REPLY TO:
LIMETREE BAY TERMINALS, LLC
1 Estate Hope
Christiansted VI 00820-5652

June 9, 2017

CERTIFIED MAIL NO.: 7016 0340 0000 1752 2774
RETURN RECEIPT REQUESTED

Ms. Suilin Chan, Chief
Air Programs - Permitting Section
U.S. EPA Region 2
290 Broadway
New York, NY 10007-1866

SUBJECT: Request for Administrative Amendment to the 2011 FCCU PSD Permit - Combustion Units Permanent Shutdown

Dear Ms. Chan,

As you know, HOVENSA L.L.C. ("HOVENSA") is a party to a Clean Air Act Consent Decree between the United States, the United States Virgin Islands and HOVENSA that was entered on June 7, 2011 (the "Consent Decree"). Certain assets subject to the Consent Decree were sold by HOVENSA to Limetree Bay Terminals, LLC (Limetree Bay Terminals) as of January 4, 2016.

Limetree Bay Terminals is not presently a party to the Consent Decree. However, Limetree Bay Terminals is working with HOVENSA, the Virgin Islands Department of Planning and Natural Resources ("VIDPNR"), the EPA and the United States Department of Justice ("DOJ") on a modification of the Consent Decree which modification would add Limetree Bay Terminals as a party and make other changes to the Consent Decree. This submittal addresses a request by the United States for Limetree Bay Terminals to assist HOVENSA so that it can comply with Paragraph 27 of the Consent Decree requiring specified NO_x emission reductions, which would be accomplished in accordance with Paragraph 229 of the Consent Decree by Limetree Bay Terminals permanently shutting down and surrendering the permits of several combustion units that it purchased from HOVENSA.

On February 28, 2017, Limetree Bay Terminals submitted a Title V Minor Modification Request to remove certain combustion units from its Title V Operating Permit. When issued, this modification would remove operating authority for these units, thereby effectuating the surrender of their respective permits and a permanent shutdown of the combustion units.

Based on discussions with EPA during our most recent Consent Decree meeting, EPA has asked that Limetree Bay Terminals make similar changes to its PSD permits, if any

of the combustion units whose permits are being surrendered are also referenced in PSD permits. After a review of active PSD permits for this location, some of these combustion units also appear in the 2011 FCCU PSD Permit. It is Limetree Bay Terminals' current understanding that the 2011 FCCU PSD permit should also be amended to remove references to these combustion units slated for shutdown.

We have reviewed applicable EPA guidance for modification of PSD permits, since there are no regulations that govern modification of PSD permits. Applicable draft EPA guidance states that a modification is typically treated as administrative if it involves no increase in either emissions or impacts and no fundamental change in either the source or one of the emissions units at that source. A modification may also be administrative where additional review or analyses of the emission unit or prior permit application is not needed. Since the units are being permanently shut down, there is no emissions increase and no additional NSR review process needed and therefore the proposed change would be only an Administrative Amendment.

The guidance does not indicate the form or content of an Administrative Amendment application. We have reviewed other applications for administrative changes to PSD permits, and submit this letter as a request for an Administrative Amendment to the FCCU PSD permit.

As part of this request, Limetree Bay Terminals thought it would be appropriate to include a company name change to the permit and the update of certain conditions that were updated in the GT-13/Low Sulfur Fuels PSD permit, but never updated in the FCCU PSD permit. In 2005, EPA issued a PSD permit to HOVENSA for the GT-13/Low Sulfur Fuels Project. This permit also included revisions to certain conditions for the FCCU that were then contained in the 1997 FCCU PSD permit. These conditions superseded the conditions in the 1997 FCCU PSD permit. The 1997 FCC PSD permit was later revised in 2011 to modify conditions for the Sulfuric Acid Plant heater. The 2011 FCCU PSD permit superseded the 1997 PSD permit, but inadvertently did not include the changes to the FCCU conditions that were in the 2005 GT-13/Low Sulfur Fuels Project PSD permit. As proposed in the red line draft permit attached, a simple strikethrough and note that clarifies which condition is in effect would be helpful and is also only an Administrative Amendment based on the criteria set forth above.

Included in this request is:

- A list of the units in the FCCU PSD permit that are being permanently shut down (below).
- A redline of the 2011 FCCU PSD permit so that it includes the correct permit terms and changes the permittee name.
- A draft permit with changes accepted

List of combustion units in the FCCU PSD permit that are being permanently shut down:

H-1401A (3 CDU)	B-1153 (#3 Boiler)
H-1401B (1 Vac)	B-1154 (#4 Boiler)
H-2101 (2 Vac)	No.1 Gas Turbine (G-1101E)
H-2102 (2 Vac)	No.2 Gas Turbine (G-1101F)
H-2185 (2 Vis)	No.3 Gas Turbine (G-1101G)
B-1151 (#1 Boiler)	No.6 Gas Turbine (G-3406)

If you have any questions, please contact Catherine Elizee at (340) 692-3773.

Sincerely,

Darius Sweet
CEO

Enclosures

cc: Umesh Dholakia (EPA Region 2)
Norman Williams (DPNR)
Verline Marcellin (DPNR)

Fact Sheet

Clean Air Act
Prevention of Significant Deterioration of Air Quality (PSD)
Final Modified Permit – FCCU, Sulfuric Acid Plant, Process Heaters, Tail Gas Treatment Systems and VOC Fugitive Emission Sources
(XXX, 2017- Supersedes 2011 Permit)

LIMETREE BAY TERMINALS, LLC
ST. CROIX, U.S. VIRGIN ISLANDS

A transfer of ownership took place on January 4, 2016, in accordance with the terms of an Amended and Restated Asset Purchase Agreement ("APA") of that same date, between HOVENSA L.L.C. (HOVENSA), Limetree Bay Holdings, LLC, Limetree Bay Terminals, LLC (Limetree Bay Terminals) and Hess Oil Virgin Islands Corp. (HOVIC). The APA conveyed assets from HOVENSA to Limetree Bay Terminals including portions of the real property that comprise terminal assets and above-ground refinery assets located on real property owned by HOVENSA. Limetree Bay Terminals owns an oil refinery and Terminal Storage Facility on the south shore of St. Croix in the Virgin Islands. This fact sheet was developed under provisions of the Clean Air Act (CAA) for the final PSD permit which the EPA Region 2 is issuing to Limetree Bay Terminals for an Administrative Amendment to the FCCU PSD permit to remove certain combustion units that are being permanently shut down and reflect the change in ownership.

- December 12, 1997- HOVIC received a PSD permit for its FCCU, Acid Plant, Process Heaters etc. for its petroleum refinery.
- May 9, 2011 – HOVENSA received the final modified PSD permit authorizing the construction and operation of the new ultra-low NOx Converter Heater replacing the existing low NOx heater at the refinery's sulfuric acid plant. This permit superseded the December 12, 1997 permit issued to HOVIC.
- January 4, 2016 – certain assets were sold by HOVENSA to Limetree Bay Terminals, which included assets which were subject to the 1997 and 2011 PSD permit.

ENCLOSURE I

Final Amended PSD Permit (INSERT DATE, 2017)
(XXX, 2017- Supersedes 2011 HOVENSA L.L.C. Permit)
Limetree Bay Terminals, LLC, St. Croix, U.S. Virgin Islands

The ~~HOVENSA~~ Limetree Bay Terminals, LLC (Limetree Bay Terminals) ~~modification~~ Amendment described in the Fact Sheet is subject to the following conditions ~~(Only Sections III A and VIII A are revised)~~:

Section I of the May 2011 Final Modified permit was superseded and replaced by the August 17, 2011 Final Modified Permit Gas Turbine No. 13/Low Sulfur Fuels Project.

I. FLUID CATALYTIC CRACKING UNIT (FCCU) COMPLEX:

A. ~~HOVENSA shall limit the maximum throughput to the FCCU to 150,000 barrels per calendar day, and the maximum coke burn-off rate to 105,000 pounds per hour~~.

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Conditions VI.C.1, 2 and 3]

B. Sulfur Dioxide (SO_2):

~~a. HOVENSA shall use a low sulfur content feedstock in which the sulfur content does not exceed 0.6 percent by weight.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Conditions VII.C.1.]

~~b. The concentration of SO_2 in the FCCU stack shall not exceed 50 parts per million by volume (ppmv) on a dry basis corrected to 0% oxygen, as determined by continuous monitoring; or the SO_2 emissions to the atmosphere must be reduced by 90%, whichever is less stringent.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – ConditionsVIII.C.3.a., b. and c.]

~~c. The emission rate of SO_2 from the FCCU shall not exceed 195.4 pounds per hour, 855.8 tons per year (TPY), based on the average value of 3 successive test runs using EPA Reference Method (RM) 6C, or the NSPS Method which would be applicable at the time of the test, following a test protocol approved by EPA. See Section X.B. Such tests shall be conducted simultaneously, upstream and downstream of the venturi scrubber.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine

No. 13/Low Sulfur Fuels Project – Condition VIII.C.3.d.]

C. Particulate Matter/PM_{10}:

~~PM and PM_{10} emissions shall not exceed 1.0 pound per 1000 pounds of coke burn-off or 105.0 pounds per hour (total emissions), or 459.9 TPY from the FCCU catalyst regenerator based on the average value of 3 successive test runs using a test protocol approved by EPA. See Section X.B.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Conditions VIII.C.1. and 2.]

D. Oxides of Nitrogen (NOx):

~~a. The maximum concentration of NOx in the stack gas for the FCCU, as determined by continuous monitoring, shall not exceed 296 ppmv of NOx on a dry basis corrected to 7% oxygen. The rolling annual average NOx concentration shall not exceed 246 ppmv on a dry basis corrected to 7% oxygen. (The rolling annual average shall be calculated based upon a daily average of 24 hourly readings.)~~

(Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.4.a.)

~~b. The emission rate of NOx from the FCCU shall not exceed 542.2 pounds per hour (calculated as NO), 1973.7 TPY based on the average value of 3 successive test runs conducted using EPA RM 7E, or the NSPS method which would be applicable at the time of the test following a test protocol approved by EPA. See Section X.B.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.4.a. and b.]

E. Carbon Monoxide (CO):

~~a. HOVENSA shall limit CO emissions to 432 ppmv on a dry basis corrected to 7% oxygen, as determined by continuous monitoring.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.5.a.]

~~b. For any 1-hour period the emission rate of CO from the FCCU shall not exceed 738.6 pounds per hour, 3235.0 TPY as tested using EPA RM 10, or the NSPS method which would be applicable at the time of the test following a test protocol approved by EPA. See Section X.B.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.5.b.]

F. Volatile Organic Compounds (VOC):

~~a. HOVENSA shall limit VOC emissions to 20 ppmv on a dry basis corrected to 7% oxygen, 12.1 pounds per hour, 52.7 TPY based on the average of three successive test runs conducted using a test method approved by EPA.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.6.a.]

~~b. EPA reserves the right to require continuous emission monitoring for VOC.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.6.b.]

G. Opacity:

~~a. HOVENSA shall assure efficient scrubber operation by measuring and maintaining the pressure drop across the venturi scrubber throat.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.7.a.]

~~b. The average opacity as measured by a visual emission observation shall not exceed 20 percent, except for one six minute period in any one hour period as specified under EPA RM 9.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.7.b.]

H. Coke Bum-Off Rate:

a. ~~The coke bum-off rate shall not exceed 105,000 pounds per hour and shall be calculated from the FCCU regenerator flue gas composition~~.

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VI.C.3.]

~~The flue gas will be analyzed daily by EPA RM 3/3A or equivalent analytical method approved by EPA. The flue gas will be analyzed for the following parameters: CO, CO_2, O_2, and inert (Ar, N_2). Water content will be determined by a psychrometric chart. This data will be input into to the unit's TDC 3000 computer and be used to calculate the coke bum-off rate by the following steps:~~

~~1. Continuously measure the air flow rate to the regenerator.~~

~~2. Calculate dry air flow rate with psychrometric chart.~~

~~3. Adjust regenerator flue gas oxygen analysis for argon (if gc method used).~~

~~Argon is an inert and should not be included in the oxygen balance calculations (see step 5, below).~~

~~4. Calculate the coke carbon content by knowing 1 mol carbon is burned for each mol of CO or CO_2 produced. The CO and CO_2 concentrations are determined daily by analysis of the flue gas.~~

~~5. Calculate coke hydrogen content by an oxygen balance between the regenerator air concentration and the flue gas excess oxygen content.~~

~~6. Calculate the hourly coke burn-off rate by adding the coke carbon and hydrogen contents. The daily average coke burn-off will be calculated and reported as a rolling average for any 24-hour period.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition X.2.]

I. Unit Start-Up

~~The FCCU is exempt from the concentration emission limits for CO and VOC, as described in sections I.E.a and I.F.a,, above, for a maximum of 8 hours during start-up of the unit. This exemption shall only be afforded 3 times per year (based on a 365-day rolling average). Start-up of the FCCU begins with the introduction of feed to the reactor, and concludes when a stable regenerator combustion temperature of 1,280 degrees Fahrenheit (°F) has been achieved. Records relating to start-up of the FCCU must be maintained in accordance with section VI, below.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.8.]

II. SULFURIC ACID PLANT:

A. ~~HOVENSA~~Limetree Bay Terminals shall limit the production of the sulfuric acid plant to a maximum of 320 tons per calendar day.

B. Sulfur Dioxide:

a. The emission rate of SO_2 from the sulfuric acid plant shall not exceed 4 pounds per ton of acid produced, 45.8 pounds per hour, 201 TPY based on the average value of 3 successive test runs using EPA RM 6C, or the NSPS Method which would be applicable at the time of the test following a test protocol approved by EPA. See Section X.B.

b. The concentration of SO_2 in the stack gas from the sulfuric acid plant shall not exceed 375 ppmv on a dry basis corrected to 7% oxygen, as determined by continuous monitoring.

C. Nitrogen Oxides:

The emission rate of NOx from the sulfuric acid plant shall not exceed 12.2 pounds per hour (as NO_2), 200 ppmv on a dry basis corrected to 7% O_2, 53.4 TPY based on the average value of 3 successive test runs using EPA RM 7E, or the NSPS method which would be applicable at the time of the test following a test protocol approved by EPA. See Section X.B.

D. Sulfuric Acid Mist (H_2SO_4) and SO_3:

The emission rate of sulfuric acid mist and SO_3 (as defined by NSPS) from the acid plant shall not exceed 0.15 pounds per ton of acid produced, 2.0 pounds per hour, 8.8 TPY based on the average of 3 successive test runs using EPA RM 8, or the NSPS Method which would be applicable at the time of the test following a test protocol approved by EPA. See Section X.B.

E. Opacity:

The opacity shall not exceed 10 percent as determined by visual emission observation made in accordance with RM 9.

F. Unit Start-Up

The Sulfuric Acid Plant is exempt from the SO_2 hourly mass emission limit and the SO_2 concentration emission limit, as described in sections II.B.a and II.B.b, above, for a maximum of 4-hours during start-up of the unit. The SO_2 hourly mass emission rate shall not exceed the PSD permitted limit of 45.8 pounds per hour, based on a 3-hour rolling average. This start-up exemption shall only be afforded 8 times per year (based on a 365-day rolling average). Start-up of the sulfuric acid plant begins with the introduction of acid gas or spent acid to the unit, and concludes when the fourth conversion bed achieves a stable temperature above 780°F. Records relating to start-up of the sulfuric acid plant must be maintained in accordance with section VI, below.

III. PROCESS HEATERS

A. Sulfuric Acid Plant Heaters (Process Air Heater, Converter Heater, and Decomposition Furnace): The maximum combined heat input shall be limited to 42 million British thermal units (MMBtu) per hour. The heaters shall be limited to burning refinery gas or propane as fuel (during all operations), with a hydrogen sulfide content not to exceed 0.1 grains per dry standard cubic foot (gr/dscf).

a. Sulfur Dioxide:

SO_2 emissions shall not exceed 0.79 pounds per hour, 3.2 TPY, 11 ppmv on a dry basis corrected to 7% oxygen.

b. Particulate Matter/PM_{10}:

PM/PM_{10} emissions shall not exceed 0.1 pounds per MMBtu of heat input, 4.2 pounds per hour, 13.4 TPY as determined by EPA RM 5, based on 3 successive test runs using a test protocol approved by EPA. See Section X.B.

c. Nitrogen Oxides:

1. NOx emissions shall not exceed 0.14 pounds per MMBtu of heat input, 4.6 pounds per hour, 18.4 TPY, 96 ppmv on a dry basis corrected to 7% oxygen.

2. ~~HOVENSA~~Limetree Bay Terminals shall use ultra low NOx burners in the Converter Heater and low NOx burners in the Process Heater and the Decomposition Furnace to control NOx emissions at all times.

d. Carbon Monoxide:

CO emissions shall not exceed 0.03 pounds per MMBtu of heat input, 1.3 pounds per hour, 3.9 TPY, 32 ppmv on a dry basis corrected to 7% oxygen.

e. Volatile Organic Compounds:

VOC emissions shall not exceed 0.1 pounds per hour, 0.32 TPY or 5 ppmv as methane on a dry basis corrected to 7% oxygen.

f. Opacity:

The opacity shall not exceed 17 percent, as determined by continuous monitoring, except for 3 minutes in any consecutive 30 minute period during which 40 percent shall not be exceeded.

g. Unit Start-Up:

The sulfuric acid plant process heaters are exempt from the concentration emission limits for CO and VOC, as described in sections III.A.d. and III.A.e, above, for a maximum of 1-hour during start-up of the unit(s). This exemption shall only be afforded 8 times per year (based on a 365-day rolling average). Start-up of a process heater begins with the introduction of feed to the unit, and concludes when minimum, stable temperatures are achieved. Records relating to start-up of the sulfuric acid plant process heaters must be maintained in accordance with section VI, below.

B. [INTENTIONALLY DELETED] ~~Visbreaker #2: The maximum heat input shall be limited to 250 MMBtu per hour. Visbreaker #2 shall be limited to burning only refinery gas or LPG with a hydrogen sulfide content not to exceed 0.1 gr/dscf.~~

~~a. Sulfur Dioxide:~~

~~SO_2 emissions shall not exceed 4.42 pounds per hour, 19.38 TPY, 13.0 ppmv on a dry basis corrected to 7% oxygen.~~

~~b. Particulate Matter/PM_{10}:~~

~~PM/PM_{10} emissions shall not exceed 0.1 pounds per MMBtu of heat input, 25.0 pounds per hour, 110 TPY, as determined by EPA RM 5, or the NSPS method which would be applicable at the time of the test following a test protocol approved by EPA. See Section X.B.~~

~~c. Nitrogen Oxides:~~

~~NOx emissions shall not exceed 0.2 pounds per MMBtu of heat input, 50.3 pounds per hour, 219 TPY, 148 ppmv on a dry basis corrected to 7% oxygen as determined by continuous monitoring.~~

~~d. Carbon Monoxide:~~

~~CO emissions shall not exceed 10.2 pounds per hour, 45.1 TPY, 50.0 ppmv on a dry basis corrected to 7% oxygen.~~

~~e. Volatile Organic Compounds:~~

~~VOC emissions shall not exceed 1.6 pounds per hour, 7 TPY, 15 ppmv as methane on a dry basis corrected to 7% oxygen.~~

~~f. Opacity:~~

~~The opacity shall not exceed 17 percent as determined by continuous monitoring, except for 3 minutes in any consecutive 30 minute period during which 40 percent shall not be exceeded.~~

C. Existing Residual Fuel-Consuming Units:

a. The existing residual fuel-consuming units listed in this section shall operate in one of three operating scenarios. During times when persistent, on-shore wind conditions prevail, ~~HOVENSA~~Limetree Bay Terminals shall operate the affected units pursuant to the "supplemental control operating scenario." During all other times, ~~HOVENSA~~Limetree Bay Terminals shall operate the affected units pursuant to either the "reduced fuel-use operating scenario," or the "normal operating scenario," as described below.

b. ~~HOVENSA~~Limetree Bay Terminals shall monitor and record residual fuel-oil usage of all of the oil-fired units listed in this section, for each operating scenario. Monitoring and record keeping shall be performed in accordance with section VI of this permit.

c. Supplemental Control Operation

1. This scenario shall be implemented during times when persistent, on-shore

wind conditions prevail, as described below. The residual fuel-oil used when this scenario is implemented shall have a sulfur content not greater than 0.5 percent by weight.

This supplemental control scenario may be modified by EPA to protect against exceedances of the SO_2 National Ambient Air Quality Standards (NAAQS). If it is determined that ~~HOVENSA's~~ Limetree Bay Terminals' use of this supplemental control scenario is causing or contributing to an exceedance of the NAAQS, EPA may terminate this plan through rulemaking procedures.

Specific procedures and protocols to be followed by ~~HOVENSA~~ Limetree Bay Terminals to implement this supplemental control scenario are delineated in ***Appendix 1***, "Air Quality Control Fuel Switching Plan for Hess Oil Virgin Islands Corp."

2. The supplemental control scenario shall be implemented when any one of the following three conditions occurs:

   i. When any one of ~~HOVENSA's~~ Limetree Bay Terminals' five ambient SO_2 monitoring stations records a rolling 24-hour average SO_2 concentration equal to or greater than 75 percent of the 24-hour NAAQS (that is, 274 $\mu g/m^3$ or 0.105 ppm).

      The monitoring data will be collected according to EPA "SLAMS" procedures but will, for the purposes of this supplemental control scenario, be averaged by the hour, starting on the hour.

   ii. During times of persistent on-shore wind conditions. That is, when the hourly average winds blow from a 45 degree sector, defined as 143 to 187 degrees, inclusive, where zero degrees is due north, for at least six consecutive hours during a 24-hour block period, or any 12 non-consecutive hours during a 24-hour block period.

      Wind direction will be monitored by a meteorological tower located on ~~HOVENSA~~ Limetree Bay Terminals property, and will be collected and reported as 1-hour averages, starting on the hour. If the average wind direction for a given hour is from within the designated 45 degree sector, the wind will be deemed to have flowed from within the designated sector for that hour. A 24- hour block period is defined as beginning at midnight, and ending on the following midnight.

   iii. When ~~HOVENSA's~~ Limetree Bay Terminals' meteorological station is inoperable for six consecutive hours.

3. During the times when this supplemental control scenario is implemented, the lower sulfur fuel-oil (0.5% sulfur by weight) shall be burned in the

following units:

Unit	Source Number(s)
No. 1 VIS	H-101, H-104
~~3 CDU/1 VAC~~	~~H-1401A, H-1401B~~
No. 2 CDU	H-401A, H-401B, H-401C
~~No. 2 VAC~~	~~H-2101, H-2102~~
No. 5 CDU	H-3101A, H-3101B
No. 6 CDU	H-4101A, H-4101B
No. 3 VAC	H-4201, H-4202
W UTIL	All West-Side Boilers (~~B-1151,~~ B-1152A, ~~B-1153, B-1154~~, B-1155)
E UTIL	All East-Side Boilers (B-3301, B-3302, B-3303, B-3304)

4. ~~HOVENSA~~ Limetree Bay Terminals may switch back to the higher sulfur fuel-oil (a fuel- oil with a sulfur content of 1.0 percent by weight) in accordance with the following conditions:

   i. If the switch to the lower sulfur fuel-oil was triggered by III.C.c.2.i, above, the switch back to 1.0% sulfur fuel-oil may occur after all five of ~~HOVENSA's~~ Limetree Bay Terminals' ambient SO_2 monitors measure a 24-hour average SO_2 concentration that is less than 75 percent of the SO_2 NAAQS for at least one 24-hour block period, following any occurrence when at least one monitor measured a 24-hour average SO_2 concentration that was 75 percent of the NAAQS or greater.

   ii. If the switch to the lower sulfur fuel-oil was triggered by III.C.c.2.ii, above, the switch back to 1.0% sulfur fuel-oil may occur when the winds blow outside of the 143 to 187 degree sector for at least 3 consecutive hours, following the period during which the winds were blowing inside the designated sector.

   iii. If the switch to the lower sulfur fuel-oil was triggered by both III.C.c.2.i and III.C.c.2.ii, above, the switch back to 1.0% sulfur fuel-oil may occur when both of the conditions delineated under III.C.c.4.i and III.C.c.4.ii are met.

   iv. If the switch to the lower sulfur fuel-oil was triggered by III.C.c.2.iii, above, the switch back to 1.0% sulfur fuel-oil may occur when the meteorological station becomes operable, and 3 consecutive hours of

wind conditions outside of the 143 to 187 degree sector have occurred.

d. Reduced Fuel-Use Operation

1. When the supplemental control operating scenario is not being implemented, ~~HOVENSA~~ Limetree Bay Terminals shall implement either the reduced fuel- use operating scenario or the normal operating scenario, as described in section III.C.e, below. Reduced fuel-use operating scenario: ~~HOVENSA~~ Limetree Bay Terminals recently improved waste heat recovery in several process units. That is, ~~HOVENSA~~ Limetree Bay Terminals can recover heat in the form of steam, which reduces the need for steam production by east and west refinery boilers, thereby lowering fuel-use requirements. It is anticipated that, during times when routine, off- shore wind conditions prevail, ~~HOVENSA~~ Limetree Bay Terminals will operate pursuant to the reduced fuel-use operating scenario a significant part of the time.

2. The units listed below will be limited to the following annual fuel- oil use, based upon operation at the maximum daily rate 90% of the year. [The annual fuel use is calculated by multiplying the number of days operated in this reduced fuel-use operating scenario by the calendar day barrel limit; the maximum annual limit equals 90% of maximum usage.] The residual fuel-oil used when this scenario is implemented shall have a sulfur content not greater than 1.0 percent by weight.

Unit	Source No.	Fuel Oil Limit (Barrels/Day)
No. 1 VIS	H-101, H-104	446
~~3 CDU/1 VAC~~	~~H-1401A, B~~	~~408~~
No. 2 CDU	H401A,B,C	996
~~No. 2 VAC~~	~~H-2101, 2102~~	~~842~~
No. 5CDU	H-3101A, B	1260
No. 6 CDU	H-4101A,B	1260
No. 3 VAC	H-4201, 4202	1035
W UTIL	B-1155	760
W UTIL	All West Side Boilers (~~B1151,~~ 1152A, ~~1153, 1154~~, 1155)	1082
E UTIL	B3301, 3302	800
E UTIL	All East Side Boilers (B3301, 3302, 3303, 3304)	1506

3. Should additional fuel be needed at these units, ~~HOVENSA~~ Limetree Bay Terminals shall be limited to burning only refinery gas or LPG to accommodate such needs.

e. Normal Operation

1. This scenario shall be implemented during times when routine, off- shore wind conditions prevail, and ~~HOVENSA~~ Limetree Bay Terminals is not operating pursuant to the reduced fuel-use operating scenario.

2. The units listed below will be limited to the following annual fuel- oil use, based upon operation at the maximum daily rate 90% of the year. [The annual fuel use is calculated by multiplying the number of days operated in this normal operating scenario by the calendar day barrel limit; the maximum annual limit equals 90% of maximum usage.] The residual fuel-oil used when this scenario is implemented shall have a sulfur content not greater than 1.0 percent by weight.

Unit		Fuel-Oil Limit (Barrels Per Calendar Day)
No. 1 VIS	H-101, H-104	415
~~3 CDU/1 VAC~~	~~H-1401A, H-1401B~~	~~0~~
No. 2 CDU	H-401A, H-401B, H-401C	282
~~No. 2 VAC~~	~~H-2101, H-2102~~	~~1,154~~
No. 5 CDU	H-3101A, H-3101B	1,210
No. 6 CDU	H-4101A, H-4101B	1,210
No. 3 VAC	H-4201, H-4202	1,273
W UTIL	B-1155	592
W UTIL	All West-Side Boilers (~~B-1151,~~ B-1152A, ~~B-1153, B-1154,~~ B-1155)	2,261
E UTIL	B-3301, B-3302	1,138
E UTIL	All East-Side Boilers (B-3301, B-3302, B-3303, B-3304)	3,325

3. Should additional fuel be needed at these units, ~~HOVENSA~~ Limetree Bay

Terminals shall be limited to burning only refinery gas or LPG to accommodate such needs.

D. Existing Distillate Fuel-Consuming Units:

a. The existing distillate fuel-consuming units listed in this section shall operate in one of two operating scenarios. That is, ~~HOVENSA~~ Limetree Bay Terminals shall operate the affected units pursuant to either the reduced fuel-use operating scenario, or the normal operating scenario, as described in sections III.C.d and III.C.e, respectively.

b. ~~HOVENSA~~ Limetree Bay Terminals shall monitor and record the distillate fuel-oil usage of all of the oil-fired units listed in this section, for each operating scenario.

Monitoring and record keeping shall be performed in accordance with section VI of this permit.

c. Reduced Fuel-Use Operation

1. When the reduced fuel-use operating scenario is implemented, the units listed below will be limited to the following annual fuel-oil use, based upon operation at the maximum daily rate 90% of the year. [The annual fuel use is calculated by multiplying the number of days operated in this reduced fuel-use operating scenario by the calendar day barrel limit; the maximum annual limit equals 90% of maximum usage.] The distillate fuel-oil used when this scenario is implemented shall have a sulfur content not greater than 0.2 percent by weight.

Unit		Fuel-Oil Limit (Barrels Per Calendar Day)
~~W UTIL~~	~~G1101-E, G1101-F, G1101-G~~	~~1,800~~
E UTIL	G3404, G3405, ~~G3406~~, G3407, G3408, G3409, G3410	4,000
E ~~& W~~ UTIL	All Turbines	4,800

2. Should additional fuel be needed at these units, ~~HOVENSA~~ Limetree Bay Terminals shall be limited to burning only refinery gas or LPG to accommodate such needs.

d. Normal Operation

1. When the normal operating scenario is implemented, the units listed below will be limited to the following annual fuel-oil use, based upon operation at the maximum daily rate 90% of the year. [The annual fuel use is calculated by multiplying the number of days operated in this normal operating scenario by the calendar day barrel limit; the maximum annual limit equals 90% of maximum usage.] The distillate fuel-oil used when this scenario is implemented shall have a sulfur content not greater than 0.2 percent by weight.

Unit	Source Number(s)	Fuel-Oil Limit (Barrels Per Calendar Day)
~~W UTIL~~	~~GI101-E, GI101-F, GI101-G~~	~~1,539~~
E UTIL	G3404, G3405, ~~G3406~~, G3407, G3408, G3409, G3410	3,888
E ~~& W~~ UTIL	All Turbines	5,427

2. Should additional fuel be needed at these units, ~~HOVENSA~~ Limetree Bay Terminals shall be limited to burning only refinery gas or LPG to accommodate such needs.

e. Other Distillate Oil-Fired Units

The following distillate oil-fired units have no limits on the amount of 0.2% sulfur distillate fuel-oil that can be burned on a daily or annual basis.

P-1602:	Diesel driven standby pump seawater intake
P-1603:	Diesel driven standby pump seawater intake
P-1604:	Diesel driven standby pump seawater intake
P-1605:	Diesel driven standby pump seawater intake
P-1620:	Diesel driven standby pump desalination water

IV. TAIL GAS TREATMENT SYSTEM:

The tail gas treatment system at ~~HOVENSA~~ Limetree Bay Terminals is comprised of four existing sulfur recovery units (Claus Plants) and two existing Beavon Units.

A. Except as provided below, ~~HOVENSA~~ Limetree Bay Terminals shall vent all tail gas from the sulfur recovery units to the Beavon units at all times.

B. ~~HOVENSA~~ Limetree Bay Terminals shall vent the tail gas from the sulfur recovery units in the following manner when one of the two Beavon units is not operating:

a. Transfer all acid gas streams (which may originate at the amine treating unit, sour water stripper, other gas sweetening processes, etc.), excluding that from the acid plant, to the sulfur recovery units associated with the operating Beavon unit.

b. Vent excess tail gas to any of the two existing incinerators when the operating Beavon unit is charged to capacity. ~~HOVENSA~~ Limetree Bay Terminals shall provide written justification to the EPA describing the nature of the venting and provide planned mitigation procedures to the EPA for prior approval.

C. ~~HOVENSA~~ Limetree Bay Terminals shall vent all Claus Plant tail gas to any of the two existing incinerators when neither Beavon unit is operating. ~~HOVENSA~~ Limetree Bay Terminals shall provide written justification to the EPA describing the nature of the outage and provide planned mitigation procedures to the EPA for prior approval.

D. In addition to the conditions set forth in IV.B.a and IV.B.b, above, ~~HOVENSA~~ Limetree Bay Terminals shall comply with the following when either one or both Beavon units are not operating and tail gas is being vented to an incinerator:

a. ~~HOVENSA~~ Limetree Bay Terminals shall discontinue the use of 1.0 percent sulfur fuel-oil and revert to the use of 0.5 percent sulfur fuel-oil in all new and existing residual oil-burning sources within the ~~HOVENSA~~ Limetree Bay Terminals plant.

b. ~~HOVENSA~~ Limetree Bay Terminals shall limit SO_2 emissions from all incinerators associated with each pair of sulfur recovery units to a total of 30 tons per day.

c. In no event shall tail gas not be vented to the Beavon units for more than 30 days per calendar year, with a maximum of 14 continuous days.

E. ~~HOVENSA~~ Limetree Bay Terminals shall operate in compliance a continuous emission monitoring system for SO_2/H_2S at the outlet of the sulfur recovery unit(s) in accordance with the Quality Assurance Plan.

F. ~~HOVENSA~~ Limetree Bay Terminals shall maintain an operation log

specifically for the Claus plants and the Beavon units. Such logs shall be made available upon request.

G. ~~HOVENSA~~ Limetree Bay Terminals shall limit sulfur concentration emissions from both Beavon units to no more than 50 ppmv hydrogen sulfide (H_2S) dry at 0% oxygen as determined by a continuous monitor.

H. ~~HOVENSA~~ Limetree Bay Terminals shall operate in compliance a continuous emission monitoring system to track the H_2S concentration, flow rate, and temperature at the Beavon stack.

V. VOC FUGITIVE EMISSION SOURCES:

Fugitive emission sources of VOCs include the wastewater treatment system conveyance lines, pump and compressor seals, cooling towers, valves and flanges, and storage and loading facilities.

A. ~~HOVENSA~~ Limetree Bay Terminals shall monitor fugitive emissions from the FCCU complex in accordance with the requirements of NSPS Subpart GGG, Fugitive Equipment Leaks in Petroleum Refineries.

B. The wastewater treatment system conveyance lines shall incorporate traps and shall be enclosed, wherever possible.

C. The API (American Petroleum Institute) separator shall be covered.

D. ~~HOVENSA~~ Limetree Bay Terminals shall utilize dual mechanical pump and compressor seals, wherever possible.

VI. MONITORING, RECORDING, AND RECORD KEEPING:

A. The FCCU complex, ~~the visbreaker,~~ the sulfuric acid plant, the sulfuric acid plant process heaters, and the tail gas treatment plant shall be equipped with operable continuous emission monitors to measure the pollutants and/or operating parameters, as indicated below:

FCCU Complex:	CO, O_2, NO_x, and SO_2 (inlet and outlet of the venturi gas scrubber for SO_2), regenerator temperature, and pressure across the venturi scrubber throat
Sulfuric Acid Plant:	O_2 and SO_2

Sulfuric Acid Plant Heaters:	Opacity, O_2
~~Visbreaker #2:~~	~~NOx, Opacity, O_2~~
Tail Gas Treatment:	SO_2/H_2S analyzers at outlet of the sulfur recovery unit(s), and H_2S at outlet of the Beavon Unit(s)

B. ~~HOVENSA~~ Limetree Bay Terminals shall install, calibrate and test each continuous emission monitor (CEM) and recorder listed in VI.A. Monitors must comply with EPA performance and siting specifications pursuant to 40 CFR Part 60, Appendix B, Performance Specifications 1-4. Equipment specifications, calibration and operating procedures, and data evaluation and reporting procedures shall be submitted to EPA in a Performance Specification Test protocol. EPA reserves the right to require the auditing of the CEMs by independent agents.

C. Records shall be kept to accurately maintain the following:

a. the daily fresh feed rate (barrels), and the sulfur content of the feed to the FCCU complex;

b. the daily coke bum-off rate (1000 pounds per hour) and hours of operation for the FCCU regenerator;

c. the daily tons of sulfuric acid produced;

d. the fuel-oil fired (in barrels and gallons) in all of the fuel-oil fired units listed in Sections III.C and III.D of this permit;

e. the date and time of each change in operating scenario under Sections III.C and III.D of this permit;

f. exceedance of the emission limitations of this permit, as determined by continuous monitoring;

g. the sulfur content of all fuel oil burned;

h. the H_2S content of all refinery gas burned;

i. Reference Method 9 readings at the sulfuric acid plant;

j. the scrubber water feed rate; and

k. the beginning, duration and completion of start-up episodes for the FCCU complex, the sulfuric acid plant and the sulfuric acid plant process heaters, pursuant to the emission exemptions of Sections I, II and III of this permit. Also, the reason(s) for the prior shutdown of these facilities must be recorded.

D. All records specified in this Section must be maintained for a period of five years after the date of record, and must be made available for inspection by the EPA and the Virgin Islands Department of Planning and Natural Resources (VIDPNR), upon request.

E. In each report quarter, a 95% quality data availability shall be maintained for all opacity monitors, and a 90% quality data availability shall be maintained for all gaseous monitors. There shall be a quality assurance plan coupled with a calibration and maintenance program.

F. When combusting residual fuel oil ~~HOVENSA~~ Limetree Bay Terminals shall continuously monitor wind conditions in accordance with the HOVENSA Meteorological Monitoring Plan dated September 5, 1991. Data on wind direction shall be monitored and recorded. The Limetree Bay Terminals~~HOVENSA~~ meteorological station shall be audited semiannually by an independent party. Maintenance and calibration records shall be maintained.

G. When combusting residual fuel oil ~~HOVENSA~~ Limetree Bay Terminals shall operate five ambient SO_2 monitoring stations, two to the west of the refinery and three to the north of the refinery, for purposes relating to the supplemental control scenario as delineated under section III.C.c of this permit. These monitors shall record hourly average and 24-hour rolling average SO_2 concentrations. In the event that monitoring data indicate an exceedance of the NAAQS, ~~HOVENSA~~ Limetree Bay Terminals shall report the exceedance to EPA, and shall recommend corrective action and modifications to the supplemental control scenario, to ensure protection of the NAAQS.

H. ~~HOVENSA~~ Limetree Bay Terminals shall develop a plan to monitor the residual and distillate fuel-oil usage pursuant to Sections III.C and III.D of this permit. Such a plan must be approved by EPA.

VII. REPORTING REQUIREMENTS:

A. All emission reports, testing reports, start-up notifications, and any other reports required under this permit shall be submitted to the EPA official named below. Three copies of any stack test report must be submitted within 60 days after completion.

Chief, Air Compliance Branch
Division of Enforcement and
Compliance Assistance
U.S. EPA Region 2 Office
290 Broadway
New York, NY 10007-1866

B. Upsets/Malfunctions:

a. Upsets/Malfunctions, changes in operating scenarios, and implementation of the ~~HOVENSA~~ Limetree Bay Terminals supplemental control plan must be reported by telephone or facsimile within four hours, with a follow-up letter submitted within seven calendar days to:

Director, Division of Environmental Protection
Virgin Islands Department of Planning and Natural Resources
1118 Water Gut Homes
Christiansted
St. Croix, U.S. Virgin Islands 00820
Phone: (340) 773-1082
Fax: (340) 773-9310

b. ~~HOVENSA~~ Limetree Bay Terminals shall submit a written report of excess emissions, the number of days operating under each operating scenario, and operation of the ~~HOVENSA~~ Limetree Bay Terminals supplemental control plan to EPA every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the information specified below:

1. For excess emissions from the FCCU complex, provide the following information:

   i. The magnitude of excess emissions computed in accordance with 40 CFR Part 60.13(h), all conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions.

   ii. Specific identification of each period of excess emissions that occurred during start-ups, shutdowns, and malfunctions of the affected facility.

   iii. The nature and cause of any malfunction of the

affected facility (if known), and the corrective action taken or preventative measures adopted.

2. For apparent excess emissions due to CEM malfunction, provide the date and time identifying each period during which the continuous monitoring system was inoperative (not including zero and span checks), and the nature of the system repairs or adjustments.

3. When no excess emissions have occurred, or the continuous monitoring system(s) has not been inoperative, repaired or adjusted, such information shall be stated in the report.

4. For the existing fuel-consuming units, provide the number of days of operation for each operating scenario implemented during the reporting quarter.

5. For implementation of the ~~HOVENSA~~ Limetree Bay Terminals supplemental control plan, provide the date(s) and time(s) for each period that this plan was operational. If the plan was triggered by SO_2 monitoring data, provide the monitoring data. If the plan was triggered by wind conditions, provide the wind data that resulted in plan implementation, as well as wind data for the duration and conclusion of plan implementation. Each semiannual meteorological station audit report shall be submitted with the appropriate quarterly report.

c. The quarterly excess emission reports required in this section shall be sent to the following EPA official, and copies must also be sent to the Chief of the Air Compliance Branch, EPA Region 2, and the Director of the Division of Environmental Protection, VIDPNR, at the addresses listed above.

Region 2 CEM Coordinator
Monitoring and Assessment Branch
Division of Environmental Science and Assessment
U.S. EPA Region 2 Office
2890 Woodbridge Avenue
Edison, New Jersey 08837

VIII. NEW SOURCE PERFORMANCE STANDARDS (NSPS)/NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP):

A. This facility is subject to the General Provisions of the NSPS (40 CFR, Part 60, Subpart A), the NSPS for Sulfuric Acid Plants (40 CFR, Part 60, Subpart H), the NSPS for Petroleum Refineries (40 CFR, Part 60, Subpart J and Ja (for the Sulfuric Acid Plant Converter Heater), the NSPS for Volatile Organic Liquid Storage Vessels [Including Petroleum Liquid Storage Vessels] (40 CFR, Part 60, Subpart Kb), the NSPS for Equipment Leaks for VOC in Petroleum Refineries

(40 CFR, Part 60, Subpart GGG), and the NSPS for VOC Emissions from Petroleum Refinery Wastewater Systems (40 CFR, Part 60, Subpart QQQ).

B. This facility shall demonstrate compliance with the General Provisions of the NESHAP (40 CFR, Part 61, Subpart A), the National Emission Standard for Equipment Leaks [Fugitive Emission Source] of Benzene (40 CFR, Part 61, Subpart J), the National Emission Standard for Equipment Leaks [Fugitive Emission Source] (40 CFR, Part 61, Subpart V), and the National Emission Standard for Benzene Waste Operations (40 CFR, Part 61, Subpart FF).

IX. OTHER PERMIT CONDITIONS:

A. ~~HOVENSA~~ Limetree Bay Terminals shall meet all other applicable federal, state and local requirements, including those contained in the Virgin Islands State Implementation Plan (VISIP).

X. TESTING REQUIREMENTS:

A. ~~HOVENSA~~ Limetree Bay Terminals shall conduct stack tests at the FCCU complex and at the sulfuric acid plant, in accordance with the test methods published in 40 CFR Part 60, Appendix A. All tests on a given unit must be conducted within 60 days after achieving maximum production rate at which the facility will normally be operated, but no later than 180 days after initial start-up at the revised rates established by this permit.

B. ~~HOVENSA~~ Limetree Bay Terminals shall obtain approval of a stack test protocol. A detailed description of the sampling point locations, sampling equipment, sampling and analytical procedures, data reporting forms, quality assurance procedures and operating conditions for such tests must be submitted to the EPA at least 120 days prior to start-up of the facility.

C. ~~HOVENSA~~ Limetree Bay Terminals shall notify EPA and VIDPNR at least 30 days prior to actual testing.

D. ~~HOVENSA~~ Limetree Bay Terminals shall provide permanent sampling and testing facilities as may be required by the EPA to determine the nature and quantity of emissions from the FCCU. Such facilities shall conform with all applicable laws and regulations concerning safe construction and safe practice.

EPA reserves the right to require additional stack testing of the pollutants for which an emission limitation has been established in Sections I, II and III of this permit.

ENCLOSURE I

Final Amended PSD Permit (INSERT DATE, 2017)
(XXX, 2017- Supersedes 2011 HOVENSA L.L.C. Permit)
Limetree Bay Terminals, LLC, St. Croix, U.S. Virgin Islands

The Limetree Bay Terminals, LLC (Limetree Bay Terminals) Amendment described in the Fact Sheet is subject to the following conditions:

Section I of the May 2011 Final Modified permit was superseded and replaced by the August 17, 2011 Final Modified Permit Gas Turbine No. 13/Low Sulfur Fuels Project.

I. FLUID CATALYTIC CRACKING UNIT (FCCU) COMPLEX:

A. ~~HOVENSA shall limit the maximum throughput to the FCCU to 150,000 barrels per calendar day, and the maximum coke burn-off rate to 105,000 pounds per hour~~.

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Conditions VI.C.1, 2 and 3]

B. Sulfur Dioxide (SO_2):

~~a. HOVENSA shall use a low sulfur content feedstock in which the sulfur content does not exceed 0.6 percent by weight.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Conditions VII.C.1.]

~~b. The concentration of SO_2 in the FCCU stack shall not exceed 50 parts per million by volume (ppmv) on a dry basis corrected to 0% oxygen, as determined by continuous monitoring; or the SO_2 emissions to the atmosphere must be reduced by 90%, whichever is less stringent.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – ConditionsVIII.C.3.a., b. and c.]

~~c. The emission rate of SO_2 from the FCCU shall not exceed 195.4 pounds per hour, 855.8 tons per year (TPY), based on the average value of 3 successive test runs using EPA Reference Method (RM) 6C, or the NSPS Method which would be applicable at the time of the test, following a test protocol approved by EPA. See Section X.B. Such tests shall be conducted simultaneously, upstream and downstream of the venturi scrubber.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.3.d.]

C. Particulate Matter/PM_{10}:

~~PM and PM_{10} emissions shall not exceed 1.0 pound per 1000 pounds of coke burn-off or 105.0 pounds per hour (total emissions), or 459.9 TPY from the FCCU catalyst regenerator based on the average value of 3 successive test runs using a test protocol approved by EPA. See Section X.B.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Conditions VIII.C.1. and 2.]

D. Oxides of Nitrogen (NOx):

~~a. The maximum concentration of NOx in the stack gas for the FCCU, as determined by continuous monitoring, shall not exceed 296 ppmv of NOx on a dry basis corrected to 7% oxygen. The rolling annual average NOx concentration shall not exceed 246 ppmv on a dry basis corrected to 7% oxygen. (The rolling annual average shall be calculated based upon a daily average of 24 hourly readings.)~~

(Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.4.a.)

~~b. The emission rate of NOx from the FCCU shall not exceed 542.2 pounds per hour (calculated as NO), 1973.7 TPY based on the average value of 3 successive test runs conducted using EPA RM 7E, or the NSPS method which would be applicable at the time of the test following a test protocol approved by EPA. See Section X.B.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.4.a. and b.]

E. Carbon Monoxide (CO):

~~a. HOVENSA shall limit CO emissions to 432 ppmv on a dry basis corrected to 7% oxygen, as determined by continuous monitoring.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.5.a.]

~~b. For any 1-hour period the emission rate of CO from the FCCU shall not exceed 738.6 pounds per hour, 3235.0 TPY as tested using EPA RM 10, or the NSPS method which would be applicable at the time of the test following a test protocol approved by EPA. See Section X.B.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.5.b.]

F. Volatile Organic Compounds (VOC):

~~a. HOVENSA shall limit VOC emissions to 20 ppmv on a dry basis corrected to~~

~~7% oxygen, 12.1 pounds per hour, 52.7 TPY based on the average of three successive test runs conducted using a test method approved by EPA.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.6.a.]

~~b. EPA reserves the right to require continuous emission monitoring for VOC.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.6.b.]

G. Opacity:

~~a. HOVENSA shall assure efficient scrubber operation by measuring and maintaining the pressure drop across the venturi scrubber throat.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.7.a.]

~~b. The average opacity as measured by a visual emission observation shall not exceed 20 percent, except for one six-minute period in any one-hour period as specified under EPA RM 9.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.7.b.]

H. Coke Burn-Off Rate:

a. ~~The coke burn-off rate shall not exceed 105,000 pounds per hour and shall be calculated from the FCCU regenerator flue gas composition~~.

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VI.C.3.]

~~The flue gas will be analyzed daily by EPA RM 3/3A or equivalent analytical method approved by EPA. The flue gas will be analyzed for the following parameters: CO, CO_2, O_2, and inert (Ar, N_2). Water content will be determined by a psychrometric chart. This data will be input into to the unit's TDC-3000 computer and be used to calculate the coke burn-off rate by the following steps:~~

~~1. Continuously measure the air flow rate to the regenerator.~~

~~2. Calculate dry air flow rate with psychrometric chart.~~

~~3. Adjust regenerator flue gas oxygen analysis for argon (if gc method used). Argon is an inert and should not be included in the oxygen balance calculations (see step 5, below).~~

~~4. Calculate the coke carbon content by knowing 1 mol carbon is burned for each mol of CO or CO_2 produced. The CO and CO_2 concentrations are determined daily by analysis of the flue gas.~~

~~5. Calculate coke hydrogen content by an oxygen balance between the regenerator air concentration and the flue gas excess oxygen content.~~

~~6. Calculate the hourly coke burn-off rate by adding the coke carbon and hydrogen contents. The daily average coke burn-off will be calculated and reported as a rolling average for any 24-hour period.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition X.2.]

I. Unit Start-Up

~~The FCCU is exempt from the concentration emission limits for CO and VOC, as described in sections I.E.a and I.F.a,, above, for a maximum of 8 hours during start-up of the unit. This exemption shall only be afforded 3 times per year (based on a 365-day rolling average). Start-up of the FCCU begins with the introduction of feed to the reactor, and concludes when a stable regenerator combustion temperature of 1,280 degrees Fahrenheit (°F) has been achieved. Records relating to start-up of the FCCU must be maintained in accordance with section VI, below.~~

[Superseded by August 17, 2011 Final Modified Permit – Gas Turbine No. 13/Low Sulfur Fuels Project – Condition VIII.C.8.]

II. SULFURIC ACID PLANT:

A. Limetree Bay Terminals shall limit the production of the sulfuric acid plant to a maximum of 320 tons per calendar day.

B. Sulfur Dioxide:

a. The emission rate of SO_2 from the sulfuric acid plant shall not exceed 4 pounds per ton of acid produced, 45.8 pounds per hour, 201 TPY based on the average value of 3 successive test runs using EPA RM 6C, or the NSPS Method which would be applicable at the time of the test following a test protocol approved by EPA. See Section X.B.

b. The concentration of SO_2 in the stack gas from the sulfuric acid plant shall not exceed 375 ppmv on a dry basis corrected to 7% oxygen, as determined by continuous monitoring.

C. Nitrogen Oxides:

The emission rate of NOx from the sulfuric acid plant shall not exceed 12.2 pounds

per hour (as NO_2), 200 ppmv on a dry basis corrected to 7% O_2, 53.4 TPY based on the average value of 3 successive test runs using EPA RM 7E, or the NSPS method which would be applicable at the time of the test following a test protocol approved by EPA. See Section X.B.

D. Sulfuric Acid Mist (H_2SO_4) and SO_3:

The emission rate of sulfuric acid mist and SO_3 (as defined by NSPS) from the acid plant shall not exceed 0.15 pounds per ton of acid produced, 2.0 pounds per hour, 8.8 TPY based on the average of 3 successive test runs using EPA RM 8, or the NSPS Method which would be applicable at the time of the test following a test protocol approved by EPA. See Section X.B.

E. Opacity:

The opacity shall not exceed 10 percent as determined by visual emission observation made in accordance with RM 9.

F. Unit Start-Up

The Sulfuric Acid Plant is exempt from the SO_2 hourly mass emission limit and the SO_2 concentration emission limit, as described in sections II.B.a and II.B.b, above, for a maximum of 4-hours during start-up of the unit. The SO_2 hourly mass emission rate shall not exceed the PSD permitted limit of 45.8 pounds per hour, based on a 3-hour rolling average. This start-up exemption shall only be afforded 8 times per year (based on a 365-day rolling average). Start-up of the sulfuric acid plant begins with the introduction of acid gas or spent acid to the unit, and concludes when the fourth conversion bed achieves a stable temperature above 780°F. Records relating to start-up of the sulfuric acid plant must be maintained in accordance with section VI, below.

III. PROCESS HEATERS

A. Sulfuric Acid Plant Heaters (Process Air Heater, Converter Heater, and Decomposition Furnace): The maximum combined heat input shall be limited to 42 million British thermal units (MMBtu) per hour. The heaters shall be limited to burning refinery gas or propane as fuel (during all operations), with a hydrogen sulfide content not to exceed 0.1 grains per dry standard cubic foot (gr/dscf).

a. Sulfur Dioxide:

SO_2 emissions shall not exceed 0.79 pounds per hour, 3.2 TPY, 11 ppmv on a dry basis corrected to 7% oxygen.

b. Particulate Matter/PM_{10}:

PM/PM_{10} emissions shall not exceed 0.1 pounds per MMBtu of heat input,

4.2 pounds per hour, 13.4 TPY as determined by EPA RM 5, based on 3 successive test runs using a test protocol approved by EPA. See Section X.B.

c. Nitrogen Oxides:

1. NOx emissions shall not exceed 0.14 pounds per MMBtu of heat input, 4.6 pounds per hour, 18.4 TPY, 96 ppmv on a dry basis corrected to 7% oxygen.

2. Limetree Bay Terminals shall use ultra low NOx burners in the Converter Heater and low NOx burners in the Process Heater and the Decomposition Furnace to control NOx emissions at all times.

d. Carbon Monoxide:

CO emissions shall not exceed 0.03 pounds per MMBtu of heat input, 1.3 pounds per hour, 3.9 TPY, 32 ppmv on a dry basis corrected to 7% oxygen.

e. Volatile Organic Compounds:

VOC emissions shall not exceed 0.1 pounds per hour, 0.32 TPY or 5 ppmv as methane on a dry basis corrected to 7% oxygen.

f. Opacity:

The opacity shall not exceed 17 percent, as determined by continuous monitoring, except for 3 minutes in any consecutive 30 minute period during which 40 percent shall not be exceeded.

g. Unit Start-Up:

The sulfuric acid plant process heaters are exempt from the concentration emission limits for CO and VOC, as described in sections III.A.d. and III.A.e, above, for a maximum of 1-hour during start-up of the unit(s). This exemption shall only be afforded 8 times per year (based on a 365-day rolling average). Start-up of a process heater begins with the introduction of feed to the unit, and concludes when minimum, stable temperatures are achieved. Records relating to start-up of the sulfuric acid plant process heaters must be maintained in accordance with section VI, below.

B. [INTENTIONALLY DELETED]

C. Existing Residual Fuel-Consuming Units:

a. The existing residual fuel-consuming units listed in this section shall operate in one of three operating scenarios. During times when persistent, on-shore wind conditions prevail, Limetree Bay Terminals shall operate the affected units

pursuant to the "supplemental control operating scenario." During all other times, Limetree Bay Terminals shall operate the affected units pursuant to either the "reduced fuel-use operating scenario," or the "normal operating scenario," as described below.

b. Limetree Bay Terminals shall monitor and record residual fuel-oil usage of all of the oil-fired units listed in this section, for each operating scenario. Monitoring and record keeping shall be performed in accordance with section VI of this permit.

c. Supplemental Control Operation

1. This scenario shall be implemented during times when persistent, on-shore wind conditions prevail, as described below. The residual fuel-oil used when this scenario is implemented shall have a sulfur content not greater than 0.5 percent by weight.

   This supplemental control scenario may be modified by EPA to protect against exceedances of the SO_2 National Ambient Air Quality Standards (NAAQS). If it is determined that Limetree Bay Terminals' use of this supplemental control scenario is causing or contributing to an exceedance of the NAAQS, EPA may terminate this plan through rulemaking procedures.

   Specific procedures and protocols to be followed by Limetree Bay Terminals to implement this supplemental control scenario are delineated in ***Appendix 1***, "Air Quality Control Fuel Switching Plan for Hess Oil Virgin Islands Corp."

2. The supplemental control scenario shall be implemented when any one of the following three conditions occurs:

   i. When any one of Limetree Bay Terminals' five ambient SO_2 monitoring stations records a rolling 24-hour average SO_2 concentration equal to or greater than 75 percent of the 24-hour NAAQS (that is, 274 $\mu g/m^3$ or 0.105 ppm).

      The monitoring data will be collected according to EPA "SLAMS" procedures but will, for the purposes of this supplemental control scenario, be averaged by the hour, starting on the hour.

   ii. During times of persistent on-shore wind conditions. That is, when the hourly average winds blow from a 45 degree sector, defined as 143 to 187 degrees, inclusive, where zero degrees is due north, for at least six consecutive hours during a 24-hour block period, or any 12 non-consecutive hours during a 24-hour block period.

Wind direction will be monitored by a meteorological tower located on Limetree Bay Terminals property, and will be collected and reported as 1-hour averages, starting on the hour. If the average wind direction for a given hour is from within the designated 45 degree sector, the wind will be deemed to have flowed from within the designated sector for that hour. A 24- hour block period is defined as beginning at midnight, and ending on the following midnight.

iii. When Limetree Bay Terminals' meteorological station is inoperable for six consecutive hours.

3. During the times when this supplemental control scenario is implemented, the lower sulfur fuel-oil (0.5% sulfur by weight) shall be burned in the following units:

Unit	Source Number(s)
No. 1 VIS	H-101, H-104
No. 2 CDU	H-401A, H-401B, H-401C
No. 5 CDU	H-3101A, H-3101B
No. 6 CDU	H-4101A, H-4101B
No. 3 VAC	H-4201, H-4202
W UTIL	All West-Side Boilers (B-1152A, , B-1155)
E UTIL	All East-Side Boilers (B-3301, B-3302, B-3303, B-3304)

4. Limetree Bay Terminals may switch back to the higher sulfur fuel-oil (a fuel- oil with a sulfur content of 1.0 percent by weight) in accordance with the following conditions:

i. If the switch to the lower sulfur fuel-oil was triggered by III.C.c.2.i, above, the switch back to 1.0% sulfur fuel-oil may occur after all five of Limetree Bay Terminals' ambient SO_2 monitors measure a 24-hour average SO_2 concentration that is less than 75 percent of the SO_2 NAAQS for at least one 24-hour block period, following any occurrence when at least one monitor measured a 24-hour average SO_2 concentration that was 75 percent of the NAAQS or greater.

ii. If the switch to the lower sulfur fuel-oil was triggered by III.C.c.2.ii, above, the switch back to 1.0% sulfur fuel-oil may occur when the winds blow outside of the 143 to 187 degree sector for at least 3 consecutive hours, following the period during which the winds were blowing inside the designated sector.

iii. If the switch to the lower sulfur fuel-oil was triggered by both III.C.c.2.i and III.C.c.2.ii, above, the switch back to 1.0% sulfur fuel-oil may occur when both of the conditions delineated under III.C.c.4.i and III.C.c.4.ii are met.

iv. If the switch to the lower sulfur fuel-oil was triggered by III.C.c.2.iii, above, the switch back to 1.0% sulfur fuel-oil may occur when the meteorological station becomes operable, and 3 consecutive hours of wind conditions outside of the 143 to 187 degree sector have occurred.

d. Reduced Fuel-Use Operation

1. When the supplemental control operating scenario is not being implemented, Limetree Bay Terminals shall implement either the reduced fuel- use operating scenario or the normal operating scenario, as described in section III.C.e, below. Reduced fuel-use operating scenario: Limetree Bay Terminals recently improved waste heat recovery in several process units. That is, Limetree Bay Terminals can recover heat in the form of steam, which reduces the need for steam production by east and west refinery boilers, thereby lowering fuel-use requirements. It is anticipated that, during times when routine, off- shore wind conditions prevail, Limetree Bay Terminals will operate pursuant to the reduced fuel-use operating scenario a significant part of the time.

2. The units listed below will be limited to the following annual fuel- oil use, based upon operation at the maximum daily rate 90% of the year. [The annual fuel use is calculated by multiplying the number of days operated in this reduced fuel-use operating scenario by the calendar day barrel limit; the maximum annual limit equals 90% of maximum usage.] The residual fuel-oil used when this scenario is implemented shall have a sulfur content not greater than 1.0 percent by weight.

Unit	Source No.	Fuel Oil Limit (Barrels/Day)
No. 1 VIS	H-101, H-104	446
No. 2 CDU	H401A,B,C	996
No. 5CDU	H-3101A, B	1260
No. 6 CDU	H-4101A,B	1260
No. 3 VAC	H-4201, 4202	1035
W UTIL	B-1155	760
W UTIL	All West Side Boilers (1152A, , 1155)	1082

E UTIL	B3301, 3302	800
E UTIL	All East Side Boilers (B3301, 3302, 3303, 3304)	1506

3. Should additional fuel be needed at these units, Limetree Bay Terminals shall be limited to burning only refinery gas or LPG to accommodate such needs.

e. Normal Operation

1. This scenario shall be implemented during times when routine, off- shore wind conditions prevail, and Limetree Bay Terminals is not operating pursuant to the reduced fuel-use operating scenario.

2. The units listed below will be limited to the following annual fuel- oil use, based upon operation at the maximum daily rate 90% of the year. [The annual fuel use is calculated by multiplying the number of days operated in this normal operating scenario by the calendar day barrel limit; the maximum annual limit equals 90% of maximum usage.] The residual fuel-oil used when this scenario is implemented shall have a sulfur content not greater than 1.0 percent by weight.

Unit	Source Number(s)	Fuel-Oil Limit (Barrels Per Calendar Day)
No. 1 VIS	H-101, H-104	415
No. 2 CDU	H-401A, H-401B, H-401C	282
No. 5 CDU	H-3101A, H-3101B	1,210
No. 6 CDU	H-4101A, H-4101B	1,210
No. 3 VAC	H-4201, H-4202	1,273
W UTIL	B-1155	592
W UTIL	All West-Side Boilers (B-1152A, B-1155)	2,261
E UTIL	B-3301, B-3302	1,138
E UTIL	All East-Side Boilers (B-3301, B-3302, B-3303, B-3304)	3,325

3. Should additional fuel be needed at these units, Limetree Bay Terminals shall be limited to burning only refinery gas or LPG to accommodate such needs.

D. Existing Distillate Fuel-Consuming Units:

a. The existing distillate fuel-consuming units listed in this section shall operate in one of two operating scenarios. That is, Limetree Bay Terminals shall operate the affected units pursuant to either the reduced fuel-use operating scenario, or the normal operating scenario, as described in sections III.C.d and III.C.e, respectively.

b. Limetree Bay Terminals shall monitor and record the distillate fuel-oil usage of all of the oil-fired units listed in this section, for each operating scenario.

Monitoring and record keeping shall be performed in accordance with section VI of this permit.

c. Reduced Fuel-Use Operation

1. When the reduced fuel-use operating scenario is implemented, the units listed below will be limited to the following annual fuel-oil use, based upon operation at the maximum daily rate 90% of the year. [The annual fuel use is calculated by multiplying the number of days operated in this reduced fuel-use operating scenario by the calendar day barrel limit; the maximum annual limit equals 90% of maximum usage.] The distillate fuel-oil used when this scenario is implemented shall have a sulfur content not greater than 0.2 percent by weight.

Unit	Source Number(s)	Fuel-Oil Limit (Barrels Per Calendar Day)
E UTIL	G3404, G3405, , G3407, G3408, G3409, G3410	4,000
E UTIL	All Turbines	4,800

2. Should additional fuel be needed at these units, Limetree Bay Terminals shall be limited to burning only refinery gas or LPG to accommodate such needs.

d. Normal Operation

1. When the normal operating scenario is implemented, the units listed below

will be limited to the following annual fuel-oil use, based upon operation at the maximum daily rate 90% of the year. [The annual fuel use is calculated by multiplying the number of days operated in this normal operating scenario by the calendar day barrel limit; the maximum annual limit equals 90% of maximum usage.] The distillate fuel-oil used when this scenario is implemented shall have a sulfur content not greater than 0.2 percent by weight.

Unit	Source Number(s)	Fuel-Oil Limit (Barrels Per Calendar Day)
E UTIL	G3404, G3405, , G3407, G3408, G3409, G3410	3,888
UTIL	All Turbines	5,427

2. Should additional fuel be needed at these units, Limetree Bay Terminals shall be limited to burning only refinery gas or LPG to accommodate such needs.

e. Other Distillate Oil-Fired Units

The following distillate oil-fired units have no limits on the amount of 0.2% sulfur distillate fuel-oil that can be burned on a daily or annual basis.

P-1602:	Diesel driven standby pump seawater intake
P-1603:	Diesel driven standby pump seawater intake
P-1604:	Diesel driven standby pump seawater intake
P-1605:	Diesel driven standby pump seawater intake
P-1620:	Diesel driven standby pump desalination water

IV. TAIL GAS TREATMENT SYSTEM:

The tail gas treatment system at Limetree Bay Terminals is comprised of four existing sulfur recovery units (Claus Plants) and two existing Beavon Units.

A. Except as provided below, Limetree Bay Terminals shall vent all tail gas from the sulfur recovery units to the Beavon units at all times.

B. Limetree Bay Terminals shall vent the tail gas from the sulfur recovery units in the following manner when one of the two Beavon units is not operating:

a. Transfer all acid gas streams (which may originate at the amine treating unit, sour water stripper, other gas sweetening processes, etc.), excluding that from the acid plant, to the sulfur recovery units associated with the operating Beavon unit.

b. Vent excess tail gas to any of the two existing incinerators when the operating Beavon unit is charged to capacity. Limetree Bay Terminals shall provide written justification to the EPA describing the nature of the venting and provide planned mitigation procedures to the EPA for prior approval.

C. Limetree Bay Terminals shall vent all Claus Plant tail gas to any of the two existing incinerators when neither Beavon unit is operating. Limetree Bay Terminals shall provide written justification to the EPA describing the nature of the outage and provide planned mitigation procedures to the EPA for prior approval.

D. In addition to the conditions set forth in IV.B.a and IV.B.b, above, Limetree Bay Terminals shall comply with the following when either one or both Beavon units are not operating and tail gas is being vented to an incinerator:

a. Limetree Bay Terminals shall discontinue the use of 1.0 percent sulfur fuel-oil and revert to the use of 0.5 percent sulfur fuel-oil in all new and existing residual oil-burning sources within the Limetree Bay Terminals plant.

b. Limetree Bay Terminals shall limit SO_2 emissions from all incinerators associated with each pair of sulfur recovery units to a total of 30 tons per day.

c. In no event shall tail gas not be vented to the Beavon units for more than 30 days per calendar year, with a maximum of 14 continuous days.

E. Limetree Bay Terminals shall operate in compliance a continuous emission monitoring system for SO_2/H_2S at the outlet of the sulfur recovery unit(s) in accordance with the Quality Assurance Plan.

F. Limetree Bay Terminals shall maintain an operation log specifically for the Claus plants and the Beavon units. Such logs shall be made available upon request.

G. Limetree Bay Terminals shall limit sulfur concentration emissions from both Beavon units to no more than 50 ppmv hydrogen sulfide (H_2S) dry at 0% oxygen as determined by a continuous monitor.

H. Limetree Bay Terminals shall operate in compliance a continuous emission

a. Transfer all acid gas streams (which may originate at the amine treating unit, sour water stripper, other gas sweetening processes, etc.), excluding that from the acid plant, to the sulfur recovery units associated with the operating Beavon unit.

b. Vent excess tail gas to any of the two existing incinerators when the operating Beavon unit is charged to capacity. Limetree Bay Terminals shall provide written justification to the EPA describing the nature of the venting and provide planned mitigation procedures to the EPA for prior approval.

C. Limetree Bay Terminals shall vent all Claus Plant tail gas to any of the two existing incinerators when neither Beavon unit is operating. Limetree Bay Terminals shall provide written justification to the EPA describing the nature of the outage and provide planned mitigation procedures to the EPA for prior approval.

D. In addition to the conditions set forth in IV.B.a and IV.B.b, above, Limetree Bay Terminals shall comply with the following when either one or both Beavon units are not operating and tail gas is being vented to an incinerator:

a. Limetree Bay Terminals shall discontinue the use of 1.0 percent sulfur fuel-oil and revert to the use of 0.5 percent sulfur fuel-oil in all new and existing residual oil-burning sources within the Limetree Bay Terminals plant.

b. Limetree Bay Terminals shall limit SO_2 emissions from all incinerators associated with each pair of sulfur recovery units to a total of 30 tons per day.

c. In no event shall tail gas not be vented to the Beavon units for more than 30 days per calendar year, with a maximum of 14 continuous days.

E. Limetree Bay Terminals shall operate in compliance a continuous emission monitoring system for SO_2/H_2S at the outlet of the sulfur recovery unit(s) in accordance with the Quality Assurance Plan.

F. Limetree Bay Terminals shall maintain an operation log specifically for the Claus plants and the Beavon units. Such logs shall be made available upon request.

G. Limetree Bay Terminals shall limit sulfur concentration emissions from both Beavon units to no more than 50 ppmv hydrogen sulfide (H_2S) dry at 0% oxygen as determined by a continuous monitor.

H. Limetree Bay Terminals shall operate in compliance a continuous emission

monitoring system to track the H_2S concentration, flow rate, and temperature at the Beavon stack.

V. VOC FUGITIVE EMISSION SOURCES:

Fugitive emission sources of VOCs include the wastewater treatment system conveyance lines, pump and compressor seals, cooling towers, valves and flanges, and storage and loading facilities.

A. Limetree Bay Terminals shall monitor fugitive emissions from the FCCU complex in accordance with the requirements of NSPS Subpart GGG, Fugitive Equipment Leaks in Petroleum Refineries.

B. The wastewater treatment system conveyance lines shall incorporate traps and shall be enclosed, wherever possible.

C. The API (American Petroleum Institute) separator shall be covered.

D. Limetree Bay Terminals shall utilize dual mechanical pump and compressor seals, wherever possible.

VI. MONITORING, RECORDING, AND RECORD KEEPING:

A. The FCCU complex, the sulfuric acid plant, the sulfuric acid plant process heaters, and the tail gas treatment plant shall be equipped with operable continuous emission monitors to measure the pollutants and/or operating parameters, as indicated below:

FCCU Complex:	CO, O_2, NO_x, and SO_2 (inlet and outlet of the venturi gas scrubber for SO_2), regenerator temperature, and pressure across the venturi scrubber throat
Sulfuric Acid Plant:	O_2 and SO_2
Sulfuric Acid Plant Heaters:	Opacity, O_2
Tail Gas Treatment:	SO_2/H_2S analyzers at outlet of the sulfur recovery unit(s), and H_2S at outlet of the Beavon Unit(s)

B. Limetree Bay Terminals shall install, calibrate and test each continuous

emission monitor (CEM) and recorder listed in VI.A. Monitors must comply with EPA performance and siting specifications pursuant to 40 CFR Part 60, Appendix B, Performance Specifications 1-4. Equipment specifications, calibration and operating procedures, and data evaluation and reporting procedures shall be submitted to EPA in a Performance Specification Test protocol. EPA reserves the right to require the auditing of the CEMs by independent agents.

C. Records shall be kept to accurately maintain the following:

a. the daily fresh feed rate (barrels), and the sulfur content of the feed to the FCCU complex;

b. the daily coke bum-off rate (1000 pounds per hour) and hours of operation for the FCCU regenerator;

c. the daily tons of sulfuric acid produced;

d. the fuel-oil fired (in barrels and gallons) in all of the fuel-oil fired units listed in Sections III.C and III.D of this permit;

e. the date and time of each change in operating scenario under Sections III.C and III.D of this permit;

f. exceedance of the emission limitations of this permit, as determined by continuous monitoring;

g. the sulfur content of all fuel oil burned;

h. the H_2S content of all refinery gas burned;

i. Reference Method 9 readings at the sulfuric acid plant;

j. the scrubber water feed rate; and

k. the beginning, duration and completion of start-up episodes for the FCCU complex, the sulfuric acid plant and the sulfuric acid plant process heaters, pursuant to the emission exemptions of Sections I, II and III of this permit. Also, the reason(s) for the prior shutdown of these facilities must be recorded.

D. All records specified in this Section must be maintained for a period of five years after the date of record, and must be made available for inspection by the EPA and the Virgin Islands Department of Planning and Natural Resources (VIDPNR), upon request.

E. In each report quarter, a 95% quality data availability shall be maintained for all opacity monitors, and a 90% quality data availability shall be maintained for all gaseous monitors. There shall be a quality assurance plan coupled with a calibration and maintenance program.

F. When combusting residual fuel oil Limetree Bay Terminals shall continuously monitor wind conditions in accordance with the HOVENSA Meteorological

Monitoring Plan dated September 5, 1991. Data on wind direction shall be monitored and recorded. The Limetree Bay Terminals meteorological station shall be audited semiannually by an independent party. Maintenance and calibration records shall be maintained.

G. When combusting residual fuel oil Limetree Bay Terminals shall operate five ambient SO_2 monitoring stations, two to the west of the refinery and three to the north of the refinery, for purposes relating to the supplemental control scenario as delineated under section III.C.c of this permit. These monitors shall record hourly average and 24-hour rolling average SO_2 concentrations. In the event that monitoring data indicate an exceedance of the NAAQS, Limetree Bay Terminals shall report the exceedance to EPA, and shall recommend corrective action and modifications to the supplemental control scenario, to ensure protection of the NAAQS.

H. Limetree Bay Terminals shall develop a plan to monitor the residual and distillate fuel-oil usage pursuant to Sections III.C and III.D of this permit. Such a plan must be approved by EPA.

VII. REPORTING REQUIREMENTS:

A. All emission reports, testing reports, start-up notifications, and any other reports required under this permit shall be submitted to the EPA official named below. Three copies of any stack test report must be submitted within 60 days after completion.

Chief, Air Compliance Branch
Division of Enforcement and
Compliance Assistance
U.S. EPA Region 2 Office
290 Broadway
New York, NY 10007-1866

B. Upsets/Malfunctions:

a. Upsets/Malfunctions, changes in operating scenarios, and implementation of the Limetree Bay Terminals supplemental control plan must be reported by telephone or facsimile within four hours, with a follow-up letter submitted within seven calendar days to:

Director, Division of Environmental Protection
Virgin Islands Department of Planning and Natural Resources
1118 Water Gut Homes
Christiansted
St. Croix, U.S. Virgin Islands 00820

Phone: (340) 773-1082
Fax: (340) 773-9310

b. Limetree Bay Terminals shall submit a written report of excess emissions, the number of days operating under each operating scenario, and operation of the Limetree Bay Terminals supplemental control plan to EPA every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the information specified below:

1. For excess emissions from the FCCU complex, provide the following information:

   i. The magnitude of excess emissions computed in accordance with 40 CFR Part 60.13(h), all conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions.

   ii. Specific identification of each period of excess emissions that occurred during start-ups, shutdowns, and malfunctions of the affected facility.

   iii. The nature and cause of any malfunction of the affected facility (if known), and the corrective action taken or preventative measures adopted.

2. For apparent excess emissions due to CEM malfunction, provide the date and time identifying each period during which the continuous monitoring system was inoperative (not including zero and span checks), and the nature of the system repairs or adjustments.

3. When no excess emissions have occurred, or the continuous monitoring system(s) has not been inoperative, repaired or adjusted, such information shall be stated in the report.

4. For the existing fuel-consuming units, provide the number of days of operation for each operating scenario implemented during the reporting quarter.

5. For implementation of the Limetree Bay Terminals supplemental control plan, provide the date(s) and time(s) for each period that this plan was operational. If the plan was triggered by SO_2 monitoring data, provide the monitoring data. If the plan was triggered by wind conditions, provide the wind data that resulted in plan implementation, as well as wind data for the duration and conclusion of plan implementation. Each semiannual meteorological station audit report shall be submitted with the appropriate quarterly report.

c. The quarterly excess emission reports required in this section shall be sent to the following EPA official, and copies must also be sent to the

Chief of the Air Compliance Branch, EPA Region 2, and the Director of the Division of Environmental Protection, VIDPNR, at the addresses listed above.

Region 2 CEM Coordinator
Monitoring and Assessment Branch
Division of Environmental Science and Assessment
U.S. EPA Region 2 Office
2890 Woodbridge Avenue
Edison, New Jersey 08837

VIII. NEW SOURCE PERFORMANCE STANDARDS (NSPS)/NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP):

A. This facility is subject to the General Provisions of the NSPS (40 CFR, Part 60, Subpart A), the NSPS for Sulfuric Acid Plants (40 CFR, Part 60, Subpart H), the NSPS for Petroleum Refineries (40 CFR, Part 60, Subpart J and Ja (for the Sulfuric Acid Plant Converter Heater), the NSPS for Volatile Organic Liquid Storage Vessels [Including Petroleum Liquid Storage Vessels] (40 CFR, Part 60, Subpart Kb), the NSPS for Equipment Leaks for VOC in Petroleum Refineries (40 CFR, Part 60, Subpart GGG), and the NSPS for VOC Emissions from Petroleum Refinery Wastewater Systems (40 CFR, Part 60, Subpart QQQ).

B. This facility shall demonstrate compliance with the General Provisions of the NESHAP (40 CFR, Part 61, Subpart A), the National Emission Standard for Equipment Leaks [Fugitive Emission Source] of Benzene (40 CFR, Part 61, Subpart J), the National Emission Standard for Equipment Leaks [Fugitive Emission Source] (40 CFR, Part 61, Subpart V), and the National Emission Standard for Benzene Waste Operations (40 CFR, Part 61, Subpart FF).

IX. OTHER PERMIT CONDITIONS:

A. Limetree Bay Terminals shall meet all other applicable federal, state and local requirements, including those contained in the Virgin Islands State Implementation Plan (VISIP).

X. TESTING REQUIREMENTS:

A. Limetree Bay Terminals shall conduct stack tests at the FCCU complex and at the sulfuric acid plant, in accordance with the test methods published in 40 CFR Part 60, Appendix A. All tests on a given unit must be conducted within 60 days after achieving maximum production rate at which the facility will normally be operated, but no later than 180 days after initial start-up at the revised rates

established by this permit.

B. Limetree Bay Terminals shall obtain approval of a stack test protocol. A detailed description of the sampling point locations, sampling equipment, sampling and analytical procedures, data reporting forms, quality assurance procedures and operating conditions for such tests must be submitted to the EPA at least 120 days prior to start-up of the facility.

C. Limetree Bay Terminals shall notify EPA and VIDPNR at least 30 days prior to actual testing.

D. Limetree Bay Terminals shall provide permanent sampling and testing facilities as may be required by the EPA to determine the nature and quantity of emissions from the FCCU. Such facilities shall conform with all applicable laws and regulations concerning safe construction and safe practice.

EPA reserves the right to require additional stack testing of the pollutants for which an emission limitation has been established in Sections I, II and III of this permit.