# 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 30, 2023

ORIGINAL PERMIT NUMBER: STX-1-014-23

(Temporary LPG 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:	
	May 24, 2023
Austin Callwood, Director	Date

# **SECTION I: FACILITY INFORMATION**

PERMITTEE: Port Hamilton Refining & Transportation, LLLP

#1 Estate Hope

Christiansted, VI 00820

SIC CODE: 2911

PERMIT NUMBER: STX-1-014-23

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 a revised application dated May 11, 2023, proposing to install and operate a temporary 15 mmBtu/hr thermal oxidizer. The objective of the proposed project is to remove the LPG currently stored in the LPG Unit #3 vessels and process piping. All liquid LPG will be removed from the vessels and manifolds. Once the liquid portion of the LPG is removed, it will be either shipped to an off-island consignee for sale or proper waste disposal. The LPG Unit #3 will be depressurized to the thermal oxidizer, followed by a nitrogen purge. The thermal oxidizer and associated fugitive emissions from process piping will be the source of emissions to the atmosphere.

The thermal oxidizer is equipped with ultra-low NO<sub>X</sub> burners and is designed to reduce Volatile Organic Compound ("VOC") emissions by 99.99% during the venting process.

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

Table 1. Temporary LPG Removal Project Equipment Description

Equipment	Description
Thermal Oxidizer	Thermal oxidizer is designed to achieve 99.99 percent VOC Destruction Removal Efficiency ("DRE").
	The new thermal oxidizer will use commercial grade propane as assist gas.

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 LPG Removal System including the thermal oxidizer, and the operation of this equipment.

### **SECTION II: SPECIFIC CONDITIONS**

The **Permittee** is proposing to install and operate a Temporary Thermal Oxidizer to remove vapors remaining after the removal of liquid LPG from LPG #3 Unit.

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. The **Permittee** is subject to 40 CFR Part 60, Subpart Ja Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007 and shall comply with applicable requirements.
- 2. 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)].

- 3. 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)].
- 4. 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)].
- 5. 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))]
- 6. 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)]
- 7. The **Permittee** must report to the Department any physical change or changes in construction which increase the amount of air pollutants or process production.
- 8. 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 LPG Removal System

#### The **Permittee** shall:

- (a) Operate and maintain the Temporary LPG Removal System in accordance with the manufacturer's specifications. The operating temperature shall be maintained between 1,400 and 1,800°F.
- (b) Ensure the LPG #3 system is isolated and only nitrogen will be added to process vessels and piping.
- (c) The Temporary LPG Removal System thermal oxidizer shall be designed to achieve a 99.99 percent VOC destruction efficiency.
- (d) The Temporary LPG Removal System thermal oxidizer shall fire only commercial grade propane as assist and pilot fuel.

#### C. EMISSIONS LIMITS

1. The emissions from the temporary LPG Removal System thermal oxidizer shall not exceed the limitations in Table 2.

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Air Pollutant	Annual Emissions (tpy)
NOx	14.5
CO	4.0
VOC	9.4
$SO_2$	1.0
PM	0.1
PM <sub>10</sub>	0.5
PM <sub>2.5</sub>	0.5

**Table 2. Temporary Thermal Oxidizer Emission Limits** 

## D. TESTING REQUIREMENTS

- 1. The **Permittee** shall comply with the performance testing requirements as applicable, as outlined in Section §60.8 in 40 CFR Part 60, Subpart A.
- 2. The **Permittee** shall comply with the performance testing requirements as applicable, as outlined in Section §60.104a(a) in 40 CFR Part 60, Subpart Ja.

### E. MONITORING REQUIREMENTS

- 1. The **Permittee** shall monitor the performance of the Temporary LPG Removal System following manufacturer recommendations.
- 2. The Permittee shall ensure that thermal oxidizer operates between 1,400 and 1,800°F by monitoring the thermal oxidizer auto temperature controls pursuant to manufacturer instructions.
- 3. The **Permittee** shall ensure that there are no operating condition changes that affect the exempt fuel gas stream/system consistent with the exemption from H<sub>2</sub>S monitoring requirements of §60.107a(b) of 40 CFR Part 60, Subpart Ja. As requested by EPA, once the thermal oxidizer is operational, PHRT will collect daily grab samples of the low-sulfur LPG gas stream firing the thermal oxidizer for seven days, or for as many days as the thermal oxidizer is operated if it is operated for less than seven days. If any grab sample indicates that the H<sub>2</sub>S concentration is at or above 5 ppmv, PHRT will contact EPA immediately.
- 4. The **Permittee** shall monitor hours of operation of the thermal oxidizer.

# RECORDKEEPING AND REPORTING

- 1. The **Permittee** shall comply with the notification, reporting and recordkeeping requirements as applicable, to affected facilities authorized by this Permit, as outlined in 40 CFR Part 60, Subpart A and Ja.
- 2. 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 initialed 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)].

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- 3. The **Permittee** shall submit a written notification to the Department of the date of commencement of operation of the units authorized in this Permit, and to be postmarked no later than 15 days after such time. [40 CFR §60.7 (a)(3)]
- 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 deinventory 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 submit Periodic Reports for each release to atmosphere for which the vent is not depressured to a control device meeting the requirements in §63.643(a)(2). 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 mass of VOC in the equipment, 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** must operate and maintain the thermal oxidizer, air pollution control equipment, and monitoring equipment covered by this Permit in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. [40 CFR §60.11(d)]
- 3. 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)]
- 4. The **Permittee** must construct and/or install the thermal oxidizer, control apparatus and emission monitoring equipment within the design limitations.
- 5. 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)].
- 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(d)].
- 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)]

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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 § 206-71(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".
- 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 § 206-7l(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 local, territorial, or federal agency. [12 VIRR § 206-3l(g)(1995)]

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- 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)]
- 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)]

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- 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 provide the Department with copies of records that this facility is required to keep as part of 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)]