IN THE DISTRICT COURT OF THE VIRGIN ISLANDS
DIVISION OF ST. CROIX

UNITED STATES OF AMERICA, and THE UNITED STATES VIRGIN ISLANDS, Plaintiffs, v. HOVENSA L.L.C., Defendant.	)	Civil Action No. 1-11-cv-06 (RAM/GWC)

UNITED STATES NOTICE OF MOTION TO ENTER
THE FIRST MODIFICTION OF THE CONSENT DECREE

TO ALL PARTIES AND THEIR COUNSEL OF RECORD:

Plaintiff the United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), and with the concurrence of Co-plaintiff the United States Virgin Islands ("Virgin Islands"), on behalf of the Virgin Islands Department of Planning and Natural Resources ("DPNR"), respectfully moves this Court to enter the parties' proposed *First Modification of the Consent Decree* (First Modification) that was lodged with the Court on August 25, 2020. (ECF Doc. 12-1). The proposed First Modification modifies the Consent Decree previously approved by this Court on June 7, 2011. (ECF Doc. 6). This Motion is based on the attached Memorandum.

Respectfully Submitted,

JEAN E. WILLIAMS
Acting Assistant Attorney General

/s/ Myles E. Flint, II
MYLES E. FLINT, II
Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Ben Franklin Station
Washington, DC 20044-7611

GRETCHEN C.F. SHAPPERT
United States Attorney
United States Virgin Islands
Federal Building and U.S. Courthouse
5500 Veterans Drive, Room 260
St. Thomas, USVI 00802

OF COUNSEL:

FLAIRE MILLS
Assistant Regional Counsel
United States Environmental Protection Agency
Region 2
290 Broadway
New York, New York 10007-1866

CERTIFICATE OF SERVICE

The undersigned certifies that on April 8, 2021, he filed the *UNITED STATES NOTICE OF MOTION TO ENTER THE FIRST MODIFICATION OF THE CONSENT DECREE and MEMORANDUM IN SUPPORT OF THE UNITED STATES MOTION TO ENTER THE FIRST MODIFICATION OF THE CONSENT DECREE* electronically with the Clerk of Court using the CM/ECF system, which will send notifications of this filing to all who have made appearances, including the following representatives of the Parties:

John Fehrenbach
Federal Representations PLLC
2001 L Street, NW - Suite 500 PMB#50061
Washington DC 20036

For The United States Virgin Islands

Pamela R Tepper
/s/ Pamela R. Tepper
PAMELA R. TEPPER
Solicitor General
U.S. Virgin Islands Department of Justice
34-38 Kronprindsens Gade
GERS Complex, 2nd Floor
St. Thomas, VI 00802

For The United States Virgin Islands

LeAnn Johnson Koch
Perkins Coie
700 13th Street, NW, Suite 800
Washington, D.C. 20005-3960

For Limetree Bay Terminals, LLC and
For Limetree Bay Refining, LLC

Douglas L. Capdeville
Law Offices of Douglas L. Capdeville, P.C.
2107 Company Street
Lot Four
Christiansted, St. Croix, U.S. Virgin Islands 00822

For Limetree Bay Terminals, LLC and
For Limetree Bay Refining, LLC

The undersigned further certifies that the foregoing *NOTICE OF MOTION TO ENTER THE FIRST MODIFICATION OF THE CONSENT DECREE and MEMORANDUM IN SUPPORT OF THE UNITED STATES MOTION TO ENTER THE FIRST MODIFICATION OF THE CONSENT DECREE* will be served on counsel for the Environmental Response Trust, and HOVENSA, LLC by electronic mail:

Mary Koks
Munsch Hardt Kopf & Harr, P.C.
700 Milam Street, Suite 2700
Houston, TX 77002-2806

For the Environmental Response Trust

Seth Kerschner
White & Case
1221 Avenue of the Americas
New York, NY 10020-1095

For HOVENSA L.L.C

/s/ Myles E. Flint, II
MYLES E. FLINT, II

IN THE DISTRICT COURT OF THE VIRGIN ISLANDS
DIVISION OF ST. CROIX

UNITED STATES OF AMERICA, and THE UNITED STATES VIRGIN ISLANDS, Plaintiffs, v. HOVENSA L.L.C., Defendant.	)	Civil Action No. 1-11-cv-06 (RAM/GWC)

MEMORANDUM IN SUPPORT OF THE UNITED STATES' MOTION TO ENTER THE FIRST MODIFICATION OF THE CONSENT DECREE

INTRODUCTION

The United States, on behalf of the United States Environmental Protection Agency ("EPA"), and with the concurrence of Co-Plaintiff the United States Virgin Islands ("Virgin Islands"), on behalf of the Department of Planning and Natural Resources ("DPNR"), respectfully submits this Memorandum in support of its motion to enter the First Modification of the Consent Decree ("First Modification"). The First Modification was lodged with the Court on August 25, 2020 (ECF Doc. 12-1), and on August 31, 2020, the United States published notice of the lodging of the First Modification in the Federal Register soliciting comment from the public. 85 Fed. Reg. 5389 (Aug. 31, 2020). The United States received one set of comments during the 30-day public comment period from Elizabeth Leigh Neville (referred to as "Commenter"), who requested that the First Modification be rejected as being "inappropriate, improper, and inadequate." When lodging the First Modification, the United States reserved its rights to

withhold consent to entry if "public comments disclose facts or considerations" indicating that the First Modification is "inappropriate, improper, or inadequate." See 28 C.F.R. § 50.7(b). The submitted comments do not show that the First Modification is inappropriate, improper, or inadequate as the comments fail to identify anything in the agreement itself which violates the law or harms the public. Attached to this Memorandum are the First Modification as Attachment A and the comments as Attachment B. All parties to the First Modification have agreed to it and consent to its entry without further notice.

After the First Modification was lodged with the Court, the United States and Limetree Bay agreed to modify the date in Paragraph 79.a from March 30, 2021 to November 22, 2021. This modification is discussed in Part V, below. The United States requests that the Court enter the attached version of the First Modification of the Consent Decree as a final judgment by signing the document at page 95 and entering it as a final judgment.

I. BACKGROUND AND SUMMARY OF THE FIRST MODIFICATION

A. 2011 Consent Decree between the United States, the Virgin Islands, and HOVENSA

On June 7, 2011, the Court entered a Consent Decree ("2011 Consent Decree" or "Decree") between the United States, the Virgin Islands, and HOVENSA, LLC ("HOVENSA") resolving claims concerning HOVENSA's petroleum Refinery in St. Croix. (ECF Doc. 6.) The 2011 Consent Decree is part of EPA's Petroleum Refinery Initiative ("Refinery Initiative"), an enforcement initiative targeting non-compliance with the Clean Air Act throughout the petroleum refining industry. Like other settlements under the Refinery Initiative, the 2011 Consent Decree resolved HOVENSA's potential liability under the relevant provisions of the Clean Air Act in exchange for HOVENSA's commitment to undertake a variety of activities directed at substantially reducing the emissions of key air pollutants from the Refinery.

The claims addressed in the 2011 Consent Decree included alleged violations of the prevention of significant deterioration provisions, the new source performance standards, the leak detection and repair provisions, and the benzene waste emissions control provisions of the Clean Air Act, ("CAA" or "Act"), 42 U.S.C. §§ 7401-7671. The 2011 Consent Decree required HOVENSA to: reduce nitrogen oxide ("NO_x") emissions and control sulfur dioxide ("SO_2"), particulate matter ("PM"), and carbon monoxide ("CO") emissions from the Refinery's fluid catalytic cracking unit; significantly reduce NO_x emissions from the Refinery's heaters, boilers, generating turbines, and compressor engines through the installation of pollution control equipment; reduce SO_2 emissions by burning lower sulfur fuel oil and complying with fuel gas combustion requirements for heaters, boilers, flares, and sulfur recovery plants; comply with regulatory requirements for acid gas and hydrocarbon flaring, and implement a program to investigate and correct the causes of flaring incidents and take preventive action; create a preventive maintenance and operation plan for minimizing SO_2 emissions from the sulfur recovery plant; reduce emissions of volatile organic compounds ("VOCs") through stricter leak detection and repair ("LDAR") requirements and by replacing valves that are leaking above a specified level with low emissions valves or low emissions valve packing; and reduce emissions of benzene by improving management of benzene waste streams. In 2011, the estimated cost of complying with these injunctive relief requirements was more than $700 million. The 2011 Consent Decree also required HOVENSA to pay $5,375,000 in civil penalties and deposit $4,875,000 into an escrow account to be used to implement Territorial Supplemental Environmental Projects.

In January 2012, HOVENSA announced that it would idle refinery operations. At the time that the Refinery operations idled, most of the injunctive relief obligations required by the

Decree were not completed. In 2015, HOVENSA announced that it would idle terminal operations.

On September 15, 2015, HOVENSA filed for bankruptcy under Chapter 11 of the U.S. Bankruptcy Code in the District Court of the U.S. Virgin Islands, Bankruptcy Division – St. Croix, Virgin Islands. See, bankruptcy proceeding entitled *In re HOVENSA L.L.C..,* No. 1-15-10003-MFW.

B. HOVENSA Bankruptcy

On December 1, 2015, the Bankruptcy Court entered an order approving the sale of certain refining and terminal assets to Limetree Bay Terminals, LLC pursuant to the terms of the Amended and Restated Asset Purchase Agreement. ECF Doc. 528-1 in Case No. 1:15-bk-10003-MFW. On January 4, 2016, the sale of the refinery and terminal assets to Limetree Bay Terminals, LLC closed. Subsequent to the closing, Limetree Bay Terminals, LLC transferred certain refinery assets to Limetree Bay Refining, LLC. As part of the bankruptcy, an Environmental Response Trust was established to, *inter alia*, assume certain Decree obligations that were not transferred to Limetree Bay Terminals, LLC or otherwise satisfied by HOVENSA.

Paragraph 7 of the 2011 Consent Decree requires HOVENSA to condition any transfer of ownership or operation of the refinery "upon the execution by the transferee of a modification to this Consent Decree, which makes the terms and conditions of this Consent Decree applicable to the transferee." ECF Doc. No. 6, ¶ 7.

C. Summary of the First Modification

The First Modification adds Limetree Bay Terminals, LLC, Limetree Bay Refining, LLC (jointly, "Limetree Bay"), and the Environmental Response Trust ("ERT") as parties to the Decree and transfers uncompleted or ongoing Decree responsibilities to Limetree Bay and the

ERT, such that Limetree Bay and the ERT effectively step into the shoes of HOVENSA [First Modification ¶¶ 1 – 7] and HOVENSA is released from its Decree obligations and liabilities as of the date of entry of the First Modification [First Modification ¶ 8]. The First Modification also modifies the following deadlines and injunctive relief obligations to reflect the changed operational realities of the Refinery: (1) briefly extends the deadline for Limetree Bay to install sufficient Qualifying Controls and apply for emission limits from the appropriate permitting authority sufficient to achieve 3,663 tons per year ("tpy") of NO_x emission reductions [First Modification ¶ 27]; (2) modifies the language to reflect the current configuration of the East Side sulfur recovery plant ("SRP") and extends the deadline for installing control technology to control the sulfur emissions from the East Side SRP and comply with New Source Performance Standards ("NSPS") Subparts A and Ja [First Modification ¶¶ 45 – 47]; (3) modifies the requirement to install and operate flare gas recovery systems ("FGRS") on certain flares in order to comply with NSPS Subpart Ja. Specifically, because the operational profile of the Refinery is now significantly different as compared to when the Decree was entered into in 2011, the First Modification conditions the installation of FGRS on the Refinery's flaring emission levels after restart (as defined in the First Modification); providing that FGRS is not required if flaring emissions remain below specified gas flow rates, but requiring Limetree Bay to install and operate FGRS if the specified gas flow rates are exceeded, thereby ensuring the expected emission reduction benefits that were required by the 2011 Consent Decree are obtained while taking into account the modified operating profile of the Refinery [First Modification ¶¶ 49, 50A – 50G, and 51]; (4) modifies Section V.P (Benzene Waste NESHAP Program) to reflect that HOVENSA selected the 6 BQ compliance option set forth in 40 C.F.R. § 61.342(e), and that Limetree Bay has agreed to redo the one-time review and verification of the Refinery's total

annual benzene ("TAB") report following restart [First Modification ¶¶ 77 – 98]; (5) modifies Section V.R (Leak Detection and Repair ("LDAR") Program) to make the terms consistent with the more recent LDAR regulations, including lower leak definitions (¶ 109), to ensure that a minimum of three audits will be conducted before the Decree is terminated (¶ 106), and updates the Valve Preventative Leak Maintenance Program (¶ 112) [First Modification ¶¶ 100 – 123] consistent with other recent Petroleum Refinery Initiative consent decrees; (6) modifies Section VIII.B (NSPS Applicability: Boilers and Generating Turbines) to extend the deadline for demonstrating compliance with NSPS Subparts A and GG at GT-4, GT-7 and GT-8, and to reflect that Limetree Bay has installed combustion liner systems on GT-7 and GT-8 to reduce NO_x emissions, and to operate at lower maximum load limits on GT-4, GT-7, and GT-8 until Limetree Bay demonstrates compliance with NSPS Subparts A and GG [First Modification ¶ 136]; (7) modifies Section IX.A (Territorial Supplemental Environmental Project) by transferring HOVENSA's obligation to disburse monies for the Territorial Supplemental Environmental Project to the ERT [First Modification ¶ 137]; and, (8) modifies Section IX.B (Additional Work) to reflect that HOVENSA's remaining obligations for the VIWAPA Emissions Monitoring Assistance Program were transferred to the ERT [First Modification ¶ 140A].

II. STATUTORY AND REGULATORY FRAMEWORK

The CAA established a regulatory scheme designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1). Section 109 of the Act, 42 U.S.C. § 7409, requires the Administrator of EPA to promulgate regulations establishing primary and secondary national ambient air quality standards ("NAAQS" or "ambient air quality

standards") for certain air pollutants. The primary NAAQS are to be adequate to protect the public health, and the secondary NAAQS are to be adequate to protect the public welfare, from any known or anticipated adverse effects associated with the presence of the air pollutant in the ambient air.

Section 110 of the Act, 42 U.S.C. § 7410, requires each State[1] to adopt and submit to EPA for approval a State Implementation Plan ("SIP") that provides for the attainment and maintenance of the NAAQS. Under Section 107(d) of the Act, 42 U.S.C. § 7407(d), each State is required to designate those areas within its boundaries where the air quality is better or worse than the NAAQS for each criteria pollutant, or where the air quality cannot be classified due to insufficient data. These designations have been approved by EPA and are located at 40 C.F.R. Part 81. An area that meets the NAAQS for a particular pollutant is classified as an "attainment" area; one that does not is classified as a "non-attainment" area.

A. Prevention of Significant Deterioration / New Source Review

Part C of Title I of the Act, 42 U.S.C. §§ 7470-7479, sets forth requirements for the prevention of significant deterioration ("PSD") of air quality in those areas designated as attaining the NAAQS standards. These requirements are designed to protect public health and welfare, to assure that economic growth will occur in a manner consistent with the preservation of existing clean air resources, and to assure that any decision to permit increased air pollution is made only after careful evaluation of all the consequences of such a decision and after public participation in the decision-making process. These provisions are referred to herein as the "PSD program." Section 165(a) of the Act, 42 U.S.C. § 7475(a), prohibits the construction and subsequent operation of a major emitting facility in an area designated as attainment unless a

[1] The definition of State includes the Virgin Islands. 42 U.S.C. § 7602(d)

PSD permit has been issued. Section 169(1) of the Act, 42 U.S.C. § 7479(1), includes within the definition of "major emitting facility" a petroleum refinery with the potential to emit 100 tpy or more of any air pollutant. As set forth in EPA's implementing regulations at 40 C.F.R. § 52.21(k), the PSD program generally requires a person who wishes to construct or modify a major emitting facility in an attainment area to demonstrate, before construction commences, that construction of the facility will not cause or contribute to air pollution in violation of any ambient air quality standard or any specified incremental amount.

As set forth at 40 C.F.R. § 52.21(i), any major emitting source in an attainment area that intends to construct a major modification must first obtain a PSD permit. "Major modification" is defined at 40 C.F.R. § 52.21(b)(2)(i) as meaning any physical change in or change in the method of operation of a major stationary source that would result in a significant net emission increase of any criteria pollutant subject to regulation under the Act. "Significant" is defined at 40 C.F.R. § 52.21(b)(23)(i) in reference to a net emissions increase or the potential of a source to emit a criteria pollutant, at a rate of emission that would equal or exceed a specific level, *e.g.*: for ozone, 40 tpy of VOCs; for CO, 100 tpy; for NO_x, 40 tpy; for SO_2, 40 tpy, (hereinafter "criteria pollutants"). As set forth at 40 C.F.R. § 52.21(j), a new major stationary source or a major modification in an attainment area shall install and operate best available control technology ("BACT") for each pollutant subject to regulation under the Act that it would have the potential to emit in significant quantities.

Part D of Title I of the Act, 42 U.S.C. §§ 7501-7515, sets forth the requirements for those geographic areas that have not attained a particular NAAQS. One such requirement is for States to have a preconstruction permitting program known as nonattainment New Source Review ("NSR"). Section 173 of the Act, 42 U.S.C. § 7503, requires that in order to obtain such a permit

the source must, among other things: (a) obtain federally enforceable emission offsets at least as great as the new source's emissions; (b) comply with the lowest achievable emission rate ("LAER") as defined in Section 171(3) of the Act, 42 U.S.C. § 7501(3); and (c) analyze alternative sites, sizes, production processes, and environmental control techniques for the proposed source and demonstrate that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

As set forth in 40 C.F.R. § 52.24, no major stationary source shall be constructed or modified in any non-attainment area as designated in 40 C.F.R. Part 81, Subpart C to which any SIP applies, if the emissions from such source will cause or contribute to concentrations of any pollutant for which a NAAQS is exceeded in such area, unless, as of the time of application for a permit for such construction, such plan meets the requirements of Part D, Title I, of the Act. A State may comply with Sections 172 and 173 of the Act by having its own non-attainment new source review regulations approved as part of its SIP by EPA, which must be at least as stringent as those set forth at 40 C.F.R. § 51.165.

B. Flaring and New Source Performance Standards

Section 111 of the Act, 42 U.S.C. § 7411, requires EPA to promulgate NSPS for certain categories of new air pollution sources. Pursuant to Section 111(b), 42 U.S.C. § 7411(b), EPA promulgated general regulations applicable to all NSPS source categories. Those general regulations are set forth at 40 C.F.R. Part 60 Subpart A. EPA's NSPS regulations applicable to petroleum refineries, including requirements for implementing and utilizing good air pollution control practices at all times, are set forth at 40 C.F.R. Part 60 Subpart Ja. FCCU regenerators,

sulfur recovery plants, and flares are among the refinery process units subject to regulation under NSPS.

C. Leak Detection and Repair

Section 112 of the CAA, 42 U.S.C. § 7412, requires EPA to promulgate emission standards for certain categories of sources of hazardous air pollutants ("National Emission Standards for Hazardous Air Pollutants" or "NESHAPs"). Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), EPA promulgated national emission standards for equipment leaks (fugitive emission sources). Those regulations are set forth at 40 C.F.R. Part 61 Subpart J and Part 63 Subparts H and CC. Additional regulations addressing equipment leaks are located at 40 C.F.R. Part 60 Subparts VVa and GGGa. The focus of the LDAR program is the refinery-wide inventory of all possible leaking valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector; regular monitoring to identify leaks; and the repair of leaks as soon as they are identified.

D. Benzene Waste NESHAP

In the 1990 amendments to the Act, Congress defined "hazardous air pollutant" and identified 189 pollutants under Section 112(b)(1) that would be subject to regulation. The Act requires EPA to establish emission standards for each pollutant in accordance with Section 112(d) of the CAA, 42 U.S.C. § 7412(d). In March 1990, EPA promulgated national emission standards applicable to benzene-containing waste streams. Benzene is a listed hazardous air pollutant and a known carcinogen. The benzene waste regulations are set forth at 40 C.F.R. Part 61 Subpart FF, "National Emission Standard for Benzene Waste Operations." Benzene is a naturally-occurring constituent of petroleum products and petroleum waste and is highly volatile. Benzene emissions can be detected anywhere in a refinery where a petroleum product or

petroleum waste are exposed to the ambient air. Refineries are required to tabulate their total annual benzene emissions, or "TAB." If the TAB is over 10 megagrams, the refinery is required to elect a control option that will require the control of all waste streams, or control of certain select waste streams.

III. STANDARD OF REVIEW FOR ENTRY OF CONSENT DECREES

"The initial decision to approve or reject a settlement proposal is committed to the sound discretion of the trial judge." SEC v. Randolph, 736 F.2d 525, 529 (9th Cir. 1984) (quoting Officers for Justice v. Civil Serv. Comm'n, 688 F.2d 615, 625 (9th Cir. 1982), cert. denied sub num. Byrd v. Civil Serv. Comm'n, 459 U.S. 1217 (1983); accord United States v. Jones & Laughlin Steel Corp., 804 F.2d 348, 351 (6th Cir. 1986); United States v. Hooker Chem. & Plastics Corp., 776 F.2d 410, 411 (2nd Cir. 1985); United States v. Union Elec. Co., 132 F.3d 422, 430 (8th Cir. 1997). Courts, however, exercise discretion within the framework of certain policy principles applicable to the settlement process.

A district court reviewing a consent decree must determine whether the proposed settlement fairly and reasonably resolves the controversy in a manner consistent with the public interest and applicable law. See United States v. Oregon, 913 F.2d 576, 580–81 (9th Cir. 1990); accord United States v. Cannons Eng'g Corp., 899 F.2d 79, 84 (1st Cir. 1990) ("The relevant standard [is] . . . whether the proposed decree is fair, reasonable, and faithful to the objectives of the governing statute."). "Unless a Consent Decree is unfair, inadequate, or unreasonable, it ought to be approved." Randolph, 736 F.2d at 529. In reviewing a proposed consent decree, the reviewing court is to ascertain whether the decree is fair, adequate, and reasonable, Cotton v. Hinton, 559 F.2d 1326, 1330 (5th Cir. 1977), as well as consistent with the objectives of the statute under which the action was brought, United States v. City of Miami, 664 F.2d 435, 441

(5th Cir. 1981) (Rubin, J., concurring). "The trial court in approving a settlement need not inquire into the precise legal rights of the parties nor reach and resolve the merits of the claims or controversy . . . ." *Id.* at 441 n.13. These standards of review should be the same for an amendment to an already approved settlement.

The reviewing court's discretion should be exercised with deference to the "strong public policy in favor of settlements, particularly in very complex and technical regulatory contexts." United States v. Comunidades Unidas Contra La Contaminacion, 204 F.3d 275, 280 (1st Cir. 2000). Voluntary settlements of disputes are favored by the Courts. See also, Pennwalt Corp. v. Plough, Inc., 676 F.2d 77, 80 (3d Cir. 1982); accord, United States v. Nicolet, Inc., No. 85-3060, 1989 WL 95555, at *2 (E.D. Pa. Aug. 15, 1989); Hooker Chemical, 776 F.2d at 411 (noting "well-established policy of encouraging settlements").

The reviewing court should accord deference to the judgment of the United States and its agencies in settling a matter. The Supreme Court, in Sam Fox Publ'g Co. v. United States, 366 U.S. 683, 689 (1961), emphasized the importance of deference to the United States regarding settlement: "sound policy would strongly lead us to decline . . . to assess the wisdom of the Government's judgment in negotiating and accepting the . . . Consent Decree, at least in the absence of any claim of bad faith or malfeasance on the part of the Government in so acting." The Circuit Courts have echoed this principle of deference to the United States. A court reviewing a settlement "should pay deference to the judgment of the government agency which has negotiated and submitted the proposed judgment." Randolph, 736 F.2d at 529 (citing Marshall v. Holiday Magic, Inc., 550 F.2d 1173, 1178 (9th Cir. 1977), Officers for Justice, 688 F.2d at 625); see also, United States v. Bechtel Corp., 648 F.2d 660, 666 (9th Cir. 1981) (concluding that the balancing of competing interests affected by a proposed Consent Decree

"must be left, in the first instance, to the direction of the Attorney General"). Courts should "refrain from second-guessing the Executive Branch." Cannons, 899 F.2d at 84. Judicial presumption in favor of voluntary settlement is "particularly strong where a Consent Decree has been negotiated by the Department of Justice on behalf of a federal administrative agency like EPA which enjoys substantial expertise in the environmental field." United States v. Akzo Coatings of Am. Inc., 949 F.2d 1409, 1436 (6th Cir. 1991). These negotiations often involve a "crew of sophisticated players, with sharply conflicting interests . . . ." Cannons, 899 F.2d at 84. Given that, the court "must look at the big picture, leaving interstitial details largely to the agency's informed judgment." Cannons, 899 F.2d at 94. In sum, while the court should not merely give its "rubberstamp approval," United States v. BP Exploration and Oil Co. 167 F. Supp. 2d 1045, 1050 (N.D. Ind. 2001), it should consider a consent decree against the strong public policy encouraging voluntary settlement, a policy that has "particular force" where the decree has been negotiated on behalf of an expert agency like EPA. Cannons, 899 F.2d at 84.

Thus, a reviewing court is not required to make the same in-depth analysis of a proposed settlement that it would be required to make in order to enter a judgment on the merits after trial:

> The trial court in approving a settlement need not inquire into the precise legal rights of the parties nor reach and resolve the merits of the claims or controversy, but need only determine that the settlement is fair, adequate, reasonable and appropriate under the particular facts and that there has been valid consent by the concerned parties.

Citizens for a Better Environ. 718 F.2d 1117, 1126 (D.C. Cir. 1983); accord Officers for Justice, 688 F.2d at 625. The relevant standard "is not whether the settlement is one which the court itself might have fashioned, or considers as ideal . . . ." United States v. Kramer, 19 F. Supp. 2d 273, 280 (D.N.J. 1998) (quoting Cannons Eng'g Corp., 899 F.2d at 84); accord United States v. Southeastern Pa. Transp. Auth., 235 F.3d 817, 823 (3d. Cir. 2000) ("A court should approve a

proposed Consent Decree if it is fair, reasonable, and consistent with CERCLA's goals."). Thus, the court cannot "substitute its judgment for that of the parties nor conduct the type of detailed investigation required if the parties were actually trying the case." BP Exploration, 167 F. Supp. 2d at 1050. Nor should the court judge the proposed settlement "against a hypothetical or speculative measure of what might have been achieved by the negotiators." Officers for Justice, 688 F.2d at 625 (citations omitted). Ultimately, "[t]he court need only be satisfied that the decree represents a 'reasonable factual and legal determination.'" Oregon, 913 F.2d at 581 (quoting United States v. City of Miami, 664 F.2d 435, 441 (5th Cir. 1981) (en banc) (Rubin, J., concurring)).

Ensuring that the settlement is in the public interest is but one factor to be considered by the Court and does not alter the fundamental reasonableness standard or the policy of deference to the settling agency. Randolph, 736 F.2d at 529 (holding that the district court applied "too strict a standard" when it "closely scrutinize[d] the proposed decree to see if it was in the public's best interest"). Even where a Consent Decree affects the public interest or third parties, "the court need not require that the decree be 'in the public's best interest' if it is otherwise reasonable." Oregon, 913 F.2d at 581 (quoting Randolph, 736 F.2d at 529 (emphasis in original)). Nor must a consent decree "impose all the obligations authorized by law." Id.

The court's role in considering a proposed decree is a limited one: "The court may either approve or disapprove the settlement; it may not rewrite it." Harris v. Pernsley, 654 F. Supp. 1042, 1049 (E.D. Pa.), aff'd, 820 F.2d 592 (3d Cir. 1987); accord Jones & Laughlin Steel, 804 F.2d at 351 (stating that a court does not have the power to modify a consent decree; it may only accept or reject the terms to which the parties have agreed). Thus, the question to be resolved in reviewing the settlement, and the degree of scrutiny to be applied, are distinct from the merits of

the underlying action.

In sum, this Court's role in reviewing the proposed amendment to the Consent Decree is limited to approval or denial, based on an evaluation of the fairness and reasonableness of the settlement and its concordance with the applicable law. The Court must conduct this evaluation in the context of the strong public policy supporting settlement and bearing in mind the substantial deference due to EPA's and the Department of Justice's ("DOJs") interpretations of applicable environmental laws and regulations as well as to EPA's engineering and scientific determinations. See, e.g., Chevron U.S.A., Inc. v. Natural Resources Defense Council, 467 U.S. 837, 843–44 (1984); American Paper Inst. v. U.S. EPA, 660 F.2d 954, 963 (4th Cir. 1981).

IV. THE FIRST MODIFICATION IS FAIR, REASONABLE, AND CONSISTENT WITH THE PUBIC INTEREST AND THE GOALS OF THE CLEAN AIR ACT

The First Modification satisfies the standard for approval of a settlement. The First Modification is fair, reasonable, and in accordance with the objectives of the Act because it resulted from complex, lengthy, and difficult arms-length negotiations; it fairly reflects the changing circumstances at the Refinery while preserving key environmental protections; and it is a reasonable compromise which is faithful to the goals of the statute and in the public interest. Accordingly, the First Modification should be entered as a final order of the Court.

The comments received contend that the First Modification should be rejected because it is "inappropriate, improper, and inadequate." The Commenter alleges that the First Modification does not meet the standard for consent decrees because:

> 1) It implies a false premise that the . . . Refinery did not shut down, when the Refinery should be considered a new major stationary source under the PSD rules and thus subject to the standards therein;
>
> 2) In order to effectively protect the public health and welfare of the people of the Virgin Islands, the cancer registry referenced therein must be

> established and significant community research undertaken *before* (emphasis in original) the commencement of polluting activity contemplated;
>
> 3) The compliance assessment and reporting protocols referenced therein allow Limetree to self-report, when this responsibility should properly be undertaken by EPA Region 2; and
>
> 4) The Refinery activity contemplated by the Modification implicates and does not address serious concerns regarding federally-listed species and Sandy Point National Wildlife Refuge.

Attachment B at page 1. As discussed below, the first comment conflates the shutdown issue; the second comment seeks something that is beyond the scope of the Act; the third comment is inconsistent with the Act; and the fourth comment seeks something that is beyond the scope of the Act. The First Modification does not violate any statutory requirements and is protective of the environment.

A. The Consent Decree is Procedurally and Substantively Fair.

1. Procedural Fairness

This settlement is the result of a fair process. A settlement is procedurally fair if the negotiations that created it were non-collusive, open, and at arms-length. See BP Exploration, 167 F. Supp. 2d at 1051 (citing Cannons, 899 F.2d at 86). The settlement embodied in the First Modification is the product of extended, arms-length negotiations. The fairness of a consent decree must be evaluated in both procedural and substantive aspects. See In Re Tutu Water Wells CERCLA Lit., 326 F.3d 201, 207 (3d Cir. 2003). To measure procedural fairness, a court should "look to the negotiation process and attempt to gauge its candor, openness and bargaining balance." Id. (quoting Cannons, 899 F.2d at 86). As noted by the court in Rohm & Haas:

> Where a settlement is the product of informed, arms-length bargaining by the EPA, an agency with the technical expertise and the statutory mandate to enforce the nation's environmental protection laws, in conjunction with the Department of Justice…a presumption of validity attaches to that agreement.

U.S. v. Rohm & Haas Co., 721 F. Supp. 666, 681 (D.N.J. 1989) (citing City of New York v. Exxon Corp., 697 F. Supp. 677, 692 (S.D.N.Y. 1988)). An additional element of procedural fairness is provided by virtue of the United States having followed the protective procedures of 28 C.F.R. § 50.7 by seeking public comment. The comments received do not challenge or question the procedural fairness.

The First Modification resulted from procedurally fair settlement negotiations. The First Modification preserves nearly all of the provisions of the 2011 Consent Decree and, in fact, improves upon some by making them consistent with updated regulatory provisions (*i.e.*, LDAR). The negotiations that led to the First Modification were conducted at arms-length and involved many discussions concerning both legal and technical issues. All parties to those discussions were represented by informed legal counsel and technical representatives. Where, as here, a proposed consent decree is "the product of good faith, arms-length negotiations" it is "presumptively valid." See United States v. Oregon, 913 F.2d 576,581 (9th Cir. 1990).

2. Substantive Fairness

In addition to being the result of a procedurally fair process, the First Modification's terms are substantively fair. To determine whether a proposed settlement is substantively fair, courts look to factors such as the strength of the plaintiff's case versus the amount of the settlement offer, the likely complexity, length and expense of litigation, the amount of opposition to the settlement, the opinion of competent counsel, the stage of the proceeding, and the amount of discovery undertaken. Great Neck Cap. App. Inv. Ptp. v. Pricewaterhousecoopers, 212 F.R.D. 400 at 409 (citing E.E.O.C. v. Hiram Walker & Sons, Inc., 768 F.2d 884, 889 (7th Cir. 1980)); BP Exploration, 167 F. Supp. 2d at 1051-52. Because these concepts do not lend themselves to "verifiable precision [,] [i]n environmental cases, EPA's expertise must be given 'the benefit of the doubt when weighing substantive fairness.'" Comunidades Unidas, 204 F.3d at 281 (quoting

Cannons, 899 F.2d at 88). These terms also are not easily quantified in this instance because this is an amendment of an existing consent decree.

The First Modification is substantively fair because it preserves the vast majority of the requirements and obligations from the 2011 Consent Decree but also fairly addresses HOVENSA's bankruptcy, Limetree Bay's purchase of certain refining and terminal assets in the bankruptcy proceeding, the creation of the ERT, and the operational realities at the Refinery. The First Modification is the result of DOJ's, EPA's and DPNR's assessment of how to adapt to the change in ownership and the operational realties of the Refinery while effecting the environmental requirements and the public protections of the Decree. In short, it reflects the sound judgment of the environmental agencies tasked with protecting the environment and enforcing the environmental laws.

a. First Comment:

It implies a false premise that the Limetree Bay Terminals (formerly known as Hovensa and HOVIC) refinery (hereinafter Refinery) did not shut down, when the Refinery should be considered a new major stationary source under the Prevention of Significant Deterioration (PSD) rules and thus subject to the standards therein.

The Commenter's first comment conflates a Decree issue and a permitting issue by mischaracterizing a Whereas clause in the First Modification. (Attachment A at page 4). The Whereas clause reads as follows:

> WHEREAS, except to the extent set forth in the preceding WHEREAS clause, neither HOVENSA nor Limetree Bay has permanently Shutdown and surrendered permits for the Refinery or portions of the Refinery to satisfy the requirements of the Consent Decree in the manner provided in Paragraph 229 (Effect of Shutdown) of the Consent Decree.

Paragraph 229 of the Decree provides that the requirements of the Consent Decree can be satisfied by the permanent Shutdown of the Refinery **and** the surrender of all air permits for the Refinery. (Attachment A, ¶ 229) (Emphasis added). In addition to Paragraph 229, Paragraph 23

of the Decree identifies "Permanent unit shutdown **and** relinquishment of permit" as one of the qualifying controls that may be used to satisfy the NO_x emission reductions required for heaters, boilers, generating turbines, and compressor engines in Paragraphs 24, 26, 27, and 28. (Attachment A, ¶ 23) (emphasis added).

This Whereas clause was included in the First Modification to make clear that neither HOVENSA nor Limetree Bay have availed themselves of the option to comply with the Decree through a permanent shutdown of part or all of the Refinery **and** surrendering air permits, as set forth in Paragraphs 23 and 229. The Whereas clause in question states only that neither HOVENSA nor Limetree Bay satisfied **both** conditions for invoking the compliance option involving permanent shutdown for units other than those described in the prior Whereas clause (i.e. those listed in Appendix N of the First Modification). Despite recognizing that the relevant permits were not surrendered and also acknowledging the intent of this Whereas clause, the Commenter uses the clause as a springboard to a lengthy discussion about a permitting process that is occurring outside of the Decree. (Attachment B, page 2, FN2). ("**The undersigned notes that this section** [of the comments] **applies to PSD analysis – not as to whether the terms of Section 229 of the Consent Decree have come to pass."** (Emphasis in original).

The Consent Decree was born of a 2011 judicial enforcement action against HOVENSA. In contrast, permitting is an adjudicative process before EPA or the State. EPA decisions and policies in the latter process are not relevant to, and indeed cannot be used to determine, the meaning of terms of the Consent Decree, which must be construed basically as a contract and its language examined within the four corners of the agreement. [2] *See United States v. ITT*

[2] Conversely, nothing in the proposed First Modification of the Consent Decree or the Motion to Enter should be read or interpreted as a statement on whether any refinery units were permanently shut down for the distinct purpose of determining the type of permits required to

Continental Banking Co., 420 U.S. 223, 238 (1975) ("[A] consent decree or order is to be construed for enforcement purposes basically as a contract . . . ."); *United States v. Armor & Co.*, 402 U.S. 673, 682 (1971) ("[T]he scope of a consent decree must be discerned within its four corners, and not by reference to what might satisfy the purpose of one of the parties to it."); *Harris v. City of Philadelphia*, 137 F.3d 209, 212 (3d. Cir. 1998); *Fox v. U.S. Dep't of Housing*. 680 F.2d 315, 319 (3d Cir. 1982).

The Whereas clause and more generally, the Decree has only a narrow, limited interaction with the permitting process. Apart from the one Whereas clause, the only other references to permitting contained in the Decree are provisions that make clear that Limetree Bay is required to: (1) incorporate emission limits set in the Decree into federally enforceable minor or major new source review permits (Attachment A, ¶ 12); (2) incorporate emission limits and standards into the Refinery's Title V permit (Attachment A, ¶ 126); and (3) to obtain required, federally enforceable permits for the construction of pollution control technology and the installation of equipment necessary to implement the requirements of the Decree (Attachment A, ¶ 127). While these requirements are implemented through permitting, permitting occurs in entirely separate processes from enforcement that encompass numerous requirements and decisions unrelated to the Decree and over which the Decree has no influence. Moreover, Paragraph 214 of the Decree specifically preserves the right of EPA and the Virgin Islands to impose stricter permitting requirements ("nothing in this Consent Decree shall be construed to prohibit or prevent the United States or the Virgin Islands from developing, implementing, and enforcing more stringent standards subsequent to the Date of Lodging through . . . the permit

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restart these units. In accordance with Paragraph 214 of the Decree, except as expressly provided, nothing in the Decree relieves HOVENSA or Limetree Bay of its obligation to comply with other applicable federal and territorial laws, including those requiring air permits.

process"). The Commenter's concern about the underlying predicate of a permitting decision is not the subject of this judicial proceeding, which is focused on transferring to a new owner the existing obligations from a 2011 Consent Decree that resolved Clean Air Act violations that arose prior to entry of the Consent Decree and which were established well-before the events underlying the Commenter's concern, nor does it affect in any way the permitting process discussed by the Commenter. Given the substantive and procedural separation of this Decree and the permitting process, the Commenter's permitting concerns are misplaced and not relevant to the Court's consideration of the Motion to Enter the First Modification.

b. Second Comment

In order to effectively protect the public health and welfare of the people of the Virgin Islands, the cancer registry referenced therein must be established and significant community research undertaken before the commencement of polluting activity contemplated.

The Clean Air Act neither authorizes nor requires that a cancer registry be established or that it must be established before the Refinery can restart. However, as part of the 2011 Consent Decree, HOVENSA was required to establish and pay $4.875 million into an escrow account to fund Territorial Supplemental Environmental Projects ("TSEPs") to be implemented for the benefit of the Virgin Islands. (ECF Doc. No. 6, ¶ 137). HOVENSA established the escrow account and deposited the $4.875 million into that account on or about October 13, 2011. As part of the First Modification, Paragraph 137 is modified to provide DPNR the responsibility of developing and implementing the TSEPs. The First Modification identifies a cancer registry to be "among the potential projects" DPNR is considering. Ordering establishment of a cancer registry, however, is beyond the authority of the Act.

c. Third Comment

The compliance assessment and reporting protocols referenced therein allow for Limetree to self-report, when this responsibility should properly be undertaken by EPA Region 2.

It is common practice for environmental regulators to require regulated entities to self-monitor and self-report. U.S. v. Chevron U.S.A., Inc., 380 F. Supp. 2d 1104, 1113 (N.D. Cal. 2005). And, if a report is falsified, the regulated entity is generally subject to both civil and criminal penalties. See Section 113 of the Act, 42 U.S.C. § 7413. The Act relies largely on a system of self-reporting, along with the use of inspections, in order to "to protect and enhance the quality of the Nation's air resources." 42 U.S.C. § 7401(b)(1). Cf., United States v. Murphy Oil, 143 F. Supp. 1054, 1084 (W.D. Wisc. 2001).

Consistent with this approach, the Consent Decree requires that each report be certified by an officer responsible for overseeing implementation of the Consent Decree, as follows:

> "I certify under penalty of law that this information was prepared under my direction or supervision by personnel qualified to properly gather and evaluate the information submitted. Based on my directions and after reasonable inquiry of the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete."

See, 2011 Consent Decree, ¶ 144. ECF Doc. 6, page 105. In addition, the Consent Decree includes stipulated penalties for failure to comply with Part X (Reporting and Recordkeeping). ECF Doc. 6, ¶ 171, page 117. Importantly, the monitoring and reporting required under both the Decree and applicable regulations are in addition to, and not in lieu of, oversight and inspection of the Refinery by EPA.

d. Fourth Comment

The Refinery activity contemplated by the Modification implicates and does not address serious concerns regarding federally-listed species and Sandy Point National Wildlife Refuge.

The Commenter failed to cite any authority to support the assertion that the First Modification must address endangered or threatened species or potential impacts to Sandy Point National Wildlife Refuge.

Under the Endangered Species Act of 1973, if any agency determines that a proposed action may affect an endangered or threatened species, the agency must formally consult with the relevant federal fish and wildlife agency, depending on the species that are protected in the area of the proposed action. The Endangered Species Act of 1973, Section 7(a)(2), 16 U.S.C.A. § 1536(a)(2). However, courts have held, as a matter of law, that a consent decree is not an agency action that triggers the Section 7 consultation requirement. U.S. v. Pacific Gas & Elec., 776 F. Supp. 2d 1007, 1023 (N.D. Cal. 2011). For this reason, the First Modification is not required to address endangered or threatened species or potential impacts to Sandy Point National Wildlife Refuge.

* * *

After carefully considering all of the Commenter's comments and after a thorough evaluation of the issues raised in those comments, the United States has concluded that none of the comments warrants either a change to the settlement terms or the wholesale rejection of the First Modification.

The 2011 Consent Decree provides for the reduction in air emissions in the Virgin Islands. The First Modification requires Limetree Bay and the ERT to step into HOVENSA's shoes in order to implement those reductions. For Limetree Bay, this means making sure that the Refinery achieves stringent emissions limits and implements other enhancements that will provide tangible benefits to the health and welfare of the residents of the Virgin Islands through the reduction of NO_x and SO_2 emissions from the Refinery. Thus, the First Modification is substantively fair.

B. The Decree is Reasonable, Adequate and Consistent with the Goals of the Act

In determining whether a decree is "reasonable, adequate, and consistent with the goals of the governing statute," courts have evaluated the following factors: "(1) the nature and extent of potential hazards; (2) the availability and likelihood of alternatives to the Consent Decree, (3) whether the Decree is technically adequate to accomplish the goal of cleaning the environment; (4) the extent to which the Consent Decree furthers the goals of the statutes which form the basis of the litigation; (5) the extent to which the Court's approval of the Consent Decree is in the public interest; and (6) whether the Consent Decree reflects the relative strengths and weakness of the Government's case against the Defendants." BP Exploration, 167 F. Supp. 2d at 1053 (citing Akzo, 949 F.2d at 1436; Cannons, 899 F.2d at 89–90).

Though not all of these factors are appropriate for discussion here, they all militate in favor of approving the First Modification, which should be considered reasonable and adequate for many of the same reasons discussed above with respect to substantive fairness. The impetus for the First Modification was the HOVENSA bankruptcy, Limetree Bay's purchase of certain refining and terminal assets, and the creation of the ERT. The resulting transfer of ownership and other interests in the Refinery triggered the requirement for a modification pursuant to Paragraph 7 of the 2011 Consent Decree. ECF Doc. 6, page 7.

The First Modification maintains the specific, tailored relief called for in the 2011 Consent Decree including the requirements to reduce NO_x emissions and control SO_2, PM, and CO emissions from the Refinery's fluid catalytic cracking unit; significantly reduce NO_x emissions from the heaters, boilers, generating turbines, and compressor engines; reduce SO_2 emissions by burning lower sulfur fuel oil and complying with fuel gas combustion requirements for heaters, boilers, flares, and sulfur recovery plants; comply with regulatory requirements for

acid gas and hydrocarbon flaring, and implement a program to investigate the causes of flaring incidents and take preventive action; create a preventive maintenance and operation plan for minimizing SO_2 emissions from the sulfur recovery plant; reduce emissions of VOCs through stricter LDAR requirements and by replacing valves that are leaking above a specified level with low emissions valves or low emissions valve packing; and reduce emissions of benzene by improving management of benzene waste streams. In recognition of the changed operational realities of the Refinery, the First Modification modifies some of the deadlines and injunctive relief obligations. However, many of those extensions will have little to no impact given that the obligations will be complied with before the relevant equipment resumes operation (see ¶¶ 27 and 45), the modification requires mitigation if it results in additional emissions (see ¶ 50A), or includes interim compliance measures (see ¶ 136). It is for these reasons that the United States believes on balance that the First Modification reasonably and adequately addresses Clean Air Act requirements and is protective of the public.

One of the primary purposes of the Clean Air Act is to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare. 42 U.S.C. § 7401(b)(1). As discussed above, the First Modification retains the 2011 Consent Decree's obligations to reduce NO_x and SO_2 emission from the Refinery and the requirements to control VOC emissions and benzene emissions from the Refinery. The First Modification also provides Limetree Bay with some flexibility to ensure that it is able to restart (as defined in the First Modification) in compliance with the terms of the Decree while also ensuring that the restart maintains the benefits of the 2011 Consent Decree.

When evaluating whether a consent decree is in the public interest, "[t]he court should bear in mind the flexibility of the public interest inquiry: the court's function is not to determine

whether the resulting array of rights and liabilities is the one that will best serve society, but only to confirm that the resulting settlement is within the reaches of the public interest." United States v. Microsoft Corp., 56 F.3d 1448, 1460 (D.C. Cir. 1995) (internal quotations omitted); U.S. v. Oregon, 913 F.2d at 581 ("[T]he court need not require that the decree be 'in the public's *best* interest' if it is otherwise reasonable.") (quoting Randolph, 736 F.2d at 529 (emphasis in original)). While the First Modification reflects a compromise based on the technical and legal judgment of the United States, the relief afforded by this settlement provides real benefits to the citizens in the Virgin Islands and real progress toward the Clean Air Act goals of enhancing air quality and promoting public health and welfare. Thus, the First Modification clearly meets the Microsoft and Oregon standards.

V. NON-MATERIAL MODIFICATION TO PARAGRAPH 79.a

Paragraph 79.a of the First Modification as lodged with the Court on August 25, 2020 (ECF Doc. 12-1, page 27), requires that Limetree Bay "shall complete a review and verification of the Refinery TAB [total annual benzene] and its compliance with the Benzene Waste NESHAP" by March 30, 2021. This date was set in the belief that the Refinery would restart during the fourth quarter of 2020. If the Refinery had restarted in that time frame, it would have provided sufficient operational data to ensure for a complete review and verification of the Refinery's TAB.

Due to the delay in the Refinery restart, the United States and Limetree Bay have agreed to change the deadline for completion of the review and verification from March 30, 2021 to November 22, 2021. Paragraph 228 of the Decree provides, in part, that "non-material modifications include . . . modifications to schedules that do not extend the date for compliance with emissions limitations following the installation of control equipment, provided such

changes are agreed upon in writing between the United States and HOVENSA [Limetree Bay]." This compliance date does not involve the installation of control equipment or emissions limitations. Because this date change does not involve the installation of control equipment or emissions limitations it is a non-material modification. Attachment C to this Memorandum is the executed Second Modification of the Consent Decree documenting the United States' and Limetree Bay's agreement to this non-material modification.

CONCLUSION

As explained above, the First Modification is fair, adequate and reasonable, and consistent with the goals of the Clean Air Act. Since the public comments submitted on the First Modification do not provide a basis for the United States to withhold its consent to the settlement, and because changing the deadline for completion of the review and verification from March 30, 2021 to November 22, 2021 is a non-material modification that does not warrant additional notice and comment, the United States requests that this Court approve the First Modification by executing page 95 of Attachment A, and enter it as an order of this Court.

Dated: April 8, 2021

Respectfully Submitted,

JEAN E. WILLIAMS
Acting Assistant Attorney General

/s/ Myles E. Flint, II
MYLES E. FLINT, II
Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Ben Franklin Station
Washington, DC 20044-7611

GRETCHEN C.F. SHAPPERT
United States Attorney
United States Virgin Islands
Federal Building and U.S. Courthouse
5500 Veterans Drive, Room 260
St. Thomas, USVI 00802

OF COUNSEL:

FLAIRE MILLS
Assistant Regional Counsel
United States Environmental Protection Agency
Region 2
290 Broadway
New York, New York 10007-1866

ATTACHMENT A

TO MEMORANDUM IN SUPPORT OF MOTION TO ENTER

IN THE DISTRICT COURT OF THE VIRGIN ISLANDS
DIVISION OF ST. CROIX

UNITED STATES OF AMERICA, and UNITED STATES VIRGIN ISLANDS	)	
Plaintiffs,	)	Civ. No. 1:11-cv-00006
v.	)	
HOVENSA L.L.C.	)	
Defendant.	)	

FIRST MODIFICATION OF THE CONSENT DECREE

WHEREAS, the United States of America ("United States"), the United States Virgin Islands ("Virgin Islands"), and HOVENSA L.L.C. ("HOVENSA") are parties to a Consent Decree entered by this Court on June 7, 2011 in the above-captioned matter (Civ. No. 1:11-cv-00006, Doc. 6).

WHEREAS, the United States, the Virgin Islands, HOVENSA, Limetree Bay Terminals, LLC, Limetree Bay Refining, LLC, and the Environmental Response Trust ("ERT") are parties to this first modification of the Consent Decree ("First Modification").

WHEREAS, HOVENSA idled the refinery and terminal operations in 2012 and 2015, respectively, and filed for bankruptcy on September 15, 2015 in the United States District Court for the District of the Virgin Islands, Bankruptcy Division (the "Bankruptcy Court").

WHEREAS, on December 1, 2015, the Bankruptcy Court entered an Order (Case No. 1:15-bk-10003-MFW, Doc. 394) approving the sale of certain refining and terminal assets owned by HOVENSA to Limetree Bay Terminals, LLC pursuant to the terms of the Amended and Restated Asset Purchase Agreement in the form appearing as Doc. 528-1 in Case No. 1:15-bk-10003-MFW ("Final APA").

WHEREAS, on January 4, 2016, the sale of certain refining and terminal assets to Limetree Bay Terminals, LLC closed.

WHEREAS, HOVENSA represented in the Final APA that it was in material compliance with the Consent Decree.

WHEREAS, pursuant to the Final APA, Limetree Bay Terminals, LLC, in part, agreed to "promptly … use commercially reasonable efforts..., in cooperation with the applicable Governmental Entities, to ... make the terms, conditions, obligations and liabilities of the Consent Decree applicable to the Purchased Assets, including [Limetree Bay Terminals, LLC] and [HOVENSA] executing a modification to the Consent Decree pursuant to which [Limetree Bay Terminals, LLC] shall assume the terms, conditions, obligations and liabilities of [HOVENSA] as they relate to the Purchased Assets under the Consent Decree and [HOVENSA] shall be released from such terms, conditions, obligations and liabilities (the "Limited Consent Decree Modification") ...."

WHEREAS, pursuant to the Final APA, "[i]f, despite [Limetree Bay Terminals, LLC's] and [HOVENSA's] respective efforts, the applicable Governmental Entities do not agree to the Limited Consent Decree Modification, regardless of whether such failure to agree occurs before or after the Closing, [Limetree Bay Terminals, LLC] and [HOVENSA] promptly thereafter shall … cooperate and take, or cause to be taken, all steps required under the Consent Decree to make the terms, conditions, obligations and liabilities of the Consent Decree applicable to [Limetree Bay Terminals, LLC], including (A) [Limetree Bay Terminals, LLC] and [HOVENSA] executing a modification to the Consent Decree pursuant to which [Limetree Bay Terminals, LLC] shall assume the terms, conditions, obligations and liabilities of [HOVENSA] under the Consent Decree and [HOVENSA] shall be released from such terms, conditions, obligations and

liabilities (the "Consent Decree Modification") …."

WHEREAS, the applicable Governmental Entities, HOVENSA and Limetree Bay Terminals, LLC did not agree to a Limited Consent Decree Modification.

WHEREAS, "on the terms and subject to the conditions of" the Final APA, Limetree Bay Terminals, LLC agreed to assume all of HOVENSA's Liabilities, other than the Excluded Liabilities, "under the Consent Decree in connection with the Purchased Assets arising out of or relating to any act, omission, circumstances or other Event occurring after the Closing" (as each term is defined in the Final APA).

WHEREAS, Limetree Bay Terminals, LLC's agreement to enter into a Consent Decree Modification does not alter the rights and obligations of the parties to the Final APA.

WHEREAS, Paragraph 7 of the Consent Decree required HOVENSA to condition any transfer, in whole or in part, of the ownership or operation of the Refinery "upon the execution by the transferee of a modification to this Consent Decree, which makes the terms and conditions of this Consent Decree applicable to the transferee."

WHEREAS, pursuant to the Plan of Liquidation and the ERT Agreement, the ERT assumed HOVENSA's Consent Decree obligations under and relating to Section IX.A (Territorial Supplemental Environmental Project ("TSEP(s)")) and Section IX.B. (VIWAPA Emissions Monitoring Assistance).

WHEREAS, on February 17, 2016, groundwater and other remediation systems, including the Vapor Enhanced Recovery Units 1 and 2 ("VER-1" and "VER-2"), were transferred from HOVENSA to the ERT in accordance with the Plan of Liquidation.

WHEREAS, on October 11, 2012, HOVENSA submitted a Notice of Dismantlement of VER-1 in compliance with Section 204-31 of the Rules and Regulations of the Virgin Islands Air

Pollution Control Act and section 2.4.7.1 of HOVENSA's Title V Permit.

WHEREAS, Limetree Bay submitted to the Virgin Islands Department of Planning and Natural Resources ("VIDPNR") and/or EPA, by letters dated February 28, 2017, June 9, 2017, and May 30, 2019, requests to modify its Title V and non-title V permits to reflect the permanent Shutdown of certain combustion devices to satisfy the requirements of Section V.F of the Consent Decree to reduce NOx emissions by 4,744 tons per year.

WHEREAS, except to the extent set forth in the preceding WHEREAS clause, neither HOVENSA nor Limetree Bay has permanently Shutdown and surrendered permits for the Refinery or portions of the Refinery to satisfy the requirements of the Consent Decree in the manner provided in Paragraph 229 (Effect of Shutdown) of the Consent Decree.

WHEREAS, on or before April 24, 2018, Limetree Bay notified the Virgin Islands of the intent to restart Refinery Operations at the Refinery.

WHEREAS, on April 24, 2018, an affiliate of Limetree Bay Terminals, LLC formed a new limited liability company under the laws of the Virgin Islands, Limetree Bay Refining, LLC.

WHEREAS, in July 2018, Limetree Bay Terminals, LLC entered into the Amended and Restated Terminal Operating Agreement with the Virgin Islands, in which Limetree Bay Terminals, LLC, in part, agreed to "use commercially reasonable efforts to … add [itself] as a named party defendant to the … Consent Decree and modify the … Consent Decree to restart Refinery Operations." (Amended and Restated Terminal Operating Agreement by and Among the Government of the Virgin Islands and Limetree Bay Terminals, LLC, Section 4.1(B)).

WHEREAS, also in July 2018, Limetree Bay Refining, LLC entered into the Refinery Operating Agreement with the Virgin Islands, in which Limetree Bay Refining, LLC, in part, agreed to "use commercially reasonable efforts to … add [itself] as a named party defendant to

the … Consent Decree and modify the … Consent Decree to restart Refinery Operations." (Refinery Operating Agreement by and Among the Government of the Virgin Islands and Limetree Bay Refining, LLC, Section 4.1(B)).

WHEREAS, on May 28, 2020, HOVENSA certified to the United States and the Virgin Islands that it had taken the actions described in Appendix Q ("HOVENSA Certification") in completion and satisfaction of the Consent Decree requirements identified therein as of June 30, 2019.

WHEREAS, due to the bankruptcy, the Parties desire to capture the certification of HOVENSA as to the Consent Decree obligations completed by HOVENSA for purposes of satisfying the requirement to certify completion for purposes of termination in accordance with Paragraphs 231 and 232 of the Consent Decree and to identify the Consent Decree obligations that have not yet been completed.

WHEREAS, on November 30, 2018, Limetree Bay Terminals, LLC, executed a Bill of Sale transferring in whole or in part certain Refinery assets that are subject to the requirements of the Consent Decree to Limetree Bay Refining, LLC.

WHEREAS, the United States, the Virgin Islands, HOVENSA, Limetree Bay Terminals, LLC, Limetree Bay Refining, LLC, and the ERT have reached an agreement on the First Modification as set forth herein, and, pursuant to Paragraphs 7 and 228 (Modification) of the Consent Decree, seek to modify the Consent Decree in accordance herewith.

WHEREAS, the United States, the Virgin Islands, HOVENSA, Limetree Bay Terminals, LLC, Limetree Bay Refining, LLC, the ERT, and this Court, by entering the First Modification, find that the First Modification has been negotiated in good faith and at arm's length; that the First Modification is fair, reasonable, and in the public interest.

WHEREAS, the United States, the Virgin Islands, HOVENSA, Limetree Bay Terminals, LLC, Limetree Bay Refining, LLC, and the ERT agree and acknowledge that final approval by the United States and entry of the First Modification is subject to the procedures set forth in 28 C.F.R. § 50.7, which provides for notice of the First Modification in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations that indicate that the First Modification is inappropriate, improper or inadequate.

NOW THEREFORE, upon the consent and agreement of the United States, the Virgin Islands, HOVENSA, Limetree Bay Terminals, LLC, Limetree Bay Refining, LLC, and the ERT, it is hereby ORDERED, ADJUDGED, and DECREED as follows:

1. The terms and conditions of the Consent Decree are applicable to Limetree Bay Terminals, LLC, Limetree Bay Refining, LLC, and their respective successors or assigns, except as otherwise specifically set forth herein.

2. The terms and conditions of the Consent Decree that apply to VER-1 and VER-2, and any obligations in Parts X (Reporting and Recordkeeping), and XIX (Termination) that relate to VER-1 and VER-2, are applicable to the ERT. All requirements of this Consent Decree that apply to VER-1 are satisfied pursuant to Paragraph 229.

3. As of the Date of Entry of the First Modification, the obligations under and relating to Section IX.A and B of the Consent Decree, including the obligation to disburse funds from the TSEP Escrow Account for any TSEP approved by VIDPNR, to disburse funds earmarked for the VIWAPA Emissions Monitoring Assistance Program, and any obligations in Part X (Reporting and Recordkeeping) that relate to the TSEP Escrow Account or to the

VIWAPA Emissions Monitoring Assistance Program are transferred to the ERT as specified in the First Modification.

4. Limetree Bay Terminals, LLC, Limetree Bay Refining, LLC, and the ERT shall be added as Parties to the Consent Decree.

5. In accordance with Paragraphs 1-4 of the First Modification, effective upon the Date of Entry of the First Modification:

a. Limetree Bay Refining, LLC and Limetree Bay Terminals, LLC shall be substituted for HOVENSA as the Defendant, for all provisions of the Consent Decree, including all rights, liabilities and obligations of HOVENSA, except as set forth in this First Modification.

b. The ERT shall be substituted for HOVENSA as the Defendant only to the extent any obligation set forth in the Consent Decree relates to either VER-1 or VER-2 or Part IX (Territorial Supplemental Environmental Project).

6. Limetree Bay shall retain any and all records that it received from HOVENSA related to the implementation of the requirements of the Consent Decree for the periods specified in the relevant Paragraphs of the Consent Decree along with all records required to be maintained by Limetree Bay pursuant to the First Modification. Limetree Bay is not liable for penalties for HOVENSA's failure to keep records required under the Consent Decree but will use commercially reasonable efforts to create a compliant version upon request by the United States or the Virgin Islands.

7. Limetree Bay shall not be required to make any submittal or report or take any action required by the Consent Decree if a prior submittal, report, or action by HOVENSA fully satisfied that same requirement of the Consent Decree.

8. As of the Date of Entry of the First Modification, HOVENSA shall be released from the obligations and liabilities under the Consent Decree.

9. Nothing in the First Modification shall affect any obligations that the parties to the First Modification may have to one another under any agreement or court order including, without limitation, the Order Granting Final Approval of Disclosure Statement and Confirming Chapter 11 Plan of Liquidation Pursuant to Chapter 11 of the Bankruptcy Code (In re HOVENSA L.L.C., Chapter 11 Case No. 1:15-bk-10003-MFW, Doc. No. 572) (the "Confirmation Order"), except as provided under the Consent Decree. Nothing in the First Modification shall affect any of the settlement, release, or injunction provisions set forth in the Plan of Liquidation or the Confirmation Order, except as provided under the Consent Decree. Nothing in the First Modification shall affect any rights obligations, or liabilities that the parties to the Final APA have to one another under the Final APA.

10. Except as specifically provided in the First Modification, the definitions in the Consent Decree shall continue to apply.

11. Replace the following definitions in Paragraph 10:

E. "Acid Gas Flaring Device" or "AG Flaring Device" shall mean any device that is used for the purpose of combusting Acid Gas and/or Sour Water Stripper Gas, except facilities in which gases are combusted to produce sulfur or sulfuric acid. The AG Flaring Devices are identified in Appendix D ("List of Flaring Devices Subject to NSPS Subpart Ja"). To the extent that, during the duration of the Consent Decree, the Refinery utilizes AG Flaring Devices other than those specified in Appendix D for the purpose of combusting Acid Gas and/or Sour Water Stripper Gas, those AG Flaring Devices shall be covered under this Consent Decree.

AA. "HOVENSA" shall mean HOVENSA L.L.C.

CC. "Hydrocarbon Flaring Device" or "HC Flaring Device" shall mean a flare used to safely control (through combustion) any excess volume of a refinery-generated gas other than Acid Gas and/or Sour Water Stripper Gas and/or Tail Gas. The HC Flaring Devices are identified in Appendix D ("List of Flaring Devices Subject to NSPS Subpart Ja"). To the extent that, during the duration of the Consent Decree, the Refinery utilizes HC Flaring Devices other than those specified in Appendix D for the purposes of combusting any excess volume of a refinery-generated gas other than Acid Gas and/or Sour Water Stripper Gas and/or Tail Gas, those HC Flaring Devices shall be covered under this Consent Decree.

MM. "Parties" shall mean, as of the Date of the Entry of the First Modification, the United States, the Virgin Islands, Limetree Bay Terminals, LLC, Limetree Bay Refining, LLC, and the Environmental Response Trust.

NN. "Refinery" shall mean the petroleum refining and terminal facilities in St. Croix, Virgin Islands. As of the Date of Lodging and the Date of Entry, both the petroleum refining and terminal facilities, the boundaries of which are shown in Appendix I ("Map of HOVENSA, L.L.C."), were owned and operated by HOVENSA L.L.C. As of the Date of Lodging of the First Modification, the petroleum refining facility is owned and operated by Limetree Bay Refining, LLC, the terminal facility is owned and operated by Limetree Bay Terminals, LLC, and the boundaries of each as of the Date of Lodging of the First Modification are shown in Appendix R ("Map of Refinery").

12. Add the following definitions to Paragraph 10 of the Consent Decree:

CCC. "BWON Equipment" shall mean equipment used in handling, storage, treatment, or disposal of "non-aqueous and aqueous benzene waste streams" regulated under 40 C.F.R. Part

61, Subpart FF, except that the term shall also include "affected facilities" under NSPS Subpart QQQ.

DDD. "BWON and LDAR Equipment" shall mean LDAR Equipment and BWON Equipment.

EEE. "Covered Equipment" shall include all pumps and valves, excluding pressure relief valves, in light liquid or gas/vapor service in all process units that are subject to the equipment leak provisions of 40 C.F.R. Part 60, Subparts VVa and GGGa.

FFF. "Date of Entry of the First Modification of the Consent Decree" and "Date of Entry of the First Modification" shall mean the date on which the First Modification of the Consent Decree is approved and signed by a District Court Judge for the District of the Virgin Islands and entered in the Court docket by the Clerk of the United States District Court for the District of the Virgin Islands.

GGG. "Date of Lodging of the First Modification of the Consent Decree" and "Date of Lodging of the First Modification" shall mean the date on which the First Modification of the Consent Decree is lodged with the United States District Court for the District of the Virgin Islands.

HHH. "Environmental Response Trust" or "ERT" shall mean the ERT established pursuant to the Plan of Liquidation and the ERT Agreement, which satisfied the conditions set forth in Article XI of the Plan of Liquidation and which designated Project Navigator, Ltd. as Environmental Response Trustee. On December 20, 2019, the Bankruptcy Court appointed PathForward Consulting Inc., as a successor Environmental Response Trustee. The effective date of the ERT was February 17, 2016, as provided in Case No. 1:15-10003, Doc. 625.

III. "ERT Agreement" shall mean Doc. 626-1 in Case No. 1:15-10003-MFW, United States District Court for the District of the Virgin Islands, Bankruptcy Division – St. Croix, Virgin Islands.

JJJ. "First Modification of the Consent Decree" and "First Modification" shall mean this modification of the Consent Decree, including any and all appendices attached to the First Modification.

KKK. "Idled Unit" shall mean (1) an emissions unit to which a requirement of the Consent Decree applies (including, but not limited to, the FCCU, Coker, Flaring Devices, heaters, boilers, Generating Turbines, and Compressor Engines) for which no part was operated between June 1, 2012 and at least June 1, 2019, and that is listed in Appendix K ("List of Idled Units") hereto, and (2) Flare 7, from the time that Flare 7 is isolated and Shutdown under Paragraph 50E. An Idled Unit does not include BWON and LDAR Equipment.

LLL. "In Regulated Service" shall mean: (1) BWON Equipment with benzene-containing wastes regulated under 40 C.F.R. Part 61 Subpart FF or (2) LDAR Equipment in "light liquid" and/or "gas/vapor service" as those terms are used in Section V.R of the Consent Decree.

MMM. "In Service Unit" shall mean an emission unit to which a requirement of the Consent Decree applies that is not an Idled Unit. In Service Unit does not include BWON and LDAR Equipment.

NNN. "LDAR Equipment" shall mean each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector In Regulated Service and, for purposes of recordkeeping and reporting requirements only, compressors shall be considered LDAR Equipment, as defined in 40 C.F.R. § 60.591.

OOO. "LHE Combustion Liner System" shall mean a Lean Head End Combustion Liner system as generally described in publication GER-4211, *Gas Turbine Emissions and Control*, which were installed by Limetree Bay on GTs 7 and 8.

PPP. "Limetree Bay" shall mean Limetree Bay Terminals, LLC, Limetree Bay Refining, LLC, and their respective successors and assigns.

QQQ. "Pilot Gas" shall mean the minimum amount of gas necessary to maintain the presence of a flame for ignition of vent gases.

RRR. "Plan of Liquidation" shall mean the Debtor's Second Amended Plan of Liquidation Pursuant to Chapter 11 of the Bankruptcy Code, Order of the United States District Court for the District of the Virgin Islands, Bankruptcy Division – St. Croix, Virgin Islands (Case No. 1:15-10003-MFW, Doc. 572-1).

SSS. "Purge Gas" shall mean the gas introduced between a Flaring Device header's water seal and the flare tip to prevent oxygen infiltration (backflow) into the flare tip. For a Flaring Device with no water seal, the function of Purge Gas is performed by Sweep Gas, and therefore, by definition, such a Flaring Device has no Purge Gas.

TTT. "Refinery Operations" shall mean the processing of crude oil and other feedstock into refined petroleum products and the commercialization thereof.

UUU. "Restart" shall mean: (1) the change in status of BWON or LDAR Equipment from not In Regulated Service to In Regulated Service; and (2) the resumption of operation of an Idled Unit. For a fuel gas combustion device or flare, resumption of operation means combusting Fuel Gas. For an FCCU, resumption of operations means receiving feed in the unit. For an SRP, resumption of operations means introducing acid gas to the unit. For a Coker and the Coke Handling Storage and Loading Facility, resumption of operation means receiving

feed to the coker drum. For a sulfur pit, resumption of operation means when sulfur is drained to a sulfur pit.

VVV. "TSEP" shall mean the Territorial Supplemental Environmental Project(s) developed by the VIDPNR pursuant to Section IX.A of the Consent Decree.

WWW. "TSEP Escrow Account" shall mean the escrow account in which HOVENSA deposited $4.875 million in accordance with Section IX.A of the Consent Decree and to which the ERT assumed HOVENSA's rights and obligations pursuant to the Plan of Liquidation and the ERT Agreement.

13. Replace Paragraph 27 with the following new Paragraph 27:

27. By six (6) years and one month from Date of Entry, Limetree Bay shall install sufficient Qualifying Controls and have applied for emission limits from the appropriate permitting authority to achieve 3,663 tpy NO_x emission reductions as determined by the summation in Paragraph 24. By six (6) years and three (3) months from Date of Entry, Limetree Bay shall provide EPA with a report showing how it satisfied the requirement of this Paragraph and Paragraph 23.

14. Add the following new Paragraph 28A to Part V.F:

28A. Limetree Bay represents that it (or HOVENSA) has installed sufficient qualifying controls to achieve the aggregate NOx emissions reductions of 4,744 tpy required by Paragraphs 26, 27, and 28, by permanent Shutdown and relinquishment of permits for the heaters, boilers, generating turbines and compressor engines identified in Appendix N ("Emissions Units Permanently Shutdown as of June 1, 2019"). Limetree Bay will submit the report required by Paragraph 28, certified in accordance with Paragraph 231. Provided the report submitted under Paragraph 28 demonstrates that the 4,744 tpy of NOx reductions have been achieved, Limetree

Bay is deemed to have satisfied the requirements of Section V.F and the requirements of Paragraphs 230 and 231 related to Termination, subject to EPA's review under Paragraphs 232 and 233.

15. Replace Paragraph 36 with following new Paragraph 36:

36. For each fuel gas combustion device that became an affected facility under NSPS Subpart Ja pursuant to the Consent Decree, entry of the First Modification shall satisfy the notice requirements of 40 C.F.R. § 60.7(a) and compliance with the relevant monitoring requirements of the Consent Decree shall satisfy the notification of initial performance test requirement of 40 C.F.R. § 60.8(a).

16. Add the following sentence to Subparagraph 41.a: As of the Date of Entry of the First Modification, the East Side SRP consists of two Claus Trains, #3 SRU, #4 SRU, and a tail gas treatment unit followed by incineration.

17. Replace Paragraphs 45 and 46 with the following new Paragraphs 45 and 46:

45. Compliance with NSPS Emissions Limits at the East Side SRP. By no later than the date of Restart of the East Side SRP, Limetree Bay shall install, at the East Side SRP, control equipment necessary to control the emissions of sulfur compounds from the East Side SRP to comply with NSPS Subparts A and Ja. Notwithstanding any provision of Limetree Bay's Title V permit (STX-TV-003-10) or any successor operating permit, Limetree Bay shall not vent tail gas from the East Side SRP to an incinerator, unless such venting complies with NSPS Subparts A and Ja.

46. [Reserved]

18. Replace Paragraph 47 with the following new Paragraph 47:

47. For the East Side SRP, which became an affected facility under NSPS Subpart Ja

pursuant to Section V.I, entry of the First Modification shall satisfy the notice requirements of 40 C.F.R. § 60.7(a), and compliance with the relevant monitoring requirements of this Consent Decree shall satisfy the notification of initial performance test requirement of 40 C.F.R. § 60.8(a).

19. Replace Paragraph 49 with the following new Paragraph 49:

49. All Flaring Devices listed in Appendix D ("List of Flaring Devices Subject to NSPS Subpart Ja") are affected facilities, as that term is used in 40 C.F.R. Part 60, Subpart Ja, and by the dates listed in Appendix D, shall comply with the requirements of NSPS Subparts A and Ja.

20. Replace Paragraph 50 with the following new Paragraphs 50A through 50F:

50A. Mitigation of Flaring Emissions. Limetree Bay shall monitor and quantify all flaring emissions from the FCCU Low Pressure Flare and Flare 3 for the one-year period beginning on the date of Restart of the flare, using the following equation:

$$Mitigation\ Amount = \sum_{i=1}^{n} \left[\left(C_{H_2S_i} - 162\ ppm\ H_2S \right) \times F_i \times \frac{1\ scf\ SO_2}{1\ scf\ H_2S} \times \frac{lb-moles\ SO_2}{385.3\ scf\ SO_2} \times \frac{64\ lbs\ SO_2}{lb-mole\ SO_2} \times \frac{1\ ton\ SO_2}{2000\ lbs\ SO_2} \right]$$

Where:

Mitigation Amount = tons of SO_2 emissions that result from combustion of gas in a particular flare with an H_2S concentration above the 162 ppm standard and which could have been captured by a reasonably sized FGRS

n = each hour that is part of a three-hour rolling average in the first 365 Days after Restart of the flare where the H_2S concentration in the gas flared at the particular flare exceeds the 162 ppm standard

$C_{H_2S_i}$ = the hourly average concentration of H_2S for hour i in the gas flared at the particular flare as measured by the H_2S CEMS

F_i = hourly average flow in scfh for hour i of all gas to the particular flare as measured by the flare flow meter but excluding Pilot Gas and excluding any flow above 2 times Baseload Average Flow

Baseload Average Flow = 90th percentile of hourly average flow in the first 365 Days after Restart of the flare of all gas to the particular flare as measured by the flare flow meter.

Limetree Bay shall mitigate the Mitigation Amount using the formula above and implementing one or more mitigation projects as specified in this Paragraph.

a. Mitigation Emissions Less Than 10 Tons. No mitigation is required if the Mitigation Amount is less than 10 tons.

b. Mitigation Emissions Above 10 Tons. If the Mitigation Amount is above 10 tons, Limetree Bay will mitigate emissions above 10 tons by implementing one or more of the mitigation projects in Appendix P ("Flaring Mitigation Projects") in accordance with the requirements therein.

50B. Installation of Flare Gas Recovery Systems. For the FCCU Low Pressure Flare and Flare 3, Limetree Bay shall design, install, operate and maintain flare gas recovery system(s) to control all continuous and intermittent, routinely-generated refinery fuel gases (not including Purge Gas, or Pilot Gas or molecular seal gases necessary to ensure safe operation of the flares) that are combusted in the flare(s), if the quantity of gases sent to the flares exceeds the amounts specified, or if there is noncompliance with the NSPS Subpart Ja emission standard, as specified in this Paragraph.

a. First Year of Operation: Gas Quantity. The requirements of this Subparagraph 50B.a apply only during the one-year period beginning on the date of Restart of the flare.

i. FCCU Low Pressure Flare. If, during the first or second six-month successive non-overlapping block period during the first year after Restart of the FCCU Low Pressure Flare, greater than an average of 1,500,000 standard cubic feet per day (scfd) combined flow of all gases, other than hydrogen from initial

reformer restart, is sent to the FCCU Low Pressure Flare (and any flare interconnected with the FCCU Low Pressure Flare), as measured by the flare flow meter, then by not later than two years from the end of the six-month period in which the gas quantity is exceeded and the report is due under Paragraph 50C.b, Limetree Bay shall install and operate a flare gas recovery system for the FCCU Low Pressure Flare.

ii. Flare 3. If, during the first or second six-month successive non-overlapping block periods during the first year after Restart of Flare 3, greater than an average of 750,000 scfd combined flow of all gases is sent to the Flare 3, as measured by the flare flow meter, then by not later than two years from the end of the six-month block period in which the gas quantity is exceeded and the report is due under Subparagraph 50C.b, Limetree Bay shall install and operate a flare gas recovery system for Flare 3.

b. After First Year of Operations: Gas Quantity. The requirements of this Subparagraph 50B.b apply beginning with the first full Calendar Quarter after the one-year period in Subparagraph 50B.a. The first full Calendar Quarter will include all days after the first year after Restart of the flare until the end of the first full Calendar Quarter.

i. FCCU Low Pressure Flare. If, during any two successive Calendar Quarters either (a) during the second year after Restart of the FCCU Low Pressure Flare, greater than an average of 750,000 scfd combined flow of all gases, other than hydrogen from initial reformer restart, or (b) after the second year after Restart of the FCCU Low Pressure Flare, greater than an average of 500,000 scfd combined flow of all gases, other than hydrogen from initial reformer restart, is

sent to the FCCU Low Pressure Flare (including any flare interconnected with the FCCU Low Pressure Flare), as measured by the flare flow meter, then by not later than two years from the end of the second Calendar Quarter in which the gas quantity is exceeded and the report required under Subparagraph 50C.c is due, Limetree Bay shall install and operate a flare gas recovery system for the FCCU Low Pressure Flare.

ii. Flare 3. If, during any two successive Calendar Quarters after the first year after Restart of Flare 3, greater than an average of 250,000 scfd combined flow of all gases is sent to Flare 3, as measured by the flare flow meter, then by not later than two years from the end of the second Calendar Quarter in which the gas quantity is exceeded and the report required under Subparagraph 50C.c is due, Limetree Bay shall install and operate a flare gas recovery system(s) for Flare 3.

iii. Within the first six months of Restart of either Flare 3 or the FCCU Low Pressure Flare, whichever is earlier, Limetree may increase the average gas quantity for Flare 3 specified in Subparagraph 50B.b.ii from 250,000 scfd to 300,000 scfd combined flow of all gases. If Limetree exercises this option, then the average gas quantity for FCCU Low Pressure Flare specified in Subparagraph 50B.b.i shall be reduced from 750,000 scfd to 700,000 scfd during the second year of Restart of the FCCU Low Pressure Flare, and from 500,000 scfd to 450,000 scfd combined flow of all gases after the second year after Restart of the FCCU Low Pressure Flare. Within 30 Days of exercising this option, Limetree shall notify EPA and the VIDPNR, including the date on which Limetree

exercised this option, as provided in Paragraph 225 (Notice), and shall certify the notification as required by Paragraph 144.

iv. Adjustment to Gas Quantity Based on Changes in Refining Operating Rate. The gas quantities specified in this Subparagraph 50B.b apply where the refinery's charge rate to the atmospheric crude unit(s) ("operating rate") is not more than 180,000 barrels (bbls) per day in a Calendar Quarter. If the average actual refinery operating rate is greater than 180,000 bbls per day in a Calendar Quarter, then the following gas quantities apply in lieu of the gas quantities in 50B.b.(i). and (ii).:

(1) FCCU Low Pressure Flare: (A) During the second year after Restart of the FCCU Low Pressure Flare: (750,000 scfd (or 700,000 scfd if applicable pursuant to Subparagraph 50B.b.iii)/180,000 bbls) multiplied by the actual refinery operating rate per Calendar Quarter, measured as an average combined flow of all gases, other than hudrogen from initial reformer restart, to the FCCU Low Pressure Flare in scfd in any Calendar Quarter, as measured by the flare flow meter. (B) After the second year after Restart of the FCCU Low Pressure Flare: (500,000 scfd (or 450,000 scfd if applicable pursuant to Subparagraph 50B.b.iii)/180,000 bbls) multiplied by the actual refinery operating rate per Calendar Quarter, measured as an average combined flow of all gases, other than hydrogen from initial reformer restart, to the FCCU Low Pressure Flare in scfd in any Calendar Quarter, as measured by the flare flow meter.

(2) Flare 3: Greater than (250,000 scfd (or 300,000 scfd if applicable pursuant to Subparagraph 50B.b.iii)/180,000 bbls) multiplied by the actual refinery operating rate, measured as an average combined flow of all gases to Flare 3 in scfd in any Calendar Quarter, as measured by the flare flow meter.

c. After First Year of Operations: Noncompliance. If, during any two successive Calendar Quarters there is noncompliance with the NSPS Subpart Ja H_2S concentration standard in 40 C.F.R. § 60.103a(h) for greater than 5% of either flare's operating time, and greater than 10 tons of excess SO_2 emissions from the same flare, then by not later than 18 months from the end of the two Calendar Quarters in which both the noncompliance rate and excess SO_2 emissions are exceeded and the report required under Subparagraph 50C.c is due, Limetree Bay shall install and operate a flare gas recovery system(s) for the relevant flare.

50C. Monitoring and Reporting. For purposes of the requirements of Paragraphs 50A and 50B, the monitoring and reporting requirements of this Paragraph applies.

a. Monitoring. For the FCCU Low Pressure Flare and Flare 3, upon Restart of the flare, Limetree Bay shall comply with the hydrogen sulfide monitoring, sulfur monitoring and flow monitoring requirements of 40 C.F.R. § 60.107a(a)(2), (e) and (f) respectively. Prior to a Restart of a flare, an instrument for continuously monitoring and recording the H_2S concentration by volume (dry basis) shall be installed, operated, calibrated and maintained pursuant to 40 C.F.R. § 60.107a(a)(2), notwithstanding any exceptions or alternate methods allowed in NSPS Subpart Ja.

i. Data from the H_2S CMS generated prior to the demonstration of compliance (see Appendix L ("Exceptions For Compliance on Restart")) shall be

included for purposes of calculating Mitigation Amount during the first year of a flare's operation pursuant to Paragraph 50A, regardless of whether the flare's H_2S CMS fails its Cylinder Gas Audit ("CGA") or RATA.

ii. In the event that the H_2S CMS fails its CGA or RATA, then the measured values of the emissions from the flare emitted prior to the demonstration of compliance will be adjusted based on the level of inaccuracy, as demonstrated by the CGA or RATA, or the CGA or RATA and other credible evidence.

iii. The quantity of hydrogen from initial reformer restart combusted in the FCCU Low Pressure Flare shall be measured by a flow meter.

b. Recordkeeping and Reporting for First Year of Operations. Within thirty (30) days of the end of each of the six-month block periods during the first year after Restart of the flare, Limetree Bay shall submit a report containing the following information for each flare:

i. The quantity of all gases in scfd sent to each flare for the period covering the six-month block period preceding the date of the report, on both a cumulative and per-day basis;

ii. The quantity of hydrogen from initial reformer restart combusted in the FCCU Low Pressure Flare on both a cumulative and per-day basis;

iii. In the second six-month block period report, the quantity of Mitigation Amount for the period covering the two six-month block periods preceding the date of the report, provided both on a cumulative and per-day basis; and

iv. Notification of whether the total gas quantity specified in Subparagraph 50B.a.i or a.ii has been exceeded.

Limetree Bay shall report this data to EPA and the VIDPNR as provided in Paragraph 225 (Notice), and shall certify the report as required by Paragraph 144.

c. Reporting After First Year of Operations. If the requirement to install flare gas recovery is triggered, as described in Subparagraphs 50B.b.i, 50B.b.ii, or 50B.c, then Limetree Bay shall notify EPA within thirty (30) days and provide the information in Subparagraphs (i)-(v) below. If the requirement for flare gas recovery is not triggered, then the information in Subparagraphs (i)-(v) below, for each Calendar Quarter, shall be included in the semi-annual progress reports required under Paragraph 143 beginning with the next semi-annual progress report following the first full Calendar Quarter after the first year of operations:

i. The quantity of all gases combusted in each flare in scfd, as measured by the flare flow meter, for the period covering the Calendar Quarter preceding the date of the report, on both a cumulative and per-day basis;

ii. The quantity of hydrogen from initial reformer restart combusted in the FCCU Low Pressure Flare;

iii. Any adjustments to the specified gas quantity pursuant to Subparagraph 50B.b.iii, including the adjusted gas quantity, operating rate, and the change in operating rate;

iv. The total period of noncompliance with the NSPS Subpart Ja concentration standard, expressed as a percentage of operating time and excess SO_2 emissions expressed as tons during the Calendar Quarter; and

v. Notification of whether the total gas quantity specified in Subparagraph 50B.b.i or b.ii has been exceeded, and/or whether the total period of noncompliance with the NSPS Subpart Ja H_2S concentration standard and excess SO_2 emissions, specified in Subparagraph 50B.c has been exceeded.

Limetree Bay shall report this data to EPA and the VIDPNR as provided in Paragraph 225 (Notice), and shall certify the report as required by Paragraph 144.

50D. Hydrogen Sulfide Monitoring. To evaluate the potential transport of H_2S to the refinery's wastewater treatment system from the use of H_2S scavengers in the flare gas system(s), by no later than 90 Days after Limetree Bay begins using H_2S scavenger in its flare gas system(s), Limetree Bay shall monitor H_2S emissions from the wastewater treatment system, as follows:

a. Limetree Bay shall install three temporary H_2S monitors at fixed locations around the dissolved air flotation (DAF) unit and the API separator on the East Side, and one temporary H_2S monitor at a fixed location near the API separator on the West Side (if Sulfix is used on Flare 3), as specified in Appendix S ("Map of H_2S Monitoring Locations"), to continuously monitor H_2S emissions from the DAF and API separators.

b. If Limetree Bay stores slop oil in fixed roof tanks, Limetree Bay shall install a temporary H_2S monitor at a fixed location near such tank.

c. Limetree Bay shall use temporary H_2S monitors that are designed to meet the following criteria:

i. Utilizes an electrochemical sensor;

ii. A response time of 15 seconds or less;

iii. A lower detection limit (sensitivity) of at least 0.5 ppm;

iv. A resolution of 0.1 ppm and an accuracy of ± 5% over its calibrated range of at least 0-100 ppm;

v. An accuracy of ± 0.05 ppm at 1 ppm (± 5%);

vi. A built-in datalogging function for data collection and analysis; and

vii. A low temperature drift (less than 0.1 ppm for the zero reading) and high selectivity for H_2S in the presence of interfering gases (such as sulfur dioxide, nitrogen dioxide, and hydrocarbons).

d. Duration. The temporary H_2S monitors shall be operated for a period of not less than two years.

i. If H_2S is detected at levels exceeding the OSHA permissible exposure limit of 10 ppm (15 mg/m^3) at any monitoring location over an 8-hour time weighted average (see 29 C.F.R. § 1910.1000(d)) equal to or more than 5% of the time during any rolling 30-day period, then Limetree Bay shall submit a plan to EPA for approval to address the cause of any H_2S emissions attributable to the use of H_2S scavengers and to install permanent H_2S monitors meeting the criteria specified in Subparagraph 50D.c. If the cause is not attributable to the use of H_2S scavengers, the report shall explain the basis for Limetree Bay's determination. If EPA disagrees with Limetree Bay's determination, the disagreement is subject to dispute resolution in accordance with Part XVI (Retention of Jurisdiction/Dispute Resolution).

ii. If H_2S is detected at levels above 10 ppm for less than 5% of the time during all rolling 30-day periods at the end of the two years, Limetree Bay is

not required to install permanent monitors, and may discontinue use of the temporary monitors.

50E. Idling of Flare 7. Limetree Bay may, for a period not to exceed 72 hours, and prior to the restart of any petroleum refining process unit, temporarily interconnect and jointly operate the FCCU Low Pressure Flare and Flare 7, until Flare 7 can be safely isolated and Shutdown at which time Flare 7 will be an Idled Unit. The temporary interconnection of Flare 7 with the FCCU Low Pressure flare will not be considered an interconnection for purposes of Subparagraphs 50B.a.i and 50B.b.i.

50F. Root Cause, Corrective Action and Reporting for Flaring Incidents Post Installation of Flare Gas Recovery. Following the installation of a flare gas recovery system on a flare pursuant to Paragraph 50B, Acid Gas, Tail Gas and Hydrocarbon Flaring Incidents occurring while the flare gas recovery system is in operation will be investigated and reported in accordance with NSPS Subpart Ja, 40 C.F.R. § 60.103a(c)(1)-(c)(3) in lieu of the investigation and reporting requirements in Paragraphs 60, 61, 70 and 71. Copies of NSPS Subpart Ja root cause and corrective action reporting will be included in the semi-annual CD reports required under Paragraph 71 and Part X (Reporting and Recordkeeping). The stipulated penalty provisions for Flaring Incidents will continue to apply until termination.

50G. If no Acid Gas, Tail Gas or Hydrocarbon Flaring Incidents occur at the Refinery for any consecutive 24 calendar month period, then any Acid Gas, Tail Gas and Hydrocarbon Flaring Incidents occurring thereafter shall be investigated and reported in accordance with NSPS Subpart Ja, 40 C.F.R. § 60.103a(c)(1)-(c)(3) in lieu of the investigation and reporting requirements in Paragraphs 60, 61, 70 and 71. The stipulated penalty provisions for Flaring Incidents will continue to apply until termination.

21. Replace Paragraph 51 with the following new Paragraph 51:

[Reserved]

22. Modify the applicable regulatory provisions in Subparagraphs 54.a and 54.b:

References in Subparagraph 54.a and Subparagraph 54.b to 40 C.F.R. § 60.102a(g)(1) relate to fuel gas combustion devices only and shall be changed to 40 C.F.R. § 60.103a(h) relating to flares.

23. Replace Paragraph 55 with the following new Paragraph 55:

55. For each Flaring Device which became an affected facility under NSPS Subpart Ja pursuant to this Consent Decree, entry of the First Modification shall satisfy the notice requirements of 40 C.F.R. § 60.7(a), and compliance with the relevant monitoring requirements of this Consent Decree shall satisfy the notification of initial performance test requirement of 40 C.F.R. § 60.8(a).

24. Replace Subparagraph 70.a with the following new Subparagraph 70.a:

a. Investigation, Reporting, Corrective Action, and Stipulated Penalties. For Tail Gas Incidents, Limetree Bay shall follow the same investigative, reporting, corrective action, and assessment of stipulated penalty procedures as those set forth in Paragraphs 60 through 68 for Acid Gas Flaring Incidents. Those procedures shall be applied to TGU shutdowns, bypasses of a TGU, or other events which result in a Tail Gas Incident, including scheduled and unscheduled Shutdowns of a Claus Sulfur Recovery Plant.

25. Modify Subparagraph 70.b.ii to include a missing formula unit:

0.169×10^{-6} = [lb mole of SO_2 / 379-scf of SO_2] [64 lbs SO_2 / lb mole SO_2][1×10^{-6}]

26. Insert the new Paragraphs 71A and 72A as follows:

71A. The requirements of Section V.K shall not apply to Limetree Bay with respect to Acid Gas Flaring Incidents and Tail Gas Incidents that occurred prior to January 4, 2016.

72A. The requirements of Section V.L shall not apply to Limetree Bay with respect to Hydrocarbon Flaring Incidents that occurred prior to January 4, 2016.

27. Replace Section V.P, Benzene Waste NESHAP Program, with the following new Section V.P, Benzene Waste NESHAP Program.

P. Benzene Waste NESHAP Program.

77. Current Subpart FF Status. Limetree Bay shall continue to comply with the compliance option set forth in 40 C.F.R. § 61.342(e) (hereinafter referred to as the "6 BQ Compliance Option"), for which, in accordance with the Consent Decree, notice was provided on September 14, 2012.

78. [Reserved]

79. One-Time Review and Verification of the Refinery's TAB and Compliance with the Benzene Waste NESHAP.

a. Phase One of the Review and Verification Process. By March 30, 2021, Limetree Bay shall complete a review and verification of the Refinery TAB and its compliance with the Benzene Waste NESHAP (Phase One Review and Verification). Limetree Bay's review and verification process shall include, but not be limited to:

i. An identification of each waste stream that is required to be included in the Refinery's TAB where these waste streams meet the definition of a waste under 40 C.F.R. § 61.341 (e.g., slop oil, tank water draws, spent caustic, spent caustic hydrocarbon layer, desalter rag layer dumps, desalter vessel process sampling points, other sample wastes, maintenance wastes, and turnaround

wastes);

ii. A review and identification of the calculations and/or measurements used to determine the flows of each waste stream for the purpose of ensuring the accuracy of the annual waste quantity for each waste stream;

iii. An identification of the benzene concentration in each waste stream, including sampling for benzene concentration at no less than 10 waste streams consistent with the requirements of 40 C.F.R. § 61.355(c)(1) and (3); provided, however, that previous analytical data or documented knowledge of waste streams may be used, 40 C.F.R. § 61.355(c)(2), for streams not sampled; and

iv. An identification of any existing noncompliance with the requirements of Subpart FF.

By no later than sixty (60) Days following the completion of Phase One Review and Verification, Limetree Bay shall submit a Benzene Waste NESHAP Compliance Review and Verification report ("BWON Compliance Review and Verification Report") that sets forth and certifies the results of the Phase One Review and Verification, including but not limited to the items identified in Subparagraphs (i) through (iv) of this Paragraph.

b. Phase Two of the Review and Verification Process. Based on EPA's review of the BWON Compliance Review and Verification Report(s), EPA may select up to 20 additional waste streams at the Refinery for sampling for benzene concentration. Limetree Bay shall conduct the required sampling under representative conditions and submit the results to EPA within sixty (60) Days of receipt of EPA's request. Limetree Bay shall use the results of this additional sampling to recalculate the TAB and the uncontrolled benzene quantity and to

amend the BWON Compliance Review and Verification Report, as needed. To the extent that EPA requires Limetree Bay to re-sample any waste stream sampled by Limetree Bay on or after June 10, 2019, Limetree Bay may average the results of such sampling events. Limetree Bay shall submit an amended BWON Compliance Review and Verification Report within ninety (90) Days following the date of the submittal of the required Phase Two sampling report, if Phase Two sampling is required by EPA.

80. Implementation of Actions Necessary to Correct Non-Compliance or to Come Into Compliance.

a. [Reserved]

b. Submittal of Compliance Plan. If the results of the BWON Compliance Review and Verification Report identify any compliance issues, Limetree Bay shall submit to EPA and the VIDPNR by no later than 180 Days after completion of the BWON Compliance Review and Verification Report, a plan that identifies with specificity a schedule that Limetree Bay will implement to ensure that the Refinery complies with the 6 BQ Compliance Option, as soon as practicable.

c. Review and Approval of Plans Submitted Pursuant to Subparagraph 80.b. Any plan submitted pursuant to Subparagraph 80.b, shall be subject to approval, disapproval or modification by EPA. Within sixty (60) Days after receiving any notification of disapproval or request for modification from EPA, Limetree Bay shall submit to EPA and the VIDPNR a revised plan that responds to all identified deficiencies. Upon receipt of approval or approval with conditions, or if no approval, disapproval, or approval with conditions is provided by EPA, Limetree Bay shall implement the plan according to the schedule provided in the plan. Disputes

arising under this Subparagraph shall be resolved in accordance with the dispute resolution provisions of Part XVI (Retention of Jurisdiction/Dispute Resolution).

d. Certification of Compliance with the 6 Mg Compliance Option. By no later than thirty (30) Days after completion of the implementation of all actions, if any, required pursuant to Subparagraphs 80.b or 80.c to come into compliance with the 6 BQ Compliance Option, Limetree Bay shall submit a report to EPA and the VIDPNR certifying that the Refinery complies with the Benzene Waste NESHAP.

81. Carbon Canisters and Individual Drain System Vents. Limetree Bay shall continue to operate the three-tier system for control of vents associated with the Subpart FF wastewater collection system. Vent controls are identified as either Type I (a single flow indicator "breather valve"), Type II ("breather valve" connected to a single carbon canister), or Type III (dual carbon canisters). All closed vent piping associated with these vent control systems will be monitored in accordance with the provisions associated with 40 C.F.R. § 61.349. Limetree Bay shall comply with the following:

a. All Type I vents with flow indicators (40 C.F.R. § 61.346(b)) shall be visually inspected for flow on a daily schedule. Flow shall be indicated if the flow indicator on the breather valve has lifted. Any "breather valve" determined to relieve six or more times in any consecutive two-month period will be converted to a Type II control system. Installation of the carbon canister required by conversion to the Type II control shall be completed within two weeks. Daily visual inspection of the Type I control system will continue until conversion to a Type II control is completed.

b. All Type II vent control systems ("breather valve" connected to a single carbon canister) shall be visually inspected on a daily schedule.

i. If the "breather valve" is determined not to have relieved, no additional monitoring is required. Secondly, if the "breather valve" is visually inspected and determined to have relieved, then the discharge opening of the carbon canister will be immediately monitored for benzene. If the benzene concentration of carbon canister discharge is determined to be less than 5 ppm, no additional actions are required. If the benzene concentration of the carbon canister discharge is determined to be equal to or greater than 5 ppm, the carbon canister will be replaced by the end of the next Day.

ii. For any Type II vent control system, if carbon canister replacement is required two or more times in any four consecutive week period the control system will be converted to a Type III system. Installation of the dual carbon canister system required by conversion to the Type III control shall be completed within two weeks. Daily inspection and monitoring (if required) of the Type II control system will continue until conversion to a Type III control is completed.

c. All Type III vent control systems will be operated in the manner described in Subparagraphs c.i through c.vii.

i. Except as expressly permitted under Subparagraph c.v, Limetree Bay shall not use single carbon canisters for any new process units or installations that require controls pursuant to the Benzene Waste NESHAP.

ii. For dual carbon canister systems, "breakthrough" between the primary and secondary canister is defined as any reading equal to or greater than 5 ppm benzene.

iii. Limetree Bay shall monitor for breakthrough between the primary

and secondary carbon canisters in accordance with the frequency specified in 40 C.F.R. § 61.354(d), or monthly, whichever is more frequent. This requirement shall commence within seven (7) Days after installation of a new, dual carbon canister system.

iv. Limetree Bay shall replace the original primary carbon canisters immediately when breakthrough is detected between the primary and secondary canister. The original secondary carbon canister will become the new primary carbon canister and a fresh carbon canister will become the secondary canister, or both canisters may be replaced. For purposes of this Subparagraph, "immediately" shall mean by the end of the next calendar Day.

v. Temporary Applications. Limetree Bay may utilize properly sized single canisters for short-term operations such as with temporary storage tanks or as temporary control devices. For canisters operated as part of a single canister system, breakthrough is defined for purposes of this Consent Decree as any reading of benzene above 5 ppm. Limetree Bay shall monitor for breakthrough from single carbon canisters each calendar day. Limetree Bay shall replace the single carbon canister with a fresh carbon canister, discontinue flow, or route the stream to an alternate, appropriate device immediately when breakthrough is detected. For this Subparagraph, "immediately" shall mean by the end of the next Day. If Limetree Bay discontinues flow to the single carbon canister or routes the stream to an alternate, appropriate control device, such canister must be replaced before it is returned to service.

vi. Limetree Bay shall maintain a readily available supply of fresh

carbon canisters at all times or otherwise ensure that such canisters are readily available to implement the requirements of this Paragraph.

vii. Limetree Bay shall maintain records associated with the requirements of this Paragraph in accordance with or as under 40 C.F.R. § 61.356(j)(10), including the monitoring readings observed and the constituents being monitored.

82. Laboratory Audits. All laboratories that perform analyses of Limetree Bay's Benzene Waste NESHAP samples shall be audited to ensure that proper analytical and quality assurance/quality control procedures are followed for such samples. For purposes of this Paragraph, audits can include audits conducted by parties other than Limetree Bay.

a. Prior to conducting its Phase One Review and Verification process set forth in Subparagraph 79.a, audits shall be completed of all laboratories used to perform analyses of Benzene Waste NESHAP samples to ensure that proper analytical and quality assurance/quality control procedures are followed. In addition, an audit shall be conducted of any laboratory used for analyses of benzene samples prior to such use.

b. Subsequent laboratory audits shall be conducted for each laboratory continuing to perform analyses of Limetree Bay's Benzene Waste NESHAP samples, such that each laboratory is audited every two (2) years for the life of the Consent Decree.

83. Annual Program. After the Date of Lodging of the First Modification, Limetree Bay shall continue to use the facility's written management of change procedures to review process information and construction projects, to ensure that all new benzene waste streams are included in Limetree Bay's waste stream inventory.

84. Training. Limetree Bay shall implement the following training program at the Refinery:

a. By June 1, 2020 and thereafter within ninety (90) Days from the installation of any new type of benzene control equipment, Limetree Bay shall update the facility's standard operating procedures ("SOPs") for all control equipment used to comply with the Benzene Waste NESHAP.

b. By June 1, 2020, Limetree Bay shall update the facility's BWON training program pursuant to the criteria in Appendix E ("Limetree Bay's LDAR and BWON Training Program Summary") and submit the updated training program to EPA.

c. Limetree Bay shall continue to provide an annual (i.e., once each calendar year) training program for employees (which shall include contract employees for purposes of this Paragraph) asked to draw benzene waste samples as specified in 40 C.F.R. § 61.355. Such employees shall be trained prior to collecting samples and receive training annually.

d. Limetree Bay shall continue to perform "refresher" training every three (3) years on the procedures in Subparagraph 84.a for all employees assigned to operate control equipment.

85. Waste/Slop/Off-Spec Oil Management.

a. Control Status of and Plan to Quantify Uncontrolled Waste/Slop/Off-Spec Oil Streams. By June 1, 2020, Limetree Bay shall submit to EPA and the VIDPNR any revisions to the facility's "Waste/Slop/Off-Spec Oil Management Plan," submitted by HOVENSA in June 2012 for quantifying waste/slop/off-spec oil movements for all benzene waste streams which are not controlled at the Refinery, along with schematics that: (i) depict the waste management units (including sewers) that handle, store, and transfer waste/slop/off-spec oil streams; (ii) identify the

control status of each waste management unit; and (iii) show how such oil is transferred. Representatives from Limetree Bay and EPA thereafter may confer about the appropriate characterization of the waste/slop/off-spec oil streams as benzene waste streams and the necessary controls, if any, for the waste management units handling such oil streams for purposes of the Refinery's TAB calculation and/or compliance with the 6 BQ Compliance Option. If requested by EPA, Limetree Bay shall promptly submit revised schematics that reflect the Parties' agreements regarding the characterization of these oil streams and the appropriate control standards. Limetree Bay shall use these plans and schematics in preparing the end-of-line sampling plans required under Paragraph 87.

b. Aqueous Benzene Waste Streams. For purposes of calculating the TAB pursuant to the requirements of 40 C.F.R. § 61.342(a), Limetree Bay shall include all waste/slop/off-spec oil streams that become "aqueous" until such streams are recycled to a process or put into a process feed tank (unless the tank is used primarily for the storage of wastes). Appropriate adjustments shall be made to such calculations to avoid the double counting of benzene. For purposes of complying with the 6 BQ Compliance Option, all waste management units handling aqueous benzene waste streams shall either meet the applicable control standards of Subpart FF or shall have their uncontrolled benzene quantity count towards the applicable 6 Mg limit.

86. Benzene Waste Operations Sampling Plans: General. By June 1, 2020, Limetree Bay shall update the Benzene Waste Operations Sampling Plan that HOVENSA submitted in June 2012, designed to describe the sampling of benzene waste streams that Limetree Bay will utilize to estimate quarterly and annual uncontrolled benzene quantities under the 6 BQ

Compliance Option. Limetree Bay shall continue to comply with the June 2012 Benzene Waste Operations Sampling Plan until the updated plan is submitted.

87. Benzene Waste Operations Sampling Plans: Content Requirements. The sampling plan shall include, but need not be limited to:

a. Annual sampling of all uncontrolled waste streams that count toward the 6 Mg/yr calculation and contain greater than 0.05 Mg/yr of benzene at the point of generation.

b. [Reserved]

c. The proposed End-of-Line (EOL) sampling locations and methods for flow calculations to be used in calculating projected quarterly and annual uncontrolled benzene quantity calculations under the terms of Paragraph 90. Based on the current configuration of the Refinery's wastewater system, overflows from API separators 1, 2, and 3 are the only "routine" wastewater benzene streams not controlled in accordance with Subpart FF. Therefore, sampling of the three API overflow streams will constitute the individual EOL locations.

88. Benzene Waste Operations Sampling Plans: Timing for Implementation. Limetree Bay will implement the updated plan unless and until (a) EPA disapproves the plan, or (b) Limetree Bay modifies the plan under Paragraph 89.

89. Benzene Waste Operations Sampling Plans: Modifications.

a. Changes in Processes, Operations, or Other Factors. If changes in processes, operations, or other factors lead Limetree Bay to conclude that the sampling plan may no longer provide an accurate basis for estimating the Refinery's quarterly or annual uncontrolled benzene quantity under Paragraph 90, then by no later than ninety (90) Days after Limetree Bay determines that the plan no longer provides an accurate measure, Limetree Bay will submit to EPA and the VIDPNR a revised plan for EPA approval. In the first full Calendar Quarter after

submitting the revised plan, Limetree Bay will implement the revised plan. Limetree Bay will continue to implement the revised plan unless and until EPA disapproves the revised plan.

b. Requests for Modifications to the Sampling Frequency. After two (2) years of implementing a sampling plan, Limetree Bay may submit a request to EPA for approval, with a copy to the VIDPNR, to reduce the facility's sampling frequency. Limetree Bay may implement the modified sampling frequency 90 days after submission unless EPA disapproves the modification.

90. Quarterly and Annual Estimations of Uncontrolled Benzene Quantities. At the end of each Calendar Quarter and based on sampling results and approved flow calculations, Limetree Bay will calculate a quarterly and projected annual uncontrolled benzene quantity.

91. In making the calculations required by Paragraph 90, Limetree Bay will use the average of the samples collected at each sampling location in accordance with the Benzene Waste Operations Sampling Plan. If these calculations do not identify any potential violations of the benzene waste operations NESHAP, Limetree Bay will submit these calculations in the reports due under this Section V.P.

92. Corrective Measures: Basis. If the quarterly uncontrolled benzene calculations, required pursuant to Paragraph 90, exceeds 1.5Mg and/or the estimated annual uncontrolled benzene quantities equal or exceed 6 Mg for the then current compliance year, then by no later than sixty (60) Days after the end of the Calendar Quarter, Limetree Bay will submit a compliance assurance plan to EPA for approval, with a copy to the VIDPNR. In that compliance assurance plan, Limetree Bay will identify the quantity and cause(s) of the potentially-elevated benzene quantities, all corrective actions that Limetree Bay has taken or plans to take to ensure that the cause(s) will not recur, and either the schedule of actions that Limetree Bay will take to

ensure that the Refinery complies with the Benzene Waste Operations NESHAP for the calendar compliance year or an explanation that Limetree Bay will be able to meet the annual limit without taking corrective action. Limetree Bay will implement the plan unless and until EPA disapproves, in which case Limetree Bay shall address EPA's comments.

93. Miscellaneous Measures.

a. As of the Date of Lodging, Limetree Bay shall:

i. Conduct monthly visual inspections of and, if appropriate, refill all water traps used to comply with Subpart FF within the Refinery's individual drain systems;

ii. Ensure that all segregated stormwater drains are marked at the drain (color coding may be used);

iii. Conduct monitoring of existing API Separators 1, 2, and 3 or any new Subpart FF-regulated oil/water separators as outlined below:

(1) Conduct semi-annual seal gap measurements on all secondary seals on all floating roof portions in accordance with 40 C.F.R. § 60.693-2.

(2) The fixed roof portions of all Subpart FF regulated oil/water separators shall be monitored on a quarterly basis if Method 21 monitoring conducted pursuant 40 C.F.R. § 61.355(h) determine a leak rate of greater than one (1) percent. Monitoring of the fixed roof portion of all Subpart FF required oil/water separators will be conducted annually if Method 21 monitoring conducted pursuant to 40 C.F.R. § 61.355(h) determine a leak rate of one (1) percent or less.

(3) A current listing, as of Date of Lodging, of all Method 21 monitoring locations for API Separators 1, 2, and 3 is attached in Appendix F ("Method 21 Monitoring Locations for API Separators 1, 2, and 3"). When modifications to the API separators occur, Limetree Bay shall update and maintain a current listing of all monitoring locations for API Separators l, 2, and 3.

94. Record Keeping and Reporting Requirements for this Section V.P Outside of the Reports Required under 40 C.F.R. § 61.357 or under the Progress Report Procedures of Part X (Reporting and Recordkeeping). At the times specified in the applicable provisions of this Section V.P, Limetree Bay will submit, as and to the extent required, the following reports to EPA and the VIDPNR:

a. BWON Compliance Review and Verification Report (Subparagraph 79.a), as amended, if necessary (Subparagraph 79.b);

b. Compliance assurance plan, if necessary (Paragraph 92);

c. Compliance certification, if necessary (Subparagraph 80.d);

d. Schematics of waste/slop/off-spec oil movements (Subparagraph 85.a), as revised, if necessary; and

e. Sampling Plans (Paragraph 86), and revised Sampling Plans, if necessary (Subparagraph 89.a).

28. Paragraph 99 is revised by changing June 30, 2011 to December 31, 2012.

29. Replace Section V.R, Leak Detection and Repair ("LDAR") Program with the following new Section V.R, LDAR Program.

R. Leak Detection and Repair ("LDAR") Program.

100. Introduction. In order to minimize or eliminate fugitive emissions of volatile organic compounds ("VOCs"), benzene, volatile hazardous air pollutants ("VHAPs"), and organic hazardous air pollutants ("HAPs") from equipment in light liquid and/or in gas/vapor service, Limetree Bay shall comply with the leak detection and repair ("LDAR") requirements of this Section V.R. The terms "in light liquid service" and "in gas/vapor service" shall have the definitions set forth in the applicable provisions of 40 C.F.R. Part 60, Subpart VVa and GGGa.

101. No later than the Date of Lodging of the First Modification, the group of all equipment within each process unit (as "equipment" and "process unit" are defined by 40 C.F.R. § 60.591a) and each compressor shall become affected facilities under 40 C.F.R. Part 60, Subpart GGGa, and shall become subject to and comply with the requirements of 40 C.F.R. Part 60, Subpart GGGa, and the requirements of this Section V.R.

102. Duration. The requirements of this Section V.R shall remain in effect through May 1, 2025, or termination of the Consent Decree, whichever is later.

103. Written Refinery-Wide LDAR Program. No later than three (3) months after the Date of Entry of the First Modification, Limetree Bay shall update and thereafter maintain its written refinery-wide program for compliance with applicable LDAR Regulations and the LDAR requirements of this Consent Decree, which shall include:

a. Procedures to identify all equipment in light liquid and/or in gas/vapor service that is subject to the LDAR Regulations and has the potential to leak VOCs, HAPs, VHAPs, and benzene within process units;

b. Procedures for identifying leaking equipment within process units;

c. Procedures for repairing and keeping track of leaking equipment; and

d. Procedures for identifying and including in the LDAR program new equipment.

Limetree Bay shall submit to EPA a copy of the written refinery-wide LDAR program updated pursuant to this Paragraph in the next semi-annual report following the development of the program, and review annually and update as needed.

104. [Reserved]

105. Training. Limetree Bay shall implement the following training programs at the Refinery:

a. Within six (6) months from the Date of Entry of the First Modification, update the LDAR training program pursuant to the criteria in Appendix E ("Limetree Bay's LDAR and BWON Training Program Summary") and submit it to EPA;

b. From and after the Date of Entry of the First Modification, Limetree Bay shall continue to provide LDAR training to existing personnel assigned to LDAR responsibilities (including but not limited to monitoring, recordkeeping, reporting, or data management). For newly hired personnel with LDAR program responsibilities, provide LDAR training prior to the personnel beginning work. All employees assigned to LDAR responsibilities shall receive training annually.

c. For other Refinery operations and maintenance personnel whose duties include limited LDAR responsibilities, continue to provide training developed pursuant to the criteria in Appendix E ("Limetree Bay's LDAR and BWON Training Program Summary") that includes instruction on those aspects of LDAR relevant to the person's duties. This training shall be provided every three (3) years until termination of this Consent Decree. For newly hired

operations and maintenance personnel, such training shall be provided within six (6) months of hiring; and

d. If contractors are used to fulfill the requirements of this Section V.R, Limetree Bay shall require that such contractors be trained as required by this Paragraph, and Limetree Bay shall maintain records of such training.

106. LDAR Audits. Limetree Bay shall continue to implement the refinery-wide audits set forth in this Paragraph, to ensure the Refinery's compliance with all applicable LDAR Regulations and the LDAR requirements of this Consent Decree. The LDAR audits shall include but shall not be limited to, comparative monitoring, records review to ensure monitoring and repairs were completed in the required periods, field reviews to ensure all regulated equipment is included in the LDAR program, a review to ensure records and reports have been maintained and submitted as required, and observation of the LDAR technicians' calibration and monitoring techniques. During the LDAR audits, leak rates shall be calculated for each process unit where comparative monitoring was performed.

a. Initial Compliance Audit. By not later than 270 Days after the Date of Lodging of the First Modification, Limetree Bay shall complete a refinery-wide third-party audit of its compliance with the LDAR Regulations and the requirements of applicable Sections of the Consent Decree, which includes, at a minimum, each of the audit requirements set forth in this Paragraph other than comparative monitoring. For purposes of this requirement, "third party" may include a qualified contractor, consultant, industry group, or trade association. Within thirty (30) Days of receipt of the completed audit, Limetree Bay shall submit its Initial Compliance Audit Report to EPA and the VIDPNR that sets forth any areas of non-compliance identified as a result of its audit and includes a proposed compliance schedule for correcting the non-

compliance. If the proposed compliance schedule extends greater than sixty (60) Days beyond the audit completion date, Limetree Bay must seek approval of the compliance schedule from EPA. Limetree Bay shall implement the compliance schedule as proposed until the schedule is approved or disapproved by EPA. Upon receipt of any disapproval from EPA, Limetree Bay shall correct the non-compliance pursuant to the schedule that EPA proposed, or, if EPA did not so specify, as expeditiously as practicable. Within one (1) year of Date of Entry of the First Modification, Limetree Bay shall certify to EPA that the Refinery:

i. Is in compliance;

ii. Has completed related corrective action and/or is on a compliance schedule (if necessary); and

iii. Shall specifically certify that all existing equipment has been identified and included in the facility LDAR program, to the extent required by applicable regulations and the Consent Decree, as of the date such certification is made.

b. Subsequent Audits. Limetree Bay shall conduct an audit of its LDAR program compliance with applicable LDAR Regulations and the requirements under this Section V.R, at least once every two (2) years after the initial compliance audit required by Subparagraph 106.a, in the same Calendar Quarter. Limetree Bay shall retain a contractor with expertise in the LDAR Program's requirements and familiarity with Certified Low-Leaking Valve and/or Certified Low-Leaking Valve Packing Technology to perform the first subsequent audit ("Third-Party LDAR Audit"). Thereafter, Limetree Bay shall alternate performance of the audit between Limetree Bay personnel familiar with the LDAR Program's requirements or contractors with

expertise in the LDAR Program's requirements ("Internal Audit") and a Third-Party LDAR Audit.

107. Implementation of Actions Necessary to Correct Non-Compliance. If the results of any of the audits conducted pursuant to this Section V.R identify any area(s) of non-compliance, Limetree Bay shall implement, as soon as practicable, all appropriate steps necessary to correct the area(s) of non-compliance and to prevent a recurrence of the cause of the non-compliance, to the extent practicable. For purposes of this Paragraph, if a ratio of the process-unit valve leak percentage established through a comparative monitoring audit conducted pursuant to Paragraph 106, and the average valve leak percentage reported for the process unit for the last four (4) monitoring periods preceding the audit, is equal to or greater than 3.0, and provided the auditor identified at least three (3) leaking valves in the process unit, it shall be deemed an area of non-compliance and cause for corrective action. If the calculated ratio yields an infinite result, Limetree Bay shall assume one (1) leaking valve was found in the process unit through its routine monitoring during the four (4) monitoring periods. In the Semi-Annual LDAR Report submitted pursuant to the provisions of Paragraph 123 covering the period when an audit was conducted, Limetree Bay shall submit the results of the audit, and shall certify to EPA that the audit has been completed and that the Refinery is in compliance or on a compliance schedule.

108. Retention of Audit Reports. Until termination of the Consent Decree, Limetree Bay shall retain the audit reports generated pursuant to this Section V.R and shall maintain a written record of the corrective actions taken in response to any deficiencies identified in any audits.

109. Leak Definition for Valves and Pumps. Limetree Bay shall utilize the leak definitions for valves as defined at 40 C.F.R. § 60.482-7a(b) and pumps in light liquid and/or gas/vapor service as defined at 40.C.F.R. § 60.482-2a(b)(1)(ii), unless a lower leak definition is established under applicable permit(s) or other applicable LDAR Regulations from the Date of Lodging of the First Modification.

110. [Reserved]

111. [Reserved]

112. Limetree Bay Valve Preventative Leak Maintenance Program. Within thirty (30) Days after the Date of Lodging of the First Modification, Limetree Bay shall implement the Valve Preventative Leak Maintenance Program (the "Valve Preventative Leak Maintenance Program" or "the program") set forth in this Paragraph 112 to replace and/or improve the emissions performance of valves subject to this Section V.R ("Covered Equipment Valve").

a. Definitions. The following definitions apply to this Paragraph 112:

i. "Extension," for the purposes of Subparagraph 112.a.iii(1)(B) and 112.a.iii(2)(B) shall mean that: (i) the tested and untested valves were produced by the same manufacturer to the same or essentially equivalent quality requirements; (ii) the characteristics of the valve that affect sealing performance (e.g., type of valve, stem motion, tolerances, surface finishes, loading arrangement, and stem and body seal material, design, and construction) are the same or essentially equivalent as between the tested valve and the untested valve; and (iii) the temperature and pressure ratings of the tested valve are at least as high as the temperature and pressure ratings of the untested valve.

ii. "Low Emissions Packing" or "Low-E Packing" shall mean either (1) or (2) as follows:

(1) A valve packing product, independent of any specific valve, for which the manufacturer has issued a written warranty that the packing will not emit fugitives at greater than 100 ppm, and that, if it does so emit at any time in the first five years, the manufacturer will replace the product; provided however, that no packing product shall qualify as "Low-E" by reason of written warranty unless the packing first was tested by the manufacturer or a qualified testing firm pursuant to generally accepted good engineering practices for testing fugitive emissions and the results of the testing reasonably support the warranty; or

(2) A valve packing product, independent of any specific valve, that has been tested by the manufacturer or a qualified testing firm pursuant to generally accepted good engineering practices for testing fugitive emissions, and that, during the test, at no time leaked at greater than 500 ppm, and on average, leaked at less than 100 ppm.

iii. "Low Emissions Valve" or "Low E Valve" shall mean either (1) or (2) as follows:

(1) A valve (including its specific packing assembly) for which the manufacturer has issued a written warranty that it will not emit fugitives at greater than 100 ppm, and that, if it does so emit at any time in the first five years, the manufacturer will replace the valve; provided

however, that no valve shall qualify as "Low E" by reason of written warranty unless the valve (including its specific packing assembly) either:

(A) first was tested by the manufacturer or a qualified testing firm pursuant to generally accepted good engineering practices for testing fugitive emissions and the results of the testing reasonably support the warranty; or

(B) is an Extension of another valve that qualified as "Low E" under Subparagraph 112.a.iii.

(2) A valve (including its specific packing assembly) that:

(A) Has been tested by the manufacturer or a qualified testing firm pursuant to generally accepted good engineering practices for testing fugitive emissions and that, during the test, at no time leaked at greater than 500 ppm, and on average, leaked at less than 100 ppm; or

(B) Is an Extension of another valve that qualified as "Low E" under Subparagraph 112.a.iii.

iv. "Maintenance Shutdown" shall mean a Shutdown of a process unit that lasts longer than thirty (30) Days.

b. Procedures Required to be Implemented. Under the Valve Preventative Leak Maintenance Program, Limetree Bay shall implement the following procedures:

i. By no later than thirty (30) Days after the Date of Lodging of the First Modification, Limetree Bay shall implement modified purchasing procedures that evaluate the availability of valves and/or valve packing that meet

the requirements for a Low-E Valve or Low-E Packing at the time that the valves and/or valve packing is acquired.

ii. Except as provided in Subparagraph 112.c, by no later than thirty (30) Days after the Date of Lodging of the First Modification, Limetree Bay shall install valve packing material that meets the requirements for Low-E Packing whenever repacking any Covered Equipment Valve.

iii. Except as provided in Subparagraph 112.c, by no later than ninety (90) Days after the Date of Lodging of the First Modification, Limetree Bay shall ensure that each new valve that would qualify as a Covered Equipment Valve that it installs is a Low-E Valve or is fitted with Low-E Packing. Newly installed sampling and instrumentation valves in service on piping with a diameter of 5/8 inches or less are not required to be Low-E Valves or be fitted with Low-E Packing.

iv. Replacement and Repacking of Leaker Valves. Except as provided in Subparagraph 112.c, by not later than five months after Restart, for each Covered Equipment Valve for which the highest emission level that is recorded during monitoring in compliance with Method 21 is at or above 2000 ppm during any two monitoring events (excluding repair verification monitoring) in any 60-month period following the Date of Lodging of the First Modification, Limetree Bay shall replace or repack such valve with a Low-E Valve or with Low-E Packing. If a valve is repacked or replaced according to this Subparagraph, there shall be a period of 15 days after it is repacked or replaced, where this Subparagraph 112.b.iv shall not apply, to allow for adjustment of the valve. The

timing of replacement or repacking under this Subparagraph 112.b.iv shall be in accordance with Subparagraph 112.d.

c. Unavailability of a Low-E Valve or Low-E Packing

i. Commercial Unavailability. Limetree Bay shall not be required to utilize a Low-E Valve or Low-E Packing to replace or repack a valve if a Low-E Valve or Low-E Packing is commercially unavailable in accordance with the provisions in Appendix M ("Process and Factors For 'Commercial Unavailability' of Low-E Valve or Packing"). Prior to claiming this commercial unavailability exemption, Limetree Bay must contact a reasonable number of vendors of valves and obtain a written representation or equivalent documentation from each vendor that the particular valve that Limetree Bay needs is commercially unavailable either as a Low-E Valve or with Low-E Packing. In the semi-annual report required under Part X (Reporting and Recordkeeping), Limetree Bay shall: (i) identify each valve for which it could not comply with the requirement to replace or repack the valve with a Low-E Valve or Low-E Packing; (ii) identify the vendors it contacted to determine the unavailability of such a Low-E Valve or Low-E Packing; and (iii) include the written representations or documentation that Limetree Bay secured from each vendor regarding the unavailability.

ii. Ongoing Assessment of Availability. Limetree Bay may use a prior determination of Commercial Unavailability of a valve or valve packing pursuant to this Paragraph and Appendix M for a subsequent Commercial Unavailability claim for the same valve or valve packing (or valve or valve packing in the same or similar service), provided that the previous determination was completed

within the preceding 12-month period. After one year, Limetree Bay must conduct a new assessment of the availability of a valve or valve packing meeting Low-E Valve or Low-E Packing requirements.

d. Timing of Valve Replacement/Improvement

i. If Replacing or Repacking Does Not Require a Process Unit Shutdown. If replacing or repacking does not require a process unit Shutdown, Limetree Bay shall replace or repack such valve by no later than thirty (30) Days after the monitoring event that triggers the replacing or repacking requirement, unless Limetree Bay complies with the following:

(1) Prior to the deadline, Limetree Bay must take all actions necessary to obtain the required valve or valve packing, including all necessary associated materials, as expeditiously as practical, and retain documentation of the actions taken and the date of each such action.

(2) If, despite Limetree Bay's efforts to comply with Subparagraph 112.d.i(1) the required valve or valve packing, including all necessary associated materials, is not available in time to complete the installation within thirty (30) Days, Limetree Bay must take all reasonable actions to minimize emissions from the valve pending completion of the required replacing or repacking. Examples include:

(A) Repair;

(B) More frequent monitoring, with additional repairs as needed; or

(C) Where practical, interim replacing or repacking of a valve with a valve that is not a Low-E Valve or with packing that is not Low-E Packing; and

(3) Limetree Bay must promptly perform the required replacing or repacking after Limetree Bay's receipt of the valve or valve packing, including all necessary associated materials.

ii. If Replacing or Repacking Requires a Process Unit Shutdown. If replacing or repacking requires a process unit Shutdown, Limetree Bay shall replace or repack such valve during the first Maintenance Shutdown that follows the monitoring event that triggers the requirement to replace or repack the valve, unless Limetree Bay documents that insufficient time existed between the monitoring event and that Maintenance Shutdown to enable Limetree Bay to purchase and install the required valve or valve packing technology. In that case, Limetree Bay shall undertake the replacing or repacking at the next Maintenance Shutdown that occurs after Limetree Bay's receipt of the valve or valve packing, including all necessary associated materials.

e. Records of Low-E Valves and Low-E Packing. Prior to purchasing any Low-E Valves or Low-E Packing, Limetree Bay shall secure, from each manufacturer, documentation that demonstrates that the proposed valve or packing technology meets the definition of "Low-E Valve" and/or "Low-E Packing." Limetree Bay shall retain that documentation for five (5) years and make it available upon request.

f. Valve Replacement/Improvement Report. In each semi-annual report due under Part X (Reporting and Recordkeeping), Limetree Bay shall include a separate section in

the report that: (i) describes the actions it took to comply with this Paragraph 112, including identifying each valve that was replaced or upgraded; and (ii) identifies the schedule for any future valve replacements or upgrades required as part of Subparagraph 112.d.

113. LDAR Monitoring Frequency. By no later than the Date of Entry of the First Modification, for all Covered Equipment, except as provided in 40 C.F.R. § 60.482-1a(c)-(f), Limetree Bay shall comply with the monitoring frequency for valves as required by 40 C.F.R. § 60.482-7a, 40 C.F.R. § 60.482-10a, and 40 C.F.R. § 60.483-2a and for pumps as required by 40 C.F.R. § 60.482-2a.

114. Electronic Storage of LDAR Data. On and after the Date of Lodging of the First Modification, Limetree Bay shall record all LDAR monitoring and repair data in an electronic database.

115. Electronic Monitoring and Reporting of LDAR Data. On and after the Date of Lodging of the First Modification, Limetree Bay shall use dataloggers and/or electronic data collection devices during LDAR monitoring. Limetree Bay or contractor(s) retained by Limetree Bay shall use their best efforts to transfer each monitoring reading to the database within five (5) Days of collecting the reading. For all monitoring events in which an electronic data collection device is used, the collected monitoring data shall include a time and date stamp, screening value, operator identification, and instrument identification. Limetree Bay may use paper logs where necessary or more feasible (e.g., small rounds, remonitoring, or when dataloggers are not available or broken), and shall record the identification of the technician undertaking the monitoring, the date, time, screening value, and the identification of the monitoring equipment. Limetree Bay shall transfer any manually recorded monitoring data to the electronic database within seven (7) Days of monitoring.

116. QA/QC of LDAR Data. By no later than ninety (90) Days after the Date of Lodging of the First Modification, Limetree Bay shall develop and implement a procedure to ensure a quality assurance/quality control ("QA/QC") review of all data generated by each LDAR monitoring technician. This QA/QC procedure shall require:

a. Monitoring technician(s) to review and certify the accuracy of the monitoring data they collected each week; and

b. Non-monitoring personnel to review monitoring data quarterly, including but not limited to, number of components monitored per technician, time between monitoring events, and abnormal data patterns.

117. LDAR Personnel. By no later than the Date of Lodging of the First Modification, Limetree Bay shall maintain the facility's existing program which holds Limetree Bay LDAR personnel accountable for LDAR performance. Limetree Bay shall maintain a position with responsibility for LDAR management and with the authority to implement improvements.

118. Adding / Removing Valves and Pumps. On and after the Date of Lodging of the First Modification, Limetree Bay shall continue to implement its tracking program for maintenance records (e.g., a Management of Change program) to ensure that valves and pumps subject to the LDAR Regulations and this Consent Decree, which are installed and placed into VOC service, are integrated into the LDAR program.

119. Calibration. Limetree Bay shall conduct all calibrations of LDAR monitoring equipment using methane as the calibration gas, in accordance with 40 C.F.R. Part 60, EPA Reference Test Method 21.

120. Calibration Drift Assessment. Within six calendar months of the Date of Lodging of the First Modification, Limetree Bay shall conduct calibration drift assessments of LDAR monitoring equipment pursuant to 40 C.F.R. § 60.485a(b)(2).

121. Extended Maintenance and Delay of Repair. Beginning no later than one (1) year from Date of Lodging of the First Modification, Limetree Bay shall eliminate normal use of delay of repair exemptions for equipment in VOC service (as defined in 40 C.F.R. § 60.481a) under applicable regulations and the Consent Decree, and shall perform monitoring and maintenance as follows: perform monitoring and "drill and tap" repairs according to Subparagraphs 121.a and b, and perform extended maintenance to attempt to stop the leak source as outlined under Subparagraph 121.c. If Limetree Bay, after having implemented one or more of the extended maintenance leak repair techniques identified in Subparagraph 121.c, cannot repair the leak, Limetree Bay may delay repair of the leak until the next process unit Shutdown. Extended maintenance shall not be required where any of the following is the case: (i) for the period beginning no later than one (1) year from the Date of Lodging of the First Modification through five (5) years of the Date of Entry of the First Modification, the number of valves on the delay of repair list does not exceed 0.1 percent refinery-wide upon determination of delay of repair; and for the period beginning no later than five (5) years of the Date of Entry of the First Modification, the number of valves on the delay of repair list does not exceed 0.05 percent refinery-wide upon determination of delay of repair; or (ii) the feasible extended maintenance techniques listed in Subparagraph 121.c would result in a Shutdown of a process unit or create an unsafe operating condition. Limetree Bay shall report the circumstances (why it was required, what was actually performed, whether it was successful) of all leaks attempted to be repaired under Subparagraph 121.c in semi-annual reports required under Paragraph 71.

a. For all equipment:

i. Require sign-off by the plant manager, a corporate official responsible for environmental management and compliance, a corporate official responsible for plant engineering, an operations manager, an area superintendent, or an area manager or designee by the 15th day after identification of the leak that the equipment cannot be removed from VOC service and is technically infeasible to repair without implementation of extended maintenance as set forth in Subparagraph 121.c; and

ii. Monitor monthly equipment on the "delay of repair" list which remains in VOC service.

b. For valves: For valves, other than control valves and pressure relief valves, require use of "drill and tap" or similarly effective repairs, unless the valve can be repaired by other means or Limetree Bay can demonstrate that there is a safety, mechanical, or adverse environmental concern posed by attempting to repair the leak in this manner. Limetree Bay shall perform multiple "drill and tap" attempts (or similarly effective repairs) within fifteen (15) Days of identification of the leak, if necessary, to repair the valve.

c. If the repair methods undertaken pursuant to Subparagraph 121.b have not stopped the source of the leak, Limetree Bay shall, within sixty (60) Days of identifying the leak, perform at least one extended maintenance attempt to stop the leak source, including building an enclosure for the equipment which meets 'no detectable emissions' standards under NSPS Subpart VV, line-stopping (i.e., inserting a plugging device inside the line so the contents can temporarily be held back while maintenance is performed on-line), hot-tapping (i.e., connecting a new piping service to an existing line with no interruption of flow), or pipe-freezing (i.e., holding

back system pressure in a section of piping using freeze chambers which are installed over a short section of piping and injected with liquid nitrogen or CO_2). Limetree Bay shall report the circumstances (why it was required, what was actually performed, was it successful) of all leaks attempted to be repaired or exempt from repair under this Subparagraph in semi-annual reports required under Part X (Reporting and Recordkeeping). If Limetree Bay applies a different extended repair technique than those listed in this Subparagraph, Limetree Bay shall report such technique under Paragraph 123 and explain how it is similarly effective at stopping the leak, and shall specifically explain why this technique could not be applied within fifteen (15) Days of identification of the leak.

122. Recordkeeping Requirements for this Section V.R. For at least two (2) years after termination of this Consent Decree, Limetree Bay shall retain records to demonstrate its compliance with the requirements of this Section V.R.

123. As part of the reports required under 40 C.F.R. §§ 60.487a and 63.655 (Semi-Annual LDAR Report), Limetree Bay shall include the following information, at the following times:

a. The next Semi-Annual LDAR Report after the applicable compliance date for each requirement shall include notification of the following:

i. Implementation of the "Valve Preventative Leak Maintenance Program" of Paragraph 112;

ii. Implementation of QA/QC procedures for review of data generated by LDAR technicians as required by Paragraph 116;

iii. Development of a tracking program for new valves and pumps added during maintenance and construction (Management of Change Program) as required by Paragraph 118;

iv. Implementation of the calibration and calibration drift assessment procedures of Paragraphs 119 and 120;

v. Implementation of the "delay of repair" procedures of Paragraph 121;

vi. Utilization of electronic data collection devices during LDAR monitoring, pursuant to the requirements of Paragraph 115;

vii. [Reserved]; and

viii. Implementation of the monitoring requirements of Paragraph 113.

b. Until termination of this Section V.R, each Semi-Annual LDAR Report that Limetree Bay submits shall include:

i. An identification of each audit, if any, that was conducted pursuant to the requirements of Paragraph 106 in the previous semi-annual period. For each audit identified, the report shall include an identification of the auditors, a summary of the audit results, and a summary of the actions that Limetree Bay took or intends to take to correct all deficiencies identified in the audits.

ii. Training. Information identifying the measures taken to comply with the provisions of Paragraph 105;

iii. [Reserved]; and

iv. Monitoring. The following information on LDAR monitoring:

(1) A list of the process units monitored during the reporting period;

(2) The number of valves and pumps present in each monitored process unit;

(3) The number of valves and pumps monitored in each process unit and if less than the number in (2), include an explanation as to why;

(4) The number of valves and pumps found leaking in each process unit during the period, and the valve leak percentage for each process unit;

(5) The number of "difficult to monitor" pieces of equipment monitored;

(6) The projected month of the next monitoring event for that unit;

(7) A list of all equipment currently on the "delay of repair" list, the date each component was placed on the list, the date each such component was determined to be leaking above applicable leak definitions, the circumstances of any extended maintenance repairs under Subparagraph 121.c, the associated monitoring results for each piece of equipment, and whether such activities were completed in a timely manner;

(8) [Reserved];

(9) The number of valves not repacked or replaced and recorded as required under Paragraph 112;

(10) The number of valves which were newly installed without appropriate packing or valve technology, as required under Paragraph 112; and

(11) The number of missed or untimely repairs under Paragraph 111.

30. Replace Part VI, Permitting with the following new Part VI, Permitting.

124. Obtaining Permit Limits for Consent Decree Emission Limits That Are Effective On or Before the Date of Entry of the First Modification. Except as set forth below, by no later than 180 Days after the Date of Entry of the First Modification, Limetree Bay shall submit applications, amendments and/or supplements to the relevant permitting authority to incorporate the surviving Consent Decree obligations identified in Appendix O ("Requirements That Shall Survive Termination of the Consent Decree") that are effective on or before the Date of Entry of the First Modification into federally enforceable minor or major new source review permits or other permits (other than Title V permits) or provisions (e.g., SIP) that are federally enforceable. Upon issuance of such permits or in conjunction with such permitting, Limetree Bay shall file all applications necessary to incorporate the requirements of those permits into the Title V permit for the Refinery.

125. Obtaining Permit Limits For Consent Decree Emission Limits That Become Effective After Date of Entry of the First Modification. Except as set forth below, as soon as practicable, but in no event later than 180 Days after the effective date or establishment of any surviving Consent Decree obligations identified in Appendix O, other than those effective on or

before the Date of Entry of the First Modification, Limetree Bay shall submit applications, amendments and/or supplements to the relevant permitting authority to incorporate those emission limits and standards into federally enforceable minor or major new source review permits, or other permits (other than Title V permits) or provisions (e.g., SIP) that are federally enforceable. Upon issuance of such permit or in conjunction with such permitting, Limetree Bay shall file all applications necessary to incorporate the requirements of those permits into the Title V permit for the Refinery.

126. Mechanism for Title V Incorporation. The Parties agree that the incorporation of any surviving Consent Decree obligations into the Title V permit for the Refinery as required by Paragraphs 124 and 125 shall be in accordance with the applicable territorial Title V rules.

127. Construction Permits. Limetree Bay agrees to obtain all required, federally enforceable permits for the construction of the pollution control technology and/or the installation of equipment necessary to implement the requirements of the Consent Decree.

127A. Obligations That Shall Survive Consent Decree Termination. The requirements imposed by the provisions identified in Appendix O shall survive termination of the Consent Decree under Part XIX (Termination).

a. Emission Limits and Standards. The requirements identified in Appendix O shall constitute emission limits and standards that shall survive termination of the Consent Decree by virtue of being incorporated into non-Title V federally enforceable minor or major permits or being required under a federally enforceable rule as required by Paragraphs 124 and 125.

b. Optional Review of Draft Permit Application for Consistency with Consent Decree.

i. By not later than 180 days prior to the date for submission of any permit application(s) to incorporate surviving emission limits and standards identified in this Paragraph 127A and Appendix O into federally-enforceable minor or major new source review permits or other permits (and, upon issuance of such permits or in conjunction with such permitting, into Title V permits) Limetree Bay may, following the procedures in Paragraph 225 (Notices), submit for EPA and VIDPNR review and comment a draft of the permit application(s) containing the terms, conditions and other provisions to incorporate such surviving obligations. EPA's review and comment is intended to assist efforts to submit permit application(s) to the relevant permitting entity that fully incorporate such surviving obligations; EPA does not warrant or guarantee by its review and comment on a *draft* permit application that Limetree Bay has met or will thereafter meet the requirement of Paragraph 234.e to show that, at the time of Termination of this Consent Decree, the *final* permit(s) once issued by the relevant permitting entity accurately and fully incorporate the surviving Consent Decree obligations. In addition, such review by EPA is not pre-decisional or binding upon the relevant permitting entity, which may at its discretion require additional and/or more stringent terms and conditions than those required under this Consent Decree.

ii. If Limetree Bay elects to submit a draft permit application(s) for optional review under this Subparagraph, Limetree Bay shall have 30 days from the date of receipt of EPA's comments in which to submit its permit application(s) to the relevant permitting entity(s), notwithstanding the deadline for

submission of permit applications under Paragraph 124 or Paragraph 125, as applicable. The Parties may agree to a longer time period for submission of the permit application(s) to the relevant permitting entity(s) if needed to address questions or issues concerning EPA's review.

31. Replace Subparagraph 130.b with the following new Subparagraph 130.b:

b. CD Emissions Reductions may be used only at the Refinery.

32. Add the following new Paragraph 135A:

135A. For Boilers 5, 8, and 9, which became subject to NSPS Subpart D pursuant to Paragraph 135, entry of the First Modification of the Consent Decree shall satisfy the notice requirements of 40 C.F.R. § 60.7(a).

33. Replace Paragraph 136 with the following new Paragraph 136:

136. NSPS Subparts A and GG.

a. Power Line-Up. Limetree Bay submitted its "power line-up" to the United States and the Virgin Islands on December 31, 2018. The power line-up identified Generating Turbines that Limetree Bay plans to operate when Idled Units at the Refinery resume operation and the normal operating range at which they are expected to operate. By December 31, 2019, Limetree Bay shall re-submit its power line-up to the United States and the Virgin Islands if there are any changes from the December 31, 2018 submission.

b. Applicability and Compliance with NSPS Subparts A and GG:

Generating Turbines 4, 7, 8, and 9 are "affected facilities" as that term is defined in 40 C.F.R. Part 60, Subparts A and GG.

i. Generating Turbine 9. Generating Turbine 9 shall continue to comply with the requirements of NSPS Subparts A and GG. Paragraph 229A and Appendix L shall apply to Generating Turbine 9.

ii. Generating Turbines 4, 7, and 8

(1) From the Date of Lodging of the First Modification until Limetree Bay demonstrates compliance with NSPS Subparts A and GG in accordance with Subparagraph 136.b.ii(2), Generating Turbines 4, 7, and 8 shall comply with the requirements of NSPS Subparts A and GG, except that in lieu of complying with the NSPS Subpart GG numerical standard for NO_x, the Generating Turbines shall comply with the applicable Maximum Load Limits set forth in Subparagraph 136.d.ii.

(2) By no later than December 31, 2020, Generating Turbines 4, 7, and 8 shall demonstrate compliance with all requirements of NSPS Subparts A and GG. Compliance with the applicable NSPS Subpart GG numerical standard for NO_x, shall be demonstrated (a) by CEMS or a stack test performed using the test methods specified in 40 C.F.R. § 60.335 and § 60.8, and at four different load points, including one load point within 5 percent at 90-to-100 percent of the manufacturer's design capacity, or at the highest achievable load point if Limetree Bay can demonstrate that a load point within 5 percent at 90-to-100 percent of design

capacity cannot be physically achieved in practice, or (b) by an alternate test method specifically approved by EPA in writing.

c. Custom Sulfur Monitoring Plan:

i. Pursuant to 40 C.F.R. § 60.334(i)(3), Limetree Bay submitted a custom sulfur monitoring schedule to EPA on August 31, 2017 for propane and distillate. The custom sulfur monitoring schedule may be revised in accordance with 40 C.F.R. § 60.334(i)(3). Limetree Bay shall comply with any proposed custom sulfur monitoring schedule as submitted unless EPA disapproves. If EPA disapproves of a custom schedule, then within thirty (30) Days of Limetree Bay's receipt of disapproval, Limetree Bay will submit to EPA a revised custom schedule that provides for compliance with the applicable monitoring requirements, which may include additional or different monitoring. Limetree Bay shall comply with the revised custom schedule as submitted unless EPA disapproves.

d. Maximum Load Limits for Generating Turbines 4, 7, and 8 until Subparagraph 136.b.ii(2) compliance demonstration:

i. Interim Controls

Limetree Bay has installed LHE Combustion Liner Systems on GTs 7 and 8, which will not be removed any earlier than the date Limetree Bay installs and operates alternative NO_x controls, or is replaced at or before end of life. Limetree Bay shall demonstrate compliance with the NSPS, Subparts A and GG numerical standard for NO_x, as required in Subparagraph 136.b.ii.(2), within sixty Days after it begins operations with alternative NO_x controls.

ii. Applicability of Maximum Load Limits

From the Date of Lodging of the First Modification until Limetree Bay demonstrates full compliance with NSPS Subparts A and GG, as required in Subparagraph 136.b.ii.(2), Generating Turbines 4, 7, and 8 shall comply with the applicable Maximum Load Limits as set forth in Subparagraphs 136.d.iii through 136.d.iv.

iii. Maximum Load Limits. From the Date of Lodging of the First Modification until a subsequent Maximum Load Limit is established in accordance with Subparagraph 136.d.iv, the following fuel and load limits are the applicable Maximum Load Limits for Generating Turbines 4, 7, and 8:

Turbine	Fuel	Maximum Load (1-hour block average)
GT-4	Propane Gas	6.67 MW
	Fuel Oil	6.49 MW
	Fuel Gas	6.49 MW
GT-7	Propane Gas	14.53 MW
	Fuel Oil	12.97 MW
	Fuel Gas	12.97 MW
GT-8	Propane Gas	12.14 MW
	Fuel Oil	11.09 MW
	Fuel Gas	11.09 MW

iv. Subsequent Maximum Load Limits.

(1) Limetree Bay may establish subsequent Maximum Load Limits for Generating Turbine 4, 7, or 8 or combust other fuels, provided it establishes those limits by conducting testing, in accordance with

Subparagraph 136.d.iv(2) – (5) below. Such testing may be conducted prior to and/or after the Date of Lodging of the First Modification.

(2) Limetree Bay shall use the test methods specified in 40 C.F.R. § 60.335 and § 60.8 to measure NO_x emissions from the Generating Turbine to establish subsequent Maximum Load Limits, except that for the purpose of conducting the stack test required by this Subparagraph 136.d.iv(2), Limetree Bay shall not be required to test at 90-to-100 percent of design capacity, as one of its four load points.

(3) Limetree Bay shall provide notice to EPA and the VIDPNR no later than thirty (30) Days prior to any stack test of Generating Turbines 4, 7, and 8 conducted to establish subsequent Maximum Load Limits.

(4) No later than thirty (30) Days after conducting tests to establish subsequent Maximum Load Limits, Limetree Bay shall provide the results of such testing to EPA and the VIDPNR.

(5) From the Day that Limetree Bay satisfactorily completes a test conducted pursuant to this Subparagraph 136.d.iv, the applicable Maximum Load Limit shall be the maximum MW load, measured in a single run, on a 1-hour block average, at which the stack test results demonstrate that a specific fuel will result in emissions that will not exceed the NSPS Subparts GG NO_x numerical standard in 40 C.F.R. § 60.332(a)(2), and Limetree Bay shall operate at or below this subsequent Maximum Load Limit.

e. Recordkeeping. From the Date of Lodging of the First Modification until compliance is demonstrated in accordance with Subparagraph 136.b.ii(2), Limetree Bay shall maintain a record of the operating MW load, measured on a 1-hour block average, for Generating Turbines 4, 7, and 8. Limetree Bay shall make these records available to EPA and the VIDPNR upon request.

f. Notice. If Generating Turbines 4, 7, or 8 exceed the applicable Maximum Load Limit set forth in Subparagraph 136.d.iii or established in accordance with Subparagraph 136.d.iv, Limetree Bay shall within seven (7) Days of the exceedance provide notice to the EPA and the VIDPNR.

g. Stipulated Penalties.

i. Generating Turbines 4, 7, and 8 – Failure to Comply with Maximum Load Limit. Limetree Bay shall be subject to a stipulated penalty of $250 for every hour that Limetree Bay operates Generating Turbine 4, 7, or 8 at a MW load more than ten (10) percent higher than the applicable Maximum Load Limit set forth in Subparagraph 136.d.iii or established in accordance with Subparagraph 136.d.iv, except that stipulated penalties for exceedances of a Maximum Load Limit do not apply during a performance test for which Limetree Bay provided notice to EPA pursuant to Subparagraph 136.d.iv(3).

ii. Generating Turbines 4, 7, 8, and 9 – Failure to Comply with NSPS Subpart GG by Compliance Date. Limetree Bay shall be subject to the following stipulated penalties for failure to comply with NSPS Subpart GG following the compliance dates set forth in Paragraphs 136.b.i and b.ii(2):

Period of Non-Compliance	Penalty Per Day Per Turbine
1st Day through 30th Day after deadline	$200
31st through 60th Day after deadline	$500
Beyond 60th Day after deadline	$1,000

34. Add the following new Paragraph 136A:

136A. For Generating Turbines 4, 7 and 8, which became subject to NSPS Subpart GG pursuant to Paragraph 136, entry of the First Modification of the Consent Decree and compliance with the relevant monitoring and compliance demonstration requirements of this Consent Decree shall satisfy the notice requirements of 40 C.F.R. § 60.7(a) and the initial performance test requirement of 40 C.F.R. § 60.8(a).

35. Replace Section IX.A with the following new Section IX.A:

IX.A. Territorial Supplemental Environmental Project

137. Virgin Islands Territorial SEP

a. The VIDPNR shall develop and ensure implementation of Territorial Supplemental Environmental Projects ("TSEP") designed to benefit the people of the Virgin Islands. These projects shall be consistent with environmental, public health, pollution prevention or reduction, or other benefits and objectives of the environmental protection laws of the United States and the Virgin Islands. Among the potential projects, the VIDPNR is developing TSEPs for the establishment of a cancer registry and the establishment of a pediatric environmental specialty health unit.

b. Within thirty (30) Days of a written request by the VIDPNR to the ERT for funding, the ERT shall provide for the disbursal of such funds from the TSEP Escrow Account, as directed by the VIDPNR, for the purpose of implementing the identified TSEP.

c. All funds disbursed pursuant to this Paragraph shall be paid directly by the ERT to the TSEP provider(s) identified by the VIDPNR.

d. In annual reports, due the thirty-first Day of January, the ERT shall identify the amount remaining in the TSEP Escrow Account at the end of the reporting period, and the amount disbursed and to whom it was disbursed during the reporting period.

e. At the time the Court orders this Consent Decree to be terminated, the ERT shall disburse any remaining monies in the TSEP Escrow Account to the VIDPNR for development and implementation of projects that are consistent with the TSEP criteria set forth in this Paragraph.

138. [Reserved]

139. [Reserved]

140. [Reserved]

36. Replace Section IX.B with the following new Section IX.B:

B. <u>Additional Work</u>

140A. <u>VIWAPA Emissions Monitoring Assistance Subsequent to the First Modification</u>

a. Prior to the disbursal of funds to VIWAPA, the ERT shall submit to EPA for EPA's review: (i) its contractor's detailed description of the assistance provided, including expenditures, certified as accurate by a responsible VIWAPA company official; and (ii) its contractor's statement indicating what monies expended by VIWAPA are consistent with the Consent Decree and the approved SOW.

b. Within thirty (30) Days of receipt by the ERT of the statement by its contractor referenced in Subparagraph a. above, the ERT shall reimburse VIWAPA from funds earmarked for the VIWAPA Emissions Monitoring Assistance Program in accordance with the statement.

c. The ERT shall not itself perform, participate (physically or otherwise) in

performing, or assume responsibility for, any work, tasks, or functions that relate to the VIWAPA Assistance Program or that VIWAPA is legally obligated to perform or performs in the ordinary course of its business.

37. Replace Section IX.C with the following new Section IX.C:

C. <u>Public Statements</u>

141. [Reserved]

38. Add the following sentence to Paragraph 142:

For BWON and LDAR Equipment, Limetree Bay shall maintain: (1) a database that identifies BWON or LDAR Equipment that is not In Regulated Service and BWON or LDAR Equipment that is In Regulated Service; (2) a database of any change in status of BWON or LDAR Equipment and the date of such change; and (3) records documenting information reported pursuant to Subparagraphs 143.a.v(3) through 143.a.v(4).

39. Replace Subparagraphs a.iv and a.v of Paragraph 143 with the following new Subparagraphs a.iv and a.v:

iv. A summary of Limetree Bay's compliance with Paragraph 136, including a description of any exceedances of any Maximum Load Limit set forth in Subparagraph 136.d.iii or as the result of any test conducted pursuant to Subparagraph 136.d.iv(2).

v. Any such additional matters relevant to the obligations of this Consent Decree, including, but not limited to, the following:

(1) A list of In Service Units, Idled Units, and any change(s) in the status of In Service Units or Idled Units from the prior semi-annual reporting period;

(2) Identification of any Idled Unit that is operated for any period prior to Restart, along with the hours, duration, and purpose of such operation, except that this requirement shall not apply to units after they have been Restarted;

(3) A list by area or process unit of BWON and LDAR Equipment that is currently In Regulated Service; and

(4) A list by area or process unit identifying any changes in status of Equipment In Regulated Service from the prior semi-annual reporting period.

40. Replace Subparagraph 143.b.iii with the following new Subparagraph 143.b.iii:

143.b.iii. SO_2 emissions in tons per year for each SRP and SO_2 and Reduced Sulfur Compounds (RSC) emissions in tons per year for each SRP using a Beavon unit as a control device.

41. Replace Paragraph 162 with the following new Paragraph 162:

162. For failure to comply with applicable NSPS Subparts A and Ja requirements, at the flares listed on Appendix D ("List of Flaring Devices Subject to NSPS Subpart Ja") after the deadlines for compliance in Paragraphs 49, per Flaring Device:

Period of Non-Compliance	Penalty per Day
1st through 30th Day after deadline	$500
31st through 60th Day after deadline	$1,500
Beyond 60th Day after deadline	$2,000

42. Insert new Paragraphs 162A, 162B and 162C:

162A. For failure to install flare gas recovery system(s), if required by Subparagraphs 50B.a, 50B.b, or 50B.c:

Period of Non-compliance	Penalty per Day
1st through 30th day after deadline	$1,200
31st through 60th day after deadline	$2,500
Beyond 60th day after deadline	$5,000, or an amount equal to 1.2 times the economic benefit of non-compliance, whichever is greater

162B. For failure to monitor emissions or flow rate as required by Paragraphs 50A, 50C.a, and 50D, and for failure to maintain records and reports as required by Subparagraphs 50C.b and 50C.c:

Period of Non-compliance	Penalty per Day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$1000
Beyond 60th day after deadline	$2,500, or an amount equal to 1.2 times the economic benefit of non-compliance, whichever is greater

162C. For failure to mitigate emissions, if required by Paragraph 50A and Appendix P ("Flaring Mitigation Projects"):

Period of Non-compliance	Penalty per Day
1st through 30th day after deadline	$1000
31st through 60th day after deadline	$2500
Beyond 60th day after deadline	$5,000, or an amount equal to 1.2 times the economic benefit of non-compliance, whichever is greater

43. In Paragraph 163, change the Subpart NSPS references "NSPS Subparts J/Ja" to "NSPS Subpart Ja".

44. Replace Subparagraph 165.e with the following new Subparagraph 165.e:

e. Failure to implement the requirements of Paragraph 112 (Valve Preventive

Maintenance Program):

i. For failure to install a Low-E Valve or a valve fitted with Low-E Packing when required to do so pursuant to Subparagraph 112.b.ii or 112.b.iii: $300 per valve.

ii. For failure to install a Low-E Valve or a valve fitted with Low-E Packing when required to do so pursuant to Subparagraph 112.b.iv: $10,000 per valve.

iii. For each failure to record information as required pursuant to Subparagraphs 112.c, 112.e, and 112.f: $100 per valve.

45. Replace Paragraph 167 with the following new Paragraph 167:

167. [Reserved]

46. Add the following new Paragraph 178A to Part XII (Stipulated Penalties):

178A. Limetree Bay shall not be liable for any stipulated penalties for non-compliance with Consent Decree requirements where:

a. the non-compliance began and ended on or prior to January 4, 2016, or

b. the non-compliance began prior to January 4, 2016 and continued on or after January 4, 2016 for a failure by HOVENSA to timely and fully comply with a submission, notice, recordkeeping, or reporting requirement under the Consent Decree, or

c. the non-compliance began prior to the Date of Lodging of the First Modification and the Consent Decree requirement was changed, deleted, replaced, or the deadline extended by the First Modification and Limetree Bay complies with the changed, deleted, replaced, or extended requirement or deadline. Limetree Bay will be liable for stipulated penalties, if it fails to comply with the changed, replaced, or extended Consent Decree

requirement or deadline.

Except as set forth in Subparagraph 178A.b or 178A.c, where non-compliance occurred and/or continued on/or after January 4, 2016, regardless of when the non-compliance began, Limetree Bay shall be responsible for stipulated penalties for such continuing non-compliance but only for the time period on/or after January 4, 2016.

47. Replace Part XVII with the following new Part XVII:

XVII. EFFECT OF SETTLEMENT

199. Definitions. For purposes of this Part XVII (Effect of Settlement), the following definitions apply:

a. "Applicable NSR/PSD Requirements" shall mean:

i. PSD requirements at Part C of Subchapter I of the Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. §§ 52.21 and 51.166; and the portions of the applicable SIP and related rules adopted as required by 40 C.F.R. §§ 51.165 and 51.166;

ii. Any Title V regulations that implement, adopt, or incorporate the specific regulatory requirements identified above; any applicable federally-enforceable territorial regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified above; any Title V permit provisions that implement, adopt, or incorporate the specific regulatory requirements identified above; and

iii. Any applicable territorial laws or regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified above

regardless of whether such laws or regulations have been formally approved by EPA as part of the applicable State Implementation Plan.

b. "Applicable NSPS Subparts A and J Requirements" shall mean the standards, monitoring, testing, reporting, and recordkeeping requirements found at 40 C.F.R. §§ 60.100 through 60.109 (Subpart J) relating to a particular pollutant and a particular affected facility, and the corollary general requirements found at 40 C.F.R. §§ 60.1 through 60.19 (Subpart A) that are applicable to any affected facility covered by Subpart J. This term shall also include the requirements of 12 VIRR Section 204-45, "Standards of Performance for Sulfur Recovery Units at Petroleum Refineries."

c. "Applicable NSPS Subparts A and Ja Requirements" shall mean the standards, monitoring, testing, reporting, and recordkeeping requirements found at 40 C.F.R. § 60.100a through 60.109a (Subpart Ja) relating to a particular pollutant and a particular affected facility, and the corollary general requirements found at 40 C.F.R. §§ 60.1 through 60.19 (Subpart A) that are applicable to any affected facility covered by Subpart Ja.

d. "Applicable NSPS Subparts A and D Requirements" shall mean the standards, monitoring, testing, reporting, and recordkeeping requirements found at 40 C.F.R. §§ 60.40 through 60.46 (Subpart D) relating to a particular pollutant and a particular affected facility, and the corollary general requirements found at 40 C.F.R. §§ 60.1 through 60.19 (Subpart A) that are applicable to any affected facility covered by Subpart D.

e. "Applicable NSPS Subparts A and GG Requirements" shall mean the standards, monitoring, testing, reporting, and recordkeeping requirements found at 40 C.F.R. §§ 60.330 through 60.335 (Subpart GG) relating to a particular pollutant and a particular affected

facility, and the corollary general requirements found at 40 C.F.R. §§ 60.1 through 60.19 (Subpart A) that are applicable to any affected facility covered by Subpart GG.

f. "Applicable NSPS Subparts A and QQQ Requirements" shall mean the standards, monitoring, testing, reporting, and recordkeeping requirements found at 40 C.F.R. §§ 60.690 through 60.699 (Subpart QQQ) relating to a particular pollutant and a particular affected facility, and the corollary general requirements found at 40 C.F.R. §§ 60.1 through 60.19 (Subpart A) that are applicable to any affected facility covered by Subpart QQQ.

g. "Benzene Waste NESHAP Requirements" shall mean the requirements imposed by the National Emission Standard for Benzene Waste Operations, 40 C.F.R. Part 61, Subpart FF, and any applicable territorial regulations that implement, adopt or incorporate the Benzene Waste NESHAP.

h. "Delayed Coker Unit Project" or "Coker Project" shall mean the equipment that was newly constructed or modified between August 19, 1999 and May 8, 2002 as follows: Coker Unit process equipment and associated gas plant, process heaters, H-8501 and H-8502, Boiler No. 10, No. 7 Amine, No. 6 Sour Water Stripper, sour water tank, pitch storage tank, desalter effluent water tank, coke cutting water tank, coke pit, Nos. 1 and 2 Sulfur Recovery Plants and associated No. 1 Beavon, the process equipment located in the No. 5 Crude, No. 3 Vacuum, No. 3 Crude, No. 1 Vacuum, No. 1 Visbreaker, and Numbers. 2, 4, 6, and 7 Distillate Desulfurizing Units, and outside battery limit modifications to the terminal, tank farm and blending equipment.

i. "Limetree Bay" shall include Limetree Bay Terminals, LLC, Limetree Bay Refining, LLC, and except with respect to Paragraph 206, HOVENSA.

j. "LDAR Requirements" shall mean the requirements relating to equipment

in light liquid service and gas/vapor service set forth at 40 C.F.R. Part 60, Subparts, VV, VVa, GGG and GGGa; 40 C.F.R. Part 61, Subparts J and V; and 40 C.F.R. Part 63, Subparts F, H, and CC; and any applicable territorial regulations or State Implementation Plan requirements that implement, adopt or incorporate those federal regulations or set similar standards.

k. "Post-Lodging Compliance Dates" shall mean any dates in this Part XVII (Effect of Settlement) after the Date of Lodging. Post-Lodging Compliance Dates include dates certain (e.g., "December 31, 2019"), dates after Lodging represented in terms of "months after Lodging" (e.g., "12 months after the Date of Lodging" or "12 months after Date of Lodging of the First Modification"), and dates after the Date of Lodging represented by actions taken (e.g., "comply with"). The Post-Lodging Compliance Dates represent the dates by which work is required to be completed or an emission limit is required to be met under the applicable provisions of the Consent Decree.

200. Liability Resolution Regarding the Applicable NSR/PSD Requirements. With respect to emissions of the following pollutants from the following units, entry of the Consent Decree resolves all civil liability of Limetree Bay to the United States and the Virgin Islands: (1) for violations of the Applicable NSR/PSD Requirements resulting from the construction or modification of the following units that occurred prior to the Date of Lodging, and that commenced and ceased prior to the Date of Lodging; and (2) for any violations of the Applicable NSR/PSD Requirements resulting from pre-Date of Lodging construction or modification of the following units, that commenced prior to the Date of Lodging and continued up to the following dates:

Unit	**Pollutant**	**Date**
FCCU	NO_x	Date of Entry of the Consent Decree

	SO_2	Date of Entry of the Consent Decree
	PM	Date of Entry of the Consent Decree
Heaters, boilers, Generating Turbines, and Compressor Engines	NO_x	December 31, 2019
	SO_2	Date of Entry of the Consent Decree
Coker Project	H_2S	December 31, 2012

The limits for VOC, CO, H_2S, NO_x, SO_2, PM, PM-10, and $PM_{2.5}$ contained in VIDPNR Permit STX-557A-E-02 for the Coker Project were intended to limit the emissions of these pollutants for purposes of avoiding permitting pursuant to 40 C.F.R. § 52.21. Section VIII.A establishes injunctive relief to resolve EPA's September 18, 2007 NOV, CAA-02-2007-1313, issued to HOVENSA. Limetree Bay may seek relaxation of the emissions limits in Permit STX-557A-E 02 and STX-557-I-00 pertaining to VOC, CO, H_2S, NO_X, SO_2, PM-10, PM, and $PM_{2.5}$, or Reduced Sulfur Compounds upon compliance with the interim limit for the Coker Steam Vents as specified in Subparagraph 132.a and with the interim limit for Beavon Unit #1 as specified in Appendix H ("Additional Coker Project Injunctive Relief"), and all other injunctive relief specified in Appendix H. Such relaxations will not be deemed to constitute a major modification to the Refinery within the meaning of 40 C.F.R. § 52.21(r)(4) and the requirements of Subparagraphs (j) through (s) of 40 C.F.R. § 52.21 shall not apply by virtue of such relaxations.

201. Conditional Resolution of Liability for CO Emissions Under the Applicable NSR/PSD Requirements. With respect to emissions of CO from the FCCU, if and when Limetree Bay accepts an emissions limit pursuant to Paragraph 19 of the Consent Decree and demonstrates compliance using CEMS at the FCCU, then any civil liability of Limetree Bay to

the United States and the Virgin Islands shall be resolved for violations of the Applicable NSR/PSD Requirements relating to CO emissions at the FCCU resulting from pre-Date of Lodging construction or modification of the FCCU that either ceased prior to the Date of Lodging or continued up to the date on which Limetree Bay demonstrates compliance with such CO emissions limit.

202. Reservation of Rights Regarding Applicable NSR/PSD Requirements: Release for Violations Continuing After the Date of Lodging Can Be Rendered Void. Notwithstanding the resolution of liability in Paragraphs 200 and 201, the releases of liability by the United States and the Virgin Islands to Limetree Bay for violations of the Applicable NSR/PSD Requirements during the period between the Date of Lodging and the Post- Lodging Compliance Dates shall be rendered void if Limetree Bay materially fails to comply with the corresponding obligations and requirements of Part V (Affirmative Relief/Environmental Projects), Sections V.A through V.E (relating to the FCCU), Sections V.F through V.H (relating to heaters, boilers, Generating Turbines and Compressor Engines), and Part VIII (Additional Injunctive Relief); provided, however, that the releases in Paragraphs 200 and 201 shall not be rendered void if Limetree Bay remedies such material failure and pays any stipulated penalties due as a result of such material failure.

203. Exclusions from Release Coverage Regarding Applicable NSR/PSD Requirements in the Consent Decree: Construction and/or Modification Not Covered. Notwithstanding the resolution of liability in Paragraphs 200 and 201, nothing in the Consent Decree precludes the United States or the Virgin Islands from seeking injunctive relief, penalties, or other appropriate relief from Limetree Bay for violations by Limetree Bay of the Applicable NSR/PSD Requirements resulting from: (i) construction or modification that commenced prior

to the Date of Lodging, if the resulting violations relate to pollutants or units not covered by the Consent Decree; or (ii) any construction or modification that commences after the Date of Lodging.

204. Evaluation of Applicable NSR/PSD Requirements. Increases in emissions from units covered by the Consent Decree, where the increases result from construction or modification of any units within the Refinery, after January 4, 2016, are beyond the scope of the release in Paragraphs 200 and 201, and Limetree Bay is not relieved from any obligation to evaluate any such increases in accordance with the Applicable NSR/PSD Requirements.

205. Resolution of Liability Regarding Applicable NSPS Requirements. With respect to emissions of the following pollutants from the following units, entry of the Consent Decree resolves all civil liability of Limetree Bay to the United States and the Virgin Islands for violations of the applicable NSPS Subparts, referenced in Paragraph 199.b through f, listed below from the date that the claims of the United States and the Virgin Islands accrued up to the specified Post-Lodging Compliance Date:

Unit	Applicable NSPS Subpart	Pollutant	Date
FCCU	A and J	SO_2, CO, and PM	Date of Lodging of the Consent Decree
		PM (opacity monitoring requirements)	Date of AMP approval receipt (see Paragraph 22)
FCCU Turboexpander Vents	A and J	SO_2, CO, PM (opacity)	Date of Lodging of the Consent Decree
All fuel gas combustion devices listed in Appendix C ("NSPS Subpart J or Ja Compliance Schedule for Listed Fuel Gas Combustion Devices (Other than Flaring Devices)")	A, J, and Ja, as applicable	SO_2	Dates listed in Appendix C ("NSPS Subpart J or Ja Compliance Schedule for Listed Fuel Gas Combustion Devices (Other than Flaring Devices)")
Flaring Devices	A, J, and Ja	SO_2	Dates listed in Appendix D ("List of Flaring Devices Subject to NSPS Subpart Ja")
East Side SRP	A, J and Ja	SO_2 and TRS	April 1, 2015
West Side SRP	A, J and Ja	SO_2 and TRS	December 31, 2011
Generating Turbines 1-3 and 6	A and GG	NO_x and SO_2	Five (5) years from Date of Entry of the Consent Decree
Generating Turbines 4, 7 and 8	A and GG	NO_x and SO_2	December 31, 2020
Generating Turbine 5 and 9	A and GG	NO_x and SO_2	Date of Lodging of the First Modification
Boilers 5, 8, and 9	A and D	NO_x, SO_2, and PM	July 31, 2012 (or 12/31/2015 for Boiler 5 if replaced)
The FCCU and Coker Drain Systems	A and QQQ	VOC	December 31, 2012

206. Reservation of Rights Regarding Applicable NSPS Requirements: Release for Violations Continuing After the Date of Lodging Can Be Rendered Void. Notwithstanding the resolution of liability in Paragraph 205, the releases of liability by the United States and the Virgin Islands to Limetree Bay for violations of the applicable NSPS Subparts listed in Paragraph 205 shall be rendered void if Limetree Bay fails to comply with the obligations and requirements of Parts V (Affirmative Relief/Environmental Projects), VI (Permitting) and VIII (Additional Injunctive Relief) (relating to NSPS requirements); provided, however, that the releases in Paragraph 205 shall not be rendered void if Limetree Bay remedies such failure and pays any stipulated penalties due as a result of such failure.

207. Resolution of Liability for Coker Project. Entry of the Consent Decree resolves all civil and administrative liability, commencing with the beginning of construction of the Coker Project through completion of the injunctive relief required pursuant to Paragraphs 132 through 134, of Limetree Bay to the United States and Virgin Islands for the following:

a. EPA's November 22, 2006 NOV, CAA-02-2007-1303, issued to HOVENSA for alleged violations arising under HOVENSA's Coker Operating Permit STX-557A-E-02, and HOVENSA's written notification dated January 9, 2008, to the Virgin Islands of calculated exceedances on January 2, 2008, of Coker Process Heater (H-8501B) of PM and VOC limits in the Coker Operating Permit;

b. The findings of violation in Paragraphs 49 through 55 of EPA's September 18, 2007 NOV, CAA-02-2007-1313, issued to HOVENSA, and any other violations of the permitting regulations cited in Paragraphs 49 through 55 of the NOV with respect to the Coker Project; and

c. EPA's March 20, 2007 Compliance Order, CAA-02-2007-1004, as

amended on April 5, 2007 by Compliance Order, CAA-02-2007-1004a, arising from HOVENSA's alleged failure to provide complete responses to EPA's December 21, 2006 Information Request Letter, issued pursuant to § 114 of the Clean Air Act.

208. Resolution of Liability Regarding Benzene Waste NESHAP Requirements. Entry of the First Modification of the Consent Decree resolves all civil liability of Limetree Bay to the United States and the Virgin Islands for violations of the statutory and regulatory requirements set forth below in Subparagraphs a - c that (i) commenced and ceased prior to the Date of Entry of the First Modification, and/or (ii) commenced prior to the Date of Entry of the First Modification and continued past the Date of Entry of the First Modification (including violations discovered after the Date of Entry of the First Modification for BWON Equipment returned to In Regulated Service on or after the Date of Entry of the First Modification), provided that the events giving rise to such violations are identified by Limetree Bay in its BWON Compliance Review and Verification Report submitted pursuant to Paragraph 79 and corrected by Limetree Bay as required under Paragraph 80.

a. Benzene Waste NESHAP. The National Emission Standard for Benzene Waste Operations, 40 C.F.R. Part 61, Subpart FF, promulgated pursuant to Section 112(e) of the Act, 42 U.S.C. § 7412(e), including any federal regulation that adopts or incorporates the requirements of Subpart FF by express reference, but only to the extent of such adoption or incorporation;

b. Any applicable, federally-enforceable permits or territorial regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified in Subparagraph a.

c. Any applicable territorial regulations enforceable by the Virgin Islands

that implement, adopt, or incorporate the specific federal regulatory requirements identified in Subparagraph a.

209. Resolution of Liability Regarding LDAR Requirements. Entry of the First Modification of the Consent Decree resolves all civil liability of Limetree Bay to the United States and the Virgin Islands for violations of the statutory and regulatory requirements set forth below in Subparagraphs a - c that (i) commenced and ceased prior to the Date of Entry of the First Modification, and/or (ii) commenced prior to the Date of Entry of the First Modification and continued past the Date of Entry of the First Modification (including violations discovered after the Date of Entry of the First Modification for LDAR Equipment returned to In Regulated Service on or after the Date of Entry of the First Modification), provided that the events giving rise to such violations are identified by Limetree Bay in its Initial Compliance Audit Report submitted pursuant to Subparagraph 106.a and corrected by Limetree Bay as required under Paragraph 107:

a. LDAR Requirements. For all equipment in light liquid and gas and/or vapor service, the LDAR requirements promulgated by EPA pursuant to Sections 111 and 112 of the Clean Air Act and codified at 40 C.F.R. Part 60, Subparts VV, VVa, GGG and GGGa, 40 C.F.R. Part 61, Subparts J and V, and 40 C.F.R. Part 63, Subparts F, H, and CC;

b. Any applicable, federally-enforceable permits or territorial regulations that implement, adopt, or incorporate the specific regulatory requirements identified in Subparagraph a; and

c. Any applicable territorial regulations or permits enforceable by the Virgin Islands that implement, adopt, or incorporate the specific regulatory requirements identified in Subparagraph a.

210. Reservation of Rights Regarding Benzene NESHAP and LDAR Requirements. Notwithstanding the resolution of liability in Paragraphs 208 and 209, nothing in the Consent Decree precludes the United States and/or the Virgin Islands from seeking from Limetree Bay injunctive and/or other equitable relief or civil penalties for violations by Limetree Bay of Benzene Waste NESHAP and/or LDAR requirements that (i) commenced and ceased prior to the Date of Entry of the First Modification, and/or (ii) commenced prior to the Date of Entry of the First Modification and continued after the Date of Entry of the First Modification (including violations discovered after the Date of Entry of the First Modification for BWON and LDAR Equipment returned to In Regulated Service on or after the Date of Entry of the First Modification) if Limetree Bay fails to identify and address such violations as required by Paragraphs 79, 80, 106.a, and 107.

211. Audit Policy. Nothing in the Consent Decree is intended to limit or disqualify Limetree Bay, on the grounds that information was not discovered and supplied voluntarily, from seeking to apply EPA's Audit Policy to any violations or noncompliance that Limetree Bay discovers during the course of any investigation, audit, or enhanced monitoring that Limetree Bay is required to undertake pursuant to the Consent Decree.

212. Claim/Issue Preclusion. In any subsequent administrative or judicial proceeding initiated by the United States or the Virgin Islands for injunctive relief, penalties, or other appropriate relief relating to Limetree Bay violations of the PSD/NSR, NSPS, Benzene Waste NESHAP, and/or LDAR requirements not identified in this Part XVII (Effect of Settlement):

a. Limetree Bay shall not assert, and may not maintain, in any subsequent administrative, civil, or criminal action commenced by the United States or the Virgin Islands any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue

preclusion, or claim-splitting. Nor may Limetree Bay assert or maintain any other defenses based upon any contention that the claims raised by the United States or the Virgin Islands in the subsequent proceeding should have been brought in the instant case. Nothing in the preceding sentences is intended to affect the ability of Limetree Bay to assert that the claims are deemed resolved by virtue of this Part XVII (Effect of Settlement).

b. Except as set forth in Subparagraph a, the United States and the Virgin Islands may not assert or maintain that the Consent Decree constitutes a waiver or determination of, or otherwise obviates, any claim or defense whatsoever, or that the Consent Decree constitutes acceptance by Limetree Bay of any interpretation or guidance issued by EPA related to the matters addressed in the Consent Decree.

213. Imminent and Substantial Endangerment. Nothing in the Consent Decree shall be construed to limit the authority of the United States and the Virgin Islands to undertake any action against any person, including Limetree Bay, to abate or correct conditions which may present an imminent and substantial endangerment to the public health, welfare, or the environment.

213A. The resolution of liability in Paragraphs 200, 201, 205, 207, 208, and 209 of the Consent Decree shall not be rendered void by the inability of an Idled Unit or BWON and LDAR Equipment not In Regulated Service to demonstrate compliance with an applicable Consent Decree requirement during the time that the Idled Unit was not operating or the BWON and LDAR Equipment was not In Regulated Service, until the unit or equipment demonstrates compliance as required by Paragraph 229A.b. In accordance with Paragraph 229A, Idled Units and BWON and LDAR Equipment not In Regulated Service that comply with Subparagraph 229A.b, shall be considered in compliance with the Consent Decree for purposes of Section V.M

(Stipulated Penalties Under This Section) and Part XII (Stipulated Penalties).

48. Replace Paragraph 221 with the following new Paragraph 221.

221. Post-Lodging, Pre-Entry Obligations. Obligations of Limetree Bay under this Consent Decree to perform duties after the Date of Lodging of the First Modification but prior to the Date of Entry of the First Modification shall be legally enforceable only on or after the Date of Entry of the First Modification. Liability for stipulated penalties, if applicable, shall accrue for violations of such obligations, and the United States or the Virgin Islands may demand payment as provided in the Decree, provided that stipulated penalties accruing between the Date of Lodging of the First Modification and the Date of Entry of the First Modification may not be collected unless and until the First Modification of the Consent Decree is entered by the Court.

49. Replace Paragraph 225 with the following new Paragraph 225:

225. Notice. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States, by email:

Eescdcopy.enrd@usdoj.gov
Re: DJ# 90-5-2-1-08229/1

As to the United States, by mail:

EES Case Management Unit
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, DC 20044-7611
DJ# 90-5-2-1-08229/1

As to EPA Headquarters, by mail:

Director
Air Enforcement Division

Office of Civil Enforcement (2242A)
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20044

Director
Air Enforcement Division
Office of Civil Enforcement
c/o Matrix New World Engineering, Inc.
26 Columbia Turnpike, Suite 200
Florham Park, NJ 07932-2213

And an electronic copy, in .pdf format, to:

foley.patrick@epa.gov

As to EPA Region 2, by mail:

Director
Enforcement and Compliance Assurance Division
U.S. EPA Region 2
290 Broadway, 21st Floor
New York, NY 10007-1866

United States Environmental Protection Agency
Region 2
Office of Regional Counsel
290 Broadway
New York, NY 10007

Director, Caribbean Environmental Protection Division
U.S. EPA Region 2
City View Plaza II, Suite 7000
#48 Rd. 165 km 1.2
Guaynabo, PR 00968-8069

And an electronic copy, in .pdf format, to:

patel.harish@epa.gov

At its option, in lieu of submitting hardcopies to EPA Headquarters and EPA Region 2 by mail, Limetree Bay may submit electronically, in .pdf format, all notifications, submissions, or

communications that are required by this Consent Decree to:

jmack@matrixneworld.com
foley.patrick@epa.gov
patel.harish@epa.gov

As to the United States Virgin Islands and VIDPNR, by mail and hand-delivery:

Director, Division of Environmental Protection
Virgin Islands Department of Planning and Natural Resources
45 Estate Mars Hill
Frederiksted, St. Croix, U.S. Virgin Islands 00840-4474

And an electronic copy, in .pdf format, to:

jp.oriol@dpnr.vi.gov

As to Limetree Bay:

Limetree Bay Terminals, LLC
General Counsel
One Estate Hope
Christiansted, USVI 00820
dmolloy@lbenergy.com

Limetree Bay Refining, LLC
General Counsel
One Estate Hope
Christiansted, USVI 00820
dmolloy@lbenergy.com

And electronic copy, in .pdf format, to:

celizee@lbenergy.com
rbiggs@lbenergy.com
leannjohnson@perkinscoie.com

As to the ERT:

Roberto Puga
PathForward Consulting Inc.
32915 Danaoak
Dana Point, CA 92629
rpuga@pathforwardconsult.com

Mary Koks
Munsch Hardt Kopf & Harr P.C.
700 Milam Street
Suite 2700
Houston, TX 77002-2806

a. Unless otherwise provided herein, notifications, submissions or communications between the Parties shall be deemed submitted on the date they are postmarked and sent by U.S. Mail or overnight mail, postage prepaid, or the date of electronic submissions, as applicable. Notices under Part XV (Force Majeure) and Part XVI (Retention of Jurisdiction/Dispute Resolution) shall be sent by overnight mail or by certified or registered mail, return receipt requested.

b. Notifications to or communications mailed to Limetree shall be deemed to be received on the earlier of (i) actual receipt by Limetree or (ii) receipt of an electronic version sent to the addressees set forth in this Paragraph.

c. If the date for submission of a report, study, notification, or other communication falls on a Saturday, Sunday, or federal or territorial holiday, the report, study, notification, or other communication will be deemed timely if it is submitted the next Working Day.

50. Add the following sentence to Paragraph 229.

As of the Date of Entry of the First Modification, the emissions units listed in Appendix N have been permanently Shutdown.

51. Add the following new Paragraph 229A "Effect of Idling" to Part XVIII (General Provisions):

229A. Effect of Idling

a. Stipulated Penalties for Idled Units and BWON and LDAR Equipment Not in Regulated Service.

i. Idled Units and BWON and LDAR Equipment not In Regulated Service that comply with Subparagraph 229A.b, shall be considered in compliance with the Consent Decree for purposes of Section V.M (Stipulated Penalties Under This Section) and Part XII (Stipulated Penalties).

ii. Limetree Bay shall not be required to report, pursuant to the Consent Decree, non-compliance with the Consent Decree requirements applicable to an Idled Unit or BWON and LDAR Equipment not In Regulated Service prior to the Restart of the Idled Unit or BWON and LDAR Equipment.

b. Restart of Idled Units, and BWON and LDAR Equipment not In Regulated Service.

i. Idled Units and BWON and LDAR Equipment not In Regulated Service shall comply with the applicable Consent Decree requirements upon Restart of an Idled Unit or after BWON and LDAR equipment is placed back In Regulated Service, unless an exception applies as provided in Subparagraph 229A.b.ii.

ii. Appendix L Restart Compliance Exceptions.

(1) Idled Units and BWON and LDAR Equipment not In Regulated Service that are subject to an exception in Appendix L ("Exceptions for Compliance on Restart") and that comply with applicable Appendix L requirements shall be considered in compliance with the corresponding Consent Decree requirements for purposes of Section V.M

(Stipulated Penalties for Acid Gas Flaring) and Part XII (Stipulated Penalties).

(2) If Limetree Bay fails to meet an interim FCCU emission limit established in Appendix L, Limetree Bay shall be subject to the stipulated penalties under Paragraph 151.

(3) For Idled Units and BWON and LDAR Equipment not In Regulated Service that are subject to an Appendix L exception for Consent Decree stack testing, performance testing, or monitoring requirements, Limetree Bay shall be subject to stipulated penalties for violating the corresponding applicable Consent Decree requirement from the Day after the applicable Appendix L deadline.

iii. If an Idled Unit is required by the Consent Decree to comply with a 365-Day rolling average, 7-Day rolling average or other emission rate based on an average of emissions for more than one Operating Day or hour in an Operating Day, compliance with the emissions limit shall be determined by using emissions data from Operating Days after Restart.

52. Replace Subparagraph 234.e with the following new Subparagraph 234.e:

e. Application for and receipt of permits incorporating the emission limits and standards in Appendix O; and

53. Add the following new Paragraph 234A to Part XIX (Termination):

234A. Exceptions to Conditions Precedent to Termination:

The conditions precedent to termination in Subparagraphs 234.b and f, to comply with all provisions contained in the Consent Decree, and operate for at least one (1) year in compliance

with the emission limits established in the Consent Decree, shall not apply to a unit that is an Idled Unit and has not yet demonstrated compliance with specifically identified Consent Decree requirements applicable to the unit in Part V (Affirmative Relief / Environmental Projects) because, except for Flare 7, the unit has not operated since June 1, 2012, or for Flare 7, the unit has not operated after it was isolated and Shutdown as provided in Paragraph 50E.

At such time as Limetree Bay believes it has satisfied the requirements to move for termination under Paragraph 234, Limetree Bay may satisfy the requirements of Subparagraphs 234.b and f by certifying that: (a) the unit is an Idled Unit, (b) for units other than Flare 7, that there have been no emissions from the Idled Unit since June 1, 2012, or for Flare 7, there have been no emissions from Flare 7 after it was isolated and Shutdown as provided in Paragraph 50E, and (c) that all surviving emission limits and standards applicable to the Idled Unit are incorporated into permits as required by Paragraphs 124 - 126 and Appendix O. Neither the United States nor the Virgin Islands shall object to Limetree Bay's certification on the grounds that Limetree Bay failed to complete Consent Decree requirements applicable to an Idled Unit if Limetree Bay was not able to do so because, for units other than Flare 7, the unit has not operated since June 1, 2012, or for Flare 7, the unit has not operated after it was isolated and Shutdown as provided in Paragraph 50E.

54. Replace Paragraph 235 with the following New Paragraph 235:

235. Termination: Procedure. At such time as Limetree Bay believes that it has satisfied the requirements for termination set forth in Paragraph 234, Limetree Bay will certify such compliance and completion to the United States and the Virgin Islands in accordance with the certification language of Paragraph 231. Unless either the United States or the Virgin Islands objects in writing with specific reasons within 120 days of receipt of Limetree Bay's certification

under this Paragraph, the Court may upon motion by Limetree Bay order that this Consent Decree be terminated. At the time the Court orders the Consent Decree to be terminated, any remaining monies in the TSEP Escrow Account shall be disbursed to the VIDPNR in accordance with Subparagraph 137.e. If either the United States or the Virgin Islands objects to the certification submitted by Limetree Bay, then the matter will be submitted to the Court for resolution under Part XVI (Retention of Jurisdiction/Dispute Resolution). In such case, Limetree Bay will bear the burden of proving that this Consent Decree should be terminated. HOVENSA's certification of completion in Appendix Q may be used by Limetree Bay to satisfy the requirements for certification in Paragraphs 230 and 231, subject to Paragraphs 232 (EPA review) and 233 (stipulated penalties), for purposes of satisfying the requirements for termination of the Consent Decree.

55. Replace the following appendices with the following new appendices, which are attached:

Appendix C	NSPS Subparts J or Ja Compliance Schedule for Listed Fuel Gas Combustion Devices (Other than Flaring Devices)
Appendix D	List of Flaring Devices Subject to NSPS Subpart Ja
Appendix E	Limetree Bay's LDAR and BWON Training Program Summary
Appendix F	Method 21 Monitoring Locations for API Separators 1, 2, and 3
Appendix G	[Reserved]
Appendix H	Additional Coker Project Injunctive Relief

56. Add the following new appendices, which are attached:

Appendix J	In Service Units and the BWON and LDAR Equipment In Regulated Service
Appendix K	List of Idled Units
Appendix L	Exceptions for Compliance on Restart

Appendix M Process and Factors for "Commercial Unavailability" of Low-E Valve or Packing

Appendix N Emissions Units Permanently Shutdown as of June 1, 2019

Appendix O Requirements That Shall Survive Termination of the Consent Decree

Appendix P Flaring Mitigation Projects

Appendix Q HOVENSA Certification

Appendix R Map of Refinery

Appendix S Map of H_2S Monitoring Locations

57. The Table of Appendices will be revised consistent with Paragraphs 55 and 56 of the First Modification.

58. Except as specifically provided in the First Modification, all other terms and conditions of the Consent Decree remain unchanged and in full effect.

59. No party to the First Modification (the United States, the Virgin Islands, HOVENSA, Limetree Bay, and the ERT) will oppose entry of the First Modification by this Court or challenge any provision of the First Modification unless the United States has notified each of those parties, in writing, that the United States no longer supports entry of the First Modification.

SO ORDERED, THIS _____ DAY OF _____, 2020.

_____
VIRGIN ISLANDS DISTRICT JUDGE

THE UNDERSIGNED PARTY enters into the First Modification of the Consent Decree in the matter of United States, et al. v. HOVENSA L.L.C.

FOR PLAINTIFF THE UNITED STATES OF AMERICA:

JEFFREY BOSSERT CLARK
Assistant Attorney General
Environment and Natural Resources Division
United States Department of Justice

Date: 8/21/2020

Myles E. Flint, II

MYLES E. FLINT, II
Senior Counsel
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
P.O. Box 7611
Ben Franklin Station
Washington, D.C. 20044-7611
(202) 307-1859

GRETCHEN C.F. SHAPPERT
United States Attorney
District of the Virgin Islands
Federal Building and U.S. Courthouse
5500 Veterans Drive, Room 260
St. Thomas, USVI 00802

THE UNDERSIGNED PARTY enters into the First Modification of the Consent Decree in the matter of United States, et al. v. HOVENSA L.L.C.

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Date: 7/27/20

SUSAN PARKER BODINE
Assistant Administrator
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency

ROSEMARIE A. KELLEY
Director
Office of Civile Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency

EVAN BELSER
Acting Director
Air Enforcement Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency

THE UNDERSIGNED PARTY enters into the First Modification of the Consent Decree in the matter of United States, et al. v. HOVENSA L.L.C.

FOR PLAINTIFF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2:

ERIC SCHAAF Digitally signed by ERIC SCHAAF Date: 2020.07.15 17:31:49 -04'00'

Date: _____

ERIC SCHAAF
Regional Counsel
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

OF COUNSEL:

FLAIRE MILLS
Associate Regional Counsel
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

THE UNDERSIGNED PARTY enters into the First Modification of the Consent Decree in the matter of United States, et al v. HOVENSA L.L.C.

Date: July 21, 2020

FOR PLAINTIFF THE UNITED STATES VIRGIN ISLANDS:

PAMELA R. TEPPER
Solicitor General
U.S. Virgin Islands Department of Justice
34-38 Kronprindsens Gade
GERS Complex, 2nd Floor
St. Thomas, VI 00802

JEAN-PIERRE L. ORIOL
Commissioner
Government of the United States Virgin Islands
Department of Planning & Natural Resources
45 Estate Mars Hill
Frederiksted, VI 00840

THE UNDERSIGNED PARTY enters into the First Modification of the Consent Decree in the matter of United States, et al v. HOVENSA L.L.C.

FOR DEFENDANT HOVENSA L.L.C.:

Date: 7/13/2020

MATTHEW R. KAHN
c/o Alvarez & Marsal North America, LLC
Attn: Tom Hill
540 W. Madison St, 18th Floor
Chicago, IL 60661

THE UNDERSIGNED PARTY enters into the First Modification of the Consent Decree in the matter of United States, et al v. HOVENSA L.L.C.

FOR LIMETREE BAY TERMINALS, LLC:

Date: 6/18/20

BRIAN K. LEVER
President and Chief Executive Officer
Limetree Bay Terminals, LLC
One Estate Hope
Christiansted, USVI 00820

THE UNDERSIGNED PARTY enters into the First Modification of the Consent Decree in the matter of United States, et al v. HOVENSA L.L.C.

FOR LIMETREE BAY REFINING, LLC:

Date: 6/18/20

BRIAN K. LEVER
President
Limetree Bay Refining, LLC
One Estate Hope
Christiansted, USVI 00820

THE UNDERSIGNED PARTY enters into the First Modification of the Consent Decree in the matter of United States, et al v. HOVENSA L.L.C.

FOR THE ENVIRONMENTAL RESPONSE TRUST:

Date: 7/9/20

ROBERTO PUGA
Agent for PathForward Consulting Inc. not in its individual capacity, but solely as the Trustee of the Hovensa Environmental Response Trust
One World Trade Center, 8th Floor
Long Beach, CA 90831

APPENDIX C
NSPS SUBPARTS J OR JA COMPLIANCE SCHEDULE FOR LISTED FUEL GAS COMBUSTION DEVICES (OTHER THAN FLARING DEVICES)

FUEL GAS COMBUSTION DEVICES FOR WHICH COMPLIANCE RESPONSIBILITY IS ASSIGNED TO THE ERT		
Unit		Date of Compliance With Subpart J Fuel Gas Limit
VER-1*	VER-1	Date of Lodging
VER-2*	VER-2	Date of Lodging
* Compliance based upon AMP submittal for EPA approval		

FUEL GAS COMBUSTION DEVICES FOR WHICH COMPLIANCE RESPONSIBILITY IS ASSIGNED TO LIMETREE BAY		
Unit		Date of Compliance With Subpart J Fuel Gas Limit
2 Vis.	H-2185	Date of Lodging
Coker	H-8501A	Date of Lodging
Coker	H-8501B	Date of Lodging
LSG Heater	H-4901	Date of Lodging
Sulf Acid*	STK-7801	Date of Lodging
GT-13 / HRSG	G-3413 / H-3413	Date of Lodging

FUEL GAS COMBUSTION DEVICES FOR WHICH COMPLIANCE RESPONSIBILITY IS ASSIGNED TO LIMETREE BAY		
Unit		Date of Compliance With Subpart Ja Fuel Gas Limit
1 Vis.	H-101	12/31/2015
1 Vis.	H-104	12/31/2015
Utl. Fract.	H-160	12/31/2015
Penex	H-200	12/31/2015
Penex	H-201	12/31/2015
Penex	H-202	12/31/2015
Penex	C-200A	12/31/2015
Penex	C-200B	12/31/2015
Penex	C-200C	12/31/2015
2 CDU	H-401A	12/31/2015
2 CDU	H-401B	12/31/2015
2 CDU	H-401C	12/31/2015
2 Plat.	H-600	12/31/2015
2 Plat.	H-601	12/31/2015
2 Plat.	H-602	12/31/2015
2 Plat.	H-603	12/31/2015
2 Plat.	H-604	12/31/2015
2 Plat.	H-605	12/31/2015
2 Plat.	H-606	12/31/2015
2 DD	H-800A	12/31/2015
2 DD	H-800B	12/31/2015
2 DD	H-801	12/31/2015
3 CDU	H-1401A	12/31/2015
1 Vac.	H-1401B	12/31/2015
3 DD	H-1500	12/31/2015
3 DD	H-1501	12/31/2015
3 DD	C-1500A	12/31/2015
3 DD	C-1500B	12/31/2015
3 DD	C-1500C	12/31/2015
2 Vac.	H-2101	12/31/2015
2 Vac.	H-2102	12/31/2015
4 DD	H-2201A	12/31/2015
4 DD	H-2201B	12/31/2015
4 DD	H-2202	12/31/2015

FUEL GAS COMBUSTION DEVICES FOR WHICH COMPLIANCE RESPONSIBILITY IS ASSIGNED TO LIMETREE BAY		
Unit		Date of Compliance With Subpart Ja Fuel Gas Limit
5 DD	H-2400	12/31/2015
5 DD	H-2401	12/31/2015
5 DD	C-2400A	12/31/2015
5 DD	C-2400B	12/31/2015
Naph Frac	H-2501	12/31/2015
1 SRU	H-1032	12/31/2015
2 SRU	H-1042	12/31/2015
1 Beavon	H-1061	12/31/2015
#1 F. Boiler	B-1151	12/31/2015
#3 F. Boiler	B-1153	12/31/2015
#4 F. Boiler	B-1154	12/31/2015
#5 F. Boiler	B-1155	12/31/2015
GT-1*	G-1101E	12/31/2015
GT-2*	G-1101F	12/31/2015
GT-3*	G-1101G	12/31/2015

FUEL GAS COMBUSTION DEVICES FOR WHICH COMPLIANCE RESPONSIBILITY IS ASSIGNED TO LIMETREE BAY		
Unit		Date of Compliance With Subpart J Fuel Gas Limit
5 CDU	H-3101A	12/31/15
5 CDU	H-3101B	12/31/15
6 CDU	H-4101A	12/31/15
6 CDU	H-4101B	12/31/15
3 Vac.	H-4201	12/31/15
3 Vac.	H-4202	12/31/15
7 DD	H-4301A	12/31/15
7 DD	H-4301B	12/31/15
7 DD	H-4302	12/31/15
3 Plat.	H-4401	12/31/15
3 Plat.	H-4402	12/31/15
3 Plat.	H-4451	12/31/15
3 Plat.	H-4452	12/31/15
3 Plat.	H-4453	12/31/15
3 Plat.	H-4454	12/31/15
3 Plat.	H-4455	12/31/15
2 Sulf.	H-4502	12/31/15
2 Sulf.	H-4503	12/31/15
2 Sulf.	H-4504	12/31/15
2 Sulf.	H-4505	12/31/15
6 DD	H-4601A	12/31/15
6 DD	H-4601B	12/31/15
6 DD	H-4602	12/31/15
6 DD	C-4601A	12/31/15
6 DD	C-4601B	12/31/15
6 DD	C-4601C	12/31/15
9 DD	H-5301A	12/31/15
9 DD	H-5301B	12/31/15
9 DD	H-5302	12/31/15
4 Plat.	H-5401	12/31/15
4 Plat.	H-5402	12/31/15
4 Plat.	H-5451	12/31/15
4 Plat.	H-5452	12/31/15
4 Plat.	H-5453	12/31/15

FUEL GAS COMBUSTION DEVICES FOR WHICH COMPLIANCE RESPONSIBILITY IS ASSIGNED TO LIMETREE BAY		
Unit		Date of Compliance With Subpart J Fuel Gas Limit
4 Plat.	H-5454	12/31/15
4 Plat.	H-5455	12/31/15
3 & 4 SRU	H-4745	12/31/15
2 Beavon	H-4761	12/31/15
#6 F. Boiler	B-3301	12/31/15
#7 F. Boiler	B-3302	12/31/15
#8 F. Boiler	B-3303	12/31/15
#9 F. Boiler	B-3304	12/31/15
#10 F. Boiler	B-3701	12/31/15
GT-4	G-3404	12/31/15
GT-5	G-3405	12/31/15
GT-6	G-3406	12/31/15
GT-7	G-3407	12/31/15
GT-8*	G-3408	12/31/15
GT-9*	G-3409	12/31/15
GT-10*	G-3410	12/31/15
* Compliance based upon AMP submittal for EPA approval		

APPENDIX D
LIST OF FLARING DEVICES SUBJECT TO NSPS SUBPART Ja

Flaring Device	Date
FCCU Low Pressure Flare and Flare 3	Restart
FCCU High Pressure Flare	Five (5) years from Date of Entry of the Consent Decree (June 7, 2016)
LPG Flare	Five (5) years from Date of Entry of the Consent Decree (June 7, 2016)
Flares 2	Seven (7) years from Date of Entry of the Consent Decree (June 7, 2018)
Flares 5, 6 and 7	Ten (10) years from Date of Entry of the Consent Decree (June 7, 2021)

Flares 1 and 4 are no longer in service and are not subject to this Consent Decree.

APPENDIX E
Limetree Bay's LDAR and BWON Training Program Summary

The Limetree Bay training program will utilize a combination of training methods to educate refinery personnel on their roles and responsibilities within the LDAR and BWON programs. The extent of education on the programs (two hours, four hours, eight hours, etc.) will be based on the employee's job assignment within their respective department and the individual's management level.

All Environmental LDAR personnel will be trained on an annual basis on the requirements of their jobs through classroom based, computer-based, field-based, or other training methods. The training will consist of specific material and processes required for the knowledge of the program including certification testing. Listed below are some of the key elements and subjects of the training module that link to roles and responsibilities.

- knowledge of the refinery structure and systems
- refinery basics: process unit functions individually and how they work in partnership
- how to read and understand P&IDs and ISOS
- the applicable regulations
- the proper operation of monitoring equipment
- applicable LDAR procedures
- the systems in place to manage our data and compliance; electronic database such as LeakDAS and like systems
- the checks and balances required to maintain quality control and compliance
- the leadership skills required to manage and maintain a successful program

All other Operations, Maintenance and Contractor personnel will be trained on the requirements of their jobs through classroom based, computer-based, field-based, or other training methods. The training consists of material and processes required for their specific role and responsibility needed to ensure knowledge of the program including certification testing. Listed below are some of the key elements and subjects of the training module.

- knowledge of Environmental Department structure and contact information
- general knowledge of the environmental regulations (LDAR & BWON) and related procedures
- knowledge of regulatory inspection, documentation and repair requirements
- knowledge of fugitive emissions procedures
- knowledge of the Valve Preventative Maintenance Program
- knowledge of how to utilize the refinery system, such as SAP, to create work notifications and approvals and electronic inspections

The requirements of this training will be incorporated into Limetree Bay's job specific training. All training will be reviewed and updated on a reoccurring basis (at least once every three (3) years). The certification testing will be utilized to assess the effectiveness of the training products.

APPENDIX F
Method 21 Monitoring Locations for API Separators 1, 2 and 3

API #1, 2, & 3	
Emission Points	**Total**
Access Hatch	48
Gauge Hatch	45
Fixed roof plates	150
Piping Penetration	52
Steel plate	31
Pump base	22
Hose connection	2
Conduit port	10
Valve stem port	16
Total	**376**

APPENDIX G
[RESERVED]

APPENDIX H
Additional Coker Project Injunctive Relief

Emissions Unit	Pollutant	Limit	Units	Averaging Time	Monitoring[a]	Reporting	Compliance Schedule
Coker Heater (two units)	**CO**	0.030	lb/mmBTU	Average of 3 1-hr samples	Annual Performance Test (EPA RM-10)	Within 60 Days of test	Date of Entry
	VOC	0.0050	lb/mmBTU	N/A	EPA RM-25 or RM-25A following any CO test exceedance	Within 60 Days of test	Date of Entry
Boiler 10	**CO**	0.070	lb/mmBTU	Average of 3 1-hr samples	Annual Performance Test (EPA RM-10)	Within 60 Days of test	Date of Entry
	VOC	0.0050	lb/mmBTU	N/A	EPA RM-25 or RM-25A following any CO test exceedance	Within 60 Days of test	Date of Entry
SRUs 1&2/ Beavon 1	**RSC (Final)**	162	ppmvd	Hourly rolling 12-hr average	NSPS RSC CEMS (40 C.F.R. 60 App A, B, & F)	NSPS quarterly reports	1/1/2014
		66	ppmvd	Daily rolling 30-day average	NSPS RSC CEMS (40 C.F.R. 60 App A, B, & F)	NSPS quarterly reports	1/1/2014
Tanks No. 6 Sour Water Stripper Tank (TK-1071), Desalter Effluent Water (DEW) Tank (TK-1663)	**VOC**	Ext. Floating Roof Tank		N/A	Subpart Kb monitoring (40 C.F.R. §60.113b(b)) for Ext. Floating Roof Kb requirements: Seal gap measurements (Secondary once/yr, Primary once/5 yrs). Inspect seals and fittings each time the vessel is emptied and degassed.	NSPS reports	Tank 1071: 12/31/2011 Tank 1663: Date of Entry
Coker Charge Tank (TK-8501)	**VOC**	Fixed Roof Tank		N/A	Subpart Kb monitoring (40 C.F.R. §60.110b-117b) Record and maintain records documenting the material stored in the hot pitch storage tank (TK-8501), showing that the tank remains exempt from the requirements in 40 C.F.R. Part 60 Subpart Kb, §60.110b(b).	NSPS reports	Date of Entry

APPENDIX H
Additional Coker Project Injunctive Relief

Emissions Unit	Pollutant	Limit	Units	Averaging Time	Monitoring[a]	Reporting	Compliance Schedule
Process equipment located in Coker Unit, Coker Gas Plant, No. 7 Amine, No. 5 Crude, No. 3 Vacuum, No. 3 Crude, No. 1 Vacuum, No. 1 Visbreaker, and No. 2, 4, 6, & 7 Distillate Desulfurizer Units and outside battery limit modifications to the terminal, tank farm & blending equipment	**VOC**	40 C.F.R. Part 60 Subpart GGGa			Comply with 40 C.F.R. Part 60 Subpart GGGa		Date of Entry

[a] For purposes of demonstrating compliance with limits which require an annual performance test, the first performance test shall be conducted no later than twelve (12) months after the Date of Entry of the First Modification or twelve (12) months from Restart for Idled Units, whichever is earlier.

APPENDIX H
Additional Coker Project Injunctive Relief

Emissions Unit	Pollutant	Design/Work Practice Controls	Monitoring	Compliance Schedule
Coke Handling, Storage and Loading Facility				
Coke Cutting/Coke Pit	**PM (all species)**	High Pressure water cutting of coke & enclosed drop zones/coke pit (No roof)	Maintain records documenting design	Date of Entry
Coke Crusher	**PM (all species)**	Enclosed[b] crusher structure. Moisture content control from initial cutting.	Maintain records documenting design	Date of Entry
Coke Transfer to Storage	**PM (all species)**	Enclosed[b] conveyor to storage, Moisture content control from initial cutting.	Maintain records documenting design	Date of Entry
Coke Storage	**PM (all species)**	Enclosed[b] storage buildings, baghouse for vent control, and moisture content control from initial cutting.	Maintain records documenting design	Date of Entry
Coke Loading	**PM (all species)**	Enclosed[b] conveyor to loading dock. “Spout” containment loading to minimize drop emissions when loading ship.	Maintain records documenting design	Date of Entry

[b] Enclosed structures can have ventilation vents or access ways.

APPENDIX J

IN SERVICE UNITS AND LDAR AND BWON EQUIPMENT IN REGULATED SERVICE

List, as of June 1, 2019, of all emissions units that are In Service Units:

Unit	Source Code	Location
GT-4	G-3404	East
GT-7	G-3407	East
GT-8	G-3408	East
Flare No. 7	H-3301	East

List, as of June 1, 2019, of LDAR and BWON Equipment to which the LDAR and BWON provisions of the Consent Decree continue to apply (i.e. are In Regulated Service):

Location of LDAR Equipment In Regulated Service

1. Offsite area piping between and into active tanks
2. Piping between docks 1 through 10 and tanks
3. Piping from tanks to truck loading rack
4. Propane and Butane storage area
5. Piping between Propane and Butane storage area and East Power House area
6. East Power House area
7. Piping from East Power House to the No. 7 Flare

Location of BWON Equipment In Regulated Service

1. #1 and #3 APIs and #3 WEMCO
2. Portions of Advanced Wastewater Treatment Plant
3. Wastewater collection equipment and oily water sewer system identified as: all oily water sewer cups, process area drains, junction boxes, and wastewater piping servicing tanks, manifolds, and process units that are not Idled Units or not in emissions units permanently Shutdown listed on Appendix N
4. Ballast and slop tanks

APPENDIX K
LIST OF IDLED UNITS

List, as of June 1, 2019, of all emissions units that are Idled Units:

IDLED WEST SIDE EMISSIONS UNITS

Emissions Unit	Emissions Unit Type	Process Unit Location
H-101	Heater	1 Vis.
H-104	Heater	1 Vis.
H-160	Heater	Utl. Fract.
H-200	Heater	Penex (Par Isom)
H-201	Heater	Penex
H-202	Heater	Penex
C-200A	Compressor Engine	Penex
C-200B	Compressor Engine	Penex
C-200C	Compressor Engine	Penex
H-601	Heater	#2 Plat
H-604	Heater	#2 Plat
H-605	Heater	#2 Plat
H-800A	Heater	2 DD
H-800B	Heater	2 DD
H-801	Heater	2 DD
C-1500A	Compressor Engine	3 DD
C-1500B	Compressor Engine	3 DD
C-1500C	Compressor Engine	3 DD
H-2201A	Heater	4 DD
H-2201B	Heater	4 DD
H-2202	Heater	4 DD
H-2400	Heater	5 DD
C-2400A	Compressor Engine	5 DD
C-2400B	Compressor Engine	5 DD
H-1061	Heater	1 Beavon
B-1155	Boiler	#5 F. Boiler
H-1105	Flare	Flare 2
H-1104	Flare	Flare 3
H-1032	Incinerator	SRU 1
H-1042	Incinerator	SRU 2
	West Sulfur Pit	SRU 1 & 2

IDLED EAST SIDE EMISSIONS UNITS

Emissions Unit	Emissions Unit Type	Process Unit Location
H-3101A	Heater	5 CDU
H-3101B	Heater	5 CDU
H-4101A	Heater	6 CDU
H-4101B	Heater	6 CDU
H-4201	Heater	3 Vac.
H-4202	Heater	3 Vac.
H-4301A	Heater	7 DD
H-4301B	Heater	7 DD
H-4302	Heater	7 DD
H-4401	Heater	3 Plat.
H-4402	Heater	3 Plat.
H-4451	Heater	3 Plat.
H-4452	Heater	3 Plat.
H-4453	Heater	3 Plat.
H-4454	Heater	3 Plat.
H-4455	Heater	3 Plat.
H-4502	Heater	2 Sulf.
H-4503	Heater	2 Sulf.
H-4504	Heater	2 Sulf.
H-4505	Heater	2 Sulf.
H-4601A	Heater	6 DD
H-4601B	Heater	6 DD
H-4602	Heater	6 DD
C-4601A	Compressor Engine	6 DD
C-4601B	Compressor Engine	6 DD
C-4601C	Compressor Engine	6 DD
H-4901	Heater	LSG
H-5301A	Heater	9 DD
H-5301B	Heater	9 DD
H-5302	Heater	9 DD
H-5401	Heater	4 Plat.
H-5402	Heater	4 Plat.
H-5451	Heater	4 Plat.
H-5452	Heater	4 Plat.
H-5453	Heater	4 Plat.

H-5454	Heater	4 Plat.
H-5455	Heater	4 Plat.
H-8501A	Heater	Coker
H-8501B	Heater	Coker
	Coke Handling, Storage and Loading Facility	Coker
STK-7801	Common Stack for Heaters H-7801, H-7802 and R-7801	Sulfuric Acid Plant
B-3302	Boiler	#7 F. Boiler
B-3303	Boiler	#8 F. Boiler
B-3304	Boiler	#9 F. Boiler
B-3701	Boiler	#10 F. Boiler
G-3409	Generating Turbine	GT-9
G-3410	Generating Turbine	GT-10
G-3413	Generating Turbine	GT-13
H-3413	Fired Heat Recovery Steam Generator	GT-13
H-3351	Flare	Flare 5
H-3352	Flare	Flare 6
STK-7921	Flare	LPG Flare
STK -7941	Flare	FCC LP Flare
STK -7942	Flare	Ground Flare
H-4745	Incinerator	SRUs 3 and 4
	Sulfur Pits	SRUs 3 and 4
STK-7051	Catalyst Regenerator	FCC

APPENDIX L
EXCEPTIONS FOR COMPLIANCE ON RESTART

Unit	CD Paragraph	CD Requirement	Restart Compliance Exception
FCCU	11	NO_x 365-Day rolling average limit	During the first 30 Days after the Restart of the FCCU, the unit shall comply with an interim limit of 80 ppmvd on a 7-Day rolling average basis instead of the 20 ppmvd limit established by Paragraph 11.
	12 14 21	RAA or RATA for: NO_x CEMS SO_x CEMS CO CEMS	Required CEMS RAA or RATA shall be conducted within 60 Days after achieving the maximum production rate at which the FCCU will be operated, or not later than 180 Days after initial Restart, whichever comes first.
	16	PM stack test	Required PM stack test shall be conducted within 60 Days after achieving the maximum production rate at which the FCCU will be operated, or not later than 180 Days after initial Restart, whichever comes first.
	18	CO limit	During the first 7 Days after the Restart of the FCCU, the unit shall comply with an interim limit of 1,000 ppmvd on a 7-Day rolling average basis instead of the 500 ppmvd limit established by Paragraph 18.
Units listed on Appendix C	34 35	NSPS monitoring, but only as to Part 60, Appendix F, Section 5 "Data Accuracy Assessment" requirements, and Part 60, Appendix B	Demonstration of compliance shall be achieved within 60 Days after achieving the maximum production rate at which the affected facilities will be operated, or not later than 180 Days after initial Restart, whichever comes first.

Unit	CD Paragraph	CD Requirement	Restart Compliance Exception
East Side Sulfur Recovery Plant	45a	NSPS monitoring, but only as to Part 60, Appendix F, Section 5 "Data Accuracy Assessment" requirements, and Part 60, Appendix B	Demonstration of compliance shall be achieved within 60 Days after achieving the maximum production rate at which the affected facilities will be operated, or not later than 180 Days after initial Restart, whichever comes first.
LPG and FCCU High Pressure Flares	49	NSPS Ja monitoring, if required	Demonstration of compliance shall be achieved not later than 90 Days after Flaring Device Restart and compliance certifications, required by Paragraph 52, shall be submitted within 30 Days thereafter.
LPG Flare FCCU High Pressure Flare FCCU Low Pressure Flare Flares 2, 3, 5, 6, and 7	49, 52	NSPS Ja monitoring for flares	Demonstration of compliance shall be achieved not later than 90 Days after Flaring Device Restart and compliance certifications, required by Paragraph 52, shall be submitted within 30 Days thereafter.
Coker Heaters, Boiler 10	133	Appendix H, Performance test (CO and VOC)	Demonstration of compliance shall be achieved within 60 Days after achieving the maximum production rate at which the affected facilities will be operated, or not later than 180 Days after initial Restart, whichever comes first.
Boilers 5, 8, 9	135	NSPS D, Performance test and CEMS, as applicable	Demonstration of compliance shall be achieved within 60 Days after achieving the maximum production rate at which the affected facilities will be operated, or not later than 180 Days after initial Restart, whichever comes first.

Unit	CD Paragraph	CD Requirement	Restart Compliance Exception
Generating Turbine 9	136	NSPS GG, CEMS and Performance test	Demonstration of compliance shall be achieved within 60 Days after achieving the maximum production rate at which the affected facilities will be operated, or not later than 180 Days after initial Restart, whichever comes first.
BWON or LDAR Equipment placed back In Regulated Service	BWON, Section V.J. LDAR, Section V.K.	Monitoring Requirements	Required monitoring shall be conducted no later than 60 Days after the BWON or LDAR Equipment is placed back In Regulated Service.

APPENDIX M
PROCESS AND FACTORS FOR "COMMERCIAL UNAVAILABILITY" OF LOW-E VALVE OR PACKING

Summary: This Appendix outlines a process to be followed and factors to be taken into consideration to establish that a Low-E Valve or Low-E Packing is not "commercially available" pursuant to Subparagraph 112.c of the Consent Decree. Factors other than those identified in Paragraph 1 of this Appendix may also be utilized to establish that a Low-E Valve or Low-E Packing is not commercially available and procedures other than those identified in Paragraphs 2–3 may be used if mutually agreed upon by the Parties in writing.

1. Factors. The following factors shall be taken in to account for determining the availability of safe and suitable Low-E Valve or Low-E Packing Technologies:

(1) Valve type;
(2) Valve service and operating conditions;
(3) Type of refinery process equipment in which the valve is used;
(4) Seal performance;
(5) Service life;
(6) Packing friction;
(7) Temperature and pressure limitations; and
(8) Retrofit applications (*e.g.*, re-piping or space limitations).

The following factors may also be relevant for consideration, depending on the process unit or equipment in use at the Refinery:

(9) Valve or valve packing specifications identified by the licensor of the process unit or equipment in use at the Refinery (including components that are part of a design package by a specialty-equipment provider as part of a larger process unit); or

(10) Valve or valve packing vendor or manufacturer recommendations for the relevant Refinery unit and/or process unit components.

2. Process. The following procedure shall be followed for determining the availability of a Low-E Valve or Low-E Packing:

a. Limetree Bay must contact a reasonable number of vendors of valves and valve packing technologies, taking into account the relevant factors identified above, prior to asserting a claim that Low-E Valve or Low-E Packing is not commercially available.

(i) For purposes of this Consent Decree, a reasonable number of vendors shall mean at least three vendors of valves or three vendors of valve packing technologies.

(ii) If fewer than three vendors of valve or valve packing technologies are contacted, the determination of whether such fewer number is reasonable for purposes of this Consent Decree shall be based on Factors (9) and/or (10) above, or on a demonstration that fewer than three vendors offer valves or valve packing technologies for the service and operating conditions of the valve to be replaced, in consideration of Factors (1) through (8) above, as applicable.

b. Limetree Bay shall obtain a written representation from each vendor contacted or equivalent documentation that the valve or valve packing does not meet the specifications for a Low-E Valve or Low-E Packing.

c. Limetree Bay shall prepare a written report fully explaining the basis for each claim that a valve or valve packing is not commercially available, to include all relevant documentation and other information supporting the claim. Such report shall also identify the commercially-available valve or packing technology that comes closest to meeting the requirements for a Low-E Valve or Low-E Packing that is selected and installed by Limetree Bay pursuant to Subparagraph 112.c of the Consent Decree. Such report shall be included in the Semi-Annual Report required by Part X of the Consent Decree, for the period in which the valve or valve packing is replaced.

3. EPA Review of Claim of Commercial Unavailability. Upon discretionary review by EPA of any claim of commercial unavailability, if EPA disagrees that a valve or valve-packing technology is commercially unavailable, EPA shall notify Limetree Bay in writing, specifying the valve or valve packing EPA believes to be commercially available and the basis for its availability for the service and operating conditions of the valve. Following receipt by Limetree Bay of EPA's notice, the following shall apply:

a. Limetree Bay is not required to retrofit the valve or valve packing for which the unavailability claim was asserted (unless otherwise required to do so pursuant to some other provision of this Consent Decree).

b. EPA's notification shall serve as notice to Limetree Bay of EPA's intent that a future claim of commercial unavailability will not be accepted for (a) the valve or valve packing that was the subject of the unavailability claim, or (b) for a valve or valve packing in the same or similar service, taking into account the factors identified in this Appendix. If Limetree Bay disagrees with EPA's notification, Limetree Bay and EPA may informally discuss the basis for the claim of commercial unavailability. EPA may thereafter revise its notification, if necessary.

c. If Limetree Bay makes a subsequent commercial unavailability claim for the same valve or valve packing (or valve or valve packing in the same or similar service) that was the subject of a prior unavailability claim which was not accepted by EPA, and such subsequent claim is also denied by EPA on the same basis as provided in EPA's prior notification, Limetree Bay shall retrofit the valve

or valve packing with the commercially available valve or valve packing technology at the next unit turnaround.

Any disputes concerning EPA's notification to Limetree Bay of the commercial availability of a valve or valve packing technology in a particular application pursuant to Subparagraph 3.c of this Appendix shall be addressed under the Dispute Resolution provisions in Part XVI of the Consent Decree.

APPENDIX N

EMISSIONS UNITS PERMANENTLY SHUTDOWN AS OF JUNE 1, 2019

- H-401A (2 CDU)
- H-401B (2 CDU)
- H-401C (2 CDU)
- H-600 (Heater in 2 Plat)
- H-602 (Heater in 2 Plat)
- H-603 (Heater in 2 Plat)
- H-606 (Heater in 2 Plat)
- H-1401A (Heater in 3 CDU)
- H-1401B (Heater in 1 Vac)
- H-1500 (Heater in 3DD)
- H-1501 (Heater in 3 DD)
- H-2101 (Heater in 2 Vac)
- H-2102 (Heater in 2 Vac)
- H-2185 (Heater in 2 Vis)
- H-2401 (Heater in 5DD)
- H-2501 (Naptha Frac.)
- B-1151 (#1 Boiler)
- B-1153 (#3 Boiler)
- B-1154 (#4 Boiler)
- B-3301 (#6 Boiler)
- C-800A, B and C (Compressors in 2DD)
- C-2201A, B and C (Compressors in 4DD)
- No. 1 Gas Turbine (G-1101E)
- No. 2 Gas Turbine (G-1101F)
- No. 3 Gas Turbine (G-1101G)
- No. 5 Gas Turbine (G-3405)

- No. 6 Gas Turbine (G-3406)

Appendix O
Requirements That Shall Survive
Termination of the Consent Decree

CD Paragraph	Requirements That Shall Survive Termination of the Consent Decree under Section XVII.
¶ 10: Certain CD Definitions	"365-day rolling average" shall mean the average daily emission rate during the preceding 365 Operating Days. (CD 10.A.) "7-day rolling average" shall mean the average daily emission rate during the preceding seven (7) Operating Days. (CD 10.B.) "FCCU and Coker Drain Systems" means the individual drain systems (as defined in 40 C.F.R. § 60.691) and ancillary equipment which manage oily wastewater generated in the process units in the FCCU complex and the Coker. (CD ¶ 10.U.) "Operating Day" shall mean a Day on which a minimum of 18 hours of valid emissions data are obtained. (CD 10.HH.) "Sulfur Recovery Plant" or "SRP" shall mean a process unit that recovers sulfur from hydrogen sulfide by a vapor phase catalytic reaction of sulfur dioxide and hydrogen sulfide. (CD 10.UU)
¶ 11: FCCU NO_x limits	Limit NO_x emissions from the FCCU to 20 ppmvd or less on a 365 day rolling average and 40 ppmvd or less on a 7-day rolling average, each at 0% O_2. NO_x emissions during periods of Startup, Shutdown or Malfunction of the FCCU shall not be used in determining compliance with the 7-day rolling average NOx emission limit, provided that during such periods Limetree Bay implements good air pollution control practices to minimize NO_x emissions.
¶ 12: Demonstrating compliance with FCCU NOx limits (NO_x and O_2 CEMS)	Certify, calibrate, maintain, and operate NO_x and O_2 CEMS on the FCCU in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and Part 60 Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B. With respect to 40 C.F.R. Part 60, Appendix F, in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3 and 5.1.4, conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") on each CEMS at least once every three (3) years. Conduct

CD Paragraph	Requirements That Shall Survive Termination of the Consent Decree under Section XVII.
	Cylinder Gas Audits ("CGA") each calendar quarter during which a RAA or a RATA is not performed.
¶ 13 and 14: FCCU SO_2 limits	Limit SO_2 emissions from the FCCU to 16 ppmvd or less on a 365-day rolling average and 25 ppmvd or less on a 7-day rolling average, each at 0% O_2. SO_2 emissions during periods of Malfunction of the Wet Gas Scrubber ("WGS") shall not be used in determining compliance with the 7-day rolling average SO_2 emission limit, provided that during such periods good air pollution control practices are implemented to minimize SO_2 emissions.
¶ 14: Demonstrating compliance with FCCU SO_2 limits (SO_2 and O_2 CEMS)	Certify, calibrate, maintain, and operate SO_2 and O_2 CEMS on the FCCU in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and Part 60 Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B. With respect to 40 C.F.R. Part 60, Appendix F, in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3 and 5.1.4, conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") on each CEMS at least once every three (3) years. Conduct Cylinder Gas Audits ("CGA") each calendar quarter during which a RAA or a RATA is not performed.
¶ 15 and 17: FCCU PM limit	Limit PM emissions from the FCCU to 0.5 pounds PM or less per 1,000 pounds of coke burned based on the average of three (3) 1-hour stack tests. PM emissions during periods of Malfunction of the FCCU's WGS shall not be used in determining compliance with the emission limit of 0.5 pounds of PM per 1,000 pounds of coke burned, provided that during such periods good air pollution control practices are implemented to minimize PM emissions.
¶ 16: PM Testing for FCCU (stack testing methodology and frequency requirements)	Follow the stack test methodology specified in 40 C.F.R. § 60.106(b)(2) to measure PM emissions from the FCCU.

CD Paragraph	Requirements That Shall Survive Termination of the Consent Decree under Section XVII.
¶¶ 18, 19, 20: FCCU CO limits	Limit CO emissions from the FCCU to 500 ppmvd or less on a 1-hour block average basis corrected to 0% O_2. If prior to termination of this Consent Decree, Limetree Bay has accepted for the FCCU a CO emissions limit of 100 ppmvd or less on a 365-day rolling average corrected to 0% O_2, then the FCCU shall also comply with that limit. CO emissions during periods of Startup, Shutdown, or Malfunction of the FCCU shall not be used in determining compliance with the 1-hour 500 ppmvd emissions limit, provided that during such periods good air pollution control practices are implemented to minimize CO emissions.
¶ 21: Demonstrating compliance with FCCU CO limits (CEMS operating requirements)	Certify, calibrate, maintain, and operate the CO CEMS on the FCCU in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMs (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and Part 60 Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B. With respect to 40 C.F.R. Part 60, Appendix F, in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3 and 5.1.4, conduct either a RAA or a RATA on each CEMS at least once every three (3) years. Conduct Cylinder Gas Audits ("CGA") each calendar quarter during which a RAA or a RAT A is not performed.
¶ 22: FCCU Subpart J affected facility status and opacity AMP	FCCU Catalyst Regenerator is an "affected facility," as that term is used in 40 C.F.R. Part 60, Subparts A and J, and is subject to and shall comply with, the requirements of 40 C.F.R. Part 60, Subparts A and J, for SO_2, PM (and opacity) and CO. If prior to termination of this Consent Decree, the FCCU becomes subject to NSPS Subpart Ja for a particular pollutant due to a "modification" (as that term is defined in NSPS Subpart Ja), the FCCU shall be subject to and comply with NSPS Subpart Ja in lieu of NSPS Subpart J for that regulated pollutant to which a standard applies as a result of the modification. If prior to termination of this Consent Decree, the FCCU becomes subject to NSPS Subpart Ja due to a "reconstruction" (as that term is defined in NSPS Subpart Ja), the FCCU shall be subject to and comply with NSPS Subpart Ja for all pollutants in lieu of Subpart J.

¶¶ 26-28, 30, 31: NO_x Emission Reductions from Heaters, Boilers, Generating Turbines and Compressor Engines and Monitoring	The units listed below have been permanently shutdown and permits relinquished in order to demonstrate a refinery-wide reduction of 4,744 tpy of NO_x. If any of the units listed below are restarted, they shall be treated as new emissions units. • H-401A (2 CDU) • H-401B (2 CDU) • H-401C (2 CDU) • H-600 (Heater in 2 Plat) • H-602 (Heater in 2 Plat) • H-603 (Heater in 2 Plat) • H-606 (Heater in 2 Plat) • H-1401A (Heater in 3 CDU) • H-1401B (Heater in 1 Vac) • H-1500 (Heater in 3DD) • H-1501 (Heater in 3 DD) • H-2101 (Heater in 2 Vac) • H-2102 (Heater in 2 Vac) • H-2185 (Heater in 2 Vis) • H-2401 (Heater in 5DD) • H-2501 (Naphtha Frac.) • B-1151 (#1 Boiler) • B-1153 (#3 Boiler) • B-1154 (#4 Boiler) • B-3301 (#6 Boiler) • C-800A, B and C (Compressors in 2DD) • C-2201A, B and C (Compressors in 4DD)

CD Paragraph	Requirements That Shall Survive Termination of the Consent Decree under Section XVII.
	• No. 1 Gas Turbine (G-1101E) • No. 2 Gas Turbine (G-1101F) • No. 3 Gas Turbine (G-1101G) • No. 5 Gas Turbine (G-3405) • No. 6 Gas Turbine (G-3406)
¶ 34: NSPS Subparts A, J, and Ja applicability for Heaters, Boilers and Generating Turbines (FGCD)	All heaters, boilers, and all other fuel gas combustion devices (other than Flaring Devices) are affected facilities, as that term is used in 40 C.F.R. Part 60, Subparts A and J or Ja for SO_2 emissions, and are subject to and shall comply with the applicable requirements of NSPS Subparts A and J or Ja for SO_2 emissions for fuel gas combustion devices. The FGCD listed on pages C-2 and C-3 of Appendix C are subject to NSPS Subpart Ja and the FGCD listed on pages C-1, C-4 and C-5 of Appendix C are subject to NSPS Subpart J. If prior to the termination of this Consent Decree, any heater boiler or other fuel gas combustion device (other than a Flaring Device) becomes subject to NSPS Subpart Ja for a particular pollutant due to a "modification" (as defined in NSPS Subpart Ja), the affected facility shall be subject to and comply with NSPS Subpart Ja in lieu of NSPS Subpart J for that regulated pollutant to which a standard applies as a result of the modification. If prior to the termination of this Consent Decree, any heater, boiler, or other fuel gas combustion device (other than a Flaring Device) becomes subject to NSPS Subpart Ja due to a "reconstruction" (as defined in NSPS Subpart Ja), the affected facility shall be subject to and comply with NSPS Subpart Ja for all pollutants in lieu of Subpart J.
¶ 35: Monitoring for Subpart J compliance for FGCD	Certify, calibrate, maintain and operate all CEMS required by this Paragraph in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to continuous opacity monitoring systems) and Part 60, Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60, Appendix B.
¶¶ 37-40: Fuel oil sulfur limits	1. Do not burn Fuel Oil greater than 0.55 wt% sulfur at any time or 0.50 wt% on a 365-day rolling average basis in any heater, boiler, or Generating Turbine.

CD Paragraph	Requirements That Shall Survive Termination of the Consent Decree under Section XVII.
	2. Switch the fuel supply for any units combusting Fuel Oil to a Fuel Oil with not greater than 0.3 wt% sulfur within one hour of when one of the following conditions occur: a. The hourly average winds blow from a 180° sector, defined as 90° to 270°, inclusive, where zero degrees is due North, for at least six (6) 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 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 180° 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. b. Limetree Bay's meteorological station is inoperable for six consecutive hours. 3. Limetree Bay may switch back to the higher sulfur content Fuel Oil (a Fuel Oil with a sulfur content of less than or equal to 0.55 wt%) in accordance with the following conditions: a. The winds blow outside of the 180° sector, defined as 90° to 270°, for at least three (3) consecutive hours, following the period which the winds were blowing inside the 180° sector; or b. When the meteorological station becomes operable, and three (3) consecutive hours of wind conditions outside the 90° to 270° sector have occurred. 4. On a daily basis, monitor the sulfur content of all Fuel Oil burned [pursuant to Paragraph 3, above] in accordance with ASTM D2622, D4294, or D5453, as follows: a. Fuel Oil Supplied from Single Storage Tank: i. If the Fuel Oil burned is supplied from a single storage tank for an entire day or part thereof, then test the contents of the storage tank once per day by a sample taken at three (3) levels in the storage tank (i.e., the bottom, middle, and top) which is then composited (Composite Sample). ii. If the same storage tank is used for more than one day and no Fuel Oil is added to the storage tank, then Limetree Bay may use the storage tank sample result from the previous day to demonstrate the sulfur content of the storage tank.

CD Paragraph	Requirements That Shall Survive Termination of the Consent Decree under Section XVII.
	b. Fuel Oil Supplied from Multiple Storage Tanks: If the Fuel Oil burned for one or more consecutive days is supplied from more than one storage tank, then Limetree Bay shall sample each storage tank separately once per day by a Composite Sample taken at three (3) levels in the storage tank (i.e., the bottom, middle, and top). c. In the event that Fuel Oil is added to any storage tank, Limetree Bay shall sample the storage tank by a Composite Sample taken at three (3) levels in the storage tank (i.e., the bottom, middle, and top) before the storage tank is placed into service. 5. Record the quantity and sulfur content of all Fuel Oil burned pursuant to [Paragraph 3 above].
¶ 42: NSPS Subparts A and Ja for East and West Sulfur Plants	The East Side SRP is an "affected facility" as that term is used in 40 C.F.R. Part 60, Subparts A and Ja and is subject to the requirements of Subparts Ja. The West Side SRP is an "affected facility" as that term is used in 40 C.F.R. Subparts A and Ja and is subject to Subpart Ja.
¶ 43: Sulfur pit re-route and monitoring	Route or re-route all sulfur pit emissions so that they are eliminated or controlled, and included and monitored as part of the SRPs' emissions subject to the NSPS Subpart Ja limit for SO_2 or reduced sulfur compounds, 40 C.F.R. § 60.102a(f).
¶ 44: NSPS for SRPs	The West Side SRP shall comply with the NSPS Subpart Ja and shall comply with 40 CFR § 60.102a(f) at all times except during periods of Startup, Shutdown, or Malfunction of the West Side SRP or during a Malfunction of the TGU. For purposes of determining compliance with the emission limits of 40 C.F.R. § 60.102a(f), the "start-up/shutdown" provisions set forth in NSPS Subpart A shall apply. At all times, including during periods of Startup, Shutdown, and Malfunction, and to the extent practicable, operate and maintain the West Side SRP and TGU and any supplemental control devices, in accordance with good air pollution control practices as required in 40 C.F.R. § 60.11(d). Monitor all non-fugitive emission points (stacks) to the atmosphere from the West Side SRP for Tail Gas emissions and shall monitor and report excess emissions, as required by 40 C.F.R. §§ 60.7(c), 60.13, and 60.106a. Conduct emission monitoring with CEMS as all such emission points. The requirement for continuous monitoring is not applicable to the Acid Gas

CD Paragraph	Requirements That Shall Survive Termination of the Consent Decree under Section XVII.
	Flaring Device(s) used to flare Acid Gas and/or Sour Water Stripper Gas diverted from the SRPs.
¶ 45 (NSPS for SRPs)	Emissions of sulfur compounds from the East Side SRP shall be controlled to comply with NSPS Subparts A and Ja. Do not vent tail gas from the East Side SRP to an incinerator unless such venting complies with NSPS Subparts A and Ja.
¶ 49, 51, 53, and 54: Flares Subpart Ja applicability only	The #2 Flare (H-1105), #3 Flare (H-1104), #5 Flare (H-3351), #6 Flare (H-3352), #7 Flare (H-3301), FCC HP Flare, FCC LP Flare, and LPG Flare are affected facilities under NSPS Subpart Ja and shall comply with NSPS Subpart Ja, provided that the Flaring Device is combusting fuel gas as defined in 40 C.F.R. § 60.101a. At all times and to the extent practicable, including during periods of Startup, Shutdown, and/or Malfunction, implement good air pollution control practices for minimizing emissions from the Flaring Devices identified in Appendix D consistent with 40 C.F.R. § 60.11(d). For continuous or intermittent, routinely-generated refinery fuel gases that are combusted in any Flaring Device identified in Appendix D, comply with 40 C.F.R. § 60.103a(h). The combustion of gases generated as a result of Startup, Shutdown, and/or Malfunction of a refinery process unit or released to a Flaring Device as a result of a process upset or relief valve leakage or other emergency malfunction is exempt from the requirement to comply with 40 C.F.R. § 60.103a(h).
¶ 99 NSPS QQQ	FCCU and Coker Drain Systems are affected facilities under Subparts A and QQQ.
¶¶ 128-131, limitations on use of CD required emissions reductions	1. Limetree Bay shall not generate or use any NO_x, SO_2, PM, PM-10, PM-2.5, VOC, or CO emissions reductions, or apply for and obtain any emission reduction credit, that result from any projects conducted or controls utilized pursuant to the Consent Decree (Civ. No. 1:11-cv-0006) ("CD Emissions Reductions") as netting reductions or emissions offsets in a PSD, major non-attainment, and/or synthetic minor New Source Review permit or permit proceeding. 2. Notwithstanding the general prohibition set forth in Paragraph 1, Limetree Bay may use 41 tons per year of NO_x, 61 tons per year of CO, and 14 tons per year of PM from CD Emissions Reductions as credits or offsets

CD Paragraph	Requirements That Shall Survive Termination of the Consent Decree under Section XVII.
	in any PSD, major non-attainment and/or minor NSR permit or permit proceeding, provided that the new or modified emissions units at which credits are being used: (1) is being constructed or modified for purposes of compliance with clean fuels requirements (72 Fed. Reg. 8428, amending 40 C.F.R. Part 80); and (2) has a federally enforceable, non-Title V permit that reflects the following requirements that are applicable to the pollutants for which credits are being used: a. For heaters and boilers, a limit of 0.027 lbs NO_x per million BTU on a 3-hour rolling average basis; b. For heaters and boilers, a limit of 0.10 grains of hydrogen sulfide per dry standard cubic foot of fuel gas or 20 ppmvd SO_2 corrected to 0% O_2 both on a 3-hour rolling average; c. For heaters and boilers, no liquid or solid fuel firing authorization; d. For FCCUs, a limit of 20 ppmvd NO_x or less on a 365-day rolling average basis corrected to 0% O_2; e. For FCCUs, a limit of 25 ppmvd SO_2 or less on a 365-day rolling average basis corrected to 0% O_2; f. For FCCUs, a limit of 0.5 pounds of PM per 1,000 pounds of coke burned on a 3-hour average basis; and g. For SRPs, NSPS Subpart J limits. 3. Utilization of the exception set forth in Paragraph 2 to the general prohibition against the generation or utilization of CD Emissions Reductions set forth in Paragraph 1 is subject to the following conditions: a. Under no circumstances shall Limetree Bay use CD Emissions Reductions for netting and/or offsets prior to the time that actual CD Emissions Reductions have occurred; b. CD Emissions Reductions may be used only at the Limetree Bay Refinery; c. The CD Emissions Reductions provisions of this Consent Decree are for purposes of this Consent Decree only and neither Limetree Bay, nor any other entity may use CD Emissions Reductions for any purpose, including in any subsequent permitting or enforcement proceeding, except as provided herein.

CD Paragraph	Requirements That Shall Survive Termination of the Consent Decree under Section XVII.
	d. Limetree Bay shall remain subject to all federal, territorial, and local regulations applicable to the PSD, major non-attainment and/or minor NSR permitting process. 4. Outside the Scope of the General Prohibition. Nothing in the Consent Decree (Civ. No. 1:11-cv-0006) is intended to prohibit Limetree Bay from seeking to: a. Use or generate netting reductions or emission offset credits from refinery units that are covered by the Consent Decree (Civ. No. 1:11-cv-0006) to represent the difference between the emissions limitations set forth in or established pursuant to the Consent Decree (Civ. No. 1:11-cv-0006) for such refinery units and the more stringent emissions limitations that Limetree Bay may elect to accept for those refinery units in a permitting process; b. Use or generate netting reductions or emission offset credits for refinery units that are not subject to an emission limitation pursuant to the Consent Decree (Civ. No. 1:11-cv-0006); c. Use emissions reductions from the installation of controls required by the Consent Decree (Civ. No. 1:11-cv-0006) in determining whether a project that (a) includes both the installation of controls under the Consent Decree (Civ. No. 1:11-cv-0006) and other construction and (b) is permitted as a single project triggers major New Source Review requirements; d. Use CD Emission Reductions for Limetree Bay's compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area (excluding PSD and Non-Attainment New Source Review rules) that apply to Limetree Bay; provided, however, that Limetree Bay shall not be allowed to trade or sell any CD Emissions Reductions; or e. Use or generate netting reductions or emission offset credits for heaters, boilers, Generating Turbines and Compressor Engines on which Qualifying Controls, as defined in Paragraph 23 of the Consent Decree (Civ. No. 1:11-cv-0006), have been installed, provided that such reductions are not included in Limetree Bay's demonstration of compliance with the requirements of Paragraphs 24, 26, 27 and 28 of the Consent Decree (Civ. No. 1:11-cv-0006).
¶ 132.b: Coker steam vent depressurization limit	Comply with a depressurization level of 2 psig for the Coker Steam Vents.

CD Paragraph	Requirements That Shall Survive Termination of the Consent Decree under Section XVII.

¶ 133 and Appx H: Coker Heater (two units) CO and VOC limits

Pollutant	Limit	Units	Averaging Time	Monitoring
CO	0.030	lb/mmBTU	Average of 3 1-hr samples	Annual Performance Test (EPA RM-10)
VOC	0.0050	lb/mmBTU	N/A	EPA RM-25 or RM-25A following any CO test exceedance

¶ 133 and Appx H: Boiler 10 CO and VOC limits

Pollutant	Limit	Units	Averaging Time	Monitoring
CO	0.070	lb/mmBTU	Average of 3 1-hr samples	Annual Performance Test (EPA RM-10)
VOC	0.0050	lb/mmBTU	N/A	EPA RM-25 or RM-25A following any CO test exceedance

¶ 133 and Appx H: SRUs 1 & 2/Beavon 1, Reduced Sulfur Compound as defined in 40 CFR 60.101a, final limits

Pollutant	Limit	Units	Averaging Time	Monitoring
RSC	162	ppmvd	Hourly rolling 12-hr average	NSPS RSC CEMS (40 C.F.R. 60 App A, B, & F)
	66	ppmvd	Daily rolling 30-day average	NSPS RSC CEMS (40 C.F.R. 60 App A, B, & F)

¶ 133 and Appx H: EFR Tank and Subpart Kb requirements

No. 6 Sour Water Stripper Tank (TK-1071),

Desalter Effluent Water (DEW) Tank (TK-1663)

Pollutant	Limit	Monitoring
VOC	Ext. Floating Roof Tank	Subpart Kb monitoring (40 C.F.R. §60.113b(b)) for Ext. Floating Roof Kb requirements: Seal gap measurements (Secondary once/yr, Primary once/5 yrs). Inspect seals and fittings each time the vessel is emptied and degassed.

¶ 133 and Appx H: Fixed Roof Tank and Subpart Kb requirements

Coker Charge [Pitch]Tank (TK-8501)

Pollutant	Limit	Monitoring
VOC	Fixed Roof Tank	Subpart Kb monitoring (40 C.F.R. §60.110b-117b) Record and maintain records documenting the material stored in the hot pitch storage tank (TK-8501), showing that the tank remains exempt from control requirements in accordance with 40 C.F.R. 60 Subpart Kb, §60.110b(b).

<table>
<tr><th>CD Paragraph</th><th>Requirements That Shall Survive Termination of the Consent Decree under Section XVII.</th></tr>
<tr><td></td><td></td></tr>
<tr><td>¶ 133 and Appx H: LDAR

Process equipment located in
Coker Unit,
Coker Gas Plant,
No. 7 Amine,
No. 5 Crude,
No. 3 Vacuum, No. 3 Crude,
No. 1 Vacuum, No. 1 Visbreaker, and No. 2, 4, 6, & 7 Distillate Desulfurizer Units and outside battery limit modifications to the terminal, tank farm & blending equipment</td><td>
<table>
<tr><th>Pollutant</th><th>Limit</th><th>Monitoring</th></tr>
<tr><td>VOC</td><td>40 C.F.R. Part 60, Subpart GGGa</td><td>Comply with 40 C.F.R. Part 60, Subpart GGGa</td></tr>
</table>
</td></tr>
<tr><td>¶ 133 and Appx H page H-3: equipment design and work practices for coke handling

Coke Handling, Storage and Loading Facility</td><td>
<table>
<tr><th>Emissions Unit</th><th>Pollutant</th><th>Design/Work Practice Controls</th><th>Monitoring</th></tr>
<tr><td>Coke Cutting/Coke Pit</td><td>PM (all species)</td><td>High Pressure water cutting of coke & enclosed drop zones/coke pit (No roof)</td><td>Maintain records documenting design</td></tr>
<tr><td>Coke Crusher</td><td>PM (all species)</td><td>Enclosed[b] crusher structure. Moisture content control from initial cutting.</td><td>Maintain records documenting design</td></tr>
<tr><td>Coke Transfer to Storage</td><td>PM (all species)</td><td>Enclosed[b] conveyor to storage, Moisture content control from initial cutting.</td><td>Maintain records documenting design</td></tr>
<tr><td>Coke Storage</td><td>PM (all species)</td><td>Enclosed[b] storage buildings, baghouse for vent control, and moisture content control from initial cutting.</td><td>Maintain records documenting design</td></tr>
<tr><td>Coke Loading</td><td>PM (all species)</td><td>Enclosed[b] conveyor to loading dock. “Spout” containment loading to minimize drop emissions when loading ship.</td><td>Maintain records documenting design</td></tr>
</table>
[b] Enclosed structures can have ventilation vents or access ways.
</td></tr>
</table>

CD Paragraph	Requirements That Shall Survive Termination of the Consent Decree under Section XVII.
¶ 135 Boilers 5, 8, and 9, NSPS Subparts A and D	Boilers 5, 8, and 9 are "affected facilities" as that term is used in 40 C.F.R. Part 60, NSPS Subparts A and D and are subject to and required to comply with the requirements of NSPS Subparts A and D.
¶ 136 [as modified]: Turbines 1-9, NSPS Subparts A and GG	Generating Turbines 4,7, 8 and 9 are "affected facilities" as that term is used in, and shall comply with, 40 C.F.R. Part 60, Subparts A and GG, including any custom sulfur monitoring plan approved by EPA in accordance with 40 CFR 60.334(i)(3).

APPENDIX P
Flaring Mitigation Projects

The flaring mitigation projects include those listed below and any others submitted by Limetree Bay for advance approval by EPA and VIDPNR ("approved mitigation projects"). Pursuant to Paragraph 50A, Limetree Bay will achieve emission reductions sufficient to satisfy the Mitigation Amount, if any, by implementing one or more of the approved mitigation projects.

Limetree Bay will begin implementing one or more of the approved mitigation project(s) by no later than 180 days after submitting the notification required by Paragraph 50C.b.iii, and will mitigate a minimum of 10 tons per year until the Mitigation Amount is satisfied.

Progress on the implementation of the approved mitigation projects including, the start and end date(s) of an approved mitigation project, the approved mitigation project(s) being implemented, the number of tons reduced during the reporting period, the tons remaining to be mitigated, and the completion of the mitigation of the Mitigation Amount, will be included in the semi-annual reports submitted under Paragraph 143.

A. Approved Mitigation Projects

The following projects are approved:

1. **Reducing H_2S in Refinery Fuel Gas**: If this project is selected for implementation, then Limetree Bay shall reduce the SO_2 emissions from fuel gas combustion devices (other than the Coker heaters, Boiler 10 and GT-13) by reducing H_2S in fuel gas.

   The emission reductions achieved pursuant to this project shall be calculated based on the difference between the average H_2S concentration during the first six months after restart of Refinery Operations ("Baseline Period"), excluding periods of non-compliance, and the actual H_2S concentration in the East Side refinery fuel gas system (using the H_2S analyzers used to comply with NSPS Subpart J) after the Baseline Period. The tons of SO_2 reduction will be determined based on the change in H_2S concentration, relative to the Baseline Period, and the total volume of fuel gas to fired sources on the East Side, each year after the Baseline Period.

2. **Boutique Amines to Reduce SO_2 from the TGTU**

   If this project is selected for implementation, then Limetree Bay shall reduce SO_2 emissions by using specialized amines in its East Side tail gas treatment unit by reducing H_2S and other sulfur compounds.

   The emission reductions achieved pursuant to this project shall be calculated based on the difference between the monitored SO_2 concentration from the incinerator stack for the first six months of operations, excluding periods of noncompliance, after restart of Refinery Operations ("Baseline Period") and each year after the Baseline Period.

3. **Boutique Amines to Reduce Other Sulfur Compounds in Fuel Gas**:

If this project is selected for implementation, Limetree Bay shall reduce SO_2 emissions from fuel gas combustion devices by decreasing the total sulfur concentration of fuel gas through the use of amines designed specifically to lower the concentration of sulfur compounds other than H_2S.

The emission reductions achieved pursuant to this project shall be calculated based on the difference between the total sulfur concentration during the first six months after restart of Refinery Operations, excluding periods of non-compliance ("Baseline Period"), and the total sulfur concentration in the East Side refinery fuel gas system after the Baseline Period. The tons of SO_2 reduction will be determined based on the change in total sulfur concentration, relative to the Baseline Period, and the total volume of fuel gas to fired sources on the East Side, each year after the Baseline Period.

B. Approval of Other Mitigation Projects

1. Limetree Bay may propose other or additional projects for approval by EPA and VIDPNR. The written proposal shall contain a written description of the project(s), the emission reductions expected to be achieved, the anticipated start and end dates for the project(s), and any other relevant information describing the project(s). EPA and VIDPNR shall consult with each other and, if necessary, with Limetree Bay regarding the proposed project(s). Following such consultation and review, EPA and VIDPNR shall either approve the project(s) or provide written comments to Limetree Bay. If approved and selected for implementation, then Limetree Bay shall implement the project(s). If written comments are provided by EPA and VIDPNR, Limetree Bay shall either revise the written description of the project(s) to reflect the comments, withdraw the proposal, or submit an alternate proposal.

C. Certification

1. With regard to the approved mitigation projects, Limetree Bay shall include in the notification required by Paragraph 50C.b.iv. (or, if applicable, in the written proposal for other or additional project(s)), a certification of the truth and accuracy of each of the following:

    a. That, as of the date of the 50C.b notification (or the proposal for additional or alternate project(s)), Limetree Bay is not required to perform or develop the mitigation project(s) by any federal, state, or local law or regulation and is not required to perform or develop the mitigation project(s) by agreement, grant, or as injunctive relief awarded in any other action in any forum;

    b. That the mitigation project(s) are not projects that Limetree Bay was planning or intending to construct, perform, or implement other than in settlement of the potential violations resolved in the First Modification;

    c. That Limetree Bay has not received and will not receive credit for the mitigation project(s) in any other enforcement action; and

d. That Limetree Bay shall neither generate nor use any pollutant reductions from the mitigation project(s) as netting reductions, pollutant offsets, or to apply for, obtain, trade, or sell any pollutant reduction credits.

APPENDIX Q

HOVENSA
PEOPLE FUELING A BRIGHTER FUTURE

Director
Air Enforcement Division
Office of Civil Enforcement (2242A)
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20044
foley.patrick@epa.gov

Director
Air Enforcement Division
Office of Civil Enforcement
c/o Matrix New World Engineering, Inc.
26 Columbia Turnpike, Suite 200
Florham Park, NJ 07932-2213
jmack@matrixneworld.com

Director
Enforcement and Compliance Assistance Division
U.S. EPA Region 2
290 Broadway, 21st Floor
New York, NY 10007-1866
patel.harish@epa.gov

United States Environmental Protection Agency
Region 2
Office of Regional Counsel
290 Broadway
New York, NY 10007

Director, Caribbean Environmental Protection Division
U.S. EPA Region 2
City View Plaza II, Suite 7000
#48 Rd. 165 km 1.2
Guaynabo, PR 00968-8069

Director, Division of Environmental Protection
Virgin Islands Department of Planning and Natural Resources
45 Estate Mars Hill
Frederiksted, St. Croix, U.S. Virgin Islands
00840-4474
jp.oriol@dpnr.vi.gov

Re: *United States of America and The United States Virgin Islands v. HOVENSA, L.L.C.*
Civil Action No. 1:11-cv-0006

To Whom It May Concern:

As you are aware, I was appointed as the independent member of HOVENSA's Executive Committee pursuant to that letter agreement dated June 4, 2015 and currently serve as Manager of HOVENSA, L.L.C. on the terms set forth in the (i) *Order Granting Final Approval of Disclosure Statement and Confirming Chapter 11 Plan of Liquidation Pursuant to Chapter 11 of the Bankruptcy Code* (Case No. 1:15-bk-10003-MFW) (Bankr. D.V.I. 2015) [Docket No. 572] and (ii) *Debtor's Second Amended Plan of Liquidation Pursuant to Chapter 11 of the Bankruptcy Code* (Case No. 1-15-bk-10003-MFW (Bankr. D.V.I. 2015) [Docket No. 572-1].

As of June 30, 2019, HOVENSA, L.L.C. has taken the actions described in the table below in completion and satisfaction of the Consent Decree requirements identified therein.

CD ¶	CD Requirement	Activities Undertaken
Sections V.A through V.E – FCCU		
11	Limit NO_X emissions from the FCCU to 20 ppmvd or less on a 365-day rolling average and 40 ppmvd or less on a 7-day rolling average, each at 0% O_2.	NO_X emission limits have not been exceeded.
12	Demonstrate compliance with FCCU NO_X emission limits by installing, maintaining, and operating CEMS and performing RATAs once every three years.	Operated pre-existing CEMS during FCCU operation, maintained them, and performed RATAs when due.
13	Limit SO_2 emissions from the FCCU to 16 ppmvd or less on a 365-day rolling average and 25 ppmvd or less on a 7-day rolling average, each at 0% O_2.	SO_2 emission limits have not been exceeded.
14	Demonstrate compliance with FCCU SO2 emission limits by installing, maintaining, and operating CEMS and performing RATAs once every three years.	Operated pre-existing CEMS during FCCU operation, maintained them, and performed RATAs when due.
16	Submit FCCU PM stack test protocol specified in 40 C.F.R. § 60.106(b)(2) .	Protocol submitted on 8/23/2011.
18	Limit CO emissions from the FCCU to 500 ppmvd or less on a 1-hour block average basis corrected to 0% O_2.	CO emission limit has not been exceeded.
21	Demonstrate compliance with FCCU CO emission limits by installing, maintaining, and operating CEMS and performing RATAs once every three years.	Operated pre-existing CEMS during FCCU operation, maintained them, and performed RATAs when due.
22	Comply with NSPS Subparts A and J for SO_2 and CO.	Emission limits have not been exceeded and CEMs operated during FCCU operation.
Section V.F - NO_X Emissions Reductions from Heaters, Boilers, Generating Turbines, and Compressor Engines		
26	Install sufficient Qualifying Controls and apply for emission limits from the appropriate permitting authority sufficient to achieve 1,079 tpy NO_X emissions reductions. Submit a report to EPA showing how refinery satisfied requirement of Paragraphs 23 and 26.	Compressor IC engines shutdown and permits surrendered, per Para. 23.e; replaced with electric motors prior to Date of Lodging. Report submitted 8/31/15, demonstrating compliance.
27	Install sufficient Qualifying Controls and apply for emission limits from the appropriate permitting authority sufficient to achieve 3,663 tpy NO_X emissions reductions.	Permanent emissions unit shutdown and surrender of permits by letter, 2/28/17, per Para. 23.e.

CD ¶	CD Requirement	Activities Undertaken
	Submit a report to EPA showing how refinery satisfied requirement of Paragraphs 23 and 27.	Report submitted 10/27/17 demonstrating compliance and confirming shutdown and permit surrender application.
28	Install sufficient Qualifying Controls and apply for emission limits from the appropriate permitting authority sufficient to achieve 4,744 tpy NO_X emissions reductions. Submit a report to EPA showing how refinery satisfied requirement of Paragraphs 23 and 28.	Permanent emissions unit shutdown and surrender of permits by letter of 5/30/19, per Para. 23.e. Report submitted 9/3/19 demonstrating compliance and confirming shutdown and permit surrender application.
29	Submit a detailed NO_X Control Plan to EPA for review and comment and to DPNR.	Initial NO_X control plan submitted 10/4/11.
29	Submit annual updates of NO_X Control Plan to EPA and DPNR.	NO_X control plan update submitted annually.
Section V.G SO_2 Emissions Reductions from, and NSPS Applicability to, Heaters, Boilers and Generating Turbines		
34	Applicability and compliance of Heaters, Boilers, and Other Fuel Gas Combustion Devices with NSPS Subparts A, J and/or Ja, as applicable.	H_2S fuel gas concentration standard has not been exceeded.
35	H_2S/SO_2 monitoring requirements of NSPS Subparts A and J or Ja, as applicable.	Operated CEMS during unit fuel gas combustion operations.
Section V.H Sulfur in Fuel Restrictions for Oil Burning		
37	Effective 30 days after Date of Lodging, no longer burn Fuel Oil greater than 0.55 wt % sulfur at any time or 0.50 wt % on a 365-day rolling average basis in any heater, boiler, or Generating Turbine.	Did not burn Fuel Oil in excess of specified concentrations in para. 37.
38	Switch the fuel supply for any units combusting Fuel Oil to a Fuel Oil with not greater than 0.3 wt % sulfur within one hour when (a) the hourly average winds blow from a 180 degree sector for at least 6 consecutive hours during a 24-hour block period, or any 12 non-consecutive hours during a 24-hour block period or (b) the meteorological station is inoperable for six consecutive hours.	Did not burn Fuel Oil with greater than 0.3 wt% sulfur.

CD ¶	CD Requirement	Activities Undertaken
39	Switch back to the higher sulfur content Fuel Oil in accordance with conditions at 39.a or b.	Did not burn Fuel Oil with greater than 0.3 wt% sulfur.
Section V.I Sulfur Recovery Plants.		
42	For East Side SRP, comply with applicable NSPS Subpart Ja provisions.	East Side SRP did not exceed applicable Ja emission standards.
42, 44.a	For West Side SRP, comply with applicable NSPS Subpart J/Ja provisions.	West Side SRP did not exceed applicable NSPS J or Ja emission standards. West Side SRP complied with NSPS J and converted to Ja compliance by 12/31/11.
43	Route or re-route all sulfur pit emissions so they are eliminated or controlled and included and monitored as part of the SRPs' emissions subject to the NSPS Subpart Ja limit for SO_2 or reduced sulfur compounds (40 C.F.R. § 60.102a(f)) for the East and West Side SRP sulfur pit emissions.	Control installed on 12/28/2011, routing all West Side sulfur pit emissions back to the SRP. Continued to comply with requirement for West Side SRP sulfur pits during unit operation. East Side SRP not in operation on applicability date, 12/31/14. Did not exceed applicable NSPS Ja emission standards.
44.a	Install SO_2 CEMS on West Side incinerators.	Installation of CEMS completed 4Q 2010.
44.c	Monitor West Side SRP tail gas emissions points.	CEMS installed, RATA completed 6/11, monitoring and reporting continued while unit in operation.
45.a.	Submit compliance plan and schedule for installation of second East Side TGU to EPA and DPNR.	Compliance plan and schedule submitted 12/16/11.
45.b.ii	Complete an optimization study to minimize emissions of sulfur compounds and maximize sulfur recovery efficiencies at the East Side SRP meeting the requirements of Paragraph 46 and submit study to EPA.	Optimization study completed and submitted 12/2/11.
46.b	Incorporate results of optimization study into PMO Plan.	Results incorporated into PMO plan, submitted 12/7/11 (see 48.a.).
48.a.	Submit a "Preventative Maintenance Operation Plan" (PMO Plan) for SRU and SAR to EPA and DPNR.	Submitted PMO Plan 12/7/2011.
Sections V.J through V.O – Flares		
49	For listed Flaring Devices, comply with applicable requirements of NSPS Subpart Ja by dates listed in Appendix D.	Fuel gas standard not exceeded.
51	Comply with applicable monitoring requirements of NSPS Ja by 6/7/14 for Flare	Complied with applicable monitoring requirements as of 6/7/14 when combusting

CD ¶	CD Requirement	Activities Undertaken
	7.	fuel gas.
52	Submit a Compliance Certification to EPA that HP, LPG, LP, 2, and 3 Flaring Devices comply with the emission standards and monitoring requirements of Subparts J/Ja, specifying the compliance method for each respective Flaring Device.	Submitted certification on 7/7/16 (HP, LPG Flares). Submitted certification on 7/11/18 (LP, 2 and 3 Flares).
58	Submit a corrective action report to minimize the likelihood of a recurrence of Root Cause of flaring event included in look-back analysis previously sent to EPA.	Corrective action report submitted 6/7/11.
59-61	Investigate (no later than 45 days post-incident) and take corrective actions for any Acid Gas Flaring Incidents, prepare report.	No Acid Gas Incidents.
59, 60, 61, 70	Investigate (no later than 45 days post-incident) and take corrective actions for any Tail Gas Flaring Incidents, prepare report.	Tail Gas Incidents investigated and reports prepared.
71	Submit semi-annual report that includes each Acid Gas Flaring Incident and Tail Gas Incident reports during relevant period.	Incident Reports submitted with semi-annual reports, last Incident Report submitted with July 2012 semiannual report.
72	For any Hydrocarbon Flaring Incidents, follow investigative, reporting and corrective action procedures as set forth in paragraphs 60 and 61.	Incident Reports submitted with semi-annual reports, last Incident Report submitted with January 2015 semiannual report.
72	Investigate (no later than 45 days post-incident) and take corrective actions for any Hydrocarbon Flaring Incidents.	Hydrocarbon Flaring Incidents investigated and reports prepared.
Sections V.P through V.R – Benzene NESHAP, NSPS QQQ, and LDAR		
79.a.	Complete Phase One Review and Verification of Refinery TAB and its compliance with the Benzene Waste NESHAP. Submit BWON Compliance Review and Verification Report.	Completed Phase One Review and Verification 1/20/12. Submitted report 3/22/12.
79.b.	Conduct any additional required sampling by EPA and submit amended BWON Compliance Review and Verification Report.	No samples requested.
80.a.	Amend TAB Reports (if necessary due to inaccuracies or not meeting requirements of 40 C.F.R. § 61.357(c)).	Amended TAB Report not necessary.
80.b.	Submit to EPA and DPNR compliance plan (if results of BWON Compliance Review	Compliance plan submitted, 9/14/12.

CD ¶	CD Requirement	Activities Undertaken
	and Verification Report identify any compliance issues).	
81	Conduct inspections in accordance with the three-tier system for control of vents associated with the Subpart FF wastewater collection system.	All required inspections completed.
82.a.	Complete BWON lab audit prior to conducting Phase One Review and Verification to analyze benzene waste NESHAP samples to ensure proper analytical and QA/QC procedures are followed.	Initial audit completed 1/26/12.
82.b.	Conduct audits for each lab continuing to perform BWON sample analyses every 2 years.	Subsequent audits completed 3Q 2013, 3Q 2015, and 3Q 2017.
83	Continue to use management of change procedures to review process information and construction projects to ensure all new benzene waste streams are included in waste stream inventory.	Used management of change procedures to review process information and construction projects.
84.a.	Complete development of SOPs for all control equipment used to comply with the benzene waste NESHAP.	Development of standard operating procedures for benzene stripper (only "control equipment" used) completed.
84.b.	Develop BWON training program. Submit to EPA.	Initial program completed. Submitted 3/7/12.
85.a.	Submit a plan for quantifying waste/slop/off-spec oil movements for all benzene waste streams that are not controlled at the Refinery, along with schematics.	Plan and schematics submitted 1/26/12.
86	Submit benzene waste operations sampling plans designed to describe the sampling of benzene waste streams to EPA and DPNR.	Sampling plan submitted to EPA and DPNR 1/26/12.
88	Implement and continue to implement the sampling plan for benzene waste operations sampling plans at the required time.	Sampling plan implemented and streams monitored.
89.a	Upon determination that a sampling plan is no longer accurate, submit BWON sampling plan revisions to EPA and DPNR for approval.	Sampling Plan revised and submitted 6/29/12 to reflect idling of refinery.
90	Calculate a quarterly and projected annual uncontrolled benzene quantity.	Quarterly and projected annual uncontrolled benzene quantity calculated.

CD ¶	CD Requirement	Activities Undertaken
91	Submit calculations of uncontrolled benzene quantity releases with reports.	Submitted calculations of benzene quantity with quarterly Subpart FF reports.
93.a.iii	Conduct monitoring of API Separators 1, 2, & 3 or any new Subpart FF-regulated oil/water separators (as described in 93.a.iii. (1)-(3)).	Monitoring of in-service API Separators conducted.
95	Record and submit information pursuant to 40 C.F.R. § 61.357(d)(6) and (7) on sampling results, training, and laboratory audits.	Recorded and reported sampling results, TAB, training and lab audit results with quarterly Subpart FF reports.
98	Submit copies of reports, plans and certifications to EPA, EPA Region 2 and DPNR.	Reported sampling results, TAB, training and lab audit results in quarterly Subpart FF reports.
99	Prepare and submit compliance plan to EPA specifying projects necessary to bring the FCCU and Coker Drain Systems into compliance with 40 C.F.R. Subpart QQQ.	Compliance Plans submitted 12/16/11 and 1/16/2012.
99	Complete FCCU and Coker Drain Systems projects described above for compliance with 40 C.F.R. Subpart QQQ.	Projects submitted as part of 12/16/11 Compliance Plan reported as complete as of 6/30/11. Projects submitted as part of 1/16/2012 Compliance Plan were field verified as complete.
102	Submit to EPA a plan and schedule for bringing Refinery into compliance with 40 C.F.R. Part 60, Subpart GGG and requirements of CD.	Plan and schedule submitted 4/25/11.
103	Develop and maintain written refinery-wide program for compliance with applicable LDAR regulations and requirements of CD. Submit copy to EPA with next semi-annual report.	Initial Refinery-wide LDAR program of 10/26/11 superseded by Revision 1 effective 1/1/2012. Revision 1 submitted with semi-annual LDAR report for 2nd semi-annual period of 2011.
105.a.	Develop and submit to EPA the LDAR training program.	LDAR training program submitted 3/7/12.
105.c.	Provide training on LDAR responsibility relevant to Refinery operations and maintenance personnel.	Initial training completed by 6/7/13 and three-year retraining completed through 12/31/16.
106.a.	Complete a refinery-wide third-party audit of compliance with LDAR Regulations and applicable sections of CD.	Initial audit completed by 1/26/12.

CD ¶	CD Requirement	Activities Undertaken
	Submit noncompliance report from third-party audit.	Report and compliance schedule submitted 2/15/12.
106.a.i	Submit to EPA that the Refinery is in compliance with LDAR Regulations.	Certification of compliance with LDAR Regulations submitted 6/7/12.
106.b.i	Retain independent contractor to perform 3rd party audit of LDAR program compliance with applicable LDAR Regulations and applicable CD requirements at least once every four years.	Audit completed 3/3/16.
106.b.ii	Conduct internal audits of the LDAR program compliance with applicable LDAR Regulations, by 1Q 2014 and at least once every four years thereafter.	Internal audits completed 1Q 2014, 3/12/18.
107	Implement all appropriate steps to correct areas of non-compliance identified in subsequent audits. Submit results of subsequent audits to EPA.	Implementation of identified corrective actions to correct areas of non-compliance identified in 2016 third party audit included in 7/15/16 LDAR Semi-Annual Report. Implementation of corrective actions to correct areas of non-compliance identified in 2014 and 2018 internal audits included in 7/28/2014 and 7/18/18 LDAR Semi-Annual Report, respectively. March 2016 third-party audit results submitted with 7/15/16 LDAR Semi-Annual Report. Internal audit results submitted with relevant LDAR Semi-Annual Report.
109	Utilize lower leak definitions for valves and pumps, as defined in 109.a. and 109.b.	Lower leak definitions were utilized beginning August 2012 and continued to be utilized.
111	Record, track, repair, and remonitor all leaks in excess of the internal leak definitions in Paragraph 109.	Complied with recording, tracking and repair requirements.
112.a.i	Perform external valve surveys in accordance with Appendix G.	Surveys conducted, beginning 7/26/12.
112.a.ii	Perform valve stuffing box condition surveys in accordance with Appendix G.	Surveys conducted, beginning 7/26/12.
112.b.	Repack or replace valves prior to or during process unit turnarounds or tank outages in accordance with Appendix G.	Repack/replace conducted, beginning 7/26/12.
112.c.	Ensure newly installed valves are fitted with proper packing or valve technology designed	Proper packing used, beginning 7/26/12.

CD ¶	CD Requirement	Activities Undertaken
	to prevent leaks above 100ppm for a period of five years after installation.	
112.d.	Establish a comprehensive tracking database for Paragraph 112.d information (Valve Preventative Leak Maintenance Program).	Tracking database established, beginning 7/26/12.
112.e.	Analyze information in 112.d database every two years after effective date (Valve Preventative Leak Maintenance Program components) and report evaluation to EPA with semiannual report.	Analyses completed by 7/26/14 and subsequent analyses completed in 2016 and 2018, results of evaluation reported in LDAR Semi-Annual reports submitted 1/7/15, 1/20/17 and 1/30/19.
113.a.	Monitor pumps at lower leak definition on a monthly basis.	Monitoring conducted.
113.b.	Monitor valves according to the monitoring frequencies required by 40 C.F.R. §§ 60.482-7 and 60.483-2, except when monthly monitoring is required.	Monitoring conducted.
114	Record all LDAR monitoring and repair data in electronic database.	Database established and commenced recording data prior to Date of Lodging.
115	Collect electronic data during LDAR monitoring and perform appropriate data transfer.	System was in place before Date of Lodging and maintained, with uploading times consistent with Paragraph.
116	Develop procedure for QA/QC of LDAR-generated data.	Procedure developed.
117	Maintain program for personnel accountability and position for LDAR management.	LDAR accountability program and position for LDAR management maintained, beginning 1/26/11.
118	Implement tracking program for maintenance and (Management of Change) to ensure valves and pumps subject to LDAR Regulations and the CD are integrated into the LDAR program.	Database was in place and maintained, beginning 1/26/11.
119	Conduct all calibrations of LDAR monitoring equipment using methane as the calibration gas in accordance with 40 C.F.R. Part 60, EPA Reference Test Method 21.	Calibrations conducted using methane as calibration gas, beginning 6/7/11.
120	Conduct calibration drift assessments of LDAR monitoring equipment at the end of each monitoring shift (at a minimum).	Compliance maintained.
121	Perform monitoring and maintenance as specified in Paragraph 121 including extended maintenance and delayed repair of leaks.	Began implementing program prior to 1/26/12 and continued to implement, as required.

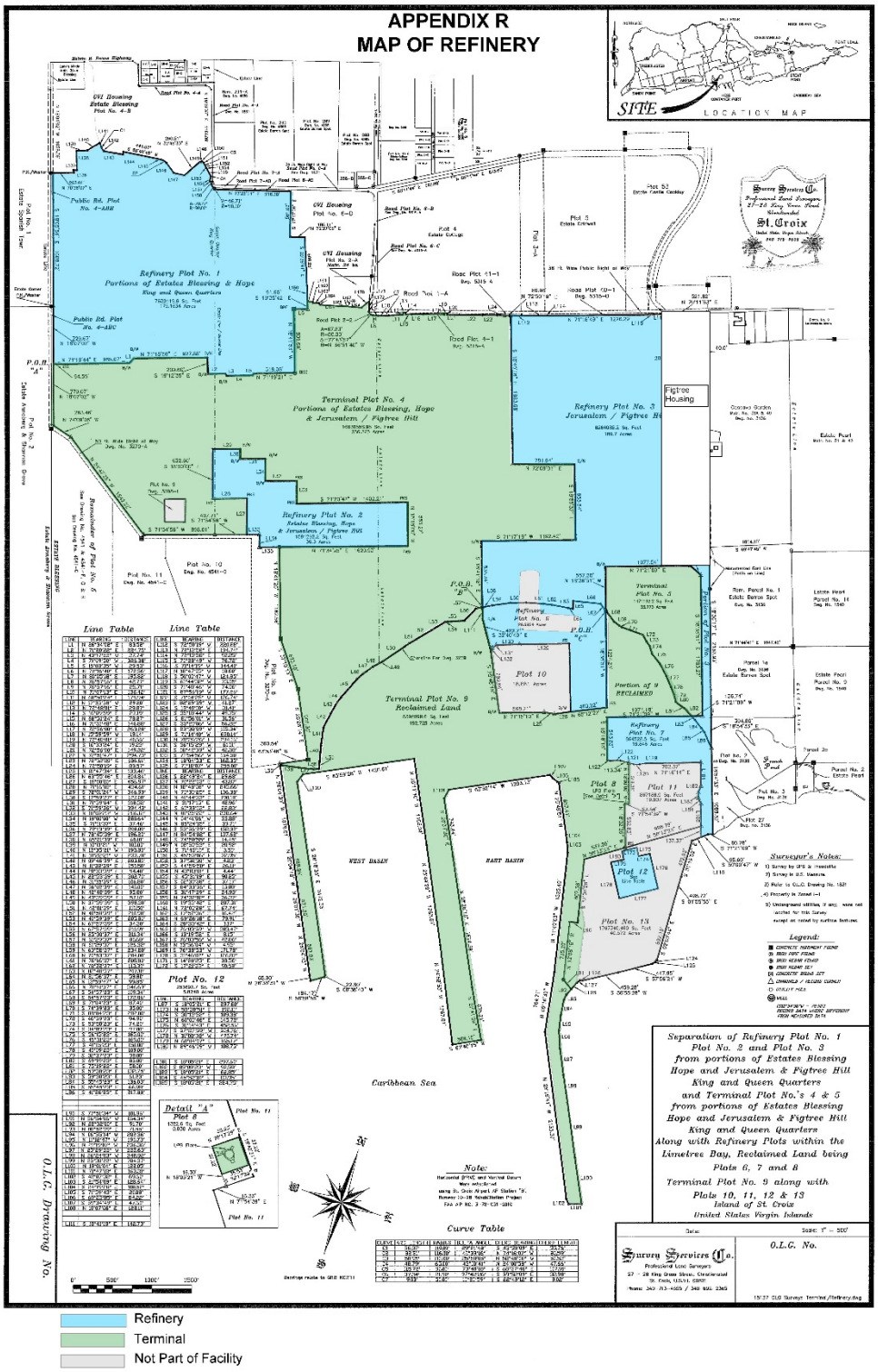
CD ¶	CD Requirement	Activities Undertaken
123	Include information in Paragraph 123 in applicable Semi-Annual LDAR Report.	All required LDAR reports were filed by Jan 30 and July 30 dates, and included the information required by Paragraph 123.
Part VI – Permitting		
124	Submit application to incorporate the emissions limits and standards of the CD effective upon Date of Entry of CD.	Submitted application to incorporate emission limits and standards effective upon Date of Entry, 8/2/11.
125	File applications to incorporate the emissions limits and standards effective after Date of Entry.	Submitted applications to incorporate emission limits and standards on 7/19/11 and 10/17/14, excluding (1) Ja compliance for East SRU (Para. 45.a); and (2) interim performance standard for East Beavon (Para. 45.b.iii).
Part VIII - Additional Injunctive Relief		
132.a.	Comply with depressurization level of 10 psig for the Coker Steam Vents.	Complied with depressurization level during coker operation, beginning Date of Entry.
132.b.	By December 31, 2012, comply with depressurization level of 2 psig for the Coker Steam Vents.	2 psig depressurization level not exceeded, on and after December 31, 2012.
133, App. H	West SRU 1&2/Beavon 1: comply with TRS (Interim) limits by Date of Entry; comply with TRS (Final) limits by 1/1/14.	Complied with Interim emission limits by Date of Entry. Final limits not exceeded.
133, App. H	TK-1071: NSPS subpart Kb monitoring, primary and secondary seal gap measurements.	Per NSPS Kb requirements to conduct gap testing when storing VOL, initial primary seal gap measurements and secondary seal gap measurements conducted per schedule during tank operations. Initial secondary seal inspection on 2/24/12. Tank not storing VOL after 2012.
133, App. H	TK-1663: NSPS subpart Kb monitoring primary and secondary seal gap measurements.	Per NSPS Kb requirements to conduct gap testing when storing VOL, initial primary seal gap measurements and secondary seal gap measurements conducted per schedule during tank operations. Initial secondary seal inspection on 11/23/11. Tank not storing VOL after 2Q 2012.
133, App. H	TK-8501: Kb recordkeeping (maintain documents showing tank is exempt).	Documentation maintained during tank operations.
133, App. H	Process Equipment located in specified units for fugitive VOC, HON minus Connectors.	LDAR program maintained during unit/equipment operation.

CD ¶	CD Requirement	Activities Undertaken
135	Comply with NSPS Subparts A and D for Boilers 5, 8, and 9 by July 31, 2012.	Boilers 5, 8, and 9 were not in operation on or after the applicability date for Subpart D of July 31, 2012. Did not exceed applicable NSPS emissions standard.
136	Comply with NSPS Subparts A and GG for Generating Turbines 1, 2, 3, 5 and 6 no later than 5 years from Date of Entry.	Emission standards not exceeded for Generating Turbines 1, 2, 3, 5 and 6. Additionally, Generating Turbines 1, 2, 3, and 6 permanently shut down and application to surrender permits submitted 2/28/17. Generating Turbine 5 permanently shut down and application to surrender permit submitted 5/30/19.
136	Comply with NSPS Subparts A and GG by Date of Entry (Generating Turbine 9).	Complied with NSPS subparts A and GG.
Part X - Reporting and Recordkeeping		
143	Submit semi-annual progress reports to EPA and DPNR.	First report submitted 1/30/12; subsequent reports submitted on semi-annual schedule.
144	Certification of semi-annual reports by HOVENSA.	All semi-annual reports submitted were certified.
Part XI – Civil Penalty		
145	Pay civil penalty to both the US and the USVI.	Penalty paid 7/5/11.

In accordance with Paragraph 231 of the above-referenced Consent Decree, I certify under penalty of law that this information was prepared under my direction or supervision by personnel qualified to properly gather and evaluate the information submitted. Based on my directions and after reasonable inquiry of the person(s) directly responsible of gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete.

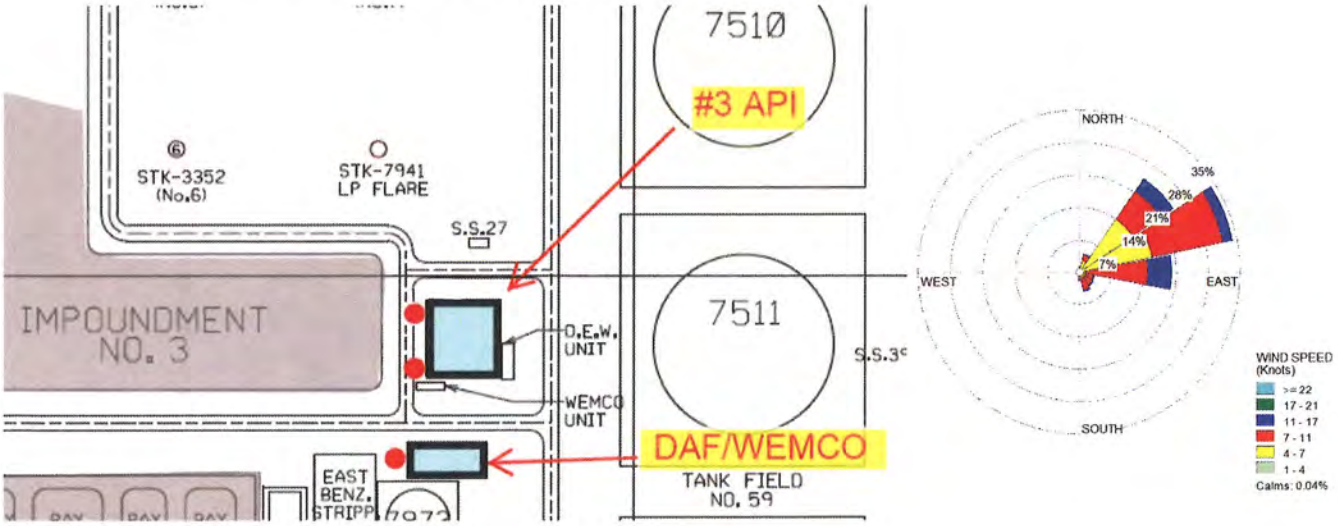
Matthew Kahn, Manager
HOVENSA, L.L.C.

cc: Tom Hill (via electronic mail)
Dan Harris, Esquire (via electronic mail)
Brian Lever (via electronic mail)
David Molloy, Esquire (via electronic mail)

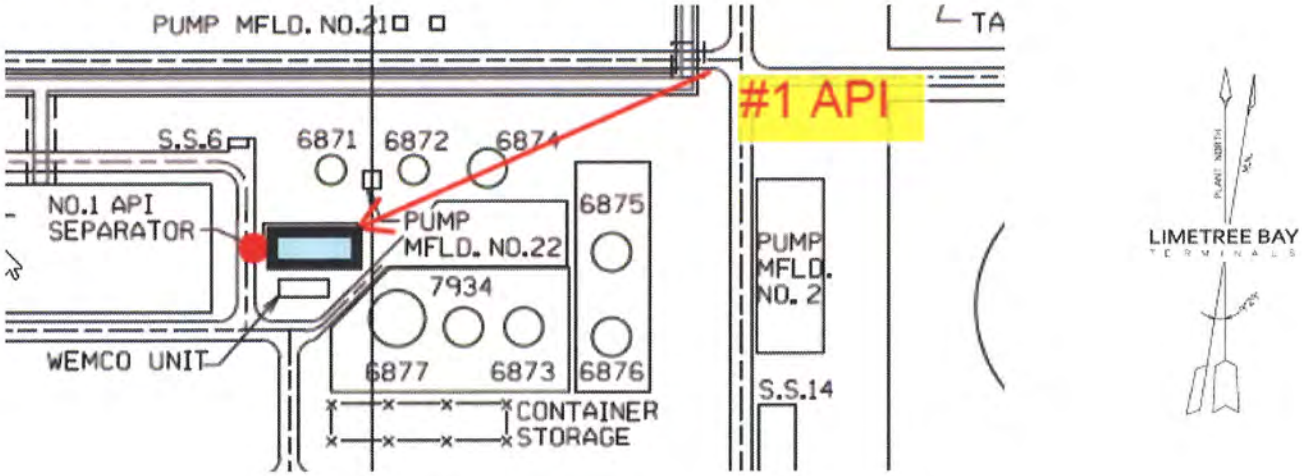

APPENDIX R
MAP OF REFINERY
SITE
LOCATION MAP
Refinery Plot No. 1
Portions of Estates Blessing & Hope
King and Queen Quarters
Terminal Plot No. 4
Portions of Estates Blessing, Hope
& Jerusalem / Figtree Hill
Refinery Plot No. 2
Estates Blessing, Hope
& Jerusalem / Figtree Hill
Refinery Plot No. 3
Jerusalem / Figtree Hill
Figtree Housing
Terminal Plot No. 9
Reclaimed Land
Plot 10
Portion of 9 RECLAIMED
Plot No. 12
WEST BASIN
HART BASIN
Caribbean Sea
Plot 11
Plot 12
Plot 13
Line Table
Curve Table
Surveyor's Notes:
Legend:
Separation of Refinery Plot No. 1
Plot No. 2 and Plot No. 3
from portions of Estates Blessing
Hope and Jerusalem & Figtree Hill
King and Queen Quarters
and Terminal Plot No.'s 4 & 5
from portions of Estates Blessing
Hope and Jerusalem & Figtree Hill
King and Queen Quarters
Along with Refinery Plots within the
Limetree Bay, Reclaimed Land being
Plots 6, 7 and 8
Terminal Plot No. 9 along with
Plots 10, 11, 12 & 13
Island of St. Croix
United States Virgin Islands
Survey Services Co.
O.L.G. No.
O.L.G. Drawing No.
Refinery
Terminal
Not Part of Facility

APPENDIX S
MAP OF H2S MONITORING LOCATIONS

#3 API and DAF/WEMCO Units (East Side)



#1 API (West Side



● Approximate location of monitor(s)

ATTACHMENT B

TO MEMORANDUM IN SUPPORT OF MOTION TO ENTER

September 30, 2020

Jeffrey Bossert Clark
Assistant Attorney General
U.S. DOJ—ENRD
P.O. Box 7611
Washington, D.C.
20044-7611

Submitted via email

Re: *United States, et al.* v. *HOVENSA L.L.C.*, Civil Action No. 1:11-cv-00006, D. J. Ref. No. 90-5-2-1-08229/1

Dear Mr. Clark,

I appreciate the opportunity to provide public comments on the First Modification of the Consent Decree ("Modification") in the above-referenced matter. I am a US Virgin Islands attorney [redacted] and former longtime resident of St. Croix. A graduate of St. Croix Country Day School (now Good Hope Country Day School) whose family has lived on island since 2000, I developed my conservation ethic and ultimately decided to pursue a career in environmental advocacy due to my years spent on St. Croix.

I. Introduction

I respectfully urge you to reject the Modification as inappropriate, improper, and inadequate because:

1) It implies a false premise that the Limetree Bay Terminals (formerly known as Hovensa and HOVIC) refinery (hereinafter Refinery) did not shut down, when the Refinery should be considered a new major stationary source under the Prevention of Significant Deterioration (PSD) rules and thus subject to the standards therein;

2) In order to effectively protect the public health and welfare of the people of the Virgin Islands, the cancer registry referenced therein must be established and significant community research undertaken *before* the commencement of polluting activity contemplated;

3) The compliance assessment and reporting protocols referenced therein allow for Limetree to self-report, when this responsibility should properly be undertaken by EPA Region 2; and

4) The Refinery activity contemplated by the Modification implicates and does not address serious concerns regarding federally-listed species and Sandy Point National Wildlife Refuge.

II. Discussion

1. The Modification Falsely Implies that the Refinery Did Not Shut Down for PSD/Clean Air Act (CAA) Permitting Purposes

As of the date of these comments, the Refinery currently has a draft Plantwide Applicability Limit permit (PAL) pending before EPA Region 2,[1] and that PAL is fundamentally and problematically predicated on the pretense that the Refinery did not shut down following its closure by Hovensa. Contrary to the Modification's assertion that "neither Hovensa nor Limetree Bay has permanently shut down and surrendered permits for the Refinery or portions of the Refinery,"[2] EPA precedent and case law clearly established that the Refinery did shut down and must thus be treated as a new stationary source under PSD rules. The Modification confuses the matter by referring to permits in broad and nonspecific terms, when the PAL has been pending for close to a year as of the date of the Modification's publication. The Modification as written must thus be rejected in order to account for practical and legal realities.

While I acknowledge the April 5, 2018 letter authored by former Assistant Administrator Wehrum to Limetree regarding EPA's reactivation policy (Wehrum Letter), this letter should be disregarded due to its lack of conformity with precedent and in light of the ethics charges against former Assistant Administrator Wehrum. Finally, the pertinent circumstances and regulations applicable to a PAL make it clear that this regime, which is fundamentally based on "actual" emissions, is not intended for facilities like this one. Limetree, which should properly be considered to be comprised of all "new" units for PSD applicability.

i. Reactivation Policy

At its foundation, the PAL is fundamentally and fatally flawed because it should properly be evaluated as a "new" stationary source under EPA's well-established "reactivation policy."[3] Predicated on longstanding agency interpretation of the CAA,[4] the reactivation policy mandates that "reactivation of facilities that have been in an extended condition of inoperation may trigger PSD requirements as 'construction' of either a new major stationary source or a major modification of an existing stationary source."[5] This policy is predicated on the notion that "to preserve their ability to reopen without a new source permit, EPA believes owners and operators of shutdown facilities must continuously demonstrate concrete plans to restart the facility sometime in the reasonably foreseeable future."[6] Under this policy, "shutdowns of more than two years . . . are presumed to be permanent" and are thus subject to all PSD requirements when reactivated.[7] It is then "up to the facility operator to rebut this presumption."[8] *Monroe Electric*, the foundational case which defines the contours of the reactivation policy, held that a "key

[1] *See*: https://www.epa.gov/sites/production/files/2019-09/documents/limetree-draft_pal_permit.pdf

[2] Modification at 4. **The undersigned notes that this section applies to PSD analysis — *not* as to whether the terms of Section 229 of the Consent Decree have come to pass.**

[3] *In the matter of Entergy Louisiana – Monroe Electric Generating Plant*, Order on Petition No. 6-99-2 (June 11, 1999). (Hereinafter, "Monroe").

[4] *Id*.

[5] *Id*. at 7.

[6] *Id*. at 9.

[7] *Id*. at 8.

[8] *Id*.

determination" in this analysis is "whether the owner or operator has demonstrated a **continuous intent** to reopen."[9] While "no single factor is likely to be conclusive," some factors that EPA has examined in determining continuous intent include "the amount of time the facility has been out of operation, the reason for the shutdown, statements by the owner or operator regarding intent, cost and time required to reactivate the facility, status of permits, and ongoing maintenance and inspections that have been conducted during the shutdown."[10] Evaluating the facts and circumstances of the Refinery in light of these factors, it is evident that there has not been a continuous intent to restart the refinery since its shutdown in 2012.

The amount of time that the Refinery has been shut down clearly indicates that the Refinery should be presumed a new source under the PSD rules. Under the reactivation policy, articulated in case law and EPA statements of policy, shutdowns of more than two years are presumed to be permanent.[11] The Refinery shuttered in January 2012, nearly nine years prior to the date of these public comments,[12] and it has not conducted oil refining activities since. Accordingly, under this factor, the Refinery should be considered a "new" source for PSD review.

As for the second factor, the reasoning behind Refinery's 2012 shutdown indicates that the Refinery should be treated as a new source under the PSD rules. Hovensa shut down the Refinery for financial and economic reasons, specifically due to its having incurred losses of over $1.3 billion over three years, caused primarily by weakness in demand for petroleum products and the addition of new capacity in emerging markets.[13] The magnitude of the financial losses driving the shutdown taken into account with global economics and Hovensa ultimately filing for bankruptcy[14] likens the Refinery's shutdown to other instances where EPA has found other facilities' economically-motivated shutdowns to be considered permanent.[15] Accordingly,

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[9] *Id*. at 9. Emphasis added.

[10] *Id*. at 8 – 9.

[11] *See Cmtys. for a Better Environment v. Cenco Ref. Co.*, 179 F. Supp. 2d 1128 (C.D.Cal.2001) (finding that a refinery shut down for six years must be treated as a new source); *Noranda Lakeshore Mines,* Memo from John Seitz, Director, Stationary Source Compliance Division, OAQPS, to David Howekamp, Director, Air Mgt. Div. Region IX (May 27, 1987) (shut down leach acid plant must be considered new source when reopening); *SME Cement, Inc.*, Memo from Edward Reich, Director Division of Stationary Source Enforcement to Sandra Gardebring, Region V (Oct. 3, 1980) (cement kiln shut down for three years held to be a new source necessitating PSD permitting upon reactivation); *Babylon #*2, Memo from Edward Reich, Director, Stationary Source Enforcement Division to William Sawyer, Region II (Aug. 8, 1980) (waste incinerator shut down for five years held to be treated as a new source); *See generally, Monroe*.

[12] Eric Watkins, *Hovensa to Close 500,000 b/d Virgin Islands Refinery*, OIL & GAS JOURNAL, January, 2012.

[13] *Id*.

[14] *In re Hovensa L.L.C., Debtor*, Chapter 11 Bankruptcy No. 15-BK-10003 MFW (V.I. Dist. Ct., Sept. 15, 2015). *See also,* Justin Jacobs, *Hovensa Files for Bankruptcy, Ending a Long-running Dispute*, PETROLEUM ECONOMIST, September, 2015 ("Hovensa filed for bankruptcy 15 September, saying that it lacked the resources to cover $1.864bn in debts and that it had reached a $184m deal with Limetree Bay Holdings, an affiliate of energy-focused private equity firm ArcLight Capital, to sell the facility's **storage terminals**, according to court documents."). Emphasis added. *The* Undersigned notes that the Wehrum Letter fails to mention Hovensa's bankruptcy.

[15] *See Monroe*. at 5 (shutdown due to "increased competition and demand-side management."); *Noranda Lakeshore Mines* (shutdown "due to market conditions" was held to be permanent); *compare to* Memorandum from John B. Rasnic to Douglas M. Skie (Nov. 19, 1991) (on file with the EPA) (Waterton Power Plant: shutdown due to repair of defective turbine not held to be permanent).

taking into account the circumstances surrounding the Refinery's economically and financially-motivated shutdown, this factor weighs in favor of a finding that the Refinery was permanently shut down.

Evaluating the third factor, "statements by the owner or operator regarding intent," it is clear that the owners have not maintained a **continuous** intent to reopen the Refinery since the 2012 shutdown. While the Wehrum Letter claims to rely on "company statements, press releases, and various correspondence from 2011 through 2017" to support its conclusion that the Refinery was not permanently shut down, express indicia of intent by and regarding Hovensa make it clear that Hovensa did not maintain continuous intent to restart the Refinery; in fact, for some time, it attempted to operate the Refinery as a long-term oil storage terminal. The press release issued by Hess immediately following the closure in January 2012 stated that: "Following the shutdown, the complex will operate as an oil storage terminal."[16] In August 2012, a local news outlet reported that: "Since the closure, **[Hovensa] has championed the idea of converting the refinery into an oil storage facility.**"[17] However, then-Governor deJongh "dismissed Hovensa's oil storage facility proposal, saying it simply would not benefit the territory."[18] Hovensa's intentions to shutter the refinery are especially clear by its officials' purported belief that Hovensa's concession agreement with the Government of the Virgin Islands was rendered "moot since the facility shut down."[19] A few months later, a January 2013 *S&P Global* article published stated that Hovensa then had "plans to become an oil storage terminal," and then referred to the Government of the Virgin Islands' rejection of "Hovensa's long-term oil storage terminal plan."[20] While it would appear that the Government of the Virgin Islands intended to keep the Refinery open in 2012-2013, statements of the then-owner, Hovensa, indicate that its intent was to operate the Refinery as an oil storage terminal; as the Government of the Virgin Islands is not the owner of the Refinery, its intentions are immaterial to this analysis.

In September 2015, Hovensa came to an initial agreement with Limetree and ultimately transferred the ownership of the Refinery to Limetree; this fact, alone, weighs in favor of a finding that the Refinery should be considered a "new" source for PSD review. EPA has stated that, "A change in ownership does not, standing alone, render a stationary source subject to PSD provisions. However, the circumstances surrounding a change in ownership may be probative of whether the shutdown of the source should be deemed permanent, which is the key analysis that must be made under EPA's reactivation policy."[21] As discussed in the preceding paragraph, it is clear that Hovensa did not continuously intend to restart the Refinery but intended to operate same as an oil storage facility. Crucially, upon taking ownership, Limetree also did not intend to restart the facility, at least not continuously from its point of acquisition until the present. As one

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[16] Press Release, Hess Corporation, Hess Announces Charge Related to Closure of Hovensa Joint Venture Refinery (Jan. 28, 2012) (on file with Hess).

[17] Source staff, *Governor Slams Hovensa Proposal, Threatens Lawsuit*, ST. JOHN SOURCE, Aug. 7, 2012.

[18] *Id*.

[19] *Id*.

[20] John-Laurent Tronche, *Hovensa Refinery, Once World's Largest, Likely to Remain* Shut, S&P GLOBAL PLATTS, Jan. 18, 2013 (while both speculative and anonymous, the Undersigned also notes the following passage from the article for context regarding the reality of Hovensa's intent during this time period: "When asked if Hovensa would ever restart, one source said, 'Nope.'").

[21] *See* Memorandum from David P. Howekamp to Robert T. Connery (Nov. 6, 1987) (on file with the EPA) (*Cyprus Casa Grande,* interpreting 40 C.F.R. § 52.21(b)(2)(iii)(g)).

news outlet stated, "Limetree's parent company ArcLight Capital owns pipelines and storage facilities across the US **and will seek to operate the terminal, rather than the refinery as a whole**."[22] Coverage of a later deal whereby Sinopec planned to "lease more than three quarters of the operational storage at the Hovensa oil terminal," allowed ArcLight (Limetree's parent company) "two years to assess what provisions [of the refinery] would be utilized and what would be dismantled and removed," reporting a payment structure within the agreement for "the sale of scrap metal."[23] While former Governor Mapp stated that the deal included "[p]otentially restarting refinery operations," he emphasized a plan to "look at the entire south shore area and pursue other business and opportunities," such as an asphalt plant.[24] Accordingly, while is clear that the Government of the Virgin Islands here aspired to restart the Refinery, it is also clear that Hovensa and Limetree have not maintained a continuous intent to restart the refinery since its 2012 shutdown, as evinced by repeat representations of their intentions to operate the Refinery as an oil storage facility or, at least in part, to sell it off as scrap metal. In applying this standard to an idled refinery in California, one federal District Court held that: "[I]t does appear that for at least some short period of time, [the facility] intended to shutdown and dismantle the facility, not restart it. ***Monroe Electric*** **indicates that this is fatal.**"[25] Thus, this factor weighs heavily in favor of a finding that the owners of the Refinery did **not** maintain a continuous intent to restart it, and accordingly, the Refinery should be considered a new source for applicability of the PSD rules.

As for the fourth factor in the reactivation policy analysis, cost and time to reactivate the facility, the more money and time that will be required to get the facility up and running, the more likely that the source is going to be found to be a "new" source for PSD applicability.[26] The Wehrum Letter appears to have analyzed this factor backwards, finding the Refinery not to be a "new" source when "Hovensa spent over $400 million to maintain the restart capability of the refineries."[27] As of July 2018, the investment required to "refurbish and restart a portion of the [Refinery]" was reported to be $1.4 billion.[28] The magnitude of this investment aligns with a 2015 statement by Fadel Gheit, an oil and gas analyst: "Hovensa's improvement needs are too large for it to be worth restarting. . . the refinery just isn't competitive anymore."[29] The analyst further stated that: "To restore full refining operations, it needs significant investments, in the billions, not millions of dollars, depending on the final configuration of the facility[.]" Accordingly, the magnitude of the investment required to restart the Refinery supports a finding that, for the purposes of PSD review, the Refinery should be considered permanently shut down.

The fifth factor in the reactivation policy analysis — status of permits — at most, weighs neutrally in evincing intent to restart. While Hovensa and, later, Limetree have maintained several of the environmental permits for the facility, most of these would be required, anyway,

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[22] Justin Jacobs, *Hovensa Files for Bankruptcy, Ending a Long-Running Dispute*, PETROLEUM ECONOMIST, Sept. 22, 2015. Emphasis added.
[23] Source Staff, *Sinopec, Freepoint Lease Hovensa Storage: Update*, ARGUS, DEC. 1, 2015.
[24] *Id*.
[25] *Cmtys. for a Better Environment*, 179 F. Supp. 2d at 1147.
[26] *See Id*. at 1146 ("The numbers are higher than in other cases where the EPA found facilities permanently shutdown. . . the cost and time for reactivation factor slightly favors finding a permanent shutdown.");
[27] Wehrum Letter.
[28] Collin Eaton, *St. Croix Oil Refinery gets $1.4 Billion Investment, Plans to Restart*, July 2, 2018.
[29] Kelsey Nowakowski, *Monarch Energy Still Interested in Hovensa, Despite Obstacles*, Oct. 2, 2015.

for the Refinery's wastewater treatment and oil storage facilities, as well as for the containment of hazardous waste at the site.[30] While the Wehrum Letter appears to put some weight on the fact that the facility has "maintained critical refinery equipment," this situation likens itself to situations such as the *Cenco* case, where the court held that the refinery was shut down for PSD purposes even when the company maintained equipment at the facility "such as utility, storage, wastewater treatment, stormwater management and emergency equipment."[31] Thus, taking this fifth factor into account, the analysis still, on balance, favors a finding that the Refinery must properly be considered a "new" source for the purposes of PSD applicability.

The final factor, "ongoing maintenance and inspections" that have taken place since the shutdown, weighs in favor of a finding that the Refinery should be considered a new stationary source. Crucial to this determination is whether this ongoing maintenance renders the facility easily able to be restarted; in the *Noranda Lakeshore Mines* opinion, EPA found the shutdown of a roaster leach plant in question to be permanent despite evidence that the plant was maintained during shutdown.[32] In the *Waterton Power Plant* opinion, EPA held that "the continued maintenance of the facility throughout the years," and "the resulting ability to bring the plant back on line with only a few weeks of work," presented a "unique situation" where a plant shut down beyond the two year presumption threshold was found not to be considered a new source for PSD applicability.[33] As is evident from the aforementioned investment (over $1 billion) needed to bring the Refinery into functional condition, taken into consideration with previously-discussed indicia of the Refinery's condition from shutdown until present, the EPA order requiring at least $700 million in upgrades to pollution controls to bring the Refinery into compliance with the CAA,[34] combined with the stated 18-month timeline for refurbishment,[35] it is clear that the Refinery has not continuously been maintained in a condition where it could be restarted easily. Accordingly, this factor indicates that the Refinery should be considered a "new" source for PSD review applicability.

In sum, reviewing the relevant facts and circumstances in light of the EPA's reactivation factors, it is evident that the Refinery can only reasonably be found to be a "new" source for purposes of PSD review. Accordingly, implications regarding the PAL, which is inappropriately predicated and calculated on a presumption that the Refinery is an "existing" source, must be rejected.

ii. Problems with the April 5, 2018 Concurrence Letter

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[30] EPA, Envirofacts, Limetree Facility Summary, https://enviro.epa.gov/enviro/multisys2_v2.get_list?facility_uin=110000307864 (executed on Nov. 22, 2019); EPA, FRS Facility Detail Report, https://enviro.epa.gov/enviro/fii_query_dtl.disp_program_facility (executed on Nov. 22, 2019).

[31] *Cmtys. for a Better Environment*, 179 F. Supp. 2d at 1147.

[32] *Noranda Lakeshore Mines.*

[33] Memorandum from John B. Rasnic to Douglas M. Skie (Nov. 19, 1991) (on file with the EPA) (Waterton Power Plant).

[34] Press Release, The United States Department of Justice, Nation's Second Largest Refinery to Pay $700 Million to Upgrade Pollution Controls at U.S. Virgin Islands Facility (Jan. 26, 2011) (on file with Department of Justice).

[35] Collin Eaton, *St. Croix Oil Refinery gets $1.4 Billion Investment, Plans to Restart*, July 2, 2018.

In addition to being misaligned with pertinent EPA precedent, as established in the prior subsection, the Wehrum Letter must be disregarded due to the circumstances surrounding former Assistant Administrator Wehrum's (Wehrum) departure from EPA. Wehrum resigned from EPA in June 2019, amid an investigation by the Energy and Commerce Committee into charges that Wehrum violated pertinent ethics rules by failing to recuse himself from matters involving his utility industry legal clients.[36] Shortly after his resignation, EPA's inspector general launched an additional investigation into whether Wehrum's "efforts at the EPA to weaken climate change and air pollution standards" improperly benefited his former fossil fuel industry clients.[37] While the Undersigned is not aware of any evidence that the Wehrum Letter was, in itself, a direct result of misconduct by Wehrum or Limetree, the nature of the charges upon which Wehrum is being investigated — abusing his position to improperly benefit certain regulated parties — begs reconsideration, particularly taken in conjunction with the fact that it represents a clear departure from EPA precedent as applied to these facts. Prior to Wehrum's departure from EPA, the Wehrum Letter drew attention for being "unusual" due to its "deference to the project proponent's . . . explanation of the project and how it should be defined and construed."[38] This industry deference is troubling in the context of Wehrum's resignation and investigation.

2. The Modification Must Require that the Cancer Registry be Established Prior to Allowing for Potentially Carcinogenic Pollution

In order to effectively and proactively protect the public health of the people of the Virgin Islands, the Modification must require that the cancer registry and pediatric environmental specialty health unit[39] be fully established and completed *before* the commencement of the polluting activities contemplated therein. This is critical, as the people of the USVI tend to have worse health outcomes and access to fewer quality healthcare resources as compared to counterparts in the mainland United States. Some of these poor health outcomes include a higher infant mortality rate and greater risk of heart disease.[40] And, to exacerbate these issues, the population in South Central St. Croix (the area surrounding the Refinery) suffers several factors that indicate impeded access to healthcare services. An estimated 26.9% of the South Central St. Croix population lives below the poverty line.[41] People living in poverty typically face greater barriers to healthcare access compared to people who are not living in poverty, such as lacking health insurance and funds to cover out-of-pocket medical expenses.[42]

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[36] Juliet Eilperin & Brady Dennis, *Top EPA Official Resigns Amid Scrutiny Over Possible Ethics Violations*, THE WASHINGTON POST, June 26, 2019.

[37] Lisa Friedman, *Bill Wehrum, an Archietect of E.P.A. Rollbacks, Faces New Ethics Inquiry*, July 22, 2019.

[38] Eric L. Hiser, *Harbinger of Things to Come: Limetree Bay Terminals*, NSR LAW BLOG, March 25, 2019.

[39] Modification at 68.

[40] Gloria B. Callwood et al., Health and Health Care in the U.S. Virigin Islands: Challenges and Perceptions (2013), *reprinted in* NCBI HHS Public Access Author manuscript, ABNF J. 2012 Winter; 23(1): 4-7 (the Undersigned notes that the cancer information in this article is outdated).

[41] FEMA St. Croix Recovery Plan at 10.

[42] U.S. Department of Health & Human Services, Financial Condition and Health Care Burdens of People in Deep Poverty, https://aspe.hhs.gov/basic-report/financial-condition-and-health-care-burdens-people-deep-poverty (July 16, 2015).

This is supported by the estimate that 30% of the USVI population does not have health insurance (compared to 12% in the United States).[43]

Public health impacts from oil refining activities on-island have long been a concern of the territory.[44] This concern is warranted, as the criteria pollutants are well-known to cause adverse health impacts.[45]

According to EPA, Particulate Matter exposure is linked to a variety of health problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and respiratory symptoms."[46] Carbon Monoxide can be of particular concern for people with certain types of heart disease.[47] This is significant given the increased risk for heart disease suffered by Virgin Islanders. Additionally, Sulfur Dioxide and Nitrogen Oxides — particularly Nitrogen Dioxide — are known to harm the human respiratory system.[48]

Volatile Organic Compounds (VOCs) from petroleum refineries are associated with a number of health effects; short exposure "may cause dizziness, fatigue, nausea, and depression . . . [and] certain Volatile Organic Compounds may even result in mutations and cancers, and . . . damage to the central nervous system, kidneys, and liver."[49] Benzene, a VOC "of particular concern since it is carcinogenic,"[50] is already being emitted by the Refinery's current oil storage activities; for example, in 2018, the Refinery released 6,839 pounds of benzene.[51] The undersigned acknowledges EPA's 2011 study monitoring VOCs on St. Croix, including downwind from the Refinery.[52] However, this study lasted only four months. According to Kathleen Arnold-Lewis, territorial director of the Chronic Disease Program at the Charles Harwood Memorial Hospital on St. Croix, "the rate of cancer deaths increased in the Virgin Islands from 2003 – 2013, overtaking heart disease as the leading cause of death in the

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[43] Samantha Artiga et al., *Health Care in Puerto Rico and the U.S. Virgin Islands: A Six-Month Check-Up After the Storms (Report)*, KFF, APR. 24, 2018.

[44] *See* Caroline A. Browne, *Op-ed: Learning from the Lessons of the Past About Oil Refineries*, THE ST. JOHN SOURCE July 24, 2018; AARP Virgin Islands, *St. Croix Residents — Are You Worried About the Air You Breathe?*, AARP, July 14, 2011.

[45] EAR at 134. More detailed discussion of air pollution

[46] EPA, Particulate Matter (PM) Pollution, Health and Enviromental Effects of Particulate Matter (PM), https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm.

[47] EPA, Carbon Monoxide (CO) Pollution in Outdoor Air, Basic Information about Carbon Monoxide (CO) Outdoor Air Pollution, https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution#Effects.

[48] EPA, Sulfur Dioxide (SO2) Pollution, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#effects; EPA, Nitrogen Dioxide (NO2) Pollution, Basic Information about NO2, https://www.epa.gov/no2-pollution/basic-information-about-no2#Effects.

[49] Aiswarya Ragothaman and William A. Anderson, "Air Quality Impacts of Petroleum Refining and Petrochemical Industries," J. *Environments* **2017**, *4*, 66; doi:10.3390/environments4030066.

[50] Ragothaman and Anderson at 4.

[51] EPA, Enforcement and Compliance History Online, "Detailed Facility Report: Limetree Bay Terminals (FKA Hovensa)," https://echo.epa.gov/detailed-facility-report?fid=110000307864, last visited September 3, 2019.

[52] EPA, "Special Air Toxic Monitoring Study," St. Croix (United States Virgin Islands), August 2011, https://www3.epa.gov/region02/waste/hovensa/hovensa-VI-Fact-Sheet-Aug-18.pdf, last visited September 3, 2019.

territory."[53] The undersigned notes that the Refinery was operating at a high volume during much of that time period.

In addition to general public cancer risk from passive environmental exposure, epidemiological evidence indicates "an increased risk for pleural cancer" in refinery workers, possibly due to past exposure to benzene.[54] Limetree has also noted the continued presence of asbestos in the Refinery,[55] an additional risk for workers.

In sum, given the high vulnerability of the surrounding community (and the USVI, generally) to certain health conditions and barriers to healthcare — and the likelihood of these existing problems being connected to the Refinery's prior activities — establishment of the cancer registry and pediatric environmental specialty health unit must be completed before polluting activities are allowed to commence.

3. The Modification Must Require Monitoring and Reporting from a Third Party – Not Limetree

For the terms of the Modification to be carried out, adequate monitoring and reporting are critical; however, problematically, the Modification provides for reports to be produced by Limetree. This is self-reporting mechanism is problematically reminiscent of how, according to Senator Nellie Rivera-O'Reilly, "the U.S. government allowed Hovensa to 'self-report' its emissions, even though some residents had complained of becoming 'violently ill' from pollution."[56] Hovensa's unsustainable environmental protection and business practices ultimately resulted in multi-million dollar fines for violating the CAA and later, bankruptcy. Accordingly, in the interest of not repeating history, EPA Region 2 should be placed in charge of monitoring Limetree's monitoring data for violations, rather than relying on self-reporting.

4. The Activity Contemplated by the Modification Implicates and Does Not Address Serious Concerns Regarding Imperiled Species and Sandy Point National Wildlife Refuge.

Finally, the activity contemplated by the Modification implicates and does not address serious concerns regarding federally-listed species, Sandy Point National Wildlife Refuge, and climate change.

i. Imperiled Species Concerns

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[53] Susan Ellis, *V.I. Central Cancer Registry will Report in 2018*, THE ST. JOHN SOURCE, March 21, 2017.
[54] Pesatori et. al., "Cancer risk in oil refinery workers: a mortality study in four Italian plants," J. Occupational Medicine, 71:1, 2014.
[55] Susan Ellis, *Decades Old Asbestos Cases Inch Forward*, THE ST. CROIX SOURCE, May 13, 2019,.
[56] Tim Craig, *Hurricanes Left Behind Mountain of Trash in the Virgin Islands – And There's Nowhere to put it*, THE WASHINGTON POST, March 4, 2018.

The Refinery activities contemplated by the Modification have the potential to adversely affect at least 23 ESA-listed species, including four sea turtle species, seven coral species, and four whale species.[57] These species are as follows:

1) Hawksbill sea turtle – Endangered
2) Leatherback sea turtle – Endangered
3) Green sea turtle (both North and South Atlantic Distinct Population Segments – "DPS") – Threatened
4) Loggerhead sea turtle – Threatened
5) Nassau grouper – Threatened
6) Scalloped hammerhead shark (Central Atlantic and Southwest Atlantic DPS) – Threatened
7) Oceanic whitetip shark – Threatened
8) Gian manta ray – Threatened
9) Elkhorn coral – Threatened
10) Staghorn coral – Threatened
11) Pillar coral – Threatened
12) Lobed star coral – Threatened
13) Mountainous star coral – Threatened
14) Boulder star coral – Threatened
15) Rough cactus coral – Threatened
16) West Indian manatee — Threatened
17) Blue whale – Endangered
18) Fin whale – Endangered
19) Sei whale – Endangered
20) Sperm whale – Endangered
21) Least tern - Endangered[58]
22) St. Croix ground lizard – Endangered
23) Roseate tern – Threatened

It is crucial that the Modification address imperiled species, as the Refinery was constructed before the enactment of the ESA,[59] and acute loss of biodiversity has taken place in recent history.[60] The Refinery presents serious risks to wildlife vis-à-vis the air emissions, as well as other impacts of the Refinery including, but not limited to, as oil spills, other accidents, and ship strikes. Accordingly, it is apparent that the Refinery activities will almost certainly

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[57] *See generally* NOAA Fisheries, SER-2018-19292, Re: Limetree Bay Terminal Single Point Mooring, St. Croix, USVI (SAJ-2017-00416 (SP-JCM)) Draft Biological Opinion, February 12, 2019. (hereinafter "USACE BiOp"); Environmental Assessment Report prepared for Major Coastal Zone Management (CZM) Permit Application No. CZX-10-19(L&W); https://www3.epa.gov/region02/waste/fshovens_statementof_basis_aoc3.pdf/

[58] U.S. Fish & Wildlife Service, Midwest Region Endangered Species (the endangered Interior Least Tern overwinters in the Caribbean).

[59] The Refinery was completed in **. U.S. Fish & Wildlife Service, Endangered Species Overview (last updated: December 11, 2018) (the ESA was enacted in 1973).

[60] United Nations, UN Report: Nature's Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating,' (May 6 2019) https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/.

result in the take[61] of Endangered or Threatened species. I thus implore DOJ to reject the Modification due to its silence on this issue.

1. Air Emissions Impacts

The air emissions contemplated by the Refinery activities in the Modification pose significant risk to many of the above-listed species. Avian species, such as the Least Tern and Roseate Tern, are particularly vulnerable to the impacts of air pollution, particularly from Nitrogen Oxide and Particulate Matter. Nitrogen Oxide can cause direct and irreversible damage to birds' lungs.[62] "Long-term exposure can lead to inflammation, ruptured blood vessels, and lung failure."[63] Nitrogen Oxide additionally presents hazards by soil and water to become more acidic via acid rain.[64] "[T]he primary hypothesis for the effects of acid deposition on terrestrial birds is that soil acidification can reduce the abundance of ground- dwelling invertebrates that some birds require for adequate calcium supply."[65] Additionally, "[a] decreased availability of high calcium based aquatic invertebrates due to acidification is known to adversely affect egg laying and eggshell integrity in birds, and the growth of hatchling birds and neonatal mammals."[66] Particulate Matter is a concern, as well; birds are more exposed to Particulate Matter than humans because they have a higher breathing rate and spend more time in the open air.[67] They are additionally vulnerable to PM becoming lodged into their lungs.[68]

Air pollution additionally presents threats to the above-listed marine species, particularly coral and air-breathing mammals. As noted above, Nitrogen Oxide contributes to the acidification of water, including ocean acidification.[69] Indeed, some "water pollution" actually begins as air pollution and settles into waterways and oceans.[70] In addition to emissions of Nitrogen Oxide, the facility will emit significant amount of greenhouse gases, including carbon dioxide, which is the primary driver of global warming and ocean acidification. Coral species, like the species listed above, are extremely vulnerable to the impacts of ocean acidification; this is due to their being "dependent on calcium carbonate for shell formation . . . because the additional carbonic acid in the ocean shifts the chemical equilibrium of the carbonate system, increasing the bicarbonate ion concentration and decreasing the carbonate shell– and skeleton–

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[61] Under the ESA, "[t]he term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." 16 USCS § 1532(19).
[62] Kenneth Qin, *Birds Suffer from Air Pollution, Just Like We Do*, AUDUBON CALIFORNIA, July 23, 2015.
[63] *Id*.
[64] Gary M. Lovett et al., *Effects of Air Pollution on Ecosystems and Biological Diversity in the Eastern United States*, THE YEAR IN ECOLOGY AND CONSERVATION BIOLOGY, *reprinted* in Lovett NYAS, 2009. https://www.caryinstitute.org/sites/default/files/public/reprints/Lovett_NYAS_2009.pdf.
[65] *Id*.
[66] Scheuhammer, *Effects of acidification on the availability of toxic metals and calcium to wild birds and mammals*, 71 Envtl. Pollut., 329 (1991).
[67] Kenneth Qin, *Birds Suffer from Air Pollution, Just Like We Do*, AUDUBON CALIFORNIA, July 23, 2015.
[68] *Id*.
[69] Ida-Maja Hassellov et al., Shipping Contributes to Ocean Acidification, GEOPHYSICAL RESEARCH LETTERS, VOL. 40, 2731–2736, June 6, 2013, https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1002/grl.50521
[70] M. Vikas & G.S. Dwarakish, *Coastal Pollution: A Review*, 4 AQUATIC PROCEDIA, 381, 385 (2015) https://reader.elsevier.com/reader/sd/pii/S2214241X15000528?token=501AB6501D3EA9B53D2041319AA6F4C7BE4D2F2589E201784011DECFBC425731D99A4F8B857F731C38640B2EFBAFA45B.

building organisms, such as . . . reef-forming corals."[71] Ocean acidification will increase their vulnerability "by increased energetic costs needed to maintain net calcification."[72] Noncalcareous marine flora and fauna also suffer effects, albeit less obvious effects of ocean acidification, such as neurological changes that alter behavior.[73]

Finally, research indicates that VOCs can impact air-breathing mammals, particularly cetaceans. One study of the chemical composition of Grey Whales' exhales matched against a database of VOCs found in humans.[74]

2. Impacts on Wildlife from Oil Spills and Similar Accidents

Oil spills, a foreseeable negative impact of an oil refinery, pose a serious risk to the 23 ESA-listed species in the footprint of the refinery.[75] Oil can harm wildlife through inhalation, ingestion, physical contact, and absorption. Contamination has the potential to occur at all levels of the food chain.[76] Ingestion can kill animals immediately. It can also result in damage to the lungs, liver, or kidneys; immune system suppression, skin irritation and ulceration; behavioral changes that may affect an animal's ability to find food or avoid predators; and impaired reproduction (affecting the species' ability to survive and recover).[77] Sea turtles are prone to oil becoming trapped in their throats through swallowing and inhalation, resulting in toxic oil compounds becoming absorbed into organ tissues.[78] Sea turtles may be susceptible to oil contamination when swimming to shore to nest. Mother turtles can pass on oil toxins to their young developing in their eggs.[79] Therefore, oil spills pose a very serious and immediate threat to listed turtles like those connected to the 14 turtle nests noted near the Refinery.[80]

Scientists have long established that extreme weather events, particularly hurricanes, have been increasing in intensity as the climate continues to warm, and this is projected to continue.[81] The actual frequency and increasing severity of hurricanes are crucial factors to consider in evaluating ESA impacts from the Refinery because severe weather events are often tied to ecologically-devastating discharges from industrial facilities. I am especially concerned

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[71] Aaron L. Strong et al., *Ocean Acidification 2.0: Managing our Changing Coastal Ocean Chemistry*, 64 BioSience, 581, 581 (2014).
[72] *Id*. at 584.
[73] *Id*.
[74] Raquel Cumeras et al., *Chemical Analysis of Whale Breath Volatiles: A Case Study for Non-Invasive Field Health Diagnostics of Marine Mammals*, 4 METABOLITES, 790-806 (2014) https://www.mdpi.com/2218-1989/4/3/790/htm.
[75] *See generally* U.S. Fish and Wildlife Service, Effects of Oil on Wildlife and Habitat, June 2010, https://www.fws.gov/home/dhoilspill/pdfs/DHJICFWSOilImpactsWildlifeFactSheet.pdf.
[76] *Id*.
[77] *Id*.
[78] NOAA Office of Response and Restoration, "How Do Oil Spills Affect Sea Turtles?" June 16, 2016, https://response.restoration.noaa.gov/about/media/how-do-oil-spills-affect-sea-turtles.html, last visited September 3, 2019.
[79] *Id*.
[80] EAR at 130. The undersigned notes that these nests "include nests which were laid by leatherbacks."
[81] *See* 2017: *Climate Science Special Report: A Sustained Assessment Activity of the U.S. Global Change Research Program* (D.J. Wuebbles, et. al.), U.S. GLOBAL CHANGE RESEARCH PROGRAM (2017); U.S. GLOBAL CHANGE RESEARCH PROGRAM, "NATIONAL CLIMATE ASSESSMENT" (2014); Sonia I. Seneviratne, et al., Intergovernmental Panel on Climate Change, *Changes in Climate Extremes and their Impacts on the Natural Physical Environment* (2012).

by the catastrophic oil spill that Hurricane Dorian caused in the Bahamas in September 2019.[82] Famously, Hurricane Katrina caused the release of 1.05 million gallons of mixed crude oil from the Murphy Oil Refinery in Louisiana in 2005.[83] Less famously but more pertinently, in 1989, Hurricane Hugo caused a spill of 10,000 barrels of oil from the Refinery in question. The risk of such events is only going to increase with the reality of a changing climate, dramatically so in the US Virgin Islands.[84]

Due to the toxicity of oil and the rate at which it can spread, wildlife mortality from oil spills can be catastrophic. For example, Deepwater Horizon oil spill "likely harmed or killed about 82,000 birds of 102 species; about 6,165 sea turtles; as many as 25,900 marine mammals[.]"[85] In sum, the deleterious potential impacts of oil spills upon listed and socially valuable fishery wildlife cannot be overstated.

Unfortunately, oil spill "response" is often extremely ineffective. While cleaning animals affected by an oil spill may present a comforting image to the public, scientific studies indicate that such "clean up" efforts may be largely futile.[86] For example, one 1996 study of brown pelicans fouled by an oil spill, "cleaned," and then released back into the wild found that the majority "died or failed to mate again . . . [and] the researchers concluded that cleaning brown pelicans couldn't restore them to good breeding health or 'normal survivability.'"[87] Following the 2002 sinking of the *Prestige*, whereby the split-in-half tanker spilled more than 70 million liters of bunker fuel, German biologist Silvia Gaus studied thousands of "cleaned" animals and concluded that "the post-treatment survival rate of oil-soaked birds is less than one percent."[88] The negative impacts of well-intentioned cleanup efforts are not confined to birds, but apply equally to sea turtles, too. According to NOAA, "Spill response and cleanup operations . . . can harm sea turtles unintentionally. Turtles can be killed after being struck by response vessels or as a result of oil burning and skimming activities. Extra lighting and activity on beaches can disrupt nesting and hatchling turtles, as well as incubating eggs."[89]

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[82] Aaaron Clark, *Hurricane Dorian Rips Roofs off Bahamas Oil Storage Tanks, Causes 'Catastrophic' Spilling,* TIME, Sept. 6, 2019.

[83] US EPA et. seq., "Murphy Oil Spill Fact Sheet, February 2006, http://www.columbia.edu/itc/journalism/cases/katrina/Federal%20Government/Environmental%20Protection%20Agency/Murphy%20Oil%20Spill%20Fact%20Sheet%20Feb%202006.pdf, last accessed September 3, 2019.

[84] U.S. Global Change Research Program, "Fourth National Climate Assessment, Chapter 20: U.S. Caribbean," https://nca2018.globalchange.gov/chapter/20/, last accessed September 3, 2019.

[85] Center for Biological Diversity, "A Deadly Toll," https://www.biologicaldiversity.org/programs/public_lands/energy/dirty_energy_development/oil_and_gas/gulf_oil_spill/a_deadly_toll.html, last visited September 5, 2019.

[86] *See generally* Andrew Nikiforuk, *Why We Pretend to Clean Up Oil Spills*, HAKAI MAGAZINE VIA SMITHOSIAN MAGAZINE, July 12, 2016, https://www.smithsonianmag.com/science-nature/oil-spill-cleanup-illusion-180959783/, last visited September 4, 2019.

[87] *Id*.

[88] *Id*.

[89] NOAA Office of Response and Restoration, "How Do Oil Spills Affect Sea Turtles?" June 16, 2016, https://response.restoration.noaa.gov/about/media/how-do-oil-spills-affect-sea-turtles.html, last visited September 3, 2019.

The sheer scale and speed at which spilled oil can spread over water presents a serious practical concern regarding recovery efforts, even when recovery workers are mobilized and ready. Jeffrey Short, a retired National Oceanic and Atmospheric Administration research chemist who studied the aftermath of the 2010 Deepwater Horizon disaster in the Gulf of Mexico as well as the Exxon Valdez spill in Prince William Sound, noted that **the Exxon Valdez spill grew at the alarming rate of half a football field per second over two days.**[90] It is worth noting that the Exxon Valdez spill happened as a result of a ship collision with a reef, and not during a serious tropical cyclone and its resultant winds and waves, as is a likely oil spill scenario here.

Additionally, despite the incorporation of several response and recovery technologies, post-spill oil recovery levels are often in reality quite low. Estimates indicate that, out of the total amount of oil it spilled in the 2010 Deepwater Horizon spill, "BP recovered 3 percent through skimming, 17 percent from siphoning at the wellhead, and 5 percent from burning."[91] Despite occurring 20 years later, this recovery rate was not a substantial improvement over the *Exxon Valdez* spill where an estimated 14 percent of the oil was recovered.[92] This is due to fundamental shortcomings on some recovery methods. Conventional containment booms, for example, do not work in areas with severe waves (which are often where an oil spill is prone to happen, e.g., during a severe weather event), and solutions like burning oil causes air pollution by turning water pollution "into sooty greenhouse gases."[93] As a practical matter, we also question how quickly Limetree's oil spill response team will be able to address an oil spill that happens during a severe weather event such as a tropical cyclone, as extreme winds and precipitation can last for several hours. As a report prepared for two First Nations tribes and the City of Vancouver, Canada summarized the matter: "Actual oil spills . . . reinforce the reality that collecting and removing oil from the sea surface is a challenging, time-sensitive, and often ineffective process, even under the most favourable conditions."[94]

Due to a polystyrene incident caused by contractors working for Limetree, I am extremely concerned about the potential impacts to wildlife from discharge of other dangerous materials, particularly during inclement weather. When Tropical Storm Karen passed the south shore of St. Croix on September 24, 2019, more than fifty 110-pound polystyrene floats from the installation of the Limetree pipeline broke loose and washed ashore.[95] Polystyrene, a petroleum-based non-biodegradable foam is a known hazard to wildlife because it can cause intestinal blockages when ingested (which happens easily and often when marine species mistake polystyrene for food).[96] It is additionally dangerous because, being chemically absorbent, it can pick up and concentrate other pollutants in the ocean — rendering it extremely dangerous when

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[90] *Nikiforuk*.
[91] *Id*.
[92] *Id*.
[93] *Id*.
[94] Nuka Research and Planning Group, LLC, "Oil Response Analysis: Technical Analysis of Oil Spill Response Capabilities and Limitations for Trans Mountain Expansion Project," May 1, 2015, https://vancouver.ca/images/web/pipeline/NUKA-oil-spill-response-capabilities-and-limitations.pdf, last visited September 4, 2019.
[95] Source Staff, Refinery's Foam Plastic Litters South Shore Months After September Storm, Nov. 18, 2019.
[96] Source Staff, *Why New York Banned Polystyrene Foam*, July 1, 2015.

ingested by wildlife such as sea turtles.[97] As of November 18, 2019, pieces of polystyrene, some as small as bits of rice, were still seen washing up on St. Croix's beaches.[98]

The polystyrene incident and Limetree's slow, lacking response thereto highlight the acute risk that this facility poses to St. Croix's wildlife, including and especially the 23 ESA-listed species noted herein. It is self-evident that the continued construction and operation of the Refinery will effectuate the take of imperiled wildlife. Tropical Storm Karen was, by St. Croix standards, a fairly mild tropical cyclone event. As severe weather events increase in intensity with climate change, it is highly foreseeable that such events will occur again. Most of Limetree's rhetoric since the incident has focused on "response."[99] Yet as is apparent from the continued presence of polystyrene pieces, adequate prevention is the only effective means to prevent jeopardy to listed species.

3. Impacts from Ship Strikes

The listed species in the impact zone of the facility are additionally at risk from increased vessel traffic that will necessarily accompany the restart of Refinery activities. Marine vessel traffic presents tremendous hazards to wildlife, both from the potential for oil spills (the implications of which are discussed at length, above) and from direct strikes. This concern is pertinent to many of the species that live in the sea near the Refinery, particularly sea turtles and whales.

All species of sea turtle are vulnerable to vessel strikes as they bask near the surface, breathe at the surface, or forage in shallow areas or on prey near the sea surface.[100] Given the proximity of the Refinery to sea turtle nesting areas, it is of particular concern that adult sea turtles are at increased risk of strike during breeding and nesting season.[101] According to NOAA Fisheries, "[i]t is estimated that hundreds of sea turtles are struck by vessels in the United States every year, and many of them are killed without being observed."[102]

Ship strikes present a serious mortality risk to whales,[103] as well. In particular, ship strikes of Sperm and other species of whale have been documented throughout the Caribbean, including documented cases in nearby Puerto Rico.[104]

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[97] *Id*.
[98] Source Staff, *Refinery's Foam Plastic Litters South Shore Months After September Storm*, Nov. 18, 2019.
[99] *Id*.
[100] NOAA Fisheries, Understanding Vessel Strikes, June 25, 2017, https://www.fisheries.noaa.gov/insight/understanding-vessel-strikes, last accessed September 5, 2019.
[101] *Id*.
[102] *Id*.
[103] International Whaling Commission, "Ship Strikes: Collisions Between Whales and Vessels," https://iwc.int/index.php?cID=html_191, last visited September 5, 2019.
[104] NMFS, "Large Ship Strike Database," January 2004, https://www.greateratlantic.fisheries.noaa.gov/shipstrike/news/shipstrike03.pdf. See also: International Whaling Commission, "Ship Strikes: Collisions Between Whales and Vessels," https://iwc.int/index.php?cID=html_191, last visited September 5, 2019.

Accordingly, due to the concerns listed above, I maintain fundamental concerns with the Refinery activities in regards to imperiled species impacts.

ii. Sandy Point National Wildlife Refuge

The Refinery restart will additionally cause serious, potentially irreparable harm to Sandy Point National Wildlife Refuge (Sandy Point), an important resource to St. Croix for its wildlife protection and tourism benefits. Sandy Point is located approximately 10 miles down-wind and down-current from the Refinery and is federally-designated critical habitat for the leatherback sea turtle.[105] It is also a vital nesting habitat for critically endangered hawksbill sea turtles and threatened green sea turtles.[106] Every year, thousands of visitors visit Sandy Point to enjoy the beach, and thousands more visit to participate in guided sea turtle nesting and hatching observation.[107] One USFWS report estimates that 11,000 people visit Sandy Point, every year.[108] Thus, it is evident that Sandy Point's preservation is critical to the protection of sea turtles and St. Croix's tourism economy. Accordingly, in the interest of preserving this vital, federally-protected critical habitat and crucially important local resource, I urge DOJ to reject the Modification as written due to its silence on this issue.

[105] 44 Fed. Reg. 17710.
[106] U.S. Fish and Wildlife Service, "Sandy Point National Wildlife Refuge: Wildlife & Habitat," https://www.fws.gov/refuge/Sandy_Point/wildlife_and_habitat.html, last visited September 5, 2019.
[107] U.S. Fish and Wildlife Service, "Sandy Point National Wildlife Refuge: Visitor Activities," https://www.fws.gov/refuge/Sandy_Point/visit/visitor_activities.html, last visited September 5, 2019.
[108] Susan Silander, U.S. Fish and Wildlife Service, "Sandy Point National Wildlife Refuge," https://ufdcimages.uflib.ufl.edu/UF/00/09/34/95/00001/sdpcon.pdf, last visited September 5, 2019.

III. Conclusion

For the aforementioned reasons, I respectfully urge DOJ to reject the Modification as written. Please feel free to contact me with any questions. Thank you for your consideration.

Respectfully submitted,

Elizabeth Leigh Neville, Esq.

ATTACHMENT C

TO MEMORANDUM IN SUPPORT OF MOTION TO ENTER

IN THE DISTRICT COURT OF THE VIRGIN ISLANDS
DIVISION OF ST. CROIX

UNITED STATES OF AMERICA, and UNITED STATES VIRGIN ISLANDS	)	
Plaintiffs,	)	Civ. No. 1:11-cv-00006 (RAM/GWC)
v.	)	
HOVENSA L.L.C.	)	
Defendant.	)	

SECOND MODIFICATION OF THE CONSENT DECREE

WHEREAS, on June 7, 2011, the Court entered a Consent Decree in the above-captioned matter (ECF Doc. 6).

WHEREAS, on August 25, 2020, the First Modification of the Consent Decree ("First Modification") was lodged with the Court. (ECF Doc. 12-1).

WHEREAS, upon entry of the First Modification, Limetree Bay will be substituted for HOVENSA as provided therein.

WHEREAS, Paragraph 228 (Modification) of the Consent Decree identifies "non-material modifications to include . . . schedules that do not extend the date for compliance with emissions limitations following the installation of control equipment, provided such changes are agreed upon in writing between the United States and HOVENSA [Limetree Bay]." Paragraph 228 further provides that non-material modifications will be effective when signed by the United States and HOVENSA [Limetree Bay]. (ECF Doc. 6, page 144).

WHEREAS, Paragraph 79.a of the First Modification requires Limetree Bay to "complete a review and verification of the Refinery TAB [total annual benzene] and its compliance with the Benzene Waste NESHAP" by March 30, 2021. (ECF Doc. 12-1, page 27).

WHEREAS, the March 30, 2021 date was set in the belief that the Refinery would restart during the fourth quarter of 2020 and because a Refinery restart in that time frame would have provided sufficient operational data to ensure for a complete review and verification of the Refinery's TAB.

WHEREAS, due to the delay in the Refinery restart, the United States and Limetree Bay agree that there will be insufficient data for a March 30, 2021 review and verification of the Refinery TAB.

WHEREAS, the United States and Limetree Bay have agreed to a second modification that modifies the compliance date set in Paragraph 79.a of the Consent Decree.

WHEREAS, because the compliance date for the review and verification of the Refinery's TAB does not involve the installation of control equipment or emissions limitations following the installation of control equipment, the United States and Limetree Bay agree that this Second Modification of the Consent Decree is a non-material modification, that pursuant to Paragraph 228, does not require written approval by the Court.

NOW THEREFORE, the United States and Limetree Bay hereby modify the Consent Decree, as amended by the First Modification, as follows:

I. Replace Paragraph 79.a with the following:

79. <u>One-Time Review and Verification of the Refinery's TAB and Compliance with the Benzene Waste NESHAP</u>.

a. <u>Phase One of the Review and Verification Process</u>. By ~~March 30, 2021~~November 22, 2021, Limetree Bay shall complete a review and verification of the Refinery TAB and its compliance with Benzene Waste NESHAP (Phase One Review and Verification). Limetree Bay's review and verification process shall include, but not be limited to:

All other terms and conditions of the Consent Decree remain unchanged and in full effect.

THE UNDERSIGNED PARTY agrees to this non-material modification of the Consent Decree in the matter of United States, et al. v. HOVENSA L.L.C.

FOR THE UNITED STATES:

JEAN E. WILLIAMS
Acting Assistant Attorney General
Environment and Natural Resources Division
United States Department of Justice

Date: 4/6/2021

MYLES E. FLINT, II
Senior Counsel
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
P.O. Box 7611
Ben Franklin Station
Washington, D.C. 20044-7611
(202) 307-1859

GRETCHEN C.F. SHAPPERT
United States Attorney
District of the Virgin Islands
Federal Building and U.S. Courthouse
5500 Veterans Drive, Room 260
St. Thomas, USVI 00802

THE UNDERSIGNED PARTY agrees to this non-material modification of the Consent Decree in the matter of United States, et al. v. HOVENSA L.L.C.

FOR PLAINTIFF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

LOREN DENTON

Digitally signed by LOREN DENTON
Date: 2021.04.01 12:47:46 -04'00'

Date: _____

ROSEMARIE A. KELLEY
Director
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency

Carroll, Thomas

Digitally signed by Carroll, Thomas
Date: 2021.04.01 11:55:51 -04'00'

Date: _____

THOMAS P. CARROLL
Acting Director
Air Enforcement Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency

OF COUNSEL

PROVIDENCE SPINA
United States Environmental Protection Agency
1200 Pennsylvania Avenue
Washington, D.C. 20460

THE UNDERSIGNED PARTY agrees to this non-material modification of the Consent Decree in the matter of United States, et al. v. HOVENSA L.L.C.

FOR PLAINTIFF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2:

Schaaf, Eric Digitally signed by Schaaf, Eric Date: 2021.04.05 16:52:45 -04'00'

Date: _____

ERIC SCHAAF
Regional Counsel
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

OF COUNSEL:

FLAIRE MILLS
Associate Regional Counsel
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

THE UNDERSIGNED PARTY agrees to this non-material modification of the Consent Decree in the matter of United States, et al v. HOVENSA L.L.C.

FOR LIMETREE BAY TERMINALS, LLC:

Date: March 31, 2021

JEFFREY RINKER
President and Chief Executive Officer
Limetree Bay Terminals, LLC
One Estate Hope
Christiansted, USVI 00820

THE UNDERSIGNED PARTY agrees to this non-material modification in the matter of United States, et al v. HOVENSA L.L.C.

FOR LIMETREE BAY REFINING, LLC:

Date: March 31, 2021

JEFFREY RINKER
President and Chief Executive Officer
Limetree Bay Refining, LLC
One Estate Hope
Christiansted, USVI 00820