA Region 2 Antibacksliding Policy dated August 10, 1993 also discusses procedures for establishing EEQ limits. For establishing EEQ limits, EPA has used the July 29, 1994 guidance and, based on that guidance, has reviewed available analytical data from the monthly Discharge Monitoring Reports (DMRs) for TOC and TSS in the

stormwater discharge through Outfalls 002 and 003 for a period of 30 months from August 2009 through January 2012.

TSS (Outfall 002) - The DMR data for TSS in Outfall 002 shows one value reported (50 mg/l in June 2009 DMR). EPA has established a 50 mg/l limit based on CW/SW guidance in the draft permit since the permittee would meet the limit based on this one data point. The data is insufficient to determine a limit based on EEQ guidance. Also, the 50 mg/l limit in the effective permit (based on CW/SW guidance) must be maintained based on anti-backsliding requirements in 40 CFR §122.44(l) for TSS in Outfall 002 (i.e., none of the causes for modification or revocation and reissuance in 40 CFR §122.62 apply including the "new information" cause for modification under 40 CFR §122.62(a)(2) since a single DMR data point does not provide sufficient "new information").

Also, since the permittee plans to divert part of the discharge from Outfall 003 through Outfall 002, EPA is applying the Outfall 003 TSS limit of 277.0 mg/l (discussed below) for Outfall 002 during such emergencies and requiring the permittee to report, in a cover letter attaching the monthly DMR, 1) the details of this emergency diversion including date and flow, 2) confirmation that the diverted stormwater through Outfall 002 has undergone the same treatment/control measures as the normal discharge through Outfall 003, and requiring the permittee to report in the monthly DMR for Outfall 002 the results for TSS according to the specified instructions.

TSS (Outfall 003) - The DMR data for TSS in Outfall 003 shows the permittee would violate a 50 mg/l CW/SW guidance limit as a daily maximum in the draft permit. However, EPA Region 2 would not apply this 50 mg/l CW/SW guidance limit in the renewal permit if the permittee is implementing control measures to meet this limit (e.g., BMPs, etc.) and still has not (subject to antibacksliding). Since the permittee is required to implement a Storm Water Pollution Prevention Plan (SWPPP) and has structural controls in place (e.g., oil trap boxes, etc.) to meet the 50 mg/l limit in the effective permit for Outfall 003 but is still violating the limit, instead of applying the CW/SW guidance limit in the draft permit for TSS in Outfall 003, EPA is including a 277 mg/l daily maximum limit which is based on BPJ in consideration of the EEQ guidance memo (see calculation in Attachment III). The anti-backsliding requirements in 40 CFR §122.44(l) are satisfied for TSS in Outfall 003. The relaxed 277 mg/l BPJ-based limit is allowed to be less stringent than the 50 mg/l BPJ-based limit in the effective permit (expired April 30, 2007) without violating anti-backsliding requirements because the following cause for modification in 40 CFR §122.62(a)(2) "Information, The Director has received new information" applies: Sufficient new information is available from the above referenced DMR data for TSS in Outfall 003 which shows the effective BPJ-based TSS permit limit (based on consideration of both the CW/SW guidance and the existing effluent quality in the current permit), which was determined based on the ability to meet such limits with adequate controls in place, is now shown not able to be met. With respect to applying anti-backsliding, Section 7.22 of EPA's "NPDES Permit Writers' Manual"

[EPA-833-K-10-001] dated September 2010 provides further clarification on anti-backsliding from existing case-by-case limits to new case-by-case/ BPJ limits as follows:

7.2.2 Anti-backsliding Regulatory Provisions

Anti-backsliding regulations are found at Title 40 of the *Code of Federal Regulations* (CFR) 122.44(l). The regulations do not specifically address backsliding where a permittee seeks relaxation of an effluent limitation that is based on a state treatment standard or water quality standard [i.e., based on CWA sections 301(b)(1)(C) or 303(d) or 303(e)]. They do, however, address all other forms of backsliding.

First, the regulations at § 122.44(l)(1) restrict the relaxation of *final effluent limitations* and the relaxation of *standards or conditions* contained in existing permits. Thus, this regulation, in effect, addresses all types of backsliding not addressed in the CWA provisions (e.g., backsliding from limitations derived from effluent guidelines, from new source performance standards, from existing case-by-case limitations to new case-by-case limitations, and from conditions such as monitoring requirements that are not effluent limitations). Under the regulation, a permittee must meet one of the causes for modification under § 122.62 for the reissued permit to allow relaxation of such limitations, standards, or conditions.

Second, the regulations at § 122.44(l)(2)(i) directly reflect the specific prohibition imposed by CWA section 402(o) on backsliding where a permittee seeks to revise an existing case-by-case TBEL developed using BPJ to reflect a subsequently promulgated effluent guideline that is less stringent than the case-by-case requirement. The regulations include the same exceptions to this prohibition that are in CWA section 402(o)(2) and the same *safety clause* in CWA section 402(o)(3).

Thus, if the permit condition being considered for relaxation is either a case-by-case effluent limitation developed using BPJ or is any other limitation, standard, or condition other than an effluent limitation based on a state standard, the permit writer can apply the requirements in § 122.44(l). For effluent limitations based on state standards, the permit writer should apply the provisions of CWA sections 402(o) and 303(d)(4) directly. Exhibit 7-2 illustrates the process of applying the statutory and regulatory provisions addressing anti-backsliding.

Also, see discussion in Section VI below on the reopener clause for the EEQ limit for TSS in Outfall 003 in consideration of antidegradation (e.g., considering EEQ limits as having a WQ-based component for which antidegradation applies).

TOC (Outfall 002) - The DMR data for TOC in Outfall 002 shows the one value reported (110 mg/l in June 2009 DMR) would violate a 50 mg/l CW/SW guidance limit as a daily maximum in the draft permit. Since the permittee is implementing control measures (i.e., for the emergency diversion of stormwater from Outfall 003 to Outfall 002) to meet a 50 mg/l limit (i.e., BMPs, etc.) and still has not, EPA is not establishing a 50 mg/l limit based on CW/SW guidance. Also, an EEQ limit cannot be established based on a single point. The 110 mg/l limit must be maintained based on anti-backsliding requirements in 40 CFR §122.44(l) for TOC in Outfall 002 (i.e., none of the causes for modification or revocation and reissuance in 40 CFR §122.62 apply including the "new information" cause for modification under 40 CFR §122.62(a)(2) since a single DMR data point does not provide sufficient "new information").

Also, since the permittee plans to divert part of the discharge from Outfall 003 through Outfall 002, EPA is applying the Outfall 003 TOC limit of 142.0 mg/l (discussed below) for Outfall 002 during such emergencies and requiring the permittee to report, in a cover letter attaching the monthly DMR, 1) the details of this emergency diversion including date and flow, and 2) confirmation that the diverted stormwater through Outfall 002 has undergone the same treatment/control measures as the normal discharge through Outfall 003, and requiring the permittee to report in the monthly DMR for Outfall 002 the results for TOC according to the specified instructions.

TOC (Outfall 003) - The DMR data for TOC in Outfall 003 shows the permittee would violate a 50 mg/l CW/SW guidance limit as a daily maximum in the draft permit. However, EPA Region 2 would not apply this 50 mg/l CW/SW guidance limit in the renewal permit if the permittee is implementing control measures to meet this limit (e.g., BMPs, etc.) and still has not (subject to antibacksliding). Since the permittee is required to implement a SWPPP and has structural controls in place (e.g., oil trap box, etc.) to meet the 110 mg/l limit in the effective permit for Outfall 003 but is still violating the limit, instead of applying the CW/SW guidance limit in the draft permit for TOC in Outfall 003, EPA is including a 142.0 mg/l daily maximum limit which is based on BPJ in consideration of the EEQ guidance memo (see calculation in Attachment III). The anti-backsliding requirements in 40 CFR §122.44(l) are satisfied for TOC in Outfall 003. The relaxed 142.0 mg/l BPJ-based limit is allowed to be less stringent than the 110.0 mg/l BPJ-based limit in the effective permit (expired April 30, 2007) without violating anti-backsliding requirements because the following cause for modification in 40 CFR §122.62(a)(2) "Information. The Director has received new information" applies: Sufficient new information is available from the above referenced DMR data for TOC in Outfall 003 which shows the effective permit BPJ-based TOC limit (based on consideration of both the CW/SW guidance and the old EEQ guidance limit), which was determined based on the ability to meet such limits with adequate controls in place, is now shown not able to be met. Also, see discussion in Section VI below on reopener clause for the EEQ limit for TOC in Outfall 003 in consideration of antidegradation (e.g., considering EEQ limits as having a WQ-based component for which antidegradation applies).

II. Water Quality-based Limitations (Outfalls 001, 002 and 003) - The basis for water quality-based effluent limitations in Outfalls 001, 002 and 003 are divided into two parts (parameters for which antibacksliding is applicable and parameters for which antibacksliding is not applicable) as follows:

1. Antibacksliding Parameters (Outfalls 001, 002 and 003) - All water quality-based antibacksliding decisions are made in accordance with EPA Region 2 Antibacksliding Policy dated August 10, 1993. Policy decisions, applicable to pollutants in Outfalls 001, 002 and 003 regulated by water quality-based effluent limitations for which antibacksliding is applicable, are provided below. In addition, according to EPA's 2010 NPDES Permit Writers' Manual, EPA has consistently interpreted Clean Water

Act (CWA) section 402(o)(1) to allow relaxation of Water Quality Based Effluent Limitations (WQBELs) and effluent limitations based on state standards if the relaxation is consistent with the provisions of CWA section 303(d)(4) or if one of the exceptions in CWA section 402(o)(2) is met. The two provisions constitute independent exceptions to the prohibition against relaxation of effluent limitations. If either is met, relaxation is permissible:

Outfall 001

For purposes of comparing current effluent limitations in Outfall 001 against the effluent limitations in the draft NPDES permit for making antibacksliding decisions, EPA is using the "prior permit" (permit modification which was issued May 8, 1991, became effective on July 1, 1991 and expired midnight, November 30, 1991) instead of the "effective permit" (permit which was issued December 28, 2001, became effective on May 1, 2002, expired midnight, April 30, 2007 and administratively extended) since the effective permit does not authorize the discharge through Outfall 001 and as such does not establish limits for comparison.

WQC Limit Absent and Water Quality Standards (WQSs) Exist - The daily maximum water quality-based effluent limitation (concentration) from the "prior permit" of 45 mg/l for BOD_5, 5 mg/l for Nitrogen (NO3, NO2, NH3), and 2.0 ug/l for Silver, is absent from the final Water Quality Certificate (WQC) dated December 16, 2011. The current "Puerto Rico Water Quality Standards Regulation" (PRWQSR) dated March 31, 2010 includes WQSs for these parameters (i.e., establishing a BOD limit based on case-by-case determination, a 5,000 ug/l Nitrogen (NO3, NO2, NH3) limit for class SB/SC waters, and a 2.24 ug/l Silver limit for class SB/SC waters).

EPA has determined that it is appropriate to remove the effluent limitation for each of these parameters without violating anti-backsliding provisions of the CWA, in accordance with section 402(o), since one of the exceptions to the provisions has been satisfied. CWA §402(o)(2)(B)(i) allows backsliding if information is available which was not available at the time of permit issuance and would have justified a less stringent effluent limitation at the time of permit issuance. The reasonable potential analysis (RPA) conducted by the Environmental Quality Board of Puerto Rico (EQB) in developing a new WQC and the associated background materials (i.e., NPDES application, DMR data) can be considered new information and the absence of a limited parameter in an EQB WQC justifies that a limit is not necessary. Removal of the limit by EQB in the WQC also constitutes a determination that the water quality standard is or will be attained.

Also, when removing limits following backsliding (as discussed above) based on a RPA, EPA may consider evaluating whether there is adequate information for EQB's RPA and if not adequate then maintain monitoring of these parameters to obtain sufficient data to either confirm there is no reasonable potential to exceed the water quality-based limits, or

to allow reopening of the WQC/permit to include those limits again if the new data shows that there is reasonable potential to exceed the water quality-based limits. Since there is no recent DMR data for Outfall 001, the NPDES permit application provides the only data for EQB's RPA (i.e., there is no monitoring data since the discharge through Outfall 001 is not authorized). The application data for these parameters are estimates based on pilot study data in Chapter 4, Table 1 of the NPDES permit application (dated 9/20/04). However, the actual wastewater was used in the pilot study in determining the effluent estimates. The estimates show that all of the values are below the end-of-pipe WQ-based limit as follows:

Parameter:	Avg.	Max.	Daily max. limit:
BOD_5 (mg/l)	5	12.2	45
Nitrogen (NO3, NO2, NH3) (mg/l)	1.36	2.78	5.0
Silver (ug/l)	0.04	0.3	2.0

In addition to the pilot data estimates, Chapter 6, Table 5 of the NPDES permit application (dated January 31, 2004) reports levels of these three parameters (based on actual data) for the combined Kuwait and Testing water concentrations (according to the ratio for the discharge) at the influent to the treatment system and that these levels (even prior to being treated) are also all below the water quality-based limits. As such, EPA has determined that maintaining monitoring requirements for these three parameters is not necessary in this situation to confirm there is no reasonable potential to exceed the removed WQ-based limits.

Also, CWA §402(o)(2)(A) allows backsliding if material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation (including removed limits). The changes to the facility after permit issuance from operation as a refinery to operation as a bulk petroleum warehouse leasing facility would justify removing these limits due to the change in characteristics of the discharge and would also justify the determination that there is no reasonable potential to exceed the removed water quality-based limits.

In addition, anti-degradation requirements for these parameters are not violated by removing them. Since the permittee will be discharging each of the pollutants at the same level, the discharge would not contribute to further degradation of the receiving water and existing uses would be maintained. To assure this treatment level is maintained in the renewal permit, EPA has included a requirement in Part I, Section C (Additional Requirements), Item 1.b(1) (see additional requirements below).

<u>WQC Limit Absent and WQS Removed</u> - The daily maximum water quality-based effluent limitation (concentration) from the "prior permit" of 200.0 ug/l for Iron, and 10.0 ug/l for Phenolic Substances, is not included in the final WQC dated December 16, 2011. The WQSs for these parameters have been removed from the PRWQSR.

Effluent limitations for these parameters are no longer applicable due to the lack of a WQS and are not included in the final WQC. EPA has determined that it is appropriate to remove these limits from the draft NPDES permit without violating antibacksliding provisions of the CWA, in accordance with Section 402(o), since one of the exceptions to the provisions has been satisified. Section 303(d)(4) of the CWA allows relaxation of the water quality-based effluent limitations developed in accordance with a Total Maximum Daily Load/Waste Load Allocation (TMDL/WLA) procedure, provided that attainment of water quality standards is assured and antidegradation requirements are considered. The end-of-pipe effluent limitations which were removed are a form of WLA. EQB's WQC constitutes a determination that a TMDL/WLA is no longer necessary for these parameters.

In addition, anti-degradation requirements for these parameters are not violated by removing them. Since the permittee will be discharging each of the pollutants at the same level, the discharge would not contribute to further degradation of the receiving water and existing uses would be maintained. To assure this treatment level is maintained in the renewal permit, EPA has included a requirement in Part I, Section C (Additional Requirements), Item 1.b(1) (see additional requirements below).

WQC Limit and WQS Less Stringent - The daily maximum water quality-based effluent limitation (concentration) in the final WQC dated December 16, 2011 is less stringent than the "prior permit" for Selenium and Zinc (i.e., limit for Selenium is relaxed from 10 to 71.14 ug/l and for Zinc from 50 to 85.62 ug/l). The less stringent WQC limits agree with the relaxed WQSs in the 2010 PRWQSR for Class SB/SC waters.

EPA has determined that it is appropriate to relax the effluent limitations in the draft NPDES permit for these parameters without violating antibacksliding provisions of the CWA, in accordance with Section 402(o), since the relaxed limitations are based on an adopted and approved WQS in Puerto Rico and since one of the exceptions to the provisions has been satisfied. Section 303(d)(4) of the CWA allows relaxation of water quality-based effluent limitations developed in accordance with a TMDL/WLA procedure, provided that attainment of water quality standards is assured and antidegradation requirements are considered. The end-of-pipe effluent limitations in the final WQC are a form of WLA. The inclusion of these effluent limitations in the final WQC (based on the PRWQSR) constitutes a determination that these relaxed limits are sufficient to assure that this discharge will not cause the quality of the receiving water to fall below the levels necessary to protect the existing or designated uses, and the water quality standard is or will be attained.

Also, antidegradation requirements are not violated by relaxing these limits since the permittee will be discharging the pollutants at the same level. To assure this treatment

level is maintained in the renewal permit, EPA has included a requirement in Part I, Section C (Additional Requirements), Item 1.b(1) (see additional requirements below).

Outfalls 002 and 003

For purposes of comparing current effluent limitations in Outfalls 002 and 003 against the effluent limitations in the draft NPDES permit for making antibacksliding decisions, EPA is using the "effective permit" (permit which was issued December 28, 2001, became effective on May 1, 2002, expired midnight, April 30, 2007 and administratively extended).

WQC Limit Absent and WQS Exists - The narrative water quality-based effluent limitation in Outfalls 002 and 003 for **Temperature** "No Thermal discharge or combination of thermal discharges into or onto the surface, estuarine and coastal waters shall be injurious to fish or shellfish or the culture or propagation of a balanced indigenous population there of nor in any way affect the designated uses" from the effective permit is not included in Table A-2 of the final WQC dated December 16, 2011. The current PRWQSR dated March 31, 2010 includes this narrative WQS for Temperature.

Our antibacksliding policy indicates that one of the exceptions other than the "new information" exception should be considered for making water quality-based antibacksliding determinations for stormwater discharges. It is EPA Region 2 practice to evaluate material and substantial alterations or additions and to delete certain limits consistent with the CWA §402(o)(2) exceptions and our Regional Policy. CWA §402(o)(2)(A) allows backsliding if material and substantial alterations or additions to the permitted facility occurred after permit issuance and would have justified a less stringent effluent limitation at the time of permit issuance. It is EPA Region 2's view that a "material and substantial alteration" needs to involve actual structural changes at the facility (not only housekeeping or procedural changes) and needs to describe how the alteration had an effect on the particular outfall. It also needs to have been completed after the issuance of the existing permit. EPA has determined that it is appropriate to remove the effluent limitations for this parameter without violating antibacksliding provisions of the Clean Water Act (CWA), in accordance with section 402(o), since the "material and substantial alterations or additions" exception to the provisions has been satisfied. Specifically, there is no thermal discharge for the stormwater through Outfalls 002 and 003. In addition, the facility is no longer associated with refinery operations since the facility is proposing, in both the effective and renewal NPDES permit applications, to operate a petroleum bulk station and terminal facility instead of the existing permitted refinery operations. These material and substantial alterations and the absence of a limited (narrative) parameter in an EQB WQC constitutes a determination that a limit is not necessary and that the water quality standard is or will be attained. Antidegradation requirements are not violated by removing the narrative limit (no thermal discharge …) for this parameter. Since the permittee will be discharging the pollutant at

the same level (i.e., no thermal discharge), the discharge would not contribute to further degradation of the receiving water and existing uses would be maintained.

2. Non-Antibacksliding Parameters (Outfalls 001, 002 and 003) - The following discussion applies to pollutants in the discharge through Outfalls 001, 002 and 003 regulated by water quality-based effluent limitations for which antibacksliding is not applicable:

Outfall 001

The discussion in this section provides the basis for establishing the non-antibacksliding water quality-based limits for pollutants in Table A-1 of the draft NPDES permit for Outfall 001. The water quality-based effluent limits are those shown in Table A-1 which are not described above in Section I (Technology-based Limits) or Section II.1 (Water Quality-Based Limits - Antibacksliding Parameters). They include limits for **Arsenic (As), Benzene, Bis(2-Chloroethyl)Ether, BOD_5 (monthly average limit), Cadmium (Cd), Color, Copper (Cu), Cyanide, Free (CN), Dissolved Oxygen, Flow, Lead (Pb), Mercury (Hg), Nickel (Ni), Oil and Grease, pH, Selenium (Se), Solids and Other Matter, Sulfide (undissociated H_2S), Surfactants (as Methylene Blue Active Substances), Suspended, Colloidal or Settleable Solids, Thallium (Tl), Taste and Odor-producing Substances, Temperature, and Turbidity,** in Outfall 001. The antibacksliding water quality-based effluent limitations for these parameters are as imposed in Table A-1 of the final WQC dated December 16, 2011. Anti-backsliding is not applicable since these limitations are equal to or more stringent than the prior NPDES permit requirements.

Outfalls 002 and 003

The discussion in this section provides the basis for establishing the non-antibacksliding water quality-based limits for pollutants in Table A-2 of the draft NPDES permit for Outfalls 002 and 003. The non-antibacksliding water quality-based effluent limits are those shown in Table A-2 which are not described above in Section I (Technology-based Limits) or Section II.1 (Water Quality-Based Limits - Antibacksliding Parameters). They include limits for **Oil and Grease, pH, Solids and Other Matter, Suspended, Colloidal or Settleable Solids, and Taste, Odor-producing Substances and Temperature (no heat added …)** in Outfalls 002 and 003. The non-antibacksliding water quality-based effluent limitations for these parameters are as imposed in Table A-2 of the final WQC dated December 16, 2011. These limitations are equal to or more stringent than the effective NPDES permit requirements.

III. Monitoring Requirements and Footnotes - The basis for the monitoring requirements (and footnotes) in the draft NPDES permit are divided into two parts (Table A-1 and Table A-2) as follows:

1. Table A-1 Monitoring Requirements - The basis for the monitoring requirements (and footnotes) in Table A-1 of the draft NPDES permit for Outfall 001 are as follows:

a. The monitoring requirements for **2,4,6-Trichlorophenol, 2-Chlorophenol, Antimony, Arsenic, Benzene, Bis(2-Chloroethyl) Ether, Bis (2-Ethylhexyl) Phthalate, BOD_5, Cadmium (Cd), Chromium VI (Cr +6), Color, Copper (Cu), Cyanide, Free (CN) , Dissolved Oxygen, Flow, Lead (Pb), Mercury (Hg), Nickel (Ni), Nitrogen (NO_3, NO_2, NH_3), Oil and Grease, Pentachlorophenol, pH, Selenium (Se), Silver (Ag), Sulfate (SO_4), Sulfide (S), Sulfide (undissociated H_2S), Surfactants (as Methylene Blue Activate Substances), Suspended, Colloidal or Settleable Solids, Thallium (Tl), Temperature, Toluene, Turbidity, and Zinc (Zn)** and the footnotes 1, 2, 3, 4, 5, β, γ, φ, δ and α in Table A-1 of the draft NPDES permit for Outfall 001 are a BPJ determination in consideration of the final WQC dated December 16, 2011. Footnote φ refers to Special Condition 11, footnote δ refers to Special Condition 12. Also, footnote α requires one year monitoring for the following parameters to determine whether effluent limits are necessary: 2,4,6-Trichlorophenol, 2-Chlorophenol, Antimony, Bis (2-Ethylhexyl) Phthalate, Chromium VI (Cr +6), Nitrogen (NO_3, NO_2, NH_3), Pentachlorophenol, Silver (Ag), Sulfate (SO_4), and Toluene.

b. The exclusion of monitoring requirements for **Chromium (total), Iron, Phenolic Substances, TOC, and TSS** in Table A-1 of the draft NPDES permit for Outfall 001 which were included in the prior permit is a BPJ determination in consideration of the significance of the discharge since water quality-based limits for Chromium (total), Iron, and Phenolic Substances and technology-based limits for TOC and TSS are not included in the draft permit.

c. A footnote "ε" was added in Table A-1 under the parameter Sulfide (undissociated as H_2S) to provide clarification not described properly in footnote "δ" which references Special Condition 12 (see discussion in Special Condition 12 below).

d. A footnote "@" was added in Table A-1 under the parameter Suspended, Colloidal, or Settleable Solids to clarify that testing for these parameters should be conducted individually for Total Suspended Solids and Settleable Solids.

2. Table A-2 Monitoring Requirements - The basis for the monitoring requirements (and footnotes) in Table A-2 of the draft NPDES permit for Outfalls 002 and 003 are as follows:

a. The monitoring requirements for **Flow, Oil and Grease, pH, Suspended, Colloidal or Settleable Solids, and Temperature** and the footnotes 1, 2, 3, 4, 5, and Ω in Table A-2 of the draft NPDES permit for Outfalls 002 and 003 are a BPJ determination in consideration of the final WQC dated December 16, 2011.

b. The monitoring requirements for **TOC and TSS** in Table A-2 of the draft NPDES permit for Outfalls 002 and 003 are a BPJ determination in consideration of the significance of the discharge.

c. A footnote "@" was included in Table A-2 of the draft NPDES permit under the parameter Suspended, Colloidal, or Settleable Solids to clarify that testing for these parameters should be conducted for Settleable Solids.

IV. Special Conditions - All special conditions contained in the draft NPDES permit are as imposed in the final WQC dated December 16, 2011except the following:

1. Special Condition 12 – Table A-1 in the final WQC issued by EQB includes an effluent limitation and monitoring requirement for sulfide (undissociated H_2S). It also includes a footnote "δ" which refers to Special Condition 12. The Final WQC does not specify an analytical method for sulfide (as undissociated H_2S) in Special Condition No. 12 of the WQC, only that an approved EPA analytical method must be utilized that achieves the lowest possible detection level. EPA has included footnote "ε" for sulfide in Table A-1 of the draft permit which specifies the methodology that must be used for calculating un-dissociated H_2S from the dissolved Sulfide concentration and clarification to Special Condition No. 12 for reporting sulfide (undissociated H_2S) concentrations when sample results are below detection limits.

2. Special Condition 21 - Special Condition 21 was modified from the requirement imposed in the water quality certificate issued by the Puerto Rico EQB. EPA has imposed the quarterly testing requirement to collect data necessary to determine whether this discharge has the reasonable potential to cause or contribute to an exceedance of Puerto Rico's water quality standards for toxicity. This Special Condition is pursuant to water quality based permitting requirements at 40 CFR 122.44(d)(1), which requires EPA and delegated states to evaluate each NPDES permit for the potential to exceed state numeric or narrative water quality standards, including those for toxics, and to establish effluent limitations for those facilities with the "reasonable potential" to exceed those standards. This Special Condition is also consistent with the "Region 2 Whole Effluent Toxicity Implementation Strategy". Federal regulations require both chemical-specific limits, based on the state numeric water quality standards or other criteria developed by EPA, and whole effluent toxicity effluent limits if reasonable potential to exceed water quality standards is determined.

Special Condition 21 also asserts the right of EPA and EQB to require additional monitoring based on the results of the quarterly samples, and the right of EPA to reopen this permit to include additional toxicity requirements, such as identification of toxic sources and treatability, and/or effluent limitations if warranted.

3. Special Condition 23 and 24 - Special Condition numbers 23 and 24 in the WQC were not included in the draft NPDES permit since they only pertained to the WQC not the draft NPDES permit.

V. General Conditions - These general conditions in Part II.B apply to all permits as required by 40 CFR Part 122.41.

VI. Additional Requirements - The basis for additional requirements in the draft NPDES permit are as follows:

1. Prohibition until Proposed Treatment System is Installed and Operational, Prohibition until Adequate Written Certification Provided, and Submission of Start-Up Plan and Monitoring Equipment Certification for the Discharge Through Outfall 001:

a. Prohibition until Proposed Treatment System for Outfall 001 is Installed and Operational - A requirement has been included in the draft NPDES permit to prohibit the discharge through Outfall 001 until the proposed treatment system referenced in the permittee's complete NPDES permit application is installed according to construction plans approved by EQB and is operational, until any necessary additional control measures/treatment required in Part I.C, item 1.b of the draft permit are installed and operational, and until the certification provisions in Part I.C, item 1.b and start up provision in Part I.C, item 1.c of the draft permit are also satisfied. This requirement is a prohibition and is not a compliance schedule (with interim limits) for achieving compliance with permit limits. [Note: 40 CFR §122.47(a) specifies: "For recommencing dischargers, a schedule of compliance shall be available only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised less than three years before recommencement of discharge." Puerto Rico Water Quality Standards (PRWQSs) for any non-complying parameters in Outfall 001 were issued or revised more than three years from the expected time period for recommencement of discharge through Outfall 001.]

b. Prohibition until Adequate Written Certification Provided - The data in the complete NPDES permit application for Outfall 001 shows expected levels of pollutants in the effluent based on operation of the proposed treatment system described in the application. The values are estimates based on a pilot study summary report included in the complete application. EPA's review of these levels shows that the facility will not be able to meet the water quality-based effluent limits in Table A-1 of the draft permit for the following parameters: Benzene, Dissolved Oxygen, Lead, Mercury, Selenium, Sulfide, Surfactants, and Turbidity. Refer to tables in Attachment IV which summarize estimates from the various tables in the application for these parameters (except Dissolved Oxygen, Surfactants, and Turbidity). Also, the analytical method used for the effluent estimates for the following parameters is not low enough to assess compliance with the draft permit

limit: Arsenic, Bis(2-Chloroethyl) Ether, Cadmium, Copper, Cyanide (Free), Nickel, Thallium, and Zinc.

In addition, the following table summarizes the maximum (minimum for Dissolved Oxygen) estimated effluent levels reported in the application for the parameters discussed in the above paragraph:

Parameter / Limit	Maximum Estimated Effluent Value Reported in the Application (9/20/04 additional information letter)
Arsenic / 36 ug/l max.	Chapter 4, Table 1 (for Application Form 2C, Item V.A, B, & C) provides a < 1,000 ug/l max. value (not detect) and indicates that this value is taken from Chapter 6 (pilot study summary report), Attachment 2.
Benzene / 510 ug/l max.	Chapter 4, Table 1 provides a 3,200 ug/l max. value and indicates that this value is taken from Chapter 6, Attachment 2. However, Chapter 6, Table S-2 shows a 130 ug/l max. value. The 3,200 ug/l value exceeds the effluent limit.
Bis(2-Chloroethyl) Ether / 5.3 ug/l max.	Chapter 4, Table 1 provides a < 20 ug/l max. value and indicates that this value is taken from Table S-2.
Cadmium / 8.85 ug/l max.	Chapter 4, Table 1 provides a < 500 ug/l max. value and indicates that this value is taken from Chapter 6, Attachment 2.
Copper / 3.73 ug/l max.	Chapter 4, Table 1 provides a < 2,000 ug/l max. value and indicates that this value is taken from Chapter 6, Attachment 2.
Cyanide (Free) / 1.0 ug/l max.	Chapter 4, Table 1 provides a < 20 ug/l max. value and indicates that this value is taken from Chapter 6, Attachment 3.
Dissolved Oxygen / 4.0 mg/l min.	Chapter 4, Table 1 provides a 3.4 mg/l min. value and indicates that this value is taken from Pilot Study Effluent Data 1 (Chapter 6, Attachment 3). The remarks in Chapter 6, Table 15 says: "Post Aeration Required".
Lead / 8.52 ug/l max.	Chapter 4, Table 1 provides an 11 ug/l max. value and indicates that this value is taken from Chapter 6, Table S-2. The value exceeds the effluent limit.
Mercury / 0.025 ug/l max.	Chapter 4, Table 1 provides a < 0.3 ug/l max. value (Not Detect) and indicates this value is taken from Chapter 6, Attachment 2. However, Chapter 6, Table S-2 shows a < 0.12 ug/l max value. Since both are below detect it is inconclusive whether the estimates meet the effluent limit. EPA Method 1631E was approved in 2002 and has a quantitation level of 0.5 ppt (0.0005 ug/l) and EPA Method 245.7 was approved March 12, 2007 and has a quantitation level of 5.0 ppt (0.005 ug/l).
Nickel / 8/28 ug/l max.	Chapter 4, Table 1 provides a < 4,000 ug/l max. value and indicates that this value is taken from Chapter 6, Attachment 2.
Selenium / 71.14 ug/l max.	Chapter 4, Table 1 provides a max. value of Not Detect (290 ug/l) and indicates this value is taken from Chapter 6, Table S-2. Since the value is below detect it is inconclusive whether the estimate meets the effluent limit.
Sulfide / 2 ug/l max.	Chapter 4, Table 1 provides a 240 ug/l max. value and indicates that this value is taken from Chapter 6, Table S-2. The value exceeds the effluent limit. Currently, the lowest possible detection limit for the determination of dissolved Sulfide (as S) is EPA Method 376.2, Standard Methods 4500-S2- D (18th Edition), or HACH Company Method 8131. If the result for dissolved Sulfide is below the detection limit of EPA Method 376.2 or Standard Methods 4500-S2- D (18th Edition), i.e., < 100 ug/l, then the permittee has demonstrated that compliance with the permit limit of 2 ug/l for Undissociated Hydrogen Sulfide was achieved.
Surfactants / 500 ug/l max.	Chapter 4, Table 1 provides an 890 ug/l max. value and indicates that this value is taken from Pilot Study Effluent Data 2 (Chapter 6, Attachment 3). The remarks in Chapter 6, Table 15 says: "Pre-aeration and increased recirculation may be required for trickling filter".

Parameter / Limit	Maximum Estimated Effluent Value Reported in the Application (9/20/04 additional information letter)
Thallium / 0.47 ug/l max.	Chapter 4, Table 1 provides a < 1,000 ug/l max. value and indicates that this value is taken from Chapter 6, Attachment 2.
Turbidity / 10 NTU	Chapter 4, Table 1 provides an 38 ug/l max. value and indicates that this value is taken from Pilot Study Effluent Data 1 (Chapter 6, Attachment 1). The remarks in Chapter 6, Table 15 says: "Addition of flocculants and coagulants may be required"
Zinc / 85.62 ug/l max.	Chapter 4, Table 1 provides a < 2,000 ug/l max. value and indicates that this value is taken from Chapter 6, Attachment 2.

Therefore, EPA has included a prohibition in the draft permit to not allow the permittee to discharge through Outfall 001 until EPA receives a written certification that the proposed treatment system design is adequate to meet all of the water quality-based effluent limits in Table A-1 of the permit (including the above parameters), and which specifies whether this treatment system is only based on the proposed treatment system specified in the complete application or also includes any necessary additional control measures/treatment. In addition, EPA is including a requirement in the draft permit that the written certification must also include the estimated level of all of these water quality-based parameters in the effluent at or below the effluent limit in Table A-1, specifically document the treatment and other control measures necessary to achieve these estimated effluent levels, indicate the size, flow rate, and retention time for each treatment unit, and provide the basis for the estimated effluent level for each of these parameters.

EPA is also including a requirement in the draft permit that the initial written certification also certify that the proposed treatment system design for Outfall 001 is adequate to meet the following water quality-based daily maximum limits shown in the prior permit which were not included in the draft permit but for which the treatment must still be adequate to meet these levels (i.e., based on anti-degradation requirements): 45 mg/l limit for BOD_5, 5 mg/l limit for Nitrogen (NO3, NO2, NH3), 2 ug/l limit for Silver, 200 ug/l limit for Iron and 10 ug/l limit for Phenolic Substances. In addition, EPA is including a requirement in the draft permit that the written certification must also include the estimated level of each of these parameters in the effluent at or below the prior permit limits for BOD_5, Nitrogen (NO3, NO2, NH3), Silver, Iron and Phenolic Substances, specifically document the treatment and other control measures necessary to achieve these estimated effluent levels, indicate the size, flow rate, and retention time for each treatment unit, and provide the basis for the estimated effluent level for each of these parameters.

[Note: If an approved EPA analytical method with the lowest possible detection limit is used to establish an effluent estimate and that detection limit is above the effluent limit for a parameter shown above, then this is a sufficient basis to demonstrate that compliance with the permit limit was achieved.]

Also, EPA is including a requirement in the prohibition that EPA, after review of the written certification, may provide timely written notice specifying the reasons the written certification is not adequate and the permittee may re-submit the written certification

addressing these reasons. EPA has also included a requirement, if additional control measures/treatment are necessary, to require the permittee to: submit written plans and specifications to EQB for additional control measures/treatment to meet these limits upon implementation, receive EQB's written approval of those plans and specifications, and submit that approval to EPA by cover letter.

Also, EPA has included a note in the draft permit that if the permittee provides an adequate written certification described in Item 1.b prior to EPA's finalization of the NPDES permit, then EPA may revise the final permit to remove this prohibition requirement.

c. Submission of Start-Up Plan and Monitoring Equipment Certification – A requirement has been included in the permit for the permittee to submit start-up plans and monitoring equipment certification.

2. Endangered Species Act Reopener - The regulation in 40 CFR §122.49 provides a list of Federal laws which may apply to issuance of a NPDES permit under those rules. It also requires that the procedures of the listed Federal laws must be followed where applicable and when the applicable law requires consideration or adoption of particular permit conditions or requires denial of a permit, those requirements also must be followed. Included in the list under 40 CFR §122.49(c) is the Endangered Species Act (ESA), 16 U.S.C. 1531 *et seq.* section 7 of the Act and implementing regulations (50 CFR part 402). This law requires the Regional Administrator to ensure, in consultation with the Secretary of the Interior or Commerce, that any action authorized by EPA is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat.

EPA is currently engaged in consultation under section 7 of the Endangered Species Act with the National Marine Fisheries Service regarding this permit action. In a May 10, 2000 memo to the Regions, EPA Headquarters provided guidance that Regions may use in making a determination as to whether a final NPDES permit may be issued while waiting for consultation to be concluded. EPA R2 will ensure that permit issuance prior to the conclusion of consultation is consistent with section 7 of the Endangered Species Act. Once our evaluation is concluded, if it concludes that permit issuance is consistent with section 7 and it occurs prior to the conclusion of consultation, then in accordance with EPA Headquarters' guidance, EPA R2 plans to re-issue the final permit before consultation is concluded and will document this decision in a memo for the Administrative Record. In that case, EPA may decide that changes to the permit are warranted after issuance based on the results of the consultation when it is completed. Therefore, a reopener provision to this effect has been included in Part I.C.2 and 3 of the draft NPDES permit.

3. Essential Fish Habitat Reopener – Pursuant to Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act, Federal agencies must

consult with the National Marine Fisheries Service (NMFS) regarding any of their actions authorized, funded or undertaken that may adversely affect Essential Fish Habitat (EFH).

EPA is currently in the process of initiating discussion/consultation with NMFS regarding this permit action. Therefore, a reopener provision to this effect has been included in Part I.C.4 and 5 of the draft NPDES permit.

4. Reopener Clause for EEQ Limits - EPA has included a reopener clause in Part I.C.6 of the draft NPDES permit to allow for modification of the permit if necessary for establishment of revised effluent limits for TOC and TSS in Outfall 003 based on EEQ in consideration of antidegradation.

VII. Additional Notes

1. Coastal Zone Management Act Requirements - According to 40 CFR § 122.49(d), EPA is prohibited from issuing a final NPDES permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State Coastal Zone Management program, and the State or its designated agency concurs with the certification (or the Secretary of Commerce overrides the State's non-concurrence).

As of the date of preparation of the public notice of this draft NPDES permit, EPA has not received such concurrence from the Puerto Rico Planning Board.

2. National Historic Preservation Act Requirements – 40 CFR §122.49 requires that if the law specified in §122.49(b) is applicable to the issuance of permits, its procedures must be followed and when the applicable law requires consideration or adoption of particular permit conditions or requires the denial of a permit, those requirements also must be followed. Section 122.49(b) says: "The National Historic Preservation Act of 1966, 16 U.S.C. 470 et seq. section 106 of the Act and implementing regulations (36 CFR part 800) require the Regional Administrator, before issuing a license, to adopt measures when feasible to mitigate potential adverse effects of the licensed activity and properties listed or eligible for listing in the National Register of Historic Places. The Act's requirements are to be implemented in cooperation with State Historic Preservation Officers and upon notice to, and when appropriate, in consultation with the Advisory Council on Historic Preservation." EPA has included the State Historic Preservations Officer and Advisory Council on Historic Preservation on the mailing list for the public notice of the draft NPDES permit. Any timely comments providing measures to mitigate potential adverse effects of the NPDES regulated discharges will be included in the final NPDES permit when feasible.

3. Environmental Justice Requirements - Consistent with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and

Low-Income Populations," EPA performs environmental justice (EJ) assessments on areas potentially affected by proposed projects. Areas that meet EPA criteria classifying populations as an EJ area undergo a full EJ analysis.

EPA R2 has used the EJ Interim policy, dated December 2000, in the EJ assessment for this facility. That policy provides permitting staff with guidance on how to consider EJ in the context of significant permitting decisions. For purposes of this interim policy, permitting decisions include new major permits, significant permit modifications (except administrative modifications), and major permit renewals. EPA Region 2 has re-rated the facility as a minor facility. The facility is no longer operating as a refinery and has applied for a renewal permit as a bulk petroleum warehouse leasing facility. As such, in conformance with our current policy, an EJ Analysis has not been conducted as part of the NPDES permit re-issuance process.

Nonetheless, although an extensive public outreach has not been performed under EJ to specifically attempt to ensure the affected minority or low-income population has been made aware of the facility's intent to discharge under a NPDES permit, EPA's current procedures for public notice via newspaper have been adhered to in order to adequately notify the public under the NPDES regulations, and any additional procedures warranted under EJ are not intended to modify an existing facility's location (e.g., away from that EJ area or another), modify its type or level of operations, or modify its ability to discharge in compliance with a NPDES permit. Also, EPA's enforcement measures, to ensure continued compliance with permit conditions, are intended to support all facilities (including all EJ facilities).

COMMONWEALTH OIL REFINING COMPANY, INC - EXISTING EFFLUENT QUALITY ANALYSIS FOR TOC AND TSS IN OUTFALL 003

Existing Effluent Quality (EEQ) Daily Maximum Limit derived by performing a statistical analysis of the permittee's discharge as reported in the monthly discharge monitoring reports (DMRs) covering a 30 month period from August 2009 through January 2012. The limits derived for Total Organic Carbon (TOC) and Total Suspended Solids (TSS) are based on the 99th percentile of the lognormal distribution of the measurements reported based on the following equation:

Maximum Daily Limit (99th percentile) = $\exp[\mu_y + z_{99}\sigma_y]$

where

x_i = daily pollutant measurement i (see Table below)

y_i = $\ln(x_i)$ (see Table below)

k = sample size of data: TOC = 15, TSS = 10

μ_y = $\sum(y_i)/k$ (estimated mean of the lognormally transformed measurements above detection)

σ_y^2 = $\sum[(y_i - \mu_y)^2/(k-1)]$ (standard deviation squared)

z_{99} = 2.326

Interested persons may want to refer to "EPA Region II Guidance for Calculating Permit Effluent Limitations Based on Existing Effluent Quality" dated July 29, 1994 and the U.S. Environmental Protection Agency's (EPA's) "Technical Support Document For Water Quality-based Toxics Control" dated March 1991.

ATTACHMENT III (Existing Effluent Quality) PR00000345

- Continued -

No.	OUTFALL 003		Commonwealth Oil Refining Company, Inc. (NPDES Permit No. PR0000345)					
	Daily Max. Limit for:		TOC			TSS		
	-Existing Permit:		110.0			50		
	- Draft Permit:		See calculated EEQ limit below			See calculated EEQ limit below		
	Units:		mg/l			mg/l		
	Frequency:		01/30			01/30		
	DMR Report Date	DMR Cover Letter Date	DMR DATA MEASUREMENT (x_i) and NATURAL LOG OF x_i (y_i)		Treatment Upset Reported in Cover Letter or ICIS database, or Nonrepresentative Values?	DMR DATA MEASUREMENT (x_i) and NATURAL LOG OF x_i (y_i)		Treatment Upset Reported in Cover Letter or ICIS database, or Nonrepresentative Values?
			x_i	y_I		x_i	y_i	
1	May-2009	N/A	N/A	N/A	Not used per guidance (greater than 30 months)	N/A	N/A	Not used per guidance (greater than 30 months)
2	Jun-2009	N/A	N/A	N/A	Not used per guidance (greater than 30 months)	N/A	N/A	Not used per guidance (greater than 30 months)
3	Jul-2009	N/A	N/A	N/A	Not used per guidance (greater than 30 months)	N/A	N/A	Not used per guidance (greater than 30 months)
4	Aug-2009	9/24/2009	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
5	Sep-2009	10/27/2009	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
6	Oct-2009	11/27/2009	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
7	Nov-2009	12/24/2009	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
8	Dec-2009	1/26/2010	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
9	Jan-2010	2/22/2010	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
10	Feb-2010	8/23/2010	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
11	Mar-2010	4/26/2010	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
12	Apr-2010	5/24/2010	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
13	May-2010	6/23/2010	**15.2**	2.721295428	No upset reported	~~945~~	~~6.851184927~~	EPA has determined this value is not representative for TSS since DMR reports unusually high value (erosion).
14	Jun-2010	7/21/2010	**7.68**	2.038619547	No upset reported	**45**	3.80666249	No upset reported
15	Jul-2010	8/27/2010	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
16	Aug-2010	9/27/2010	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
17	Sep-2010	10/25/2010	**128**	4.852030264	No upset reported	**31**	3.433987204	No upset reported
18	Oct-2010	11/22/2010	**66.8**	4.201703081	No upset reported	~~67~~	~~4.204692619~~	Reported cleaning effluent channel preceding days. EPA has determined this value is not representative for TSS.
19	Nov-2010	12/27/2010	**4.35**	1.470175845	No upset reported	~~156~~	~~5.049856007~~	Reported cleaning effluent channel preceding days. EPA has determined this value is not representative for TSS.
20	Dec-2010	1/20/2011	**17.2**	2.844909384	No upset reported	~~107~~	~~4.672828834~~	Reported evaluating current mechanisms for control of erosion by heavy rains in view of unusually high value. EPA has determined this value is not representative for TSS.
21	Jan-2011	2/25/2011	~~17.2~~	~~2.844909384~~	Incorrectly reported 12/2010 DMR data in Outfall 003 and not representative for TOC.	~~107~~	~~4.672828834~~	Incorrectly reported 12/2010 DMR data in Outfall 003 for TOC/TSS. EPA has determined this value is not representative for TSS.
22	Feb-2011	3/25/2011	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
23	Mar-2011	4/27/2011	**25.7**	3.246490992	No upset reported	~~211~~	~~5.351858133~~	Reported TSS was high & will submit report addressing this matter. EPA has determined this value is not representative for TSS.
24	Apr-2011	5/27/2011	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
25	May-2011	6/24/2011	**18.1**	2.895911938	No upset reported	**6**	1.791759469	No upset reported
26	Jun-2011	7/26/2011	**18.6**	2.923161581	No upset reported	**11**	2.397895273	No upset reported
27	Jul-2011	8/25/2011	**19.5**	2.970414466	No upset reported. Reported retention time expired. This value is still representative.	**7**	1.945910149	No upset reported. Reported retention time expired. EPA has determined this value is still representative.
28	Aug-2011	9/27/2011	**8.09**	2.090628731	No upset reported	**47**	3.850147602	No upset reported. Heavy rain reported.
29	Sep-2011	10/19/2011	No Data	N/A	Not used, no data	No Data	N/A	Not used, no data
30	Oct-2011	11/17/2011	**32.4**	3.478158423	No upset reported	**7**	1.945910149	No upset reported
31	Nov-2011	12/20/2011	**14.1**	2.646174797	No upset reported. Exceeded shelf life. EPA has determined this value is still representative.	**6**	1.791759469	No upset reported. Exceeded shelf life. EPA has determined this value is still representative.
32	Dec-2011	1/23/2012	**29.2**	3.374168709	No upset reported. Reported retention time expired. This value is still representative.	**4**	1.386294361	No upset reported. Reported retention time expired. EPA has determined this value is still representative.
33	Jan-2012	2/22/2012	**30.4**	3.414442608	No upset reported	**4**	1.386294361	No upset reported. Reported retention time expired. EPA has determined this value is still representative.
	Daily Max. EEQ Limit:			**142**			**277**	

ATTACHMENT IV (Summary of Estimated Effluent Levels in Outfall 001) PR00000345

Outfall 001																	
Parameter			Modified NPDES Permit Effective 7/1/91, Expired 11/30/91		Draft NPDES Permit (Note: from 12/16/11 final WQC)						Chapter 4, Table 1, Form 2C, V.A, B.C				Chapter 6, Table 15 (Comparison of Probable NPDES Permit Limits and Treatment Plant Effluent)	
					Gross Discharge Limitations						Application Date	Data	Basis for Estimate		Avg.	Remarks
					Monthly Average		Daily Maximum									
Benzene (µg/L)			N/A	N/A	----		510				1/31/04	3,200 ug/l max.	TWCD		---	----
											9/20/04 addit. info	3,200 ug/l max.	TWCD		---	---
	1/31/04 Application, Chapter 6 (Pilot Study Summary Report)	Table 3 (TWCD):	Table 3, Tank 1019 Characterization Additional Parameters (EPA converted from mg/l to ug/l for comparison purposes with above limit)													
				Tank Characterization Study		Supplemental Sampling				Average						
				Tank 1019	1019 Duplicate	9/13/02	9/16/02	9/18/02	9/23/02							
				390	410	--	--	--	--	400						
		Table 4 (TWCD):	Table 4, Summary of Water Characterization – Wastewater Storage Tanks Other Than 1019, Tank Characterization Study (EPA converted from mg/l to ug/l for comparison purposes with above limit)													
			Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	Tanks 701, 711, 722, 980		Tanks 701, 711, 722, 980		Tanks 726, 727, 728		Tanks 738, 739	Tanks 903, 1010, 1013	
			0.094	400	0.72	4.6	1.4	3200		2900		< 100		2.2	1400	
		Table 5:	Table 5, Projected Contaminant Concentrations of Mixed Kuwait Water and Testing Water (Based on Average Testing Water Contaminant Concentrations) (EPA converted from mg/l to ug/l for comparison purposes with above limit)													
			Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	PRWQS Limits								
			1,220	1,280	760	4.6	1,340	400								
	9/20/04 Supplement to Pilot Study Summary Report	Table S-1	Projected Effluent Quality Based on Observed Percent Removals – note 1 (EPA converted from mg/l to ug/l for comparison purposes with above limit)													
			Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	Percent Removal (see adjacent column for reference)				Reference for Percent Removal note 2 (Refer to Pilot Summary Report, January 2004)				
			120	130	80	0	130	90%				Engineer's Estimate (note 3)				
			Note 1: Data for tanks based on Tank Characterization Data presented in Table 5 of the Pilot Summary Report. Values reported in this table were calculated as follows: Value=(100% - Percent Removal) * Value in Table 5. Note that in estimating the influent concentrations for Table 5 that detection limits were used in cases where the data are below detection level to calculate the estimated mixture concentration. Values in this table based on data that was below detection levels denoted with a less than sign, i.e., "<". Note 2: For Tables and Attachments see Pilot Summary Report, March 2004. Note 3: Engineer's Estimate – The performance of the system was estimated in cases for which there was insufficient data to use pilot test results.													
		Table S-2	Comparison of Maximum Projected Effluent based on Percent Removal versus Estimated Effluent Data – Table 1 Form 2C (EPA converted from mg/l to ug/l for comparison purposes with above limit)													
			Maximum Projected Effluent based on Percent Removal (note 1)					Estimated Effluent Data from Table 1 Form 2C (note 2)								
			Average		Maximum			Average		Maximum						
			120		130			< 780		3,200						
			Note 1: See accompany text for full explanation of calculation. Flow-weighted average and maximum values based on concentration values presented in Table S-1. Note 2: These values were reported in Chapter 4, Form 2C, Table 1 of the NPDES Permit Application for Commonwealth Oil Refining Company (CORCO).													

Note:
TWCD = Tank Water Characterization Data; EE = Engineering Estimate; ND = Not Detect/Non-Detect, etc.

ATTACHMENT IV (Summary of Estimated Effluent Levels in Outfall 001) - continued PR00000345

Outfall 001														
Parameter			*Modified NPDES Permit Effective 7/1/91, Expired 11/30/91*		*Draft NPDES Permit (Note: from 12/16/11 final WQC)*		*Chapter 4, Table 1, Form 2C, V.A, B,C*					*Chapter 6, Table 15 (Comparison of Probable NPDES Permit Limits and Treatment Plant Effluent)*	
					Gross Discharge Limitations		*Application Date*	*Data*	*Basis for Estimate*			Avg.	Remarks
					Monthly Average	*Daily Maximum*							
Lead (Pb) (µg/L)			N/A	*15.0*	----	8.52	*1/31/04*	7 ug/l max.	TWCD			---	----
							9/20/04 addit. info	11 ug/l max.	Table S-2			---	---
	1/31/04 Application, Chapter 6 (Pilot Study Summary Report)	Table 3 (TWCD):	Table 3, Tank 1019 Characterization Additional Parameters (EPA converted from mg/l to ug/l for comparison purposes with above limit)										
				Tank Characterization Study		Supplemental Sampling					Average		
				Tank 1019	1019 Duplicate	9/13/02	9/16/02	9/18/02	9/23/02				
				2.41	< 5	< 5	< 5	< 5	< 8		< 5		
		Table 4 (TWCD):	Table 4, Summary of Water Characterization – Wastewater Storage Tanks Other Than 1019, Tank Characterization Study (EPA converted from mg/l to ug/l for comparison purposes with above limit)										
			Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	Tanks 701, 711, 722, 980		Tanks 701, 711, 722, 980		Tanks 726, 727, 728	Tanks 738, 739	Tanks 903, 1010, 1013
			0.712	< 5	11.9	21.9	21.5	0.987		< 5		1.26	0.319	0.929
		Table 5:	Table 5, Projected Contaminant Concentrations of Mixed Kuwait Water and Testing Water (Based on Average Testing Water Contaminant Concentrations) (EPA converted from mg/l to ug/l for comparison purposes with above limit)										
			Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	PRWQS Limits						
			0	0	10	20	0	15.0						
	9/20/04 Supplement to Pilot Study Summary Report	Table S-1	Projected Effluent Quality Based on Observed Percent Removals – note 1 (EPA converted from mg/l to ug/l for comparison purposes with above limit)										
			Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	Percent Removal (see adjacent column for reference)				Reference for Percent Removal note 2 (Refer to Pilot Summary Report, January 2004)		
			1	< 1	3	11	2	50%				Engineer's Estimate (note 3)		
			Note 1: Data for tanks based on Tank Characterization Data presented in Table 5 of the Pilot Summary Report. Values reported in this table were calculated as follows: Value=(100% - Percent Removal) * Value in Table 5. Note that in estimating the influent concentrations for Table 5 that detection limits were used in cases where the data are below detection level to calculate the estimated mixture concentration. Values in this table based on data that was below detection levels denoted with a less than sign, i.e., "<". Note 2: For Tables and Attachments see Pilot Summary Report, March 2004. Note 3: Engineer's Estimate – The performance of the system was estimated in cases for which there was insufficient data to use pilot test results.										
		Table S-2	Comparison of Maximum Projected Effluent based on Percent Removal versus Estimated Effluent Data – Table 1 Form 2C (EPA converted from mg/l to ug/l for comparison purposes with above limit)										
			Maximum Projected Effluent based on Percent Removal (note 1)				Estimated Effluent Data from Table 1 Form 2C (note 2)						
			Average		Maximum		Average		Maximum				
			< 2		11		5		7				
			Note 1: See accompany text for full explanation of calculation. Flow-weighted average and maximum values based on concentration values presented in Table S-1. Note 2: These values were reported in Chapter 4, Form 2C, Table 1 of the NPDES Permit Application for Commonwealth Oil Refining Company (CORCO).										

Note:
TWCD = Tank Water Characterization Data; EE = Engineering Estimate; ND = Not Detect/Non-Detect, etc.

ATTACHMENT IV (Summary of Estimated Effluent Levels in Outfall 001) - continued PR00000345

Outfall 001																
Parameter			Modified NPDES Permit Effective 7/1/91, Expired 11/30/91		Draft NPDES Permit (Note: from 12/16/11 final WQC)		Chapter 4, Table 1, Form 2C, V.A, B,C							Chapter 6, Table 15 (Comparison of Probable NPDES Permit Limits and Treatment Plant Effluent)	
					Gross Discharge Limitations		Application Date	Data	Basis for Estimate					Avg.	Remarks
					Monthly Average	Daily Maximum									
Mercury (Hg) (µg/L)			N/A	1.0	----	0.025	1/31/04	ND	TWCD					---	----
							9/20/04 addit. Info.	ND (0.3 ug/l max.)	TWCD					---	---
	1/31/04 Application, Chapter 6 (Pilot Study Summary Report)	Table 3 (TWCD):	Table 3, Tank 1019 Characterization Additional Parameters (EPA converted from mg/l to ug/l for comparison purposes with above limit)												
				Tank Characterization Study		Supplemental Sampling					Average				
				Tank 1019	1019 Duplicate	9/13/02	9/16/02	9/18/02	9/23/02						
				0.117	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5		< 0.38				
		Table 4 (TWCD):	Table 4, Summary of Water Characterization – Wastewater Storage Tanks Other Than 1019, Tank Characterization Study (EPA converted from mg/l to ug/l for comparison purposes with above limit)												
			Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	Tanks 701, 711, 722, 980		Tanks 701, 711, 722, 980		Tanks 726, 727, 728		Tanks 738, 739	Tanks 903, 1010, 1013
			0.0338	< 0.38	0.0656	0.0721	0.347	0.0158		< 0.2		0.0054		0.0009	0.0233
		Table 5:	Table 5, Projected Contaminant Concentrations of Mixed Kuwait Water and Testing Water (Based on Average Testing Water Contaminant Concentrations) (EPA converted from mg/l to ug/l for comparison purposes with above limit)												
			Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	PRWQS Limits							
			0.05	---	0.06	0.07	0.08	1							
	9/20/04 Supplement to Pilot Study Summary Report	Table S-1	Projected Effluent Quality Based on Observed Percent Removals – note 1 (EPA converted from mg/l to ug/l for comparison purposes with above limit)												
			Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	Percent Removal (see adjacent column for reference)				Reference for Percent Removal note 2 (Refer to Pilot Summary Report, January 2004)			
			0.05	< 0.12	0.06	0.07	0.08	0%				Attachment 3			
			Note 1: Data for tanks based on Tank Characterization Data presented in Table 5 of the Pilot Summary Report. Values reported in this table were calculated as follows: Value=(100% - Percent Removal) * Value in Table 5. Note that in estimating the influent concentrations for Table 5 that detection limits were used in cases where the data are below detection level to calculate the estimated mixture concentration. Values in this table based on data that was below detection levels denoted with a less than sign, i.e., "<". Note 2: For Tables and Attachments see Pilot Summary Report, March 2004. Note 3: Engineer's Estimate – The performance of the system was estimated in cases for which there was insufficient data to use pilot test results.												
		Table S-2	Comparison of Maximum Projected Effluent based on Percent Removal versus Estimated Effluent Data – Table 1 Form 2C (EPA converted from mg/l to ug/l for comparison purposes with above limit)												
			Maximum Projected Effluent based on Percent Removal (note 1)					Estimated Effluent Data from Table 1 Form 2C (note 2)							
			Average		Maximum			Average				Maximum			
			< 0.08		< 0.12			0.05				0.30			
			Note 1: See accompany text for full explanation of calculation. Flow-weighted average and maximum values based on concentration values presented in Table S-1. Note 2: These values were reported in Chapter 4, Form 2C, Table 1 of the NPDES Permit Application for Commonwealth Oil Refining Company (CORCO).												

Note:
TWCD = Tank Water Characterization Data; EE = Engineering Estimate; ND = Not Detect/Non-Detect, etc.

ATTACHMENT IV (Summary of Estimated Effluent Levels in Outfall 001) - continued PR00000345

Outfall 001																
Parameter			Modified NPDES Permit Effective 7/1/91, Expired 11/30/91		Draft NPDES Permit (Note: from 12/16/11 final WQC)		Chapter 4, Table 1, Form 2C, V.A, B,C							Chapter 6, Table 15 (Comparison of Probable NPDES Permit Limits and Treatment Plant Effluent)	
					Gross Discharge Limitations		Application Date		Data					Basis for Estimate		Avg.	Remarks
					Monthly Average	Daily Maximum											
Selenium (Se) (µg/L)			N/A	*10.0*	----	71.14	1/31/04		ND					PSED		---	----
							9/20/04 Addit. Info.		ND (290 ug/l max.)					Table S-2		---	---
	1/31/04 Application, Chapter 6 (Pilot Study Summary Report)	Table 3 (TWCD):	Table 3, Tank 1019 Characterization Additional Parameters (EPA converted from mg/l to ug/l for comparison purposes with above limit)														
				Tank Characterization Study		Supplemental Sampling					Average						
				Tank 1019	1019 Duplicate	9/13/02	9/16/02	9/18/02	9/23/02								
				1,090	< 10	< 5	< 5	12	<5		< 190						
		Table 4 (TWCD):	Table 4, Summary of Water Characterization – Wastewater Storage Tanks Other Than 1019, Tank Characterization Study (EPA converted from mg/l to ug/l for comparison purposes with above limit)														
			Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	Tanks 701, 711, 722, 980		Tanks 701, 711, 722, 980		Tanks 726, 727, 728			Tanks 738, 739	Tanks 903, 1010, 1013	
			1,260	< 190	574	28.5	1,730	0.4		< 10		0.33			0.25	1.93	
		Table 5:	Table 5, Projected Contaminant Concentrations of Mixed Kuwait Water and Testing Water (Based on Average Testing Water Contaminant Concentrations) (EPA converted from mg/l to ug/l for comparison purposes with above limit)														
			Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	PRWQS Limits									
			270	40	290	30	210	10									
	9/20/04 Supplement to Pilot Study Summary Report	Table S-1	Projected Effluent Quality Based on Observed Percent Removals – note 1 (EPA converted from mg/l to ug/l for comparison purposes with above limit)														
			Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	Percent Removal (see adjacent column for reference)						Reference for Percent Removal note 2 (Refer to Pilot Summary Report, January 2004)			
			270	< 40	290	30	210	0 %						Attachment 3			
			Note 1: Data for tanks based on Tank Characterization Data presented in Table 5 of the Pilot Summary Report. Values reported in this table were calculated as follows: Value=(100% - Percent Removal) * Value in Table 5. Note that in estimating the influent concentrations for Table 5 that detection limits were used in cases where the data are below detection level to calculate the estimated mixture concentration. Values in this table based on data that was below detection levels denoted with a less than sign, i.e., "<". Note 2: For Tables and Attachments see Pilot Summary Report, March 2004. Note 3: Engineer's Estimate – The performance of the system was estimated in cases for which there was insufficient data to use pilot test results.														
		Table S-2	Comparison of Maximum Projected Effluent based on Percent Removal versus Estimated Effluent Data – Table 1 Form 2C (EPA converted from mg/l to ug/l for comparison purposes with above limit)														
			Maximum Projected Effluent based on Percent Removal (note 1)					Estimated Effluent Data from Table 1 Form 2C (note 2)									
			Average		Maximum			Average				Maximum					
			< 180		290			< 10				15					
			Note 1: See accompany text for full explanation of calculation. Flow-weighted average and maximum values based on concentration values presented in Table S-1. Note 2: These values were reported in Chapter 4, Form 2C, Table 1 of the NPDES Permit Application for Commonwealth Oil Refining Company (CORCO).														

Note:
TWCD = Tank Water Characterization Data; EE = Engineering Estimate; ND = Not Detect/Non-Detect, etc.

Outfall 001

Parameter	Modified NPDES Permit Effective 7/1/91, Expired 11/30/91		Draft NPDES Permit (Note: from 12/16/11 final WQC) Gross Discharge Limitations: Monthly Average	Draft NPDES Permit Gross Discharge Limitations: Daily Maximum	Chapter 4, Table 1, Form 2C, V.A, B,C: Application	Data	Basis for Estimate	Chapter 6, Table 15 (Comparison of Probable NPDES Permit Limits and Treatment Plant Effluent): Avg.	Remarks
Sulfide (un-dissociated H_2S) (µg/L)	N/A	*2.0 (S)*	----	2.0	1/31/04	110 ug/l max.	PSED	---	----
					9/20/04 Addit. Info.	240 ug/l max.	Table S-2	---	---

1/31/04 Application, Chapter 6 (Pilot Study Summary Report)

Table 3 (TWCD): Table 3, Tank 1019 Characterization Additional Parameters (EPA converted from mg/l to ug/l for comparison purposes with above limit)

Tank Characterization Study		Supplemental Sampling				Average
Tank 1019	1019 Duplict.	9/13/02	9/16/02	9/18/02	9/23/02	
40,000	40,000	994	2,790	2,160	1,490	14,600

Table 4 (TWCD): Table 4, Summary of Water Characterization – Wastewater Storage Tanks Other Than 1019, Tank Characterization Study (EPA converted from mg/l to ug/l for comparison purposes with above limit)

Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	Tanks 701, 711, 722, 980	Tanks 701, 711, 722, 980	Tanks 726, 727, 728	Tanks 738, 739	Tanks 903, 1010, 1013
4,000	14,600	< 100	< 100	< 100	2,200	2,200	---	---	2,??? (punched hole obstructs view of value)

Table 5: Table 5, Projected Contaminant Concentrations of Mixed Kuwait Water and Testing Water (Based on Average Testing Water Contaminant Concentrations) (EPA converted from mg/l to ug/l for comparison purposes with above limit)

Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	PRWQS Limits
2,630	4,880	1,180	100	2,010	2

Table 11: Table 11, Sulfide, (EPA converted from mg/l to ug/l for comparison purposes with above limit)

Date:	9/13/02	9/16/02	9/18/02	9/23/02	Average
Influent Tank Water	994	2,790	2,160	1,490	1,860
Trickling Filter Effluent	78	64	80	64	72
Final Effluent	58	114	85	80	84

9/20/04 Supplement to Pilot Study Summary Report

Table S-1: Projected Effluent Quality Based on Observed Percent Removals – note 1 (EPA converted from mg/l to ug/l for comparison purposes with above limit)

Tank 1018	Tank 1019	Tank 1020	Tank 1023	Tank 1024	Percent Removal (see adjacent column for reference)	Reference for Percent Removal note 2 (Refer to Pilot Summary Report, January 2004)
130	240	60	10	10	95 %	Table 11

Note 1: Data for tanks based on Tank Characterization Data presented in Table 5 of the Pilot Summary Report. Values reported in this table were calculated as follows: Value=(100% - Percent Removal) * Value in Table 5. Note that in estimating the influent concentrations for Table 5 that detection limits were used in cases where the data are below detection level to calculate the estimated mixture concentration. Values in this table based on data that was below detection levels denoted with a less than sign, i.e., "<".
Note 2: For Tables and Attachments see Pilot Summary Report, March 2004.
Note 3: Engineer's Estimate – The performance of the system was estimated in cases for which there was insufficient data to use pilot test results.

Table S-2: Comparison of Maximum Projected Effluent based on Percent Removal versus Estimated Effluent Data – Table 1 Form 2C (EPA converted from mg/l to ug/l for comparison purposes with above limit)

Maximum Projected Effluent based on Percent Removal (note 1): Average	Maximum	Estimated Effluent Data from Table 1 Form 2C (note 2): Average	Maximum
140	240	80	110

Note 1: See accompany text for full explanation of calculation. Flow-weighted average and maximum values based on concentration values presented in Table S-1.
Note 2: These values were reported in Chapter 4, Form 2C, Table 1 of the NPDES Permit Application for Commonwealth Oil Refining Company (CORCO).

Note:
TWCD = Tank Water Characterization Data; EE = Engineering Estimate; ND = Not Detect/Non-Detect, etc.

COMMONWEALTH OF PUERTO RICO
OFFICE OF THE GOVERNOR
ENVIRONMENTAL QUALITY BOARD

Governing Board

RETURN RECEIPT REQUESTED

December 16, 2011

Mr. Roberto Gratacós
Vice-President of Operations
Commonwealth Oil Refining Company, Inc. (CORCO)
600 Road 127
Peñuelas, Puerto Rico 00624

Dear Mr. Gratacós:

RE: WATER QUALITY CERTIFICATE
COMMONWEALTH OIL REFINING COMPANY, INC. (CORCO)
STATE ROAD NO. 127, KM 17.3
TALLABOA WARD
PEÑUELAS, PUERTO RICO
NPDES NO. PR0000345

We have received and reviewed the application for a permit under Section 402, National Pollutant Discharge Elimination System (NPDES), of the Federal Clean Water Act, as amended (33 U.S.C. 466 *et seq.*) (the Act) for the referenced facility.

Pursuant to Section 401 (a) (1) of the Act, after due consideration of the applicable provisions established in the Puerto Rico Water Quality Standards Regulation (PRWQSR), as amended and in Sections 208(e), 301, 302, 303, 304(e), 306 and 307 of the Act, it is certified that there is reasonable assurance, as determined by the Environmental Quality Board (EQB), that the allowed discharge will not cause violations to the applicable water quality standards at the receiving water body if the limitations and monitoring requirements on Tables A-1 and A-2 are met.

The conditions specified in the aforementioned tables shall be incorporated into the NPDES permit in order to satisfy the provisions of Section 301 (b) (1) (C) of the Act.

If you have any objection to the Water Quality Certificate (WQC), you have the right to request reconsideration to the EQB within the statutory period (twenty (20) calendar days from the date that the WQC is received).

The Agency reserves the right to comment at a later date concerning other environmental aspects of the discharge.

Mr. Reynaldo Matos Jiménez
Associate Member

Blanche González Hodge, Esq.
Associate Member

Pedro J. Nieves Miranda, Esq.
Chairman

NVV/dcc

c: Eng. Carl-Axel P. Soderberg, EPA-CEPD

SPECIAL CONDITIONS

NPDES NO. PR0000345

These special conditions are an integral part of the Water Quality Certificate (WQC) and shall be incorporated into the NPDES permit in order to satisfy the provisions of Section 301(b)(1)(C) of the Federal Clean Water Act (CWA) as amended (33 U.S.C. 466 *et seq.*):

1. The flow of discharge 001 shall not exceed the limitation of 1,090.20 m^3/day (0.288 MGD) as daily maximum. No increase in flow of discharge 001 shall be authorized without a recertification from the Environmental Quality Board (EQB). [1,4]

2. The discharge from the Outfalls 002 and 003 will consist of waters composed entirely of stormwater. [4]

3. Prior to the construction of any additional treatment system, or the modification of the existing one, the permittee shall obtain the approval from EQB of the engineering report, plans and specifications. [4]

4. The permittee shall install, maintain and operate all water pollution control equipment in such manner as to be in compliance with the applicable Rules and Regulations. [1,3]

5. No toxic substances shall be discharged, in toxic concentrations, other than those allowed as specified in the NPDES permit. Those toxic substances included in the permit renewal application, but not regulated by the NPDES permit, shall not exceed the concentrations specified in the applicable regulatory limitations. [2,3]

6. The waters of Puerto Rico shall not contain any substance attributable to discharge 001, at such concentration which, either alone or as result of synergistic effects with other substances, is toxic or produces undesirable physiological responses in human, fish or other fauna or flora. [2]

7. The discharges 001, 002 and 003 shall not cause the presence of oil sheen in the receiving water body. [2]

8. The sampling point for discharges 002 and 003 shall be accessible and free of vegetation, debris, trash, etc., at any time. [4]

9. All water or wastewater treatment facilities, whether publicly or privately owned, must be operated by a person licensed by the Potable Water and Wastewater Treatment Plants Operators Examining Board of the Commonwealth of Puerto Rico.[3]

10. All sample collection, preservation, and analysis shall be carried out in accordance with the Title 40 of the Code of Federal Regulations (40 CFR) Part 136. A licensed chemist authorized to practice the profession in Puerto Rico shall certify all chemical analyses. All bacteriological tests shall be certified by a licensed microbiologist or medical technologist authorized to practice the profession in Puerto Rico. [4,3]

11. The samples taken for the analysis of Cyanide and Mercury shall be analyzed using the analytical method approved by the Environmental Protection Agency (EPA) with the lowest possible detection level, in accordance with Rule 1306.8 of the Puerto Rico Water Quality Standards Regulation (PRWQSR), as amended. [3]

12. The permittee shall use the approved EPA analytical method, with the lowest possible detection limit, in accordance with 40 CFR, Part 136 for Sulfide (as S). Also, the permittee shall complete the calculations specified in Method 4500-S^{2-} F, Calculation of Un-ionized Hydrogen Sulfide, of Standards Methods 18th Edition, 1992, to determine the concentration of undissociated H_2S. If the sample results of Dissolved Sulfide are below the detection limit of the approved EPA method established in the 40 CFR, Part 136, then the concentration of undissociated H_2S should be reported as "below detection limit". [3,3]

13. The flow-measuring device for the discharge 001 shall be periodically calibrated and properly maintained. Calibration and maintenance records must be kept in compliance with applicable Rules and Regulations. [4,3]

14. The sampling point for discharge 001 shall be located immediately after the primary flow-measuring device of the effluent of the treatment system.

15. The sampling points for discharges 001, 002 and 003 shall be labeled with an 18 inches per 12 inches (minimum dimensions) sign that read as follows, according to the discharge:

"Punto de Muestreo para la Descarga 001"
"Punto de Muestreo para la Descarga 002"
"Punto de Muestreo para la Descarga 003"

16. The permittee shall keep daily records of rain, indicating the date and duration of the events. Copy of these records shall be submitted monthly to EQB.

17. STORM WATER POLLUTION PREVENTION PLAN (SWPP PLAN)/BEST MANAGEMENT PRACTICES PLAN (BMP PLAN) [4]

a. Within sixty (60) days after the Effective Date of the NPDES Permit (EDP), the permittee shall submit to the EQB for review and approval a modified SWPP Plan, which shall be implemented within ninety (90) days after the EQB has approved the modified SWPP Plan. Meanwhile, the permittee shall comply with the terms and conditions included in the SWPP Plan of the facility as approved by the EQB on February 4, 2004.

b. A copy of the approved SWPP Plan shall be maintained at the facility and shall be available upon request.

c. The SWPP Plan shall be modified whenever changes at the facility materially increase the potential for releases of pollutants or when situations occur that reflect that the plan is inadequate. The modified SWPP Plan shall be submitted to EQB for review and approval within ninety (90) days from the date when the changes occurred and shall be implemented within ninety (90) days after the EQB has approved the modified SWPP Plan.

18. The permittee shall comply at all times with the provisions, measures or practices included in the most recent version of the SWPP Plan/BMP Plan (Special Condition 17) approved by EQB. [4]

19. WHEN FLOW OCCURS (WFO) [4]

WFO - For our purposes means when flow occurs during normal business hours of the facility, but not more often than one rainfall runoff sampling per month.

a. First Half of Month

During the first fifteen (15) days of the month, sampling shall be as follows: A minimum period of 48 hours without measurable precipitation (measurable precipitation being rainfall greater than 0.1 inch) shall precede the storm event to be sampled. For those parameters which require grab samples, the sample shall be taken during the first thirty (30) minutes of storm water discharge.

b. Second Half of Month

In the event that the permittee is unable to satisfy the above condition during the first fifteen (15) days of the month, beginning on the sixteenth (16th) day of the

month, the permittee shall sample any storm water discharge which occurs during normal business hours for the facility.

c. General Requirements

The permittee must report in a cover letter attached to each Discharge Monitoring Report (DMR), details of the conditions under which the storm water samples were taken and the date of sampling.

Alternatively, if no sample was taken during the month, the permittee shall be deemed to have met the sampling requirements if the permittee certifies that it was not possible to satisfy the specified sampling protocol during the first fifteen (15) days of the month and that there was no measurable discharge of storm water during normal business hours from the sixteenth (16th) day of the month until the last day of the month.

20. The storm water discharges associated with industrial activities covered by this WQC will not cause violations to the applicable water quality standards at the receiving water body. [3]

21. This special condition shall not become in effect until EQB has determined the applicability to the respective facility and has notified the permittee and the EPA, in writing, of the necessity to comply with this special condition.

Not later than one hundred eighty (180) days after the Effective Date of this NPDES Permit Condition (EDPC), the permittee shall conduct quarterly acute toxicity tests for a period of one (1) year, after which the tests shall be performed annually, of its wastewater discharge through Outfall Serial Number 001 in accordance with the following: [3]

a. The test species should be silverside (Menidia beryllina) and mysid (Mysidopsis bahia). The test should be static renewal type.

b. The toxicity tests shall be conducted in accordance with the EPA publication, EPA 821-R-02-012 Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Edition), October 2002, or the most recent edition of this publication, if such edition is available.

c. The tests shall provide a measure of the acute toxicity as determined by the wastewater concentration, which cause 50 percent mortality of the test organisms over a 48-hour period. The test results shall be expressed in terms of Lethal Concentration (LC) and reported as 48-hour LC_{50}.

d. A procedure report shall be submitted within ninety (90) days after EDPC. The following information shall be included in the procedure report:

1. An identification of the organizations responsible for conducting the tests and species to be tested.

2. A detailed description of the methodology to be utilized in the conduct of the tests, including equipment, sample collection, dilution water and source of test organisms.

3. A schematic diagram, which depicts the effluent sampling location in relation to the wastewater treatment facility and the discharge monitoring point.

e. The results of the tests conducted shall be submitted to EPA Region 2 and EQB within sixty (60) days of completion of each test. Based on the review of the test results, the Regional Administrator of EPA or the EQB can require additional toxicity tests, including chronic tests and toxicity/treatability studies, and may impose toxicity limitations.

22. The sludge produced within the facility due to the operation of the treatment system shall be analyzed and all constituents shall be identified as required by "Resources Conservation and Recovery Act" (RCRA) and by "Toxic Substances Control Act" (TSCA). The permittee shall obtain appropriate federal and state permits prior to the final disposal of such wastes. The sludge shall be disposed properly in such manner that water pollution or other adverse effects to surface waters or to underground waters do not occur. The pertinent permit form EQB's Solid Wastes Program must be obtained. 3/

23. Each condition of this WQC is considered as separate. Therefore, if the applicability of any condition of this WQC is stayed due to any circumstance, the remaining conditions of this WQC will not be affected.

24. The EQB, by the issuance of this WQC, does not relieve the applicant from its responsibility to obtain additional permits or authorizations from the EQB as required by law. The issuance of the WQC shall not be construed as an authorization to conduct activities not specifically covered in the WQC, which will cause water pollution as defined by the PRWQSR. [4]

1, 2, 3, 4 and 5 see next page

1. According to Rule 1301 of the Puerto Rico Water Quality Standards Regulation, as amended.

2. According to Rule 1303 of the Puerto Rico Water Quality Standards Regulation, as amended.

3. According to Rule 1306 of the Puerto Rico Water Quality Standards Regulation, as amended.

4. According to the Environmental Public Policy Act of September 22, 2004, Act No. 416, as amended.

5. According to the Code of Federal Regulation Number 40 (40 CFR), Part 131.36, as amended (Federal Register/Volume 57, No. 246/Tuesday, December 22, 1992).

TABLE A-1 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS NPDES NO. PR0000345

During the period beginning on the EDP and lasting through the EDP + 5 years, the permittee is authorized to discharge from outfall serial number 001 treated wastewaters coming from its operations[8] and Kuwait Water[9]. Such discharge shall be limited and monitored by the permittee as specified below:

Receiving Water Name and Classification: Tallaboa Bay, SC

Effluent Characteristics	Gross Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
2,4,6-Trichlorophenol (µg/L) [2,3]		----	α	Grab
2-Chlorophenol (µg/L) [2,3]		----	α	Grab
Antimony (Sb) (µg/L) [2,3]		----	α	Grab
Arsenic (As) (µg/l) [2,3]		36	Monthly	Grab
Benzene (µg/L) [2,3]		510	Monthly	Grab
Bis(2-Chloroethyl)Ether (µg/L) [2,3]		5.3	Monthly	Grab
Bis(2-Ethylhexyl)Phthalate[8] (µg/L) [2,3]		----	α	Grab
BOD_5 (mg/L) [4,5,3]	30.0		Monthly	Composite
Cadmium (Cd) (µg/L) [2,3]		8.85	Monthly	Grab
Chromium VI (Cr^{+6}) (µg/L) [2,3]		----	α	Grab

TABLE A-1 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS NPDES NO. PR0000345

Receiving Water Name and Classification: Tallaboa Bay, SC

Effluent Characteristics	Gross Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
Color (Pt-Co Units) [2,3]	Shall not be altered by other than natural causes.		Monthly	Grab
Copper (Cu) (µg/L) [2,3]		3.73	Monthly	Grab
Cyanide, Free (CN) (µg/L) φ [2,3]		1.0	Monthly	Grab
Dissolved Oxygen (mg/L) [1,2,3]	Shall not be less than 4.0.		Daily	Grab
Flow m³/day (MGD) [1,3,4]		1,090.20 (0.288)	Continuous Recording	
Lead (Pb) (µg/L) [2,3]		8.52	Monthly	Grab
Mercury (Hg) (µg/L) φ [2,3,5]		0.025	Monthly	Grab
Nickel (Ni) (µg/L) [2,3]		8.28	Monthly	Grab
Nitrogen (NO_3, NO_2, NH_3) (mg/L) [2,3]		----	α	Grab
Oil and Grease (mg/L) [2,3]	The water of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oils and greases.		Twice per Month	Grab

TABLE A-1 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS NPDES NO. PR0000345

Receiving Water Name and Classification: Tallaboa Bay, SC

Effluent Characteristics	Gross Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
Pentachlorophenol (µg/L) [2,3]		----	α	Grab
pH (SU) [2,3]	Shall always lie between 7.3 and 8.5.		Daily	Grab
Selenium (Se) (µg/L) [2,3]		71.14	Monthly	Grab
Silver (Ag) (µg/L) [2,3]		----	α	Grab
Solids and Other Matter [2,3]	The waters of Puerto Rico shall not contain floating debris, scum or other floating materials attributable to the discharge in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the water body.		----	----
Sulfate (SO_4) (mg/L) [2,3]		----	α	Grab
Sulfide (undissociated H_2S) (µg/L) [2,3 δ]		2.0	Monthly	Grab
Surfactants (as Methylene Blue Activate Substances) (µg/L) [1,2,3]		500	Monthly	Grab

TABLE A-1 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS NPDES NO. PR0000345

Receiving Water Name and Classification: Tallaboa Bay, SC

Effluent Characteristics	Gross Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
Suspended, Colloidal or Settleable Solids (mL/L) [1,2,3]	Solids from wastewater source shall not cause deposition in or be deleterious to the existing or designated uses of the water body.		Daily	Grab
Thallium (Tl) (µg/L) [2,3]		0.47	Monthly	Grab
Taste and Odor-producing Substances [2,3]	Shall contain none in amounts that will render any undesirable taste or odor to edible aquatic life.		—	—
Temperature °F (°C) [2,3]	Except by natural causes, no heat may be added to the waters of Puerto Rico, which would cause the temperature of any site to exceed 90°F (32.2°C).		Daily	Grab
Toluene (µg/L) [2,3]		—	α	Grab
Turbidity (NTU) [2,3]		10	Monthly	Grab
Zinc (Zn) (µg/L) [2,3]		85.62	Monthly	Grab
Special Conditions	See attached sheets, which contain special conditions that constitute part of this certification.		—	—

TABLE A-1 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS NPDES NO. PR0000345

Receiving Water Name and Classification: Tallaboa Bay, SC

Notes:

To comply with the monitoring requirements specified above, samples shall be taken at the sampling point for discharge serial number 001.

All flow measurements shall achieve accuracy within the range of plus or minus (±) 10%.

β Operations wastewaters from the following:

a) tank and line product displacement water
b) groundwater from product recovery
c) lab sink drain water
d) oily sewer/dock sump water
e) RCRA unit closure water
f) tank and line testing water
g) tank and line cleaning water
h) wastewater from maintenance jobs
i) ballast water

γ Kuwait Water = Separation wastewater that was generated from the separation from weathered Kuwaiti crude oil, generated during post-Persian Gulf War firefighting.

φ See Special Condition 11.

δ See special condition 12.

α The permittee shall implement a monthly monitoring program using the analytical method approved by EPA with the lowest possible detection level, in accordance with Rule 1306.2 (C) of the PRWQSR, as amended, for one (1) year period, after which they will be conducted annually. The monitoring program shall commence not later than thirty (30) days after the EQB's written approval of the Quality Assurance Project Plan (QAPP). The QAPP must be submitted for evaluation and approval of EQB not later than thirty (30) days after the EDP. The results of the monitoring program shall be submitted to EQB and EPA-Region 2 no later than sixty (60) days of completion of the one year monitoring program. Based on the evaluation of the results obtained, EQB will determine if an effluent limitation is necessary for this parameter. In such case, the WQC will be reopened to include the applicable effluent limitation.

1, 2, 3, 4 and 5 see page 7 of Special Conditions.

TABLE A-2 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS NPDES NO. PR0000345

During the period beginning on the EDP and lasting through the EDP + 5 years, the permittee is authorized to discharge from outfall serial numbers 002 and 003 to Bahía de Tallaboa, waters composed entirely of storm water. Such discharge shall be limited and monitored by the permittee as specified below:

Receiving Water Name and Classification: Tallaboa Bay, SC

Effluent Characteristics	Gross Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
Flow m^3/day (MGD) [1,2,4]		N/A	Ω	
Oil and Grease (mg/L) [2,3]	The water of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oils and greases.		WFO	Grab
pH (SU) [2,3]	Shall always lie between 7.3 and 8.5.		WFO	Grab
Solids and Other Matter [2,3]	The waters of Puerto Rico shall not contain floating debris, scum or other floating materials attributable to the discharge in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the water body.		---	---
Suspended, Colloidal or Settleable Solids (mL/L) [2,3]	Solids from wastewater source shall not cause deposition in or be deleterious to the existing or designated uses of the water body.		WFO	Grab
Taste and Odor-producing Substances [2,3]	Shall contain none in amounts that will render any undesirable taste or odor to edible aquatic life.		---	---

TABLE A-2 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS NPDES NO. PR0000345

Receiving Water Name and Classification: Tallaboa Bay, SC

Effluent Characteristics	Gross Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
Temperature °F (°C) [3]	Except by natural causes, no heat may be added to the waters of Puerto Rico, which would cause the temperature of any site to exceed 90°F (32.2°C).		WFO	Grab
Special Conditions	See attached sheets, which contain special conditions that constitute part of this certification.		----	----

Notes:

To comply with the monitoring requirements specified above, samples shall be taken at the sampling points of discharges 002 and 003.

WFO See Special Condition 19.

Ω Continuous recording for discharge 003, estimated when flow occurs (WFO) for discharge 002.

1, 2, 3, 4 and 5 see page 7 of the Special Conditions.