DEPARTMENT OF PLANNING AND NATURAL RESOURCES



AIR POLLUTION CONTROL PROGRAM AUTHORITY TO CONSTRUCT AND PERMIT TO OPERATE

For:

PORT HAMILTON REFINING AND TRANSPORTATION, LLLP

EFFECTIVE DATE ORIGINAL PERMIT: May 15, 2023

ORIGINAL PERMIT NUMBER: **STX-1-012-23** (Temporary Rich Amine Removal Project)

THE PERMITTEE PORT HAMILTON REFINING & TRANSPORTATION, LLLP IS SUBJECT TO ALL TERMS, CONDITIONS, LIMITATIONS, AND STANDARDS CONTAINED HEREIN. THE CONDITIONS IN THIS PERMIT ARE FEDERALLY AND LOCALLY ENFORCEABLE.

Signed:

Austin F. Callwood
Director

May 11, 2023

Date

Temporary Rich Amine Removal Project Authority to Construct and Permit to Operate

2 | P a g e

SECTION I: FACILITY INFORMATION

PERMITTEE: Port Hamilton Refining & Transportation, LLLP

#1 Estate Hope

Christiansted, VI 00820

SIC CODE: 2911

PERMIT NUMBER: STX-1-012-23

FACILITY ADDRESS: #1 Estate Hope

Christiansted, VI 00820

MAILING ADDRESS: #1 Estate Hope

Christiansted, VI 00820

ISLAND: St. Croix

FACILITY CONTACT: Catherine Elizee

Environmental Manager

#1 Estate Hope

Christiansted, VI 00820

(340) 244-9171

CatherineElizee@phrt.com

PORT HAMILTON REFINING AND TRANSPORTATION, LLLP (the "Permittee") submitted to the U.S. Virgin Islands Department of Natural Resources ("Department") a permit application dated March 31, 2023 and revised application dated May 2, 2023, proposing to install and operate a temporary 33.5 MMBtu/hr boiler and frac tank vent control system. The objective of the proposed project is to remove the rich amine currently stored in the vessels and process piping identified in the Order on Consent. All liquid rich amine will be removed from the vessels and manifolds. Once all liquid rich amine is drained, each unit will be pre-heated and rinsed with steam and detergent materials to remove any traces of hydrocarbons and hydrogen sulfides. A steam rinse will be conducted between each detergent phase and as the final step, nitrogen will be introduced to blanket all vessels and piping. The boiler, frac tank vent system, and associated fugitive emissions from process piping will be the source of emissions to atmosphere.

The boiler is equipped with low NO_X burners. The frac tank vent system is equipped with a multi-tower packed column scrubber and is designed to reduce Hydrogen Sulfide ("H₂S") emissions by 99.9% during the venting process and a dual carbon-bed system designed to reduce Volatile Organic Compound ("VOC") emissions by 99.9% during the venting process.

Temporary Rich Amine Removal Project Authority to Construct and Permit to Operate

3 | Page

The **Permittee** has proposed to construct, modify, and operate the following equipment as outlined in Table 1.

Equipment Description Temporary Boiler Boiler combusting ultra-low sulfur diesel ("ULSD") fuel and equipped with low-NOx burners ("LNB"). Heat rate of 33.5 mmBtu/hr Vent control system designed to achieve 99.9 percent H₂S and 99.9 Frac tanks vent control system percent VOC Destruction Removal Efficiency ("DRE")

Table 1. Temporary Rich Amine Removal Project Equipment Description

This Authority to Construct and Permit to Operate (herein "the Permit" or "this Permit") is issued under the authority of the Virgin Islands Air Pollution Control Act and Virgin Islands Rules and Regulations (VIRR) Title 12, Chapter 9, §206-26, §206-27 and §206-31 and permits the installation of the temporary Rich Amine Removal project including the temporary boiler and frac tank vent control system, and the operation of this equipment.

SECTION II: SPECIFIC CONDITIONS

The **Permittee** is proposing to install and operate a temporary boiler and frac tank vent control system to remove vapors remaining after the removal of liquid rich amine from process vessels.

In accordance with the Virgin Islands Air Pollution Control Act, the Virgin Islands Rules, and Regulations (VIRR), Title 12, Chapter 9, the Commissioner of the Department of Planning and Natural Resources (DPNR) may modify, suspend, or revoke a permit to operate on any of the following grounds:

- (1) Materially false or inaccurate statements in the application or supporting papers;
- (2) Failure by the **Permittee** to comply with any terms and conditions of the permit;
- (3) Exceeding the scope of the project as described in the application;
- (4) Newly discovered information or significant physical changes since the permit was issued; and
- (5) Non-compliance with any provisions of the Virgin Islands Code and Rules and Regulations directly related to the permitted activity.

This Permit to Operate is issued subject to the following binding conditions:

A. OPERATIONAL REQUIREMENTS

1. Prior to operation at any other location, the **Permittee** must submit a separate application for an Authority to Construct and Permit to Operate the equipment(s) at each new location or construction project that will be conducted on noncontiguous property. [12 VIRR § 206-21(a)(1995)].

Temporary Rich Amine Removal Project Authority to Construct and Permit to Operate

- 4 | Page
- 2. Construction and operation of the sources authorized by this Permit will not prevent the attainment or maintenance of any ambient air quality standard and will not result in a violation of any provision of this chapter or the Virgin Islands State Implementation Plan [12VIRR § 206-26(a)(2)(1995) and 12 VIRR §206-27(a)(1)(B) (1995)].
- 3. The **Permittee** shall not cause or permit the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, annoyance to persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause or have tendency to cause injury or damage to business or property. [12 VIRR § 204-27(a)(1995)].
- 4. Nothing in any other regulation concerning emission of air contaminants, or any other regulations relating to air pollution, shall in any manner be construed as authorizing or legalizing the creation or maintenance of a nuisance described in the above-mentioned condition. [12 VIRR § 204-27(b)(1995))].
- 5. The **Permittee** shall not build, erect, install or use any article, machine, equipment or other contrivance, the sole purpose of which is to dilute or conceal an emission without resulting in a reduction in the total release of air contaminants to the atmosphere. [12 VIRR § 204-30 (1995)]
- 6. The **Permittee** must report to the Department any physical change or changes in construction which increase the amount of air pollutants or process production.
- 7. During construction, any source subject to this Permit, which is responsible for contravening ambient air quality standards, will be required to be modified to bring operation into compliance.

B. SPECIFIC EQUIPMENT CONDITIONS

1. Temporary Boiler

The **Permittee** shall:

- (a) Operate and maintain the Temporary Boiler in accordance with the manufacturer's specifications.
- (b) Ensure only ULSD fuel is combusted in the Temporary Boiler.
- (c) Ensure that the Temporary Boiler will not be attached to a foundation and will remain on site for no more than 180 consecutive days.
- (d) The Temporary Boiler will be equipped with low-NOx burners.

2. Frac Tank Vent Control System

The **Permittee** shall:

- (a) Operate and maintain the Frac Tank Vent Control System in accordance with the manufacturer's specifications.
- (b) Conduct sampling twice per hour to determine if scrubber or carbon-bed materials

Temporary Rich Amine Removal Project Authority to Construct and Permit to Operate 5 | P a g e

require replacement. Replacement will be triggered if sampling shows 5ppm or more of H₂S or VOCs.

- (c) The Frac Tank Vent Control System shall be designed to achieve a 99.9 percent H₂S destruction efficiency.
- (d) The Frac Tank Vent Control System shall be designed to achieve a 99.9 percent VOC destruction efficiency.

C. EMISSIONS LIMITS

1. The emissions from the temporary Rich Amine Removal Project shall not exceed the limitations in Table 2.

Air Pollutant **Annual Emissions (tpy) NOx** 9.0 CO 2.7 VOC 1.4 SO_2 0.1 PM 1.0 PM_{10} 1.0 $PM_{2.5}$ 1.0

Table 2. Temporary Rich Amine Removal Project Emission Limits

D. MONITORING REQUIREMENTS

- 1. The **Permittee** shall monitor H₂S and VOC (ppmvw) at the outlet of the frac tank vent control system (vent to atmosphere) by sampling twice every hour during the steam rinse and cleaning phase.
- 2. The **Permittee** shall monitor the lower explosive limit (LEL) by sampling twice every hour at the inlet and outlet of frac tank vent control system during atmospheric venting.
- 3. The **Permittee** shall monitor the hours of operation of the Temporary Boiler.
- 4. The **Permittee** shall monitor hours of operation of the Frac Tank Vent Control System at each location.

E. RECORDKEEPING AND REPORTING

1. The **Permittee** shall document the number of consecutive days the Temporary Boiler remains at the location. [40 CFR §60.41c].

Temporary Rich Amine Removal Project Authority to Construct and Permit to Operate 6 | P a g e

- 2. The **Permittee** shall document the total fuel use of the Temporary Boiler and shall submit and/or make available to the Department.
- 3. The **Permittee** shall maintain all records necessary for determining compliance with this Permit in a readily accessible location for five (5) years and shall make these records available to the Department upon written or verbal request. All such records must be initiated or signed by the person recording the information or maintained in a verifiable electronic system whose information can be certified as to its accuracy. [12 VIRR § 206-7l(a)(4)(B) (1995)].
- 4. The **Permittee** shall maintain the manufacturer's specifications and operating procedures on site and readily available to the Department representatives upon request. [12 VIRR § 206-91(b) (1995)].
- 5. The **Permittee** shall maintain standard site procedures used to de inventory equipment. The current copy of the procedures shall be retained on-site at all times. Previous versions of the standard site procedures, as applicable, shall be retained for five years. [40 CFR 63.655(i)(12)(i)].
- 6. The **Permittee** shall maintain records of the LEL of the vent stream at the inlet of the frac tank vent control system. If the LEL exceeds 10 percent, records will be maintained identifying the maintenance vent, the process unit or equipment associated with the maintenance vent, the date of maintenance vent opening, and the LEL at the time of the vessel opening or venting to the atmosphere. [40 CFR 63.655(i)(12)(ii)].
- 7. The **Permittee** shall submit Periodic Reports for each release to atmosphere for which the LEL at the inlet of the frac tank vent control system is greater than or equal to 10 percent. If the LEL exceeds 10 percent, the periodic reports will identify the maintenance vent, the process unit or equipment associated with the maintenance vent, the date and time of maintenance vent opening to atmosphere, the LEL at the time of atmospheric venting, and an estimate of the mass of organic HAP released during the entire atmospheric venting event. [40 CFR 63.655(g)(13)].

SECTION III: GENERAL UNIT REQUIREMENTS

- 1. All records and data required to demonstrate compliance with this Permit shall be submitted to the Department upon request. [12VIRR § 206-91(b) (1995]
- 2. The **Permittee** shall ensure that any fugitive dust associated with the construction or installation of the equipment covered by this Permit is minimized and controlled. [12 VIRR § 204-25 (1995)]
- 3. The **Permittee** must construct and/or install the equipment, control apparatus and emission monitoring equipment within the design limitations.
- 4. The **Permittee** shall not discharge into the atmosphere, any air contaminant(s) with opacity greater than or equal to twenty percent (20%) for any time period. [12 VIRR § 204-22(a)].

Temporary Rich Amine Removal Project Authority to Construct and Permit to Operate 7 | P a g e

- 5. The **Permittee** shall not discharge into the atmosphere any air contaminant(s) with opacity greater than or equal to forty percent (40%) for more than three minutes in any thirty-minute period. [12 VIRR § 204-22(b)].
- 6. The **Permittee** shall not discharge into the atmosphere, particulate matter in excess of the value determined from 12 VIRR §204-32 Table II. [12 VIRR § 204-23(b)].
- 7. The **Permittee** shall not cause or permit any materials to be handled, transported, or stored in a building, its appurtenances, or cause a road to be used, constructed, altered, repaired or demolished without taking the necessary precautions to prevent particulate matter from becoming airborne. [12 VIRR § 204-25(a) (1995)].
- 8. The Commissioner may require other reasonable measures as may be necessary to prevent particulate matter from becoming airborne. [12 VIRR § 204-25(b) (1995)]
- 9. The **Permittee** shall not cause or permit the discharge of visible emissions of fugitive dust beyond the boundary line of the property on which their emissions originate. [12 VIRR § 204-25(c) (1995)]

SECTION V: GENERAL REQUIREMENTS

- 1. This Authority to Construct shall automatically become invalid one (1) year after the date of its issuance, unless the construction or modification has commenced or an application for extension, in the form of a letter to the Commissioner, is made thirty (30) days prior to the expiration date of the Permit. [12 VIRR § 206-26 (f)(1) (1995)]
- 2. The Permit to Operate shall be valid for a period of three (3) years after the date of its issuance, unless a timely application for renewal has been made. [12 VIRR § 206-27(d) (1995)]
- 3. Any revisions to activities described in the permit application and authorized in this Permit must be approved by the Commissioner prior to commencement of operations. [12 VIRR § 206-31 (1995)]
- 4. In the case that this Permit is subject to any challenge by third parties, the effectiveness of the Permit stands until any judicial court decides the contrary.
- 5. Failure of the Commissioner to act on a permit application shall not be deemed issuance by default. [12 VIRR § 206-73(a)(8) (1995)]
- 6. The **Permittee** must comply with all conditions of this Permit. Any permit noncompliance constitutes a violation and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [12 VIRR § 206-7l(a)(7)(A) (1995)]
- 7. All terms and conditions contained herein shall be enforceable by the US EPA and citizens of the United States under the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.
- 8. Nothing in this Permit shall alter or affect the authority of the USEPA to obtain information pursuant to 42 U.S.C. 7414, "Inspections, Monitoring, and Entry".

Temporary Rich Amine Removal Project Authority to Construct and Permit to Operate 8 | P a g e

- 9. The **Permittee** shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit. [12 VIRR § 206-7l(a)(7)(B) (1995)]
- 10. The Department may modify, revoke, reopen and reissue the Permit or terminate the Permit for cause [12 VIRR § 206-28]. The filing of a request by the source for a permit modification, revocation and reissuance, or termination or the filing of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [12 VIRR § 206-71(a)(7)(C)(1 995)]
- 11. This Permit does not convey any property rights of any sort, or any exclusive privilege. [12 VIRR § 206-71(a)(7)(D) (1995)]
- 12. Issuance of this Permit does not relieve the **Permittee** from the responsibility of obtaining and complying with any other permits, licenses, or approvals required by the Department or any other federal, territorial, or local agency. [12 VIRR § 206-3l(g)(1995)]
- 13. Nothing in this Permit shall alter or affect the liability of the **Permittee** for any violation of applicable requirements prior to or at the time of Permit issuance. [12 VIRR § 206-63(e)(3)(ii) (1995)]
- 14. Any condition or portion of this Permit, which is challenged, becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this Permit. [12 VIRR § 206-7l(a)(6) (1995)]
- 15. Compliance with the terms of this Permit shall be deemed compliance with all applicable requirements as of the date of Permit issuance, provided that all applicable requirements are included and specifically identified in the Permit or permit application. [12 VIRR § 206-63(e)(l) (1995)]
- 16. In accordance with 12 VIRR § 206-65, the Department shall allow certain defined changes at permitted facilities that contravene permit terms or conditions or make them inapplicable without requiring a permit revision. Such changes may not include changes that violate applicable requirements or contravene permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- 17. If after notification as described in Condition 16 above, the Department deems that the change implemented by the source does not qualify under 206-65(b), the original terms of the permit remain fully enforceable.
- 18. Provisions for operational flexibility do not preclude a source's obligation to comply with all applicable requirements. [12 VIRR § 206-65(a)(3) (1995)]
- 19. Any application forms, all reports, or compliance certifications submitted pursuant to this Permit shall contain a certification of truth, accuracy and completeness signed by a responsible official of the facility. Any certification submitted by the facility shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete. [12 VIRR § 206-64 (1995)]

Temporary Rich Amine Removal Project Authority to Construct and Permit to Operate 9 | P a g e

- 20. Information contained in permit applications shall be public, except that which is claimed confidential in accordance with the Virgin Islands Air Pollution Control Act. The contents of the permit itself are not entitled to confidentiality. [12 VIRR § 206-62(d) (1995)]
- 21. The **Permittee** must allow an authorized representative of the Department, upon presentation of credentials, to perform the following:
 - (a) Enter upon the **Permittee** premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records required under the conditions of this permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - (d) As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.
 - [12 VIRR § 206-91(a) (1995)]
- 22. The **Permittee** shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. [12 VIRR § 206-71(a)(7)(E) (1995)]
- 23. Upon request, the **Permittee** shall furnish to the Department copies of records that this facility is required to keep by this Permit, which information may be claimed to be confidential in accordance with the Virgin Islands Air Pollution Control Act. The **Permittee** may furnish such records directly to the Department, if necessary, along with a claim of confidentiality. [12 VIRR § 206-71(a)(7)(E) (1995)]
- 24. A copy of this Permit shall be kept on-site by the **Permittee** [12 VIRR § 206-20(d) (1995)]