# IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

	)	
UNITED STATES OF AMERICA	)	
and	)	
THE STATE OF TEXAS,	)	
	)	
Plaintiffs,	)	
	)	
V.	)	No.
	)	
VOPAK TERMINAL DEER PARK INC. and	)	
VOPAK LOGISTICS SERVICES USA INC.,	)	
	)	
Defendants.	)	
	)	
	_ )	

**CONSENT DECREE** 

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WHEREAS, Plaintiffs, United States of America, on behalf of the United States
Environmental Protection Agency ("U.S. EPA" or "EPA"), and the State of Texas ("State"), on
behalf of the Texas Commission on Environmental Quality ("TCEQ"), have filed a Complaint in
this action pursuant to the Clean Air Act, 42 U.S.C. §§ 7401 *et seq.* ("CAA" or "Act"),
Chapter 382 of the Texas Health and Safety Code, and Sections 7.032, 7.101, and 7.105 of the
Texas Water Code against Vopak Terminal Deer Park Inc. ("VTDP") and Vopak Logistics
Services USA Inc. ("VLS"), concurrently with the lodging of this Consent Decree, for alleged
environmental violations at the Deer Park, Texas facility ("Deer Park Facility"), owned and
operated by VTDP and VLS, and located in and around Deer Park, Harris County, Texas.

WHEREAS, through the Complaint, the State also seeks recovery of its attorney's fees, court costs, and/or reasonable investigative costs related to this proceeding if the State prevails, pursuant to Texas Water Code § 7.108.

WHEREAS, the United States and the State allege that VTDP and VLS have violated and/or continue to violate, at the Deer Park Facility, one or more of the following statutory and/or regulatory provisions:

- a. The New Source Performance Standards ("NSPS") requirements under Section 111 of the CAA, 42 U.S.C. § 7411, and their implementing regulations, promulgated at 40 C.F.R. Part 60, Subparts A, K, Ka, and Kb;
- b. The National Emission Standards for Hazardous Air Pollutants ("NESHAPs") requirements under Section 112 of the CAA, 42 U.S.C. § 7412, and their implementing regulations promulgated at 40 C.F.R. Part 63, Subparts A, DD, and EEEE;
- c. The operating permit requirements of Title V of the CAA, 42 U.S.C. §§ 7661-7661f, their implementing regulations promulgated at 40 C.F.R. §§ 70.1(b), 70.5(a)–(b), 70.6(a), (c),

and 70.7(b), and their implementing regulations promulgated by the State of Texas at 30 Tex. Admin. Code §§ 122.10-122.606; and

d. The federally enforceable Texas State Implementation Plan ("SIP").

WHEREAS, the Complaint against VTDP and VLS alleges that these entities have violated or continue to violate one or more of the above-mentioned provisions at their Deer Park Facility through their operation of: (a) the wastewater treatment system (hereinafter, "WWTS"), (b) the deep well disposal system (hereinafter, "DWS"); (c) the Marine Flares; and (d) the chemical storage tanks.

WHEREAS, Vopak Terminals North America Inc. ("VTNA") is the owner of VTDP, and Vopak North America Inc. d/b/a Vopak Americas ("VNA") is the owner of VTNA and VLS.

WHEREAS, the U.S. EPA issued to VTNA, VTDP, VNA, and VLS, and provided to the State, a Notice of Violation and Finding of Violation on February 19, 2015, setting forth many of the violations contained in the Complaint.

WHEREAS, the U.S. EPA, by letter dated February 6, 2017, provided counsel for VNA and the State notice of several additional alleged violations of certain requirements or prohibitions of the Texas SIP, which are also contained in the Complaint.

WHEREAS, the provisions of this Consent Decree apply to VTNA, VTDP, VNA, and VLS (collectively, "Vopak").

WHEREAS, Vopak denies the violations alleged in the Complaint and does not admit any liability to the United States or the State arising out of the transactions or occurrences alleged in the Complaint.

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation

among the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

## I. JURISDICTION AND VENUE

- 1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and over the Parties. This Court has supplemental jurisdiction over the State law claims asserted by the State pursuant to 28 U.S.C. § 1367. Venue lies in this District pursuant to Sections 113(b) and 304(c) of the CAA, 42 U.S.C. §§ 7413(b) and 7604(c), 28 U.S.C. §§ 1391(b), (c) and 1395(a), because the violations alleged in the Complaint occurred and/or are occurring at Vopak's Deer Park Facility, which is located in this District. For purposes of this Decree, or any action to enforce this Decree, Vopak consents to the personal jurisdiction of this Court and waives any objection to venue in this District. Vopak reserves the right to challenge and oppose any claims to jurisdiction that do not arise from the Court's jurisdiction over this Consent Decree or an action to enforce this Consent Decree.
- 2. For purposes of this Decree, Vopak does not contest that the Complaint states claims upon which relief may be granted.
- 3. Notice of the commencement of this action has been given to the State under Sections 113(a)(1) and 113(b) of the CAA, 42 U.S.C. §§ 7413(a)(1) and (b).

#### II. APPLICABILITY

- 4. The obligations of this Consent Decree apply to and are binding upon the United States and the State, and upon Vopak and any successors, assigns, or other entities or persons otherwise bound by law.
- 5. At least 30 Days prior to (i) any proposed transfer of ownership or operation of the assets comprising Vopak's Deer Park Facility, or (ii) any transaction in which Vopak proposes to sell more than 50 percent of the equity interest of VNA, VTNA, VTDP, or VLS (i.e., "Transfer(s)"), or within such shorter time as the United States and the State may agree to in writing, Vopak shall provide a copy of this Consent Decree to the proposed transferee and shall provide written notice of the prospective Transfer, together with a copy of the relevant portions of the proposed Transfer agreement, to the United States and the State in writing, in accordance with Section XVII (Notices). No Transfer, whether in compliance with the procedures of this Paragraph or otherwise, relieves Vopak of its obligation to ensure that the terms of this Decree are implemented, unless (i) the transferee agrees to undertake the obligations of this Consent Decree and to be substituted for Vopak as a Party under this Decree and thus bound by the terms hereof, (ii) the United States and the State consent to relieve Vopak of its obligations or this Court orders such substitution over the objection of the Plaintiffs through the process set forth in Paragraph 7, and (iii) the Court modifies this Consent Decree and the transferee becomes a Party to this Consent Decree.
- 6. After the submission to the United States and the State of the notice of the proposed Transfer, as required by Paragraph 5, Vopak may request the Plaintiffs' consent to file a joint motion requesting the Court to approve a modification substituting the transferee for Vopak as the party responsible for complying with all or some of the obligations of the Consent Decree.

Plaintiffs may consent to such a filing or the United States shall notify Vopak, after consultation with the State, that Plaintiffs do not agree to modify the Consent Decree to make the transferee responsible for complying with the obligations of the Consent Decree, as requested.

- 7. If, for any reason, Vopak does not secure the agreement of Plaintiffs to file a joint motion within 60 Days after requesting the Plaintiffs' consent to file a joint motion under Paragraph 6, Vopak and the transferee may file, without the agreement of the United States or the State, a motion requesting the Court to approve a modification substituting the transferee for Vopak as the Party responsible for complying with some or all of the obligations of the Consent Decree. The United States or the State may file an opposition to the motion objecting to the Transfer: (a) because EPA or the State has determined that the transferee lacks the financial or technical ability to assume the obligations of the Decree; (b) because the proposed modification fails to effectively transfer all of the Consent Decree's obligations to the transferee; or (c) for any other good cause. The motion to modify the Decree shall be granted unless: (i) Vopak and the transferee fail to show that the transferee has the financial and technical ability to assume the obligations of the Decree, as requested; (ii) Vopak and the transferee fail to show that the modification language effectively transfers such obligations to the transferee; or (iii) the Court finds other good cause for denying the motion.
- 8. Vopak shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained to perform work required under this Consent Decree. Vopak shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

9. In any action to enforce this Consent Decree, Vopak shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

## III. DEFINITIONS

- 10. Terms used in this Consent Decree that are defined in the CAA or in federal and/or state regulations promulgated pursuant to the CAA shall have the meanings assigned to them in the CAA or such regulations, unless otherwise provided in this Consent Decree.

  Whenever the terms set forth below are used in this Consent Decree, the definitions set forth below shall apply.
- a. "Activated Sludge" shall mean the suspended biomass containing living microbial organisms used in the Aeration Basin to degrade and remove dissolved organics from the wastewater.
- b. "Aeration Basin" shall mean the circular basin that aerates the wastewater by surface agitation, the location of which is indicated in Appendix A.
- c. "Aeration Basin Clarifier" shall mean the tank used to remove suspended solids, including Activated Sludge, from the Aeration Basin effluent wastewater, the location of which is indicated in Appendix A.
- d. "Analyte List" shall mean the initial list of substances set forth in Appendix B for which Vopak shall conduct periodic sampling.
- e. "Assist Air" shall mean any air that is directed by a blower or a fan toward one or more Flare burners.
- f. "Breakthrough" shall mean that a Carbon Adsorption System Vent Stream has a VOC concentration of 100 ppm or greater, as measured by a flame ionization detector at a

sampling point located at the outlet of the initial saturation canister but before the inlet to the second or final polishing canister at the associated CAS.

- g. "Capable of Phase Separation" shall mean that a post-centrifugal examination of a sample of the material shows visible separated organic phase material.
- h. "Capital Expenditure" shall mean funds used by Vopak to acquire, upgrade or maintain physical assets such as property, industrial buildings, or equipment that are expected to provide utility to Vopak for more than one year, but shall not include routine preventative maintenance expenditures or any other preventative maintenance expenditure for a single component or group of related components of less than \$5,000.
- i. "Carbon Adsorption System" or "CAS" shall mean a control device that uses dual canisters of activated carbon to remove organic gases and vapors from emissions via adsorption, and shall consist of an initial saturation canister and a final polishing canister prior to releasing emissions to ambient air.
- j. "Closed-Vent System" shall mean a system that is not open to the ambient air, except as provided in Paragraph 19, and is composed of piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapor from an emission point to a control device.
- k. "Combustion Efficiency" or "CE" shall mean a Flare's efficiency in converting the organic carbon compounds in a Vent Stream to carbon dioxide.
- 1. "Complaint" shall mean the complaint filed by the United States and the State in this action.
- m. "Consent Decree" or "Decree" shall mean this Decree and all appendices attached hereto listed in Section XXVI.

- n. "Consent Decree Emissions Reductions" shall mean any emissions reductions that result from any projects, controls, or any other actions taken at the WWTS to comply with this Consent Decree.
- o. "DAF" shall mean the Dissolved Air Flotation unit, which is the tank that was placed in service on or around January 1, 2014, and is equipped with an air diffuser and skimmers, the location of which is indicated in Appendix A.
- p. "DAF Effluent and Sludge Pit" shall mean a sump with two compartments, the location of which is indicated in Appendix A.
- q. "Day" or "Days" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until 11:59 p.m. (Central Time) of the next business day.
- r. "Deepwell System" or "DWS" shall mean the emissions sources authorized by Permit 87923 and listed in Special Condition 18, except the centrifuge and its influent and effluent tanks, 05-T-43 and 05-T-44, which were removed from service prior to January 1, 2012.
- s. "Digester" shall mean the tank with a rectangular open area where skimmed material and sludge from the DAF and sludge from the Aeration Basin Clarifier are routed, the location of which is indicated in Appendix A.
  - t. "Effective Date" shall have the definition provided in Section XVIII.
- u. "Emulsion Oil Treatment System" or "EOTS" shall mean Tanks T-574 and T-575, also identified as the facilities and functions authorized by Permit 87923 and listed in Special Condition 14 as 05-T-574 and 05-T-575, the locations of which are indicated in Appendix A.

- v. "EPA" or "U.S. EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.
- w. "Facility" or "Vopak's Deer Park Facility" shall mean the collection of sources owned and/or operated by Vopak, located in or around Deer Park, Texas, as delineated in Appendix C.
- x. "Flare" shall mean any combustion device that uses an uncontrolled volume of ambient air to burn gases, including but not limited to the Land Flares, the Marine Flares, and the WWTS Flare.
- y. "Flocculation Basin" shall mean the basin that is equipped with four submerged impellers that mix alum and poly coagulants with wastewater, the location of which is indicated in Appendix A.
  - z. "HAP" shall mean hazardous air pollutants.
  - aa. "Historic WWTS Emission Units" shall mean the following emission units:
- (1) Tank 569, which is the 5,000 bbl capacity storage tank that Vopak used as the primary Receipt Tank for the WWTS until it was taken out of service on or around September 30, 2013, the location of which is indicated in Appendix A;
- (2) the "old DAF," which is the DAF that was permanently taken out of service on or around September 23, 2014;
- (3) the centrifuge and its influent and effluent tanks, identified as 05-T-43 and 05-T-44 in Special Condition 14 of Permit 87923, which, according to Vopak, were taken out of service on August 24, 2006; and
- (4) the API Separator, identified as 01-C-8 in Special Condition 14 of Permit 87923, which, according to Vopak, was taken out of service on August 24, 2006.

- bb. "Infrared Camera Inspection" shall mean an inspection of an IFR Tank Vent using an optical gas imaging infrared camera designed for and capable of detecting hydrocarbon and VOC emissions.
- cc. "IFR Tank Vents" shall mean the vents on the permanent fixed roof of an internal floating roof ("IFR") tank.
- dd. "Land Flares" shall mean the emission units designated as FL-600 and FL-900 in Permit O1068.
- ee. "Lower Explosive Limit" or "LEL" shall mean the minimum concentration of a specific vapor or gas in air, below which propagation of a flame does not occur in the presence of an ignition source.
- ff. "Low-VOC Service" shall mean a tank that is limited to storing only Low-VOC Vapor Pressure Liquids.
- gg. "Low-VOC Vapor Pressure Liquids" shall mean liquid material with True Vapor Pressures less than 0.5 psia during storage, handling and processing.
- hh. "Marine Flares" shall mean the emission units designated as TO-1M and TO-2M in Permit O1068.
- ii. "Neutralization Basin" shall mean the basin equipped with a mechanical mixer, the location of which is indicated in Appendix A.
- jj. "Off-Site Source" shall mean any source of waste, wastewater, used oil, or used solvent other than the Facility.
- kk. "Paragraph" shall mean a portion of this Decree identified by an Arabic numeral.
  - ll. "Parties" shall mean the United States, the State, and Vopak.

- mm. "Permit O1068" shall mean the Title V Permit issued by TCEQ to VTDP on September 26, 2003, and renewed most recently on April 11, 2014.
- nn. "Permit 87923" shall mean the air permit issued by TCEQ to VLS on July 13, 2010, as altered by TCEQ on May 3, 2011.
- oo. "Phase-Separated Hydrocarbon Tanks" or "PSHT" shall mean fixed-roof tanks that store materials that are Capable of Phase Separation. As of the Effective Date, these tanks include Tanks identified as T-4-A, T-4-B, T-4-C, T-4-D, T-4-E, T-51, and T-53, the locations of which are indicated in Appendix A.
- pp. "Pilot Gas" shall mean all gas introduced through the pilot tip(s) of a Flare to maintain a flame.
  - qq. "Plaintiffs" shall mean the United States and the State.
- rr. "Portable FID" shall mean a portable flame ionization detector ("FID") that measures the concentration of organic species in a Vent Stream or in ambient air using flame ionization detection technology.
- ss. "Process Knowledge" shall mean information that includes, but is not limited to, records of materials present at the Facility, analyses of process stream composition, engineering calculations based on material balances, process stoichiometry, or previous test results (provided the results are still relevant).
- tt. "Receipt Tank" shall mean a fixed-roof tank that receives and stores wastewater prior to its transfer to Tank 570, Tank 571, the Flocculation Basin, the EOTS, or a PSHT. As of the Effective Date, these tanks include Tanks T-530, T-532, T-572, T-573, T-584, T-585, and T-591, the locations of which are indicated in Appendix A.

- uu. "Response Factor" shall mean the ratio between the concentration of a compound being measured and the response of the detector to that compound.
- vv. "Root Cause Failure Analysis" shall mean an assessment conducted through a process of investigation to determine the primary cause, and any other contributing cause(s), of a discharge of gases in excess of specified thresholds.
- ww. "Section" shall mean a portion of this Decree identified by a Roman numeral.
- xx. "Standard Operating Procedure" shall mean a written procedure that is published by Vopak to its employees, including step-by-step instructions, to be followed in carrying out a specific operation for a specific situation.
  - yy. "State" shall mean the State of Texas, on behalf of TCEQ.
- zz. "Supplemental Gas" shall mean all gas introduced to a Flare to comply with the net heating value requirements of 40 C.F.R. § 60.18(b) and/or 40 C.F.R. § 63.11(b).
- aaa. "SW-846" shall mean the Test Methods for Evaluating Solid Waste: Physical/Chemical Methods Compendium (https://www.epa.gov/hw-sw846/sw-846-compendium) (last visited on April 24, 2017).
- bbb. "Sweep Gas" shall mean the minimum amount of gas introduced into a Flare header in order to: (a) prevent oxygen buildup, corrosion, and/or freezing in the Flare header; (b) maintain a safe flow of gas through the Flare header; and (c) prevent oxygen infiltration (backflow) into the Flare tip.
- ccc. "Tanks 570 and 571" shall mean two equalization tanks, the locations of which are identified as T-570 and T-571 in Appendix A.

- ddd. "TCEQ" shall mean the Texas Commission on Environmental Quality and its predecessor and/or successor agencies.
- eee. "Tentatively Identified Compounds" or "TICs" shall mean those compounds that can be detected by an analytical method, such as Test Method 8260B, but for which the concentration cannot be confirmed without additional analytical testing.
- fff. "Test Method 21" shall mean the U.S. EPA reference method, published at 40 C.F.R. Part 60, Appendix A-7, for the determination of VOC leaks.
- ggg. "Test Method 25A" shall mean the U.S. EPA test method, published at 40 C.F.R. Part 60, Appendix A-7, for the determination of total gaseous organic concentration of vapors consisting primarily of alkanes, alkenes, and/or aromatic hydrocarbons, using a flame ionization analyzer. For purposes of this Consent Decree, the concentration is expressed in terms of propane.
- hhh. "Test Method 8260B" shall mean the U.S. EPA Method 8260B, Revision 2, December 1996, Final Update III to the Third Edition of the Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, U.S. EPA publication SW-846, or later applicable revision, used to determine the concentration of individual VOCs in a variety of solid waste matrices, including aqueous and organic phase samples, using Gas Chromatography/Mass Spectrometry (GC/MS).
- iii. "Title V Permit" shall mean an operating permit required under Title V of the CAA, the implementing regulations promulgated at 40 C.F.R. Part 70, and the implementing regulations promulgated by the State of Texas at 30 Tex. Admin. Code, Chapter 122.
- jjj. "TPDES Permits" shall mean the Texas Pollutant Discharge Elimination System permit WQ0001731000 issued by TCEQ to VLS on May 13, 2015, permit

WQ0002383000 issued by TCEQ to VTDP on November 15, 2013, permit TXG670260 issued by TCEQ to VLS with an effective date of April 24, 2015, and permit TXG670259 issued by TCEQ to VTDP with an effective date of April 24, 2015, as each may be renewed or modified during the term of this Consent Decree.

kkk. "True Vapor Pressure" or "TVP" shall mean the equilibrium partial pressure exerted by the VOC in a stored volatile organic liquid at 95°F for volatile organic liquids stored at the ambient temperature, or the highest calendar-month average of the volatile organic liquid storage temperature for volatile organic liquids stored above or below the ambient temperature, as determined by the reference methods set forth at 40 C.F.R. § 60.111b (definition of maximum true vapor pressure).

lll. "United States" shall mean the United States of America, acting on behalf of U.S. EPA.

mmm. "Vent Stream" shall mean a gaseous stream that includes one or more air contaminants, such as a VOC, and is contained within piping, ductwork, and connections.

nnn. "Visual Inspection" shall mean the process of visually inspecting an internal floating roof and the primary seal or the secondary seal (if one is in service) to determine if the internal floating roof is not resting on the surface of the liquid inside the storage tank, if there is liquid accumulated on the roof, if the seal is detached, or if there are holes or tears in the seal fabric.

ooo. "VOC" or "Volatile Organic Compounds" shall have the definition set forth in 40 C.F.R. § 51.100(s).

ppp. "VOC Removal Efficiency" shall mean a control device's efficiency to remove VOC from a Vent Stream on a mass per unit volume basis.

- qqq. "Vopak" shall mean Vopak North America Inc. d/b/a/ Vopak Americas, Vopak Terminals North America Inc., Vopak Terminal Deer Park Inc., and Vopak Logistics Services USA Inc.
- rrr. "Waste Gas" shall mean the mixture of all gases from Facility operations that is directed to a Flare for the purpose of disposing of the gas. Waste Gas does not include gas introduced to a Flare exclusively to make it operate safely and as intended; therefore, Waste Gas does not include Pilot Gas, Assist Air, or the minimum amount of Sweep Gas or Supplemental Gas that is necessary to perform the functions of Sweep Gas and Supplemental Gas.
- sss. "Wastewater Treatment System" or "WWTS" shall mean the following facilities and functions: Tanks 570 and 571; the Flocculation Basin; the DAF; the DAF Effluent and Sludge Pit; the Aeration Basin; the Aeration Basin Clarifier; the Digester; and the Neutralization Basin.
- ttt. "Wastewater Treatment System Flare" shall mean the Flare to be designed, installed, and operated pursuant to this Consent Decree.
- uuu. "WATER9" shall mean the U.S. EPA model (published at https://www3.epa.gov/ttn/chief/software/water/index.html) (last visited on April 24, 2017) for estimating air emissions associated with wastewater collection, storage, treatment, and disposal facilities.

#### IV. CIVIL PENALTY

11. Within 30 Days after the Effective Date, Vopak shall pay the sum of \$2.5 million as a civil penalty. If Vopak fails to pay this amount within 30 Days after the Effective Date, Vopak shall pay this amount together with interest accruing from the date on which the Consent

Decree is lodged with the Court until the date the payment is made, at the rate specified in 28 U.S.C. § 1961, as of the date of lodging.

12. Vopak shall pay \$1.25 million of the amount due under Paragraph 11 to the United States by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice account, in accordance with instructions provided to Vopak by the Financial Litigation Unit ("FLU") of the United States Attorney's Office for the Southern District of Texas after the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System ("CDCS") number, which Vopak shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions by electronic mail to:

General Counsel and Corporate Secretary Vopak Americas 2000 West Loop South, Suite 1550 Houston, Texas 77027 Scott.Grossman@vopak.com (713) 561-7264

on behalf of Vopak. Vopak may change the individual to receive payment instructions on its behalf by providing written notice of such change to the United States and U.S. EPA in accordance with Section XVII (Notices).

At the time of payment, Vopak shall send notice that payment has been made: (a) to U.S. EPA via email at cinwd\_acctsreceivable@epa.gov or via regular mail at U.S. EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; (b) to the United States via email or regular mail in accordance with Section XVII; and (c) to U.S. EPA in accordance with Section XVII. Such notice shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States and the State of Texas v. Vopak Terminal* 

Deer Park Inc. and Vopak Logistics Services USA Inc., and shall reference the civil action number, CDCS Number and DOJ case number 90-5-2-1-11406.

- 13. Vopak shall not deduct any penalties paid under this Decree pursuant to this Section or Section XI (Stipulated Penalties) in calculating its federal, state, or local income tax.
- 14. No later than 30 Days after the Effective Date, Vopak shall pay a civil penalty of \$1.25 million and \$40,000 in attorney's fees to the State. Vopak shall make the full payment of this amount to the State by wire transfer to the Texas Comptroller of Public Accounts Federal Reserve Clearing Account for the Office of the Attorney General, as provided below:

Financial Institution:	TX COMP AUSTIN	
Routing Number:	114900164	
Account Name:	Comptroller of Public Accounts Treasury	
	Operations	
Account Number to Credit:	463600001	
Reference:	Vopak, AG Case# CX2955432418,	
	Priscilla Hubenak, Chief, Environmental	
	Protection Division	
Attention:	Office of the Attorney General, Kristy Lerma,	
	Financial: Rptg	

At the time of payment, Vopak shall send by notice to the State, in accordance with Section XVII (Notices), a copy of the wire transfer authorization form and the wire transaction record, together with a transmittal letter, which shall state that the payment is for the civil penalty and attorney's fees owed pursuant to the Consent Decree in the *United States and the State of Texas v. Vopak Terminal Deer Park Inc. and Vopak Logistics Services USA Inc.*, and shall reference the civil action number and Reference: AG# CX2955432418.

## V. COMPLIANCE REQUIREMENTS

#### A. Installation of Pollution Controls

- 15. No later than four years after the Effective Date, Vopak shall ensure that all wastewater that is not permitted to be discharged pursuant to TPDES Permits is routed directly to one or more of the Receipt Tanks or, if the Receipt Tanks have insufficient remaining capacity because of weather events, to Tank 570 or Tank 571.
  - 16. No later than four years after the Effective Date, Vopak shall:
    - a. fully cover Tanks 570 and 571, the Flocculation Basin, the DAF, the
       Neutralization Basin, the Digester, and the DAF Effluent and Sludge Pit;
       and
    - b. construct and install one or more Closed-Vent System(s) to capture and continuously route VOC emissions to a Flare from Tanks 570 and 571, the Flocculation Basin, the DAF, the Neutralization Basin, the Digester, the DAF Effluent and Sludge Pit, and each Receipt Tank.
- 17. No later than four years after the Effective Date, Vopak shall design, install, and continuously operate a Flare (hereinafter, "WWTS Flare") and associated Flare monitoring equipment (including, but not limited to, the equipment necessary to conduct the monitoring required by Paragraphs 39 and 40) to control and monitor emissions from the Closed-Vent Systems required by Paragraph 16. Vopak shall continuously operate such WWTS Flare in accordance with the Flare Operational Requirements specified in Paragraphs 50 through 55, below.

- 18. Upon the Effective Date, prior to any Phase-Separated Hydrocarbon Tank or the Emulsion Oil Treatment System ("EOTS") receiving or storing any separated organic phase materials, Vopak shall ensure that each Phase-Separated Hydrocarbon Tank and the EOTS are equipped with a Closed-Vent System that captures and continuously routes VOC emissions to a Carbon Adsorption System or to the WWTS Flare.
- 19. Vopak shall ensure that each hatch and relief device in the Closed-Vent Systems remains in a closed position during normal operations except when, in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials, Vopak is conducting sampling, inspection, maintenance, or the device opens to prevent physical damage or permanent deformation.
- 20. Upon the Effective Date, Vopak shall comply with 30 Tex. Admin. Code § 115.212 during all loading or transfers from the Phase-Separated Hydrocarbon Tanks into trucks or transport vessels.
- 21. Upon the Effective Date, Vopak shall not directly or indirectly transfer any material from any Phase-Separated Hydrocarbon Tank to the Receipt Tanks or to the Wastewater Treatment System. This Paragraph does not apply to post-treatment wastewater transferred from the EOTS to the Receipt Tanks where the source of the wastewater is not the Receipt Tanks or the Wastewater Treatment System.
- 22. Upon the Effective Date and until Vopak has installed and commenced continuous operation of the Flare described in Paragraph 17:
- a. Vopak shall not direct any waste or wastewater to the Wastewater

  Treatment System that: (i) contains materials that are Capable of Phase Separation (including,
  but not limited to, methyl ethyl ketone ("MEK"), and (ii) is collected by truck from any

equipment that was originally placed in service prior to October 1, 2016;

- b. Vopak shall not direct any waste or wastewater to the Wastewater Treatment System that is collected by truck from any equipment that was acquired by Vopak or originally placed in service on or after October 1, 2016, and that: (i) contains materials that are Capable of Phase Separation (including, but not limited to, MEK), or (ii) Vopak knows, based on its Process Knowledge, contains VOCs with a True Vapor Pressure ("TVP") of greater than 0.5 psia; and
- c. Vopak shall not direct any waste or wastewater received from an Off-Site Source to the Receipt Tanks or to the Wastewater Treatment System.

The prohibitions in Subparagraphs (a) and (b) do not apply to post-treatment wastewater transferred from the EOTS to the Receipt Tanks.

- 23. Upon the Effective Date, Vopak shall ensure that (a) all separated organic phase materials that are removed from any of the Receipt Tanks or from Tanks 570 or 571 (hereinafter, "Removed Organics") are transported via a closed system to one or more of the Phase-Separated Hydrocarbon Tanks or the EOTS; and (b) all separated organic phase materials that are removed from the EOTS after the EOTS has processed Removed Organics are transported via a closed system to one or more of the Phase-Separated Hydrocarbon Tanks.
- 24. Upon the Effective Date: (a) Removed Organics may not be commingled in the EOTS with materials from any other source; and (b) post-treatment wastewater from the EOTS may not be transferred directly to Tank 570, Tank 571, or the WWTS.
- 25. Upon the Effective Date, Vopak shall continuously operate Carbon Adsorption Systems or a Flare to control emissions from the Phase-Separated Hydrocarbon Tanks and the EOTS.

- 26. Each CAS required by this Consent Decree shall consist of at least two activated carbon canisters that are connected in series, such that Vopak can detect and address Breakthrough. When a condition of Breakthrough of VOC from the initial saturation canister occurs, Vopak shall switch the Waste Gas flow to the final polishing canister and place a fresh canister as the new final polishing canister within 24 hours. Carbon canisters shall be appropriately sized based on a CAS design analysis and the intended service.
- 27. Vopak may construct and/or designate additional Phase-Separated Hydrocarbon Tanks following the Effective Date, so long as Vopak: (i) ensures that any such newly designated PSHTs comply with Paragraphs 18 through 25 before such tanks receive any separated organic phase material; and (ii) within 30 Days of having first received any separated organic phase material, conducts a CAS stack test to ensure that VOC emissions are compliant with the requirements of Paragraph 31(a), (b), and (c).
- 28. Vopak may construct and/or designate additional Receipt Tanks following the Effective Date, so long as Vopak ensures that any such newly constructed and/or designated Receipt Tanks comply with Paragraphs 16(b), 17, and 19 prior to receiving or storing wastewater.

#### **B.** Emission Testing and Monitoring Requirements

29. Vopak shall conduct all emissions monitoring and testing required by this Consent Decree in accordance with a Quality Assurance Project Plan ("QAPP"). Vopak shall submit a proposed QAPP to EPA and TCEQ for approval no later than 15 Days after the Effective Date, in accordance with the process set forth under Section VIII (Approval of Deliverables). Vopak shall comply with the proposed initial QAPP for all emissions monitoring and testing required by this Consent Decree until EPA and TCEQ approve the QAPP in accordance with the process set

forth in Section VIII (Approval of Deliverables), following which date the approved QAPP shall apply. Vopak shall ensure that the QAPP complies with "EPA Requirements for Quality Assurance Project Plans, EPA QA/R-5, March 2001" ("QAPP Requirements"). In the QAPP, Vopak shall identify its Approving Official for purposes of implementing the QAPP. The QAPP shall also include, but not be limited to, protocols for all monitoring required by Section V, criteria for calibrating the Portable FID monitor including the calibration frequency, stack testing protocols, and procedures for measuring tank LEL levels. Vopak may make changes to the QAPP without EPA's approval if Vopak's Approving Official determines that the changes will not significantly impact the technical and quality objectives of the monitoring governed by the QAPP ("Objectives") and provides written notice to EPA and TCEQ of any such changes within 15 Days of making any change. If Vopak's Approving Official determines that changes to the EPA-approved QAPP may significantly impact such Objectives, or modifications are requested by EPA, Vopak shall timely submit a revised QAPP to EPA and TCEQ, and the process set forth in Section VIII (Approval of Deliverables) shall apply to such submission.

30. Vopak shall provide at least 20 Days' advance notice to the Plaintiffs of any stack test conducted pursuant to Paragraphs 27, 31, or 34.

#### C. Carbon Adsorption Systems

- 31. No later than 30 Days after the Effective Date, Vopak shall conduct an initial stack test of each dual-canister CAS installed at the Wastewater Treatment System for the Phase-Separated Hydrocarbon Tanks or for the EOTS to ensure that the VOC emissions:
- a. reflect a VOC Removal Efficiency of no less than 95 percent, comparing the emissions at the outlet of the final polishing canister and the emissions at the inlet of the initial saturation canister;

- b. are reduced such that the True Vapor Pressure in the Vent Stream at the outlet of the final polishing canister does not exceed 0.5 psia; and
  - c. comply with all applicable permit emission limits.
- 32. If a stack test required by Paragraphs 27 or 31 indicates noncompliance with any of the requirements in Paragraphs 31(a), (b), or (c), Vopak shall:
- a. immediately take the affected tank(s) out of service (i.e., stop material movements into the affected tank(s)); and
- b. within 45 Days of the receipt of such information, conduct a Root Cause Failure Analysis, provide a corrective action plan to U.S. EPA and TCEQ, implement such corrective action, and perform a subsequent stack test to demonstrate that compliance with the affected requirement has been achieved.
- 33. Whenever any of the Phase-Separated Hydrocarbon Tanks or the EOTS are being filled, but no more frequently than once per day per CAS, Vopak shall perform Portable FID monitoring of the Vent Stream between the initial saturation canister and the final polishing canisters of the associated CAS for Breakthrough. Vopak may submit a request to U.S. EPA and TCEQ to reduce this frequency of monitoring based on an analysis of the amount of time the CAS can be reasonably expected to operate continuously without Breakthrough.

## D. Wastewater Treatment System Flare

34. No later than 120 Days after Vopak has commenced continuous operation of the Flare required by Paragraph 17, Vopak shall demonstrate, through an initial Combustion Efficiency stack test conducted at a time during which Waste Gas flows are within two standard deviations of the mean Waste Gas flow to the Flare, that the Flare is achieving a Combustion

Efficiency of no less than 98 percent. Combustion Efficiency shall be calculated using the following equation:

$$CE = \frac{CO_2}{(CO_2 + CO + THC)} \times 100$$

# E. Wastewater Treatment System Monitoring

- 35. Upon the Effective Date, Vopak shall revise the Analyte List on a monthly basis, adding any Tentatively Identified Compounds from Test Method 8260B analyses performed following confirmation of the identification of each such TIC by the laboratory. Vopak may remove any analyte from the Analyte List if such analyte is not on the Test Method 8260B list of analytes and has not been detected in any analyses performed over 24 consecutive months.

  Vopak shall use the revised Analyte List for all subsequent Test Method 8260B analyses. Vopak shall, for all samples analyzed using Test Method 8260B, ensure that the sample is stored on ice and delivered to the laboratory cold and in accordance with proper chain of custody procedures.
- 36. Upon the Effective Date, Vopak shall monitor and record, in gallons, the following:
- a. the volume of wastewater entering the Flocculation Basin each Day using
   a totalizer flow meter located downstream of the confluence of streams exiting Tanks 570 and
   571 and the point at which recirculated water is added to the system;
- b. the volume of the Removed Organics transferred to any PSHT from any Receipt Tank, Tank 570 or 571, or the EOTS by direct measurement of the level of the PSHT immediately prior to and immediately after such transfer of Removed Organics;
  - c. the volume of the materials transferred from any Receipt Tank to the

Wastewater Treatment System by direct measurement of the level of the Receipt Tank immediately prior to and immediately after the transfer of its contents; and

- d. the total calendar monthly volume of methanol added to the Aeration Basin.
- 37. Upon the Effective Date, Vopak shall use Test Method 8260B from SW-846 to sample and analyze each of the analytes listed on the Analyte List, as it may be modified in accordance with Paragraph 35, in:
- a. the wastewater entering the Flocculation Basin (including any flow that follows the confluence of streams exiting Tanks 570 and 571) each calendar month, but Vopak shall not obtain such sample and perform such analyses when the effluent from the Aeration Basin Clarifier is being recirculated;
- the Removed Organics transferred from any Receipt Tank, Tanks 570 or
   or the EOTS to any PSHT during such transfer; and
- c. the materials transferred from any Receipt Tank to the Wastewater

  Treatment System immediately prior to such transfer.
- 38. No later than the last Day of the calendar month following the calendar month during which the stack test described in Paragraph 34 occurs, and continuing on a calendar monthly basis thereafter, Vopak shall use Test Method 8260B to sample and analyze the concentration of each of the analytes listed on the Analyte List, as it may be modified in accordance with Paragraph 35, in (a) the Aeration Basin Clarifier effluent (hereinafter, "Method 8260B Concentration"); and (b) the Aeration Basin influent. Vopak shall not obtain the samples and perform the analyses required by this Paragraph when the effluent from the Aeration Basin Clarifier is being recirculated.

- 39. Beginning no later than 30 Days after the installation and commencement of continuous operation of the Flare and Flare monitoring equipment required by Paragraph 17, above, Vopak shall continuously measure the flow of Waste Gas to the WWTS Flare.
- 40. Beginning no later than 30 Days after the installation and commencement of operation of the Flare and Flare monitoring equipment required by Paragraph 17, above, Vopak shall use Method 25A to measure continuously and record, on a block 15-minute average, the total gaseous organic concentration (expressed in terms of propane) of the Waste Gas routed to the WWTS Flare.
- 41. Beginning no later than 30 Days after the installation and commencement of continuous operation of the Flare and Flare monitoring equipment required by Paragraph 17, above, Vopak shall use Method 21 of 40 C.F.R. Part 60, Appendix A to monitor, on a calendar quarterly basis, each Closed-Vent System required by Paragraph 16(b), and all covers and openings on the following equipment: the Receipt Tanks, Tank 570, Tank 571, the Flocculation Basin, the DAF, the Neutralization Basin, the Digester, and the DAF Effluent and Sludge Pit. If Method 21 monitoring results are equal to or greater than 500 ppmv above background, Vopak shall make a first effort to repair the equipment as soon as practicable, but no later than 5 Days after detection of the emissions, and such repair shall be completed no later than 15 Days after the emissions are detected. Vopak shall only be permitted to delay the equipment repair that is required by this Paragraph if the repair is technically impossible without a complete or partial shutdown of the emissions source, in which case Vopak shall ensure that the repair occurs before the end of the next such shutdown of the emissions source.

# F. Demonstration of Compliance with VOC Removal Requirements at WWTS

- 42. No later than 60 Days after the Effective Date, and continuing on a calendar monthly basis thereafter, Vopak shall calculate:
- a. the total calendar monthly mass of VOC transferred from the Receipt Tanks to the Wastewater Treatment System using the volume and analyte concentration measurements required by Paragraphs 36(c) and 37(c) (hereinafter "M<sub>receipt</sub>");
- b. the total calendar monthly mass of VOC transferred into the PSHTs using the volume and analyte concentration measurements required by Paragraphs 36(b) and 37(b) (hereinafter referred to as " $M_{PSHT}$ "); and
- c. the total calendar monthly mass of methanol added to the Aeration Basin using the volume measurements required by Paragraph 36(d) at standard temperature (20°C) and pressure (1 atm) (hereinafter " $M_{MeOH}$ ").
- 43. No later than 45 Days after the commencement of the measurements required by Paragraphs 39 and 40, and continuing on a calendar monthly basis thereafter, Vopak shall calculate:
- a. the total calendar monthly mass of VOC routed to the WWTS Flare using the volume and concentration measurements required by Paragraphs 39 and 40 (hereinafter, " $M_{flare}$ ");
- b. using the most updated version of WATER9, the calendar monthly mass of VOC removed by biological treatment in the Aeration Basin (hereinafter, " $M_{AB}$ "). Vopak shall base this calculation on the monthly average volume measurements required by Paragraph 36(a) and the analytes concentrations in the Aeration Basin influent as measured under Paragraph 38(b);

- c. using the most updated version of WATER9, the calendar monthly VOC concentrations in the effluent of the Aeration Basin using the volume measurements required by Paragraph 36(a) and the analytes concentrations in the Aeration Basin influent as measured under Paragraph 38(b) (hereinafter, "WATER9 Concentration"); and
- d. the calendar monthly mass of methanol removed by biological treatment in the Aeration Basin (hereinafter, " $M_{MeOHAB}$ "). Vopak shall base this calculation on the monthly mass calculation required by Paragraph 42(c) multiplied by the fraction of methanol removed by biological treatment as calculated by the most recent version of WATER9.
- 44. No later than the last Day of the calendar month following the calendar month during which the stack test described in Paragraph 34 occurs, and continuing on a calendar monthly basis thereafter, Vopak shall operate the Wastewater Treatment System with at least 90 percent efficiency, as demonstrated in accordance with the following formula, in which the value of E ("Efficiency") shall not be less than 90:

$$E = \left(\frac{0.98 \times M_{flare} + M_{PSHT} + M_{AB} + M_{MeOHAB}}{M_{receipt} + M_{PSHT} + M_{MeOH}}\right) \times 100$$

45. At the end of the first full calendar quarter after the calendar quarter in which Vopak performed the calculation required in Paragraph 44, and continuing on a calendar quarterly basis thereafter, Vopak shall confirm and adjust as necessary the fraction of each VOC compound removed by biological treatment in the Aeration Basin as follows: for each VOC compound, except methanol, detected in the influent to the Aeration Basin under Paragraph 38(b), Vopak shall compare the previous calendar quarterly average concentrations calculated under Paragraph 43(c) ("WATER9 Concentration") with the previous calendar quarterly average concentrations of VOC compounds above the quantitation limit in the Aeration

Basin effluent measured under Paragraph 38(a) ("Method 8260B Concentration"). If, for any VOC compound, the WATER9 Concentration and the Method 8260B Concentration vary by more than a factor of ten, Vopak shall adjust the fraction of that VOC compound removed by biological treatment so that a recalculated calendar quarterly average WATER9 Concentration varies from the Method 8260B Concentration by less than a factor of ten. Vopak shall thereafter use the adjusted fraction of that VOC compound removed by biological treatment in the calculations required by Paragraphs 43(b) and (c). In no case shall an adjustment under this Paragraph retroactively affect the compliance demonstration required by Paragraph 44.

- 46. Vopak may discontinue the quarterly evaluation and adjustment of the fraction of each VOC compound removed by biological treatment in the Aeration Basin described in Paragraph 45 if four consecutive quarterly evaluations do not result in the adjustment of the fraction of any VOC compound removed by biological treatment. However, Vopak shall resume the quarterly evaluation and adjustment of the fraction of each VOC compound removed by biological treatment in the Aeration Basin, as required in Paragraph 45, if:
- a. the minimum mixed liquor total suspended solids ("MLSS") concentration in the Aeration Basin on a daily average basis is less than 1,000 mg/L, as determined by Method 160.2 (Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020) or Method 2540D (Standard Methods of the Examination of Water and Wastewater, 18th Edition, American Public Health Association); or
- b. Vopak imports any suspended biomass (activated sludge) from an off-site wastewater treatment system for use in the Aeration Basin.

## **G. Flare Operations**

47. No later than 30 Days after the Effective Date, Vopak shall:

- a. operate the Land Flares and the Marine Flares in accordance with the Flare Operational Requirements set forth in Subsection H (Flare Operational Requirements); and
- b. continuously operate any Flare at the Facility that is receiving a Vent Stream from tanks containing styrene.
- 48. No later than four years after the Effective Date, Vopak shall continuously operate the Flare required by Paragraph 17 in accordance with the Flare Operational Requirements set forth in Subsection H (Flare Operational Requirements) below.
- 49. No later than 30 Days after the Effective Date, Vopak shall install an audible or visual alarm that alerts Vopak personnel in the event that either of the Land Flares, for any reason, is not combusting during loading operations.

# **H. Flare Operational Requirements**

- 50. At all times when a Flare at the Facility is receiving a Vent Stream, Vopak shall continuously operate such Flare to: (a) achieve a Combustion Efficiency of no less than 98 percent, as demonstrated through compliance with 40 C.F.R. § 60.18; and (b) ensure no exceedance of applicable permit emission limitations.
- 51. At all times when a Flare at the Facility is receiving a Vent Stream, Vopak shall continuously operate such Flare consistent with good air pollution control practices for minimizing emissions and in accordance with its design and the manufacturer's specifications. With respect to the Flare installed pursuant to Paragraph 17 (the WWTS Flare), good air pollution practices include, but are not limited to, ensuring through engineering design that the air speed is variable and is adjusted based on Waste Gas flows and concentrations, so that the Assist Air does not provide air in excess of seven times the stoichiometric ratio for complete combustion.

- 52. Vopak shall program and continuously operate an alarm that will notify operators in the event that a natural gas enrichment meter ("flow meter") at a marine skid transmits a flow reading during marine loading operations that is (a) equal to or less than zero or (b) greater than the maximum range specified by the relevant flow meter manufacturer's specification. If the alarm sounds, Vopak shall document the specific conditions giving rise to the alarm and implement the necessary steps to remedy the situation as quickly as practicable, which steps may include operating the marine vapor skid manually with predetermined natural gas flows until proper flow meter operation can be confirmed.
- 53. Vopak shall calibrate or verify all flow meters used to ensure that the net heating value of the gases in the Vent Stream that are combusted by any Marine Flare at the Facility are in compliance with 40 C.F.R.  $\S$  60.18(c)(3) at the frequency recommended by the manufacturer, or at least annually, whichever is more frequent. Vopak shall ensure, through such calibration or verification, that the flow meters are accurate within  $\pm 5.0$  percent.
- 54. Vopak shall ensure a pilot flame is present at all times during operation of each Flare at the Facility.
- 55. Nothing in this Consent Decree shall preclude Vopak from electing to route Waste Gas from the Phase-Separated Hydrocarbon Tanks or the EOTS to the WWTS Flare in accordance with all applicable requirements.

# I. Terminal Tanks Enhanced Inspection Program

56. No later than 90 Days after the Effective Date, and continuing on a quarterly basis thereafter, Vopak shall perform Infrared Camera Inspections at least once each calendar quarter to determine whether VOC emissions are detected from the IFR Tank Vents on Tanks 403, 404, 405, 407, 408, 410, 411, 520, 601, 602, 606, 720, 721, and 918 (identified in Appendix D).

- 57. Vopak shall ensure that all Infrared Camera Inspections conducted pursuant to this Consent Decree are performed by individuals, whether employees of a third-party vendor or Vopak personnel, who have received training in infrared gas imaging camera fundamentals and operation and who maintain proficiency with the infrared gas imaging camera through regular use.
- 58. Vopak shall ensure that all Infrared Camera Inspections conducted pursuant to this Consent Decree are performed in accordance with the following requirements:
- a. all infrared gas imaging cameras shall be capable of imaging organic gases that absorb infrared light in approximately the 3.2 to 3.4 micron range, and have an automatic mode (for thermal contrast and brightness) for Infrared Camera Inspections;
- b. all Infrared Camera Inspections shall be conducted in automatic mode and in gray scale, and Vopak shall select the Polarity in order to achieve the maximum contrast of the VOCs with the sky background condition;
- c. all Infrared Camera Inspections shall be conducted at a distance of no greater than 50 feet from the vents, and Vopak shall image all vents;
- d. Vopak shall conduct Infrared Camera Inspections only when the tanks are idle (neither filling nor being drawn down); and
- e. Vopak shall conduct Infrared Camera Inspections only at times when the wind speed is forecasted to be greater than 4 mph and less than 12 mph.
- 59. If the infrared gas imaging camera operator observes emissions during Infrared Camera Inspections conducted pursuant to Paragraph 56 or 63:
- a. an infrared camera video recording shall be made immediately and during the inspection in which the operator observed emissions, and in accordance with the

requirements of Paragraphs 57 and 58; and

- b. within 72 hours of the initial observation of emissions, Vopak shall conduct a Visual Inspection of the tank and measure the tank's LEL level. The Visual Inspection of the tank shall be through roof openings and shall include an inspection of the internal floating roof and rim seal(s).
- 60. No later than 180 Days after the Effective Date, and continuing on a semi-annual basis thereafter, Vopak shall conduct semi-annual Visual Inspections of all internal floating roof tanks of 30,000 barrels or more in capacity and shall measure the tank's LEL level.
- 61. As to all LEL measurements taken pursuant to this Consent Decree, Vopak shall calibrate the LEL meter with n-pentane or other appropriate gas such that a Response Factor can be used to determine the actual LEL of the vapors in the tank. To minimize the influence of ambient air on the LEL meter reading, Vopak shall measure the LEL level of the tank by inserting a tube connected to the LEL meter approximately 1 meter below the plane of the hatch, and closing the hatch without pinching the tube. Tanks that contain Low-VOC Vapor Pressure Liquids do not need to be inspected.
  - 62. If, during the inspections required by Paragraph 59 or 60:
- a. the internal floating roof is not resting on the surface of the liquid inside the tank and is not resting on the leg supports;
  - b. there is liquid on the floating roof;
  - c. the seal(s) is(are) detached;
  - d. there are holes or tears in the seal fabric;
  - e. there are visible gaps between the seals(s) and the wall of the tank; or
  - f. the LEL reading immediately below the plane of the hatch is greater than

30 percent of the LEL (for tanks installed after June 1, 1984) or 50 percent of the LEL (for tanks installed before June 1, 1984),

Vopak shall, within 45 Days of the Visual Inspection, repair the tank to correct the specific failure(s) discovered ("Required Repairs").

- 63. After completion of any Required Repairs, Vopak shall conduct an Infrared Camera Inspection on the affected tank to confirm that the tank is in good working order within 30 Days of completion of the Required Repairs. If emissions are observed during this Infrared Camera Inspection, Vopak shall follow the process set forth in Paragraph 59 again.
- 64. If, during the inspections required by Paragraph 59 or 60, Vopak does not observe any of the failures set forth in Paragraph 62, no further action is required until the next scheduled Visual Inspection or Infrared Camera Inspection.
- 65. If one or more Required Repairs cannot be made without removing the affected tank from service, Vopak shall empty and remove the tank from service within 45 Days of the Visual Inspection required by Paragraph 59 or 60; provided, however, that if the Required Repairs cannot be made or the tank cannot be emptied within 45 Days, Vopak may use no more than two extensions of no more than 30 Days each, with written notice to U.S. EPA and TCEQ. Vopak may utilize an extension of time only if alternate suitable storage capacity is unavailable.
- 66. If, for any given tank, no Required Repairs are called for by Paragraph 62 for four consecutive calendar quarters, the Infrared Camera Inspection frequency required by Paragraph 56 shall be reduced to annually, upon notice to U.S. EPA and TCEQ. If any subsequent inspection calls for Required Repairs under Paragraph 62, then the frequency of Infrared Camera Inspection under Paragraph 56 shall be increased to quarterly.

- 67. If Vopak has undertaken Required Repairs at any tank subject to inspection under Paragraph 59 or 60 four times since the Effective Date and Required Repairs are still necessary under Paragraph 62, Vopak shall either place the tank permanently into Low-VOC Service or ensure that the tank will remain out of service until Vopak, U.S. EPA, and TCEQ agree on a proper course of action.
- 68. Nothing in this Consent Decree shall relieve Vopak of its obligations, under local, state, or federal law, to ensure the safety of the public or its workforce.

## J. Pipeline Degassing Emissions

- 69. No later than 30 Days after the Effective Date, Vopak shall develop and implement a Standard Operating Procedure to ensure that, during any change of service, cleaning or degassing of a pipeline, VOCs with a TVP of greater than 0.5 psia are routed to a control device until VOC concentrations as measured in the pipe are less than 1,000 ppm.
- 70. No later than 90 Days after the Effective Date, Vopak shall apply to incorporate the action levels and corrective action measures from the Standard Operating Procedure into a non-Title V federally enforceable permit.

## **K.** Other Requirements

- 71. Upon the Effective Date, Vopak shall comply with all requirements in Special Conditions 18 and 23 of Permit 87923.
- 72. Upon the Effective Date, Vopak shall comply with applicable 40 C.F.R. Part 63, Subpart DD requirements.

#### VI. EMISSION CREDIT GENERATION

- Reductions: as netting reductions; as emissions offsets; or to apply for, obtain, trade, or sell any emission reduction credits. With respect to (a) projects achieving Consent Decree Emission Reductions and (b) projects that are initially authorized concurrently with, or after, projects achieving Consent Decree Emission Reductions, the baseline actual emissions during any 24-month period selected by Vopak shall be adjusted downward to exclude any portion of the baseline emissions that would have been eliminated as Consent Decree Emissions Reductions had Vopak been complying with this Consent Decree during that 24-month period. Any plant-wide applicability limits ("PALs") or PAL-like limits that apply to emissions units addressed by this Consent Decree must be adjusted downward to exclude any portion of the baseline emissions used in establishing such limit(s) that would have been eliminated as Consent Decree Emissions Reductions had Vopak been complying with this Consent Decree during such baseline period.
- 74. <u>Outside the Scope of the Prohibition</u>. Nothing in Paragraph 73 is intended to prohibit Vopak from seeking to:
- a. use or generate emission reductions from emissions units that are covered by this Consent Decree to the extent that the proposed emission reductions represent the difference between Consent Decree Emissions Reductions and more stringent control requirements that Vopak may elect to accept for those emissions units in a permitting process;
- b. use or generate emission reductions from emissions units that are not subject to an emission limitation or control requirement pursuant to this Consent Decree; or
- c. use Consent Decree Emissions Reductions for compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area

(excluding PSD and Non-attainment NSR rules, but including, for example, Reasonably Available Control Technology rules) that apply to the Facility; provided, however, that Vopak shall not be allowed to trade or sell any Consent Decree Emissions Reductions.

# VII. THIRD PARTY AUDIT REQUIREMENTS

- 75. Within 60 Days after the Effective Date, Vopak shall retain, at its expense, one or more independent third party contractors (each, an "Audit Contractor") to:
- a. conduct a one-time comprehensive evaluation of the training and management practices at Vopak's Deer Park Facility to determine their effectiveness in minimizing the introduction of organic liquids into the WWTS during and after rainfall events ("Waste Minimization Audit"); and
- b. conduct annual evaluations of Vopak's compliance with the requirements of this Consent Decree ("Consent Decree Compliance Audit").
- 76. To ensure continuity, Vopak shall make commercially reasonable efforts to utilize a single Audit Contractor to perform the Audits described in Paragraph 75(b), and to utilize the same Audit Contractor that performs the Waste Minimization Audit to analyze and report on the status of any corrective action recommendations, as described in Paragraph 86.
- 77. Vopak shall make available to the Audit Contractor(s): (a) all of Vopak's non-privileged records regarding Vopak's compliance with this Consent Decree; (b) any non-privileged records requested by the Audit Contractor that are necessary to conduct the Waste Minimization Audit; and (c) any non-privileged records regarding Vopak's implementation of corrective actions recommended by the Waste Minimization Audit. Vopak shall provide the Audit Contractor(s) with access to Vopak's Deer Park Facility and shall provide all reasonable assistance to allow the Audit Contractor(s) to conduct the Audits referenced in Paragraph 75,

including making employees, affiliates, or contractors available to answer questions or provide information.

#### **A. Audit Contractor Selection Process**

- 78. Within 60 Days after the Effective Date, Vopak shall notify the United States and the State in writing as to the name of the Audit Contractor(s) retained and as to its qualifications to perform the Waste Minimization Audit and the Consent Decree Compliance Audit, as applicable. If requested, Vopak shall provide résumés, biographical information, and other relevant material concerning the candidates, including information on the relationship between Vopak and the candidate. In the notification submitted pursuant to this Paragraph, Vopak shall certify that the Audit Contractor(s) meet(s) all of the conditions set forth in Subparagraphs 78(a) through (d), below.
- a. The Audit Contractor and its personnel have demonstrated experience in the Clean Air Act and have the appropriate education to conduct the Audit(s) referenced in Paragraph 75, above, for which it is being proposed.
- b. The Audit Contractor and its personnel have not conducted research, development, design, construction, financial, engineering, legal, consulting, or any other advisory services for Vopak since at least October 1, 2016.
- c. The Audit Contractor shall not provide commercial, business, or voluntary services to Vopak, excluding services provided in its capacity as Audit Contractor, for a period of at least one year following the completion of the Audit(s) for which it has been retained.
- d. Vopak shall not provide future employment to any of the Audit

  Contractor's personnel who conducted or otherwise participated in auditing services under this

Consent Decree for a period of at least one year following the completion of the Audit(s) for which the Audit Contractor was retained.

- 79. In the event that Vopak is not able to certify that the Audit Contractor(s) meet(s) all the conditions in Paragraph 78 and if Vopak is unable, after extensive efforts, to identify an alternative Audit Contractor that would satisfy such conditions, Vopak shall submit to the United States and the State:
  - a. an explanation of its efforts to find an alternative Audit Contractor;
- b. an explanation of specifically which of the independence requirements in Paragraph 78(b)-(d) are not being met and the reasons why they are not being met; and
- c. a conflict of interest mitigation plan for how Vopak will ensure that the Audit Contractor will still have sufficient independence to objectively and competently perform the Audit(s) referenced in Paragraph 75.
- 80. If the United States or the State determines that the Audit Contractor that Vopak selected is not acceptable for any reason, it will notify Vopak in writing and Vopak shall, as soon as practicable: (a) substitute an alternate Audit Contractor that satisfies the criteria set forth in Paragraphs 78(a) through (d); and (b) submit the certification referenced in Paragraph 78 regarding the substitute Audit Contractor. Any dispute regarding the qualifications or acceptability of an Audit Contractor shall be resolved in accordance with Section XIII (Dispute Resolution), and the deadlines for the submittal of the relevant Audit Report, as set forth in Paragraphs 83 and 84, as applicable, shall be extended by the number of Days during which any such dispute resolution proceeding is pending.
- 81. Vopak shall ensure that each Audit Contractor complies with the following general requirements:

- a. The Audit Contractor shall provide written advance notice as soon as practicable to Vopak, the United States, and the State in the event that the Audit Contractor is unable to continue to serve as the Audit Contractor under this Consent Decree;
- b. The Audit Contractor shall provide U.S. EPA and the State with a written advance schedule of any on-site visits, telephone calls, or other meetings with Vopak or its agents or contractors and shall invite U.S. EPA to participate in person or by teleconference;
- c. The Audit Contractor shall not share any drafts of preliminary findings or reports in any format (electronic or paper) with any of the Parties; and
- d. The Audit Contractor shall promptly disclose to the United States and the State any conflicts of interests for it or its subcontractors that may arise with respect to its performance of the Audits described in Paragraph 75. In the event of a conflict, the Audit Contractor shall take any and all action to resolve such conflict.

#### **B.** Waste Minimization Audit Process

- 82. No later than 90 Days after the Effective Date, Vopak shall meet with the Audit Contractor to discuss the Audit Contractor's project plan for how it plans to perform the Waste Minimization Audit. Vopak shall provide U.S. EPA and the State with at least 15 Days' advance notice of such meeting and an opportunity to attend.
- 83. No later than 180 Days after the Effective Date, Vopak shall ensure that the Audit Contractor submits a Waste Minimization Audit Report to Vopak so that Vopak may, if needed, identify within the Report any Confidential Business Information ("CBI"), subject to 40 C.F.R. Part 2 and/or confidential trade secret, commercial, or financial information, subject to Tex. Gov't Code § 552.110. Vopak shall make no other changes to the Report nor request any other changes to be made by the Audit Contractor. No later than 201 Days after the Effective Date,

Vopak shall ensure the Audit Contractor submits the Waste Minimization Audit Report, including any such CBI or other markings, to the United States, the State, and Vopak simultaneously. Vopak shall ensure that the Waste Minimization Audit Report includes the Audit Contractor's recommendations for corrective actions regarding Facility training, Standard Operating Procedures and other written materials, and best management practices related to good housekeeping, spill prevention, and preventative maintenance (collectively, "corrective actions"). The Report shall also include a recommended schedule for the implementation of such corrective actions. Vopak shall ensure that the Waste Minimization Audit Report relates the recommended corrective actions to specific examples of situations that may be encountered during normal operations and emergency response situations. In no case shall any corrective action recommendation require: (a) a Capital Expenditure; or (b) a permit, approval, or authorization from any governmental entity.

# **C. Consent Decree Compliance Audit Process**

April 1 of each year thereafter, Vopak shall ensure that the Audit Contractor submits annual Consent Decree Compliance Audit Reports to Vopak so that Vopak may, if needed, identify within the Report any CBI, subject to 40 C.F.R. Part 2 and/or confidential trade secret, commercial, or financial information, subject to Tex. Gov't Code § 552.110. Vopak shall make no other changes to the Report nor request any other changes to be made by the Audit Contractor. No later than April 21 of the first full calendar year after the Effective Date, and by April 21 of each year thereafter, Vopak shall ensure the Audit Contractor submits the Consent Decree Compliance Audit Report, including any such CBI or other markings, to the United States, the State, and Vopak simultaneously. The period addressed by the first Consent Decree Compliance

Audit Report shall run from the Effective Date to the last day of December of the first full calendar year after the Effective Date. The subsequent Reports shall address each 12-month period beginning on January 1.

- 85. Vopak shall ensure that, in preparing each Consent Decree Compliance Audit Report, the Audit Contractor:
- a. reviews and evaluates all proposed plans, reports, and other deliverables that Vopak is required to submit under this Consent Decree during the relevant Audit Period to determine whether such plans, reports, and other deliverables comply with the requirements of this Consent Decree;
- b. identifies any requirement of the Consent Decree applicable during the Audit Period with which Vopak did not comply and, for each such requirement: (i) provides a detailed description of the basis for this conclusion regarding noncompliance, including a summary of any relevant oral communications between the Audit Contractor and any of Vopak's officers, agents, or employees; and (ii) attaches supporting documentation; and
- c. reports on the status of permitting, construction or other activities that are underway or not yet completed that have been taken by Vopak to comply with the Consent Decree.
- 86. In addition to the requirements set forth in Paragraph 85, Vopak shall ensure each Consent Decree Compliance Audit Report whose due date is no later than one year after the date that Vopak has installed and commenced continuous operation of the Flare described in Paragraph 17 includes the status of any corrective action recommendation(s) set forth in the Waste Minimization Audit Report and Vopak's efforts to implement any such recommendation(s).

## **D.** General Audit Report Requirements

- 87. Within 90 Days of receiving each Consent Decree Compliance Audit Report,
  Vopak may submit to U.S. EPA and the State a response to the findings, conclusions, and
  recommendations set forth in the Consent Decree Compliance Audit Report. To the extent that
  Vopak concurs with a finding or conclusion that Vopak is in noncompliance with the Consent
  Decree or that it has yet to complete a requirement, Vopak may state whether it agrees with the
  recommended actions for achieving compliance and with the recommended schedule for
  completing those actions. Alternatively, if Vopak disagrees with any of the Audit Contractor's
  findings or conclusions, Vopak may explain the basis for the disagreement and propose changes
  to the Audit Report. To the extent that Vopak disagrees with any aspect of the Audit
  Contractor's recommendations for corrective action, Vopak may propose alternative corrective
  actions, as well as an alternative schedule for completing those actions.
- 88. Within 30 Days of receipt of Vopak's response, if any, Vopak shall ensure that the Audit Contractor submits a reply to Vopak, the State, and U.S. EPA that addresses each of the issues raised by Vopak. To the extent that the Audit Contractor concurs with Vopak's response, Vopak shall ensure that the Audit Contractor provides U.S. EPA, the State, and Vopak with a Revised Consent Decree Compliance Audit Report.
- 89. Vopak shall implement all commercially reasonable recommended corrective actions set forth in the Revised Waste Minimization Audit Report, in accordance with the schedule therein, or, if no Revised Report is generated, Vopak shall implement all commercially reasonable corrective actions set forth in the original Waste Minimization Audit Report submitted pursuant to Paragraph 83, in accordance with the schedule therein.

- 90. If Vopak determines that any recommended corrective action is commercially unreasonable, it shall so notify U.S. EPA and the State within 30 Days of the issuance of the final Waste Minimization Audit Report, together with supporting documentation. Vopak's determination that any recommended corrective action is commercially unreasonable and should not be implemented shall be subject to U.S. EPA's approval, after consultation with the State, which decision shall be subject to Dispute Resolution under Section XIII.
- 91. U.S. EPA and the State shall not be bound by any Audit Report generated pursuant to this Consent Decree. U.S. EPA and/or the State may accept or reject, in whole or in part, the Audit Contractor's findings, conclusions, and/or recommendations. If U.S. EPA or the State determines that Vopak is in violation of any Consent Decree requirement for which stipulated penalties are provided under Section XI (Stipulated Penalties), Vopak shall be subject to the assessment of such penalties, regardless of the Audit Report, in accordance with the provisions of Section XI (Stipulated Penalties).
- 92. The Waste Minimization Audit Report and each Consent Decree Compliance
  Audit Report, when provided to the State and the United States, shall be signed by an official of
  the Audit Contractor and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I have compared this Audit Report in the form it was initially provided to Vopak, pursuant to the Consent Decree requirements, for the purpose of identifying any CBI, confidential trade secret, commercial, or financial information in this Audit Report in the form it was provided to Vopak, the State, and the United States simultaneously, and I have determined that the only difference between these two versions of the Audit Report is the presence of this

certification and, if any, Vopak's identification of CBI, confidential trade secret, commercial, or financial information. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- 93. Vopak may terminate its contract with an Audit Contractor only for good cause shown and with the consent of the United States. Provided, however, that Vopak may terminate its contract with an Audit Contractor without the consent of the United States if Vopak (a) has determined that the Contractor failed to comply with Vopak's Health and Safety Requirements, and (b) provides written notice of the termination to the Plaintiffs, together with documentation of the basis therefor, within 30 Days of the termination.
- 94. Except as otherwise provided in Paragraphs 83 and 84 regarding Vopak's identification of CBI and/or confidential trade secret, commercial, or financial information, no Audit Report, nor any information developed or findings or recommendations of the Audit Contractor, shall be subject to any privilege or protection.

### VIII. APPROVAL OF DELIVERABLES

- 95. After review of any plan, report, or other item that is required to be submitted for approval by U.S. EPA pursuant to Section V of this Consent Decree, U.S. EPA shall, after consultation with the State, in writing: (a) approve the submission; (b) approve the submission upon specified conditions; (c) approve part of the submission and disapprove the remainder; or (d) disapprove the submission.
- 96. If the submission is approved pursuant to Paragraph 95, Vopak shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part pursuant to Paragraph 95(b) or (c), Vopak shall,

upon written direction from U.S. EPA, after consultation with the State, take all actions required by the approved plan, report, or other item that U.S. EPA, after consultation with the State, determines are technically severable from any disapproved portions, subject to Vopak's right to dispute only the specified conditions or the disapproved portions, under Section XIII (Dispute Resolution).

- 97. If the submission is disapproved in whole or in part pursuant to Paragraph 95(c) or (d), Vopak shall, within 45 Days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, Vopak shall proceed in accordance with the preceding Paragraph.
- 98. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, U.S. EPA, after consultation with the State, may again require Vopak to correct any deficiencies or may themselves correct any deficiencies, in accordance with the preceding Paragraphs, subject to Vopak's right to invoke Dispute Resolution and the right of U.S. EPA and the State to seek stipulated penalties as provided in the preceding Paragraphs.
- 99. Any stipulated penalties applicable to the original submission, as provided in Section XI (Stipulated Penalties), shall accrue during the 45-Day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Vopak's obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

#### IX. PERMITS

- 100. Where any compliance obligation under this Decree requires Vopak to obtain a federal, state, or local permit or approval, Vopak shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. Vopak may seek relief under the provisions of Section XII (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Vopak has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.
- 101. No later than 90 Days after the Effective Date, Vopak shall apply to update a non-Title V, federally enforceable permit to incorporate the control of emissions from styrene tanks.
- 102. No later than 90 Days after the Effective Date, Vopak shall apply to update a non-Title V, federally enforceable permit so that the operation of Tanks 584, 585, 589, and 590 is authorized by only one permit.
- 103. Prior to termination of this Consent Decree, Vopak shall obtain non-Title V federally enforceable permits that incorporate the following terms as "applicable requirements," such that these requirements will survive termination of this Consent Decree:
- a. <u>Installation of Pollution Controls</u>: All the requirements set forth in Paragraphs 15 through 21 and Paragraphs 23 through 28;
- b. <u>Carbon Adsorption Systems</u>: All the requirements set forth in Paragraph 33;
- c. <u>Wastewater Treatment System Flare</u>: All the requirements set forth in Paragraph 34;
  - d. <u>Wastewater Treatment System Monitoring</u>: All the requirements set forth

in Paragraphs 35 through 41;

- e. <u>Demonstration of Compliance with VOC Removal Requirements at the WWTS</u>: All the requirements set forth in Paragraphs 42 through 44, except Subparagraph (c) of Paragraph 43;
- f. <u>Flare Operations and Operational Requirements</u>: All the requirements set forth in Paragraphs 47 through 55;
- g. <u>Terminal Tanks Enhanced Inspection Program</u>: All the requirements set forth in Paragraphs 56 through 67; provided, however, that Vopak shall not be required to incorporate the requirements pertaining to Infrared Camera Inspections if Vopak proposes, and the Plaintiffs approve in writing, an alternative tank inspection program for incorporation into Vopak's non-Title V federally enforceable permit that EPA determines is at least as effective and protective as the requirements set forth in Paragraphs 56 through 67;
- h. <u>Pipeline Degassing Emissions</u>: All the requirements in the permit applied for pursuant to Paragraph 70;
- i. <u>Emission Credit Generation</u>: All the requirements set forth in Section VI; and
- j. <u>Control of Emissions from Styrene Tanks</u>: All the requirements in the permit applied for pursuant to Paragraph 101.

To the extent that the requirements of this Consent Decree that are subject to this Paragraph 103 contain terms defined in Section III of this Consent Decree, Vopak shall also incorporate such definitions into the permit applications submitted pursuant to this Paragraph.

104. Prior to the termination of this Consent Decree, Vopak shall submit complete applications to the appropriate permitting authorities in the State of Texas to obtain a new Title V

permit for the Facility or modify, amend, or revise the Facility's existing Title V permit to: (a) incorporate the requirements identified in Paragraph 103 as applicable requirements; (b) include 40 C.F.R. Part 63, Subpart DD as an applicable requirement, if applicable at the time of permitting; (c) include 40 C.F.R. Part 60, Subpart Kb as an applicable requirement for Tanks 506, 513, 520, 535, 536, 606, 764, 786, and 790; and (d) ensure that the Title V permit authorization(s) cover(s) the entire Facility as well as any emission sources that are contiguous to the Facility and under common control.

# X. RECORDKEEPING AND REPORTING REQUIREMENTS

- 105. Vopak shall maintain the following records:
- a. The following data associated with the CAS Portable FID monitoring performed pursuant to Paragraph 33:
  - (1) the calibration of the Portable FID monitoring instrument;
  - (2) the Portable FID monitoring results, in parts per million by volume, and the monitoring date and time;
  - (3) the specific PSHT(s) that is/are being filled at the time of monitoring; and
  - (4) if Breakthrough is detected, the date and time that the Waste Gas flow was switched to the final polishing canister and a fresh canister was placed as the new final polishing canister;
- b. Records required by 30 Tex. Admin. Code § 115.216, pertaining to loading or transfers from the PSHTs into trucks or transport vessels, to demonstrate compliance with 30 Tex. Admin. Code § 115.212;
  - c. All test result reports for emissions tests conducted on any Flare or CAS

## pursuant to the Consent Decree;

- d. For Method 21 monitoring data collected pursuant to Paragraph 41:
  - (1) a scale plot plan showing the location of each tank or vessel for which a Closed-Vent System, cover and/or opening must be monitored;
  - (2) a process flow diagram showing the general process streams and each tank or vessel for which a Closed-Vent System, cover and/or opening must be monitored; and
  - (3) for each Closed-Vent System, cover or opening required to be monitored pursuant to Paragraph 41:
    - (a) the Method 21 monitoring results in parts per million by volume, and the monitoring date and time;
    - (b) the calibration of the Method 21 monitoring instrument; and
    - (c) if a Closed-Vent System, cover or opening is found leaking, the date that the leak was repaired, the Method 21 reading of the recheck procedure after the leak was repaired, and a description of the actions taken to repair the leak;
- e. WWTS flow data and concentration data, including all sample analyses reports required pursuant to Paragraphs 36 through 38;
- f. The results of the monthly calculations required to demonstrate compliance with the VOC removal requirements pursuant to Paragraphs 42 through 44;
  - g. Records reflecting the comparison of WATER9 results to sample analyses,

as required by Paragraphs 45 and 46;

- h. Records reflecting the daily average concentration of mixed liquor total suspended solids in the Aeration Basin in mg/L, as required by Paragraph 46(a);
- i. The dates that Vopak imported any suspended biomass (activated sludge) from an off-site wastewater treatment system for use in the Aeration Basin, if any;
- j. As to each event for which the alarm required pursuant to Paragraph 52 is activated, the date and time of the alarm, the specific meter or meters involved, the specific conditions that caused the alarm, the steps taken to remedy the situation including the manually adjusted natural gas flow rates that were used, if any, and the date and time proper meter operation was confirmed;
- k. The WWTS Flare Assist Air flow rates, or other documentation, to demonstrate that that the Assist Air does not provide air in excess of seven times the stoichiometric ratio for complete combustion, as required by Paragraph 51;
- 1. The Marine Flare flow meter calibrations/verifications required pursuant to Paragraph 52;
- m. Training records for infrared gas imaging camera operators pursuant to Paragraph 57;
- n. The manufacturer, model, and serial number of each infrared gas imaging camera used to comply with the Terminal Tanks Infrared Gas Imaging Program, required pursuant to Paragraphs 56 through 59 and 63;
- o. Forecasted wind speeds during any Infrared Camera Inspections required pursuant to Paragraphs 56 through 59 and 63;
  - p. Infrared camera videos recorded pursuant to Paragraph 59, including the

identification number of the specific tank depicted in the recorded video, and the date and time that the video was recorded;

- q. Visual Inspection records required pursuant to Paragraphs 59 and 60, including the date and time of each tank inspection, the identification number of each tank inspected, the measured LEL of the tank, and whether or not any Required Repairs were identified (indicate which, if any, conditions identified in Paragraph 62, Subparagraphs (a) through (f) were observed);
- r. For each tank for which one or more Required Repairs was identified pursuant to Paragraph 62:
  - (1) The date the tank was either repaired or removed from service;
  - (2) A copy of any written notice for an extension of time to empty a tank and take it out of service pursuant to Paragraph 65; and
  - (3) A description of any Required Repairs that were made pursuant to Paragraph 62.
- s. The Analyte List, including any monthly updates made pursuant to Paragraph 35; and
- t. Flare flow rate and concentrations data pertaining to the WWTS Flare, pursuant to Paragraphs 39 and 40.
- 106. No later than the 30 Days after the first anniversary of the Effective Date, and on an annual basis thereafter, Vopak shall submit to U.S. EPA and the State, in writing and in the manner set forth in Section XVII (Notices), a Report covering the 12-month period that ends the Day before the anniversary of the Effective Date. The Report shall include, but not be limited to, documentation of each of the following items:

- a. For all permit applications, including permit modifications, required in order to comply with the terms of the Decree, the permit application information including TCEQ project number and date of permit application submission;
- b. The beginning date and, if applicable, end date, of any construction, installation or operation undertaken pursuant to Section V of this Consent Decree;
- c. Designation of any new PSHTs, as provided by Paragraph 27, or any new Receipt Tanks, as provided by Paragraph 28;
- d. The date that Vopak began routing Waste Gas from any PSHT to the WWTS Flare, and identification of the PSHT(s) involved, as provided by Paragraph 55;
- e. A summary of all test reports for emission tests conducted on any Flare or CAS pursuant to the Consent Decree;
- f. The design analyses prepared to ensure that each CAS installed on a newly constructed and/or designated Phase-Separated Hydrocarbon Tank is appropriately sized, as required by Paragraph 26;
- g. Any deviations from the continuous monitoring required by Paragraph 39 or 40 for the WWTS Flare;
- h. The results of the monthly calculations conducted pursuant to Paragraphs 42, 43 and 44;
- i. Notice of any occasion on which Vopak adjusted the fraction of any VOC compound removed by biological treatment in the Aeration Basin, pursuant to Paragraph 45, or discontinued or resumed the quarterly evaluations described in Paragraph 45, and the basis therefor;
  - j. Laboratory reports of all DWS and WWTS sample analyses for compound

and TIC speciation concentrations;

- k. All reports required under 40 C.F.R. § 63.697;
- l. All reports, if any, required under 40 C.F.R. Part 63, Subpart EEEE at the Wastewater Treatment System;
- m. The Standard Operating Procedure developed pursuant to Paragraph 69, except that Vopak shall provide this document in the first annual report and then shall produce it in subsequent annual reports only if it has been modified;
- n. A summary of all deviations from the 500 ppmv above background monitoring level and a summary of any repairs conducted pursuant to Paragraph 41, including repair delays;
- o. Data regarding tanks moving to lower or higher Infrared Camera

  Inspection frequency or that are placed in Low-VOC Service or out of service, as required by

  Paragraphs 66 and 67;
  - p. All records required by Subparagraphs 105(m) through (r);
- q. All non-privileged documents regarding (i) corrective actions recommended pursuant to Paragraph 83 and/or undertaken pursuant to Paragraph 89; (ii) Vopak's disagreements with and/or proposed changes to the Audit Contractor's findings or conclusions as referenced in Paragraph 87; (iii) Vopak's conclusion that a corrective action recommendation requires a Capital Expenditure or a permit, approval, or authorization from any governmental entity, as referenced in Paragraph 83; (iv) Vopak's determination that a recommended corrective action is commercially unreasonable, pursuant to Paragraph 90; and (v) any decision by Vopak to terminate an Audit Contractor pursuant to Paragraph 93; and
  - r. A description of any noncompliance with any of the requirements of this

Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. Nothing in this Subparagraph relieves Vopak of its obligation to provide the notice required by Section XII (Force Majeure).

- 107. All reports shall be submitted to the persons designated in Section XVII (Notices).
- 108. Each report submitted by Vopak under this Section shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- 109. This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.
- 110. The reporting requirements of this Consent Decree do not relieve Vopak of any reporting obligations required by the Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.
- 111. Any information provided pursuant to this Consent Decree may be used by the United States and/or the State in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

## XI. STIPULATED PENALTIES

112. Vopak shall be liable for stipulated penalties to the United States and the State for violations of this Consent Decree as specified below, unless excused under Section XII (Force

Majeure). A violation includes failing to perform any obligation required by the terms of this Consent Decree, including any work plan or schedule approved under this Consent Decree, according to all applicable requirements of this Consent Decree and within the specified time schedules established by or approved under this Consent Decree.

- 113. If Vopak fails to pay any portion of the civil penalty required to be paid under Section IV of this Decree (Civil Penalty) when due, Vopak shall pay a stipulated penalty of \$5,000 per Day for each Day that the payment is late to the United States and/or the State. Late payment of the civil penalty and any accrued stipulated penalties shall be made in accordance with Section IV (Civil Penalty) of this Consent Decree.
- 114. The following violations shall accrue stipulated penalties in accordance with the chart below:

Penalty per Day per Violation		
\$4,000	1st through 14th Day of violation	
\$8,000	15 <sup>th</sup> through 30 <sup>th</sup> Day of violation	
\$12,000	31st Day of violation and beyond	

- a. Failure to comply with the requirement in Paragraph 15.
- b. Failure to comply with any of the requirements in Paragraph 16 or 19.
- c. Failure to design, install, and continuously operate the WWTS Flare and associated Flare monitoring equipment (including, but not limited to, the equipment necessary to conduct the monitoring required by Paragraphs 39 and 40) to control and monitor emissions from the Closed-Vent Systems, as required by Paragraph 17.
  - d. Failure to comply with Paragraph 21 before the compliance requirements

in Paragraphs 16 and 17 have been fully implemented.

- e. Failure to comply with any of the requirements in Paragraph 22.
- 115. The following violations shall accrue stipulated penalties in accordance with the chart below:

Penalty per Day per Violation		
\$2,000	1st through 14th Day of violation	
\$5,000	15 <sup>th</sup> Day through 30 <sup>th</sup> Day of violation	
\$10,000	31st Day of violation and beyond	

- a. Failure to comply with the requirement in Paragraph 18.
- b. Failure to comply with the requirement in Paragraph 23.
- c. Failure to comply with the requirement in Paragraph 25.
- d. Failure to comply with any of the requirements in Paragraph 32.
- e. Failure to perform Portable FID monitoring of the Vent Stream between the initial saturation canister and the final polishing canisters of the associated CAS for Breakthrough, whenever any of the Phase-Separated Hydrocarbon Tanks are being filled, but no more frequently than daily, as required by Paragraph 33.
- f. Failure to demonstrate, through an initial Combustion Efficiency stack test conducted at a time during which Waste Gas flows are within two standard deviations of the mean Waste Gas flow to the Flare, that the Flare is achieving a Combustion Efficiency of no less than 98 percent, in accordance with Paragraph 34.
  - g. Failure to comply with any of the requirements in Paragraph 50 or 51.
  - h. Failure to document the specific conditions giving rise to the alarm as

required by Paragraph 52 and to implement the necessary steps to remedy the situation as quickly as practicable, which steps may include operating the marine vapor skid manually with predetermined natural gas flows until proper flow meter operation can be confirmed, in accordance with Paragraph 52.

- i. Failure to comply with the requirement in Paragraph 54.
- j. Failure to comply with any of the requirements in Paragraph 61, 62, or 65.
- k. Failure to comply with the requirement in Paragraph 67.
- 1. Failure to comply with the requirement in Paragraph 69.
- 116. The following violations shall accrue stipulated penalties in accordance with the chart below:

Penalty per Day per Violation		
\$1,000	1st through 14th Day of violation	
\$2,500	15 <sup>th</sup> through 30 <sup>th</sup> Day of violation	
\$5,000	31st Day of violation and beyond	

- a. Failure to comply with the requirement in Paragraph 20.
- b. Failure to comply with any of the requirements in Paragraph 21 *after* the compliance requirements in Paragraphs 16 and 17 have been implemented.
  - c. Failure to conduct the initial stack test required by Paragraph 27 or 31.
- d. Failure to conduct an initial Combustion Efficiency stack test no later than
  120 Days after Vopak has commenced continuous operation of the Flare required by Paragraph
  17, in accordance with Paragraph 34.
  - e. Failure to comply with any of the requirements in Paragraph 35, 36, 37,

38, 39, or 40.

- f. Failure to use Method 21 of 40 C.F.R. Part 60, Appendix A to monitor, on a calendar quarterly basis, each Closed-Vent System required by Paragraph 16(b), and all seals, covers and openings on the following equipment: the Receipt Tanks, Tank 570, Tank 571, the Flocculation Basin, the DAF, the Neutralization Basin, the Digester, and the DAF Effluent and Sludge Pit, as required by Paragraph 41.
  - g. Failure to comply with any of the requirements in Paragraph 42 or 43.
  - h. Failure to comply with any of the requirements in Paragraph 45 or 46.
- i. Failure to comply with any of the requirements in Paragraph 49 or failure to program and continuously operate an alarm that will notify operators in the event that a natural gas enrichment meter at a marine skid transmits a flow reading during marine loading operations that is (a) equal to or less than zero, or (b) greater than the maximum range specified by the relevant flow meter manufacturer's specification, as required by Paragraph 52.
  - j. Failure to comply with any of the requirements in Paragraph 52.
- k. Failure to conduct the Infrared Camera Inspections required by Paragraph 56.
  - 1. Failure to comply with any of the requirements in Paragraph 57 or 58.
  - m. Failure to comply with any of the requirements in Paragraph 59 or 60.
  - n. Failure to comply with any of the requirements in Paragraph 63.
  - o. Failure to comply with any of the requirements in Paragraph 71 or 72.
  - p. Failure to comply with any of the requirements in Paragraph 83 or 84.
  - q. Failure to comply with any of the requirements in Paragraph 89.

- r. Failure to comply with any of the requirements in Paragraph 70, 100, or 101.
  - s. Failure to comply with any of the requirements in Paragraph 106.
  - 117. For failure to comply with any of the requirements in Paragraph 26:

Penalty per Day per Violation		
\$700	1 <sup>st</sup> through 4th Day of violations.	
\$2,000	5 <sup>th</sup> Day of violations and beyond.	

118. For failure to perform repairs as required by Paragraph 41:

Penalty per Day per Violation		
\$1,000	1st through 15th Day of violation	
\$2,000	16 <sup>th</sup> Day of violations and beyond.	

119. For failure to comply with the monthly emission limit in Paragraph 44:

Penalty per Violation per Month		
\$10,000	For values of E equal to or greater than 85 and less than 90	
\$20,000	For values of E equal to or greater than 80 and less than 85	
\$30,000	For values of E equal to or greater than 75 and less than 80	
\$50,000	For values of E less than 75	

The stipulated penalties under this Paragraph shall accrue once for each month in which a violation of the monthly emission limit in Paragraph 44 occurs.

120. For failure to comply with any of the requirements in Paragraph 105: \$700 per Day per Violation.

- 121. For any violation of this Consent Decree not covered elsewhere in this Section:\$1,000 per Day per violation.
- 122. Stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.
- 123. Vopak shall pay any stipulated penalties that accrue pursuant to this Section to the United States and the State, as applicable, within 30 Days of receiving a written demand by the United States or the State, unless Vopak invokes the dispute resolution procedures under Section XII ("Dispute Resolution") of this Consent Decree within the 30-Day period. The United States or the State, or both, may seek stipulated penalties under this Section by sending a joint written demand to Vopak, or by either Plaintiff sending a written demand to Vopak, with a copy simultaneously sent to the other Plaintiff. Where Plaintiffs jointly pursue stipulated penalties that accrue pursuant to any Paragraph(s) in this Section, Vopak shall pay 50 percent of the total penalty owed to the United States and 50 percent of the total penalty owed to the State. Prior to either Plaintiff making a written demand for Stipulated Penalties pursuant to this Paragraph, the Plaintiffs shall consult with each other. Either Plaintiff may waive stipulated penalties or reduce the amount of stipulated penalties it seeks, in the unreviewable exercise of its discretion and in accordance with this Paragraph. Any such reduction or waiver shall only apply to the Stipulated Penalties owed to the Plaintiff exercising the discretion allowed under this Paragraph and shall not affect the right of the other Plaintiff to seek the full amount of stipulated penalties due for a violation, less the amount paid to the other Plaintiff.

- 124. Stipulated penalties shall continue to accrue as provided in Paragraphs 113 through 122 during any Dispute Resolution, but need not be paid until the following:
- a. If the dispute is resolved by agreement or by a decision of the United States or the State that is not appealed to the Court, Vopak shall pay accrued penalties determined to be owing, together with interest, to the United States or the State within 30 Days of the effective date of the agreement or the receipt of the United States' or the State's decision or order;
- b. if the dispute is appealed to the Court, and the United States or the State prevails in whole or in part, Vopak shall pay all accrued penalties that are determined due by the Court, together with interest, within 60 Days after receiving the Court's decision or order, except as provided in Subparagraph 124(c), below; and
- c. if any Party appeals the District Court's decision, Vopak shall pay all accrued penalties determined to be owing, together with interest, within 15 Days after receiving the final appellate court decision.
- 125. Vopak shall pay stipulated penalties owing to the United States or the State, in the manner set forth and with the confirmation notices required by Section IV (Civil Penalty), except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.
- 126. If Vopak fails to pay stipulated penalties according to the terms of this Consent Decree, Vopak shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States or the State from seeking any remedy otherwise provided by law for Vopak's failure to pay any stipulated penalties.

- 127. The payment of penalties and interest, if any, shall not alter in any way Vopak's obligation to complete the performance of the requirements of this Consent Decree.
- 128. Stipulated penalties are not the United States' or the State's exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XV (Effect of Settlement/Reservation of Rights), the United States and the State expressly reserve the right to seek any other relief they deem appropriate for Vopak's violation of this Decree or applicable law, including, but not limited to, an action against Vopak for statutory penalties, additional injunctive relief, mitigation or offset measures, and/or contempt. However, the amount of any statutory penalty assessed for a violation of this Consent Decree shall be reduced by an amount equal to the amount of any stipulated penalty assessed and paid pursuant to this Consent Decree.

# XII. FORCE MAJEURE

- 129. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Vopak, of any entity controlled by Vopak, or of Vopak's contractors, which delays or prevents the performance of any obligation under this Consent Decree despite Vopak's best efforts to fulfill the obligation. The requirement that Vopak exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (a) as it is occurring and (b) following the potential force majeure, such that the delay and any adverse effects of the delay are minimized. "Force Majeure" does not include Vopak's financial inability to perform any obligation under this Consent Decree.
- 130. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Vopak shall provide notice orally or by electronic or facsimile transmission to U.S. EPA and the State

within 72 hours of when Vopak first knew that the event might cause a delay. Within seven business days thereafter, Vopak shall provide in writing to U.S. EPA and the State an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Vopak's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Vopak, such event may cause or contribute to an endangerment to public health, welfare, or the environment. Vopak shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Vopak from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Vopak shall be deemed to know of any circumstance of which Vopak, any entity controlled by Vopak, or Vopak's contractors knew or should have known.

131. If U.S. EPA and the State agree that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, by itself, extend the time for performance of any other obligation. U.S. EPA will notify Vopak in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

- 132. If U.S. EPA and/or the State does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, the Plaintiffs will notify Vopak in writing of such decision.
- 133. If Vopak elects to invoke the dispute resolution procedures set forth in Section XIII (Dispute Resolution), it shall do so no later than 15 Days after receipt of the notice provided pursuant to Paragraph 132. In any such proceeding, Vopak shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Vopak complied with the requirements of Paragraphs 129 and 130. If Vopak carries this burden, the delay at issue shall be deemed not to be a violation by Vopak of the affected obligation of this Consent Decree identified to U.S. EPA, the State, and the Court.

### XIII. DISPUTE RESOLUTION

- 134. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Vopak's failure to seek resolution of a dispute under this Section shall preclude Vopak from raising any such issue as a defense to an action by the United States and/or the State to enforce any obligation of Vopak arising under this Decree.
- 135. <u>Informal Dispute Resolution</u>. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Vopak sends the United States and the State a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal

negotiations shall not exceed 30 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States and the State shall be considered binding unless, within 15 Days after the conclusion of the informal negotiation period, Vopak invokes formal dispute resolution procedures as set forth below.

- 136. <u>Formal Dispute Resolution</u>. Vopak shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States and the State a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Vopak's position and any supporting documentation relied upon by Vopak.
- 137. The Plaintiffs shall serve their Statement of Position within 45 Days of receipt of Vopak's Statement of Position. The Plaintiffs' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States or the State. An administrative record of the dispute shall be maintained by U.S. EPA and shall contain all Statements of Position, including supporting documentation, submitted pursuant to this Paragraph. Where appropriate, Plaintiffs may allow submission of supplemental statements of position by the parties to the dispute.
- 138. The Plaintiffs' Statement of Position shall be binding on Vopak, unless Vopak files a motion for judicial review of the dispute in accordance with the following Paragraph.
- 139. Vopak may seek judicial review of the dispute by filing with the Court and serving on the United States and the State, in accordance with Section XVII (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within 21 Days of receipt of the Plaintiffs' Statement of Position pursuant to the preceding Paragraph. The motion shall

contain a written statement of Vopak's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

- 140. The United States and/or the State shall respond to Vopak's motion within the time period allowed by the Local Rules of this Court. Vopak may file a reply memorandum, to the extent permitted by the Local Rules.
- 141. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 139, Vopak shall bear the burden of demonstrating that its position complies with this Consent Decree and that it is entitled to relief under applicable principles of law. Each Party reserves its right to argue the applicable Standard of Review.
- 142. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Vopak under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 124. If Vopak does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XI (Stipulated Penalties).

#### XIV. INFORMATION COLLECTION AND RETENTION

- 143. The United States, the State, and their representatives, including attorneys, contractors, and consultants, shall have the right of entry into any facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:
  - a. monitor the progress of activities required under this Consent Decree;

- b. verify any data or information submitted to the United States or the State in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Vopak or its representatives, contractors, or consultants;
- d. obtain non-privileged documentary evidence, including photographs and similar data; and
  - e. assess Vopak's compliance with this Consent Decree.
- 144. Upon request, Vopak shall provide U.S. EPA and TCEQ, or their authorized representatives, splits of any samples taken by Vopak. Upon request, U.S. EPA and TCEQ shall provide Vopak splits of any samples taken by U.S. EPA or TCEQ, respectively.
- 145. Until five years after the termination of this Consent Decree, Vopak shall retain and instruct its contractors and agents to preserve all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to Vopak's performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States or the State, Vopak shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.
- 146. At the conclusion of the information-retention period provided in the preceding Paragraph, Vopak shall notify the United States and the State at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the

preceding Paragraph and, upon request by the United States or the State, Vopak shall deliver any such documents, records, or other information to U.S. EPA or TCEQ. Vopak may assert that certain documents, records, or other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Vopak asserts such a privilege, it shall provide the following: (a) the title of the document, record, or information; (b) the date of the document, record, or information; (c) the name and title of each author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by Vopak. However, Vopak may make no claims of privilege or protection regarding: (1) any emissions data related to the Facility; or (2) the portion of any documents, records, or other information that Vopak is required to create or generate pursuant to this Consent Decree.

- 147. Vopak may also assert that information required to be provided under this Section is protected as CBI under 40 C.F.R. Part 2 and/or as confidential trade secret, commercial, or financial information in accordance with Tex. Gov't Code § 552.110. As to any information that Vopak seeks to protect as CBI and/or as confidential trade secret, commercial, or financial information, Vopak shall follow the procedures set forth in 40 C.F.R. Part 2 and Tex. Gov't Code § 552.305.
- 148. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or the State pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Vopak to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

#### XV. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

- 149. This Consent Decree resolves the civil claims the United States and the State may have against Vopak for the following violations at Vopak's Deer Park Facility, through the date of lodging:
- a. Failure to comply with the requirements of (i) 40 C.F.R. Part 60, Subparts A, K, Ka, and Kb, promulgated pursuant to Section 111 of the CAA, (ii) 40 C.F.R. Part 61, Subparts A and BB, promulgated pursuant to Section 112 of the CAA, (iii) 40 C.F.R. Part 63, Subparts A, R, and EEEE, promulgated pursuant to Section 112, (iv) 30 Tex. Admin. Code § 116.150 and 40 C.F.R. § 51.165, (v) 30 Tex. Admin. Code § 115.112, and (vi) 30 Tex. Admin. Code § 101.221(a), 116.115(b)(2)(G), and 116.115(c), insofar as such requirement(s) pertain to any tanks subject to the inspection requirements set forth in Subsection I (Terminal Tanks Enhanced Inspection Program) of Section V (Compliance Requirements) of this Decree;
- b. Failure to comply with the standards and emissions limitations of 40 C.F.R. Part 63, Subpart DD, as set forth under 40 C.F.R. § 63.683(b)(1);
- c. Failure to comply with the emission limits for acetone, benzene, styrene, and VOC applicable at the WWTS and set forth in Special Condition 1 of Permit 87923 and required by 30 Tex. Admin. Code § 116.115(c);
- d. Failure to comply with the requirements set forth in Special Conditions 14 and 18 (prescribing the facilities and functions of the Wastewater Treatment and Deepwell Systems, respectively) and 23 (entitled "Sampling and Calculation of Emission Estimates") of Permit 87923, and required by 30 Tex. Admin. Code § 116.115(c);
  - e. Failure to employ the Best Available Control Technology (BACT), as

required by 30 Tex. Admin. Code § 116.111(a)(2)(C), at the WWTS, the Historic WWTS Emission Units, the Marine Flares, and the Land Flares;

- f. Failure to comply with the requirements of 40 C.F.R. § 51.165 and 30 Tex. Admin. Code § 116.150 at the WWTS, any of the Historic WWTS Emission Units, the Marine Flares, or the Land Flares;
- g. Failure to adhere to the representations set forth in the application for Permit 87923 at the Wastewater Treatment System and the Deepwell System, as required by 30 Tex. Admin. Code § 116.116(b)(1);
- h. Failure to comply with the requirement to operate the Marine Flares and Land Flares properly and keep them in good working order, as set forth under 30 Tex. Admin. Code §§ 101.221(a), 116.115(b)(2)(G), and 116.615(9); and the requirement to operate the Marine Flares and Land Flares in accordance with good air pollution control practices, as set forth in 40 C.F.R. §§ 60.11(d), 61.12(c), and 63.6(e)(1)(i);
- i. Failure to comply with 40 C.F.R. § 60.18 at the Marine Flares and Land
   Flares;
- j. Failure to comply with the requirement to include the operating emissions units authorized by Permit 87923 in a Title V federal operating permit, as set forth under 42 U.S.C. §§ 7661a(a) and 7661b(c), and the regulations promulgated thereunder at 40 C.F.R. §§ 70.1(b), 70.5(a), and 70.7(b) and 30 Tex. Admin. Code § 122.121;
- k. Failure to apply for a permit revision to update the applicable requirements in Vopak's Title V Permit O1068 for Tanks 506, 513, 520, 535, 536, 561, 606, 764, 786, and 790, so as to include the enforceable emissions limits and standards of 40 C.F.R. Part 60, Subpart Kb, as set forth under 42 U.S.C. § 7661c(a), and the regulations promulgated thereunder

at 40 C.F.R. §§ 70.5(b), 70.6(a), and (c) and 30 Tex. Admin. Code § 122.210(a);

- l. Failure to minimize excess MTBE emissions from Vopak's P-Pit area piping during shutdown activities using reasonably available measures, as required by 40 C.F.R. § 63.2378(b);
- m. Failure to timely seek to incorporate Standard Permit 80015, issued to VTDP on October 9, 2006, into TCEQ Air Permit 466A, upon renewal or amendment, as set forth under 30 Tex. Admin. Code § 116.615(3);
- n. Failure to control emissions from, or totally enclose, equipment used to perform VOC/water separation for VOC-containing compounds with partial pressures greater than 0.5 psia, as set forth under 30 Tex. Admin. Code § 115.132(a);
- o. Failure to comply with the requirement to fully cover, seal, totally enclose, or otherwise control emissions from the WWTS or the Historic WWTS Emission Units, or to demonstrate that such equipment, components, and streams are exempt from controls or are not affected VOC wastewater streams, as set forth under 30 Tex. Admin. Code § 115.142;
- p. Failure to ensure that Tanks T-584, T-585, T-589, and T-590 are covered by a single permit, as required by 30 Tex. Admin. Code § 116.110(a)(1); and
- q. Failure to comply with the terms of Vopak's Title V Permit O1068 by violating any of the requirements identified in Subparagraphs (a), (g), (i) through (k), and (n) of this Paragraph.
- 150. The United States and the State reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree. This Consent Decree shall not be construed to limit the rights of the United States or the State to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or state laws, regulations, or permit

conditions. The United States and the State further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Vopak's Deer Park Facility, whether related to the violations addressed in this Consent Decree or otherwise.

- 151. In any subsequent administrative or judicial proceeding initiated by the United States or the State for injunctive relief, civil penalties, or other appropriate relief relating to Vopak's Deer Park Facility, Vopak shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or the State in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 149.
- 152. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Vopak is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Vopak's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and the State do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Vopak's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. § 7401, *et seq.*, or with any other provisions of federal, State, or local laws, regulations, or permits.
- 153. This Consent Decree does not limit or affect the rights of Vopak or of the United States or the State against any third parties, not party to this Consent Decree, nor does it limit the

rights of third parties, not party to this Consent Decree, against Vopak, except as otherwise provided by law.

154. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

## XVI. COSTS

155. The United States and Vopak shall bear their own costs of this action, including attorney's fees, except that the State may collect its attorney's fees as set forth in Paragraph 14 of this Decree, and United States and the State shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due, but not paid, by Vopak.

## **XVII. NOTICES**

156. Unless otherwise specified in this Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and transmitted as follows:

As to the United States by email: eescdcopy.enrd@usdoj.gov

Re: DJ # 90-5-2-1-11406;

As to U.S. EPA by email: <a href="mailto:vopak@epa.gov">vopak@epa.gov</a>

As to the State of Texas by email: <u>Ekaterina.deangelo@oag.texas.gov</u>

re: AG# CX2955432418; and James.sallans@tceq.texas.gov

As to TCEQ by email: <u>James.sallans@tceq.texas.gov</u>

As to Vopak by email: <a href="mailto:consent.decree.claims@vopak.com">consent.decree.claims@vopak.com</a>

157. If any electronic transmission is returned as undeliverable or if any electronic reporting system is unavailable, the notifying Party shall, within 2 Days, submit the writing to the following addresses:

As to the United States: EES Case Management Unit

Environment and Natural Resources Division

U.S. Department of Justice

P.O. Box 7611

Washington, DC 20044-7611 Re: DJ# 90-5-2-1-11406

As to the U.S. EPA: Director, Air Enforcement Division

Office of Civil Enforcement U.S. EPA Headquarters

William Jefferson Clinton Building 1200 Pennsylvania Ave., NW

Mailcode: 2242-A Washington, DC 20460

As to the State of Texas: Division Chief

Environmental Protection Division Office of the Attorney General P.O. Box 12548, MC-066 Austin, TX 78711-2548

Reference: AG# CX2955432418

As to TCEQ: Director of Litigation

Litigation Division, MC-175

Texas Commission on Environmental Quality

P.O. Box 13087

Austin, TX 78711-3087

As to Vopak: Vopak Terminal Deer Park Inc.

Attn: General Manager

2759 Independence Parkway South

Deer Park, Texas 77536

and

Vopak Terminal Deer Park Inc. Attn: General Counsel 2000 West Loop South, Suite 1550 Houston, Texas 77027

- 158. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.
- 159. Notices submitted pursuant to this Section shall be deemed submitted upon transmission, posting or mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

#### XVIII. EFFECTIVE DATE

160. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.

#### XIX. RETENTION OF JURISDICTION

161. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XIII (Dispute Resolution) and XX (Modification), or effectuating or enforcing compliance with the terms of this Decree.

# XX. MODIFICATION

- 162. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.
- 163. Any disputes concerning modification of this Decree shall be resolved pursuant to Section XIII (Dispute Resolution), provided, however, that, instead of the burden of proof

provided by Paragraph 141, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

## XXI. TERMINATION

- Requirements) and Section IX (Permits), has thereafter maintained continuous satisfactory compliance with this Consent Decree for a period of two years, and has paid the civil penalty, the State's attorney's fees, and any accrued stipulated penalties as required by this Consent Decree, Vopak may serve upon the United States and the State a Request for Termination. Vopak shall include in such Request a statement that it has satisfied the above-named requirements, together with all necessary supporting documentation including, but not limited to, a list of all federally enforceable permit provisions that reflect the limits, requirements, and restrictions incorporated therein, as required by Paragraph 103, such that those limits, requirements, and restrictions survive termination of this Consent Decree.
- 165. Following receipt by the United States and the State of Vopak's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Vopak has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States and the State agree that the Decree may be terminated, the Parties shall submit for the Court's approval a joint stipulation terminating the Decree.
- 166. If the United States and/or the State do not agree that the Decree may be terminated, Vopak may invoke Dispute Resolution under Section XIII. However, Vopak shall

not seek Dispute Resolution of any dispute regarding termination until 120 Days after service of its Request for Termination.

#### XXII. PUBLIC PARTICIPATION

167. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7 and Texas Water Code § 7.110. The United States and the State reserve the right to withdraw or withhold their consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Vopak consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States and/or the State has notified Vopak in writing that it no longer supports entry of the Decree.

#### XXIII. SIGNATORIES/SERVICE

168. Each undersigned representative of the State and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document. The undersigned representative of Vopak certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind VNA, VTNA, VTDP, and VLS to this document. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Vopak agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service

requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons. Vopak need not file an answer to the Complaint in this action unless or until the Court expressly declines to enter this Consent Decree.

## XXIV. INTEGRATION

169. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than deliverables that are subsequently submitted and approved pursuant to this Decree, the Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Consent Decree.

#### XXV. FINAL JUDGMENT

170. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, the State, and Vopak.

## XXVI. APPENDICES

- 171. The following Appendices are attached to and are part of this Consent Decree:
  - "Appendix A" is the Vopak Wastewater Treatment System Area Diagram;
  - "Appendix B" is the Analyte List;
  - "Appendix C" is the Vopak Deer Park Facility Map; and

"Appendix D" is the Vopak Terminal Deer Park Tank	Diagram.
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Dated and entered this day of	, 2017
	II C DISTRICT HIDGE

We hereby consent to the entry of the Consent Decree in the matter of <u>United States and the State</u> of <u>Texas v. Vopak Terminal Deer Park Inc. and Vopak Logistics Services USA Inc.</u>, subject to public notice and comment.

FOR THE UNITED STATES OF AMERICA:

Date

JEFFREY H. WOOD

Acting Assistant Attorney General

gaffrey H. W.

Environment and Natural Resources Division

U.S. Department of Justice

5 | 15 | 17 Date

NICOLE VEILLEUX

Senior Counsel

**Environmental Enforcement Section** 

Environment and Natural Resources Division

U.S. Department of Justice

Washington, DC 20044-7611

ASIA MCNEIL-WOMACK

Trial Attorney

**Environmental Enforcement Section** 

**Environment and Natural Resources Division** 

U.S. Department of Justice

Washington, DC 20044-7611

We hereby consent to the entry of the Consent Decree in the matter of <u>United States and the State</u> of <u>Texas v. Vopak Terminal Deer Park Inc. and Vopak Logistics Services USA Inc.</u>, subject to public notice and comment.

ABE MARTINEZ
Acting United States Attorney
Southern District of Texas

/s/ via email 5/15/17

By:

DANIEL HU
Assistant United States Attorney
Texas Bar No. 10131415
S.D. Tex. ID: 7959
1000 Louisiana St., Suite 2300
Houston, TX 77002

Telephone: (713) 567-9000

We hereby consent to the entry of the Consent Decree in the matter of <u>United States and the State of Texas v. Vopak Terminal Deer Park Inc. and Vopak Logistics Services USA Inc.</u>, subject to public notice and comment.

5/11/17 DATE

5/10/17 DATE

5/9/17 DATE

4/27/17 DATE FOR THE U.S. ENVIRONMENTAL PROTECTION

AGENCY:

LAWRENCE E. STARFIELD Acting Assistant Administrator

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

Washington, DC 20004

SUSAN SHINKMAN

Director, Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

Washington, DC 20004

PHILLIP A. BROOKS

Director, Air Enforcement Division

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

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Washington, DC 20004

ROBERT G. KLEPP

Polsect ,

Attorney Adviser

Air Enforcement Division

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

Washington, DC 20004

We hereby consent to the entry of the Consent Decree in the matter of <u>United States and the State of Texas v. Vopak Terminal Deer Park Inc. and Vopak Logistics Services USA Inc.</u>, subject to public notice and comment.

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY (continued):

CHERYL T. SEAGER

Director

Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 Dallas, TX 75202

We hereby consent to the entry of the Consent Decree in the matter of <u>United States and the State of Texas v. Vopak Terminal Deer Park Inc. and Vopak Logistics Services USA Inc.</u>, subject to public notice and comment.

#### FOR THE STATE OF TEXAS:

KEN PAXTON Attorney General of Texas

JEFFREY C. MATEER First Assistant Attorney General

BRANTLEY STARR
Deputy First Assistant Attorney General

JAMES E. DAVIS
Deputy Attorney General for Civil Litigation

laterina Deleegelo

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Office of the Attorney General of Texas

**Environmental Protection Division** 

P.O. Box 12548, Capital Station

Austin, TX 78711-2548

Telephone: 512-463-2012

Facsimile: 512-320-0911

ATTORNEYS FOR THE STATE OF TEXAS

We hereby consent to the entry of the Consent Decree in the matter of <u>United States and the State</u> of Texas v. Vopak Terminal Deer Park Inc. and Vopak Logistics Services USA Inc.

For Vopak North America Inc. d/b/a Vopak Americas, Vopak Terminals North America Inc., Vopak Terminal Deer Park Inc., and Vopak Logistics Services USA Inc.:

April 26, 2017

DATE

SCOTT B. GROSSMAN

General Counsel and Corporate Secretary

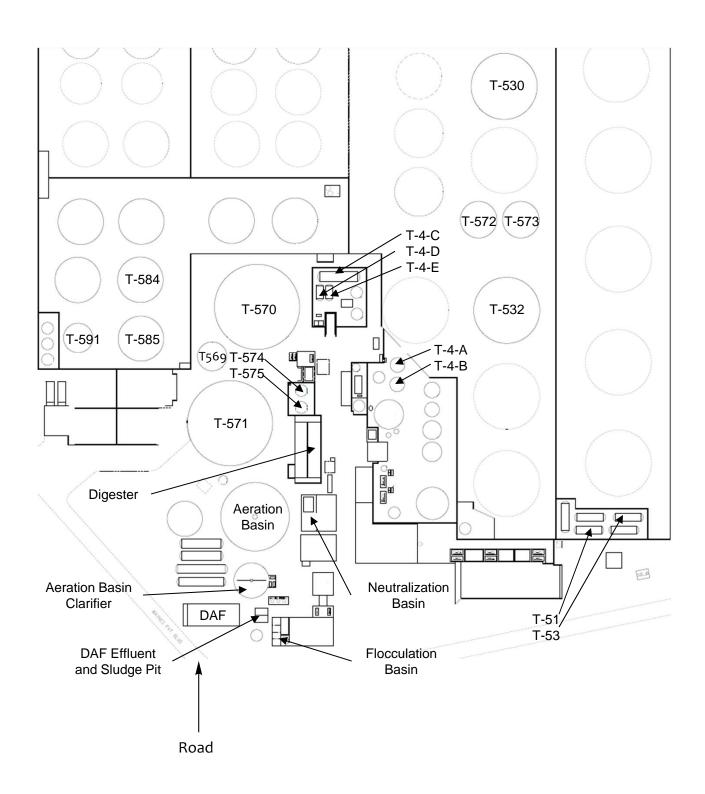
Vopak North America Inc.

# APPENDIX A

Vopak Wastewater Treatment System Area Diagram

Appendix A: Vopak Wastewater Treatment System Area Diagram





# APPENDIX B

Analyte List

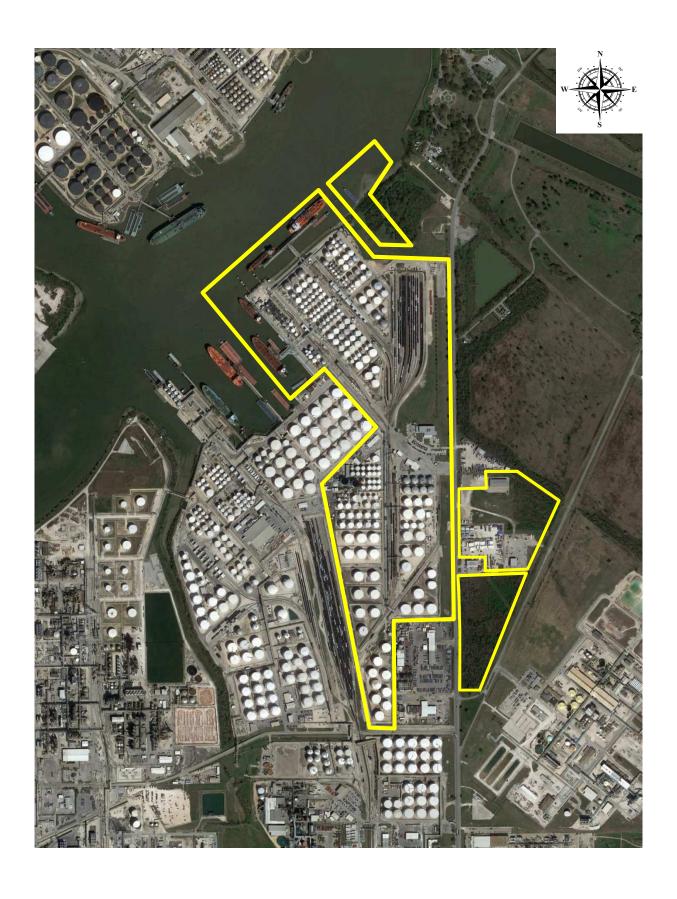
Substance	CAS
Acetone	67-64-1
Acetonitrile	75-05-8
Acrolein	107-02-8
Acrylonitrile	107-13-1
Allyl alcohol	107-18-6
Allyl chloride	107-05-1
Benzene	71-43-2
Benzoic acid	65-85-0
Benzyl alcohol	100-51-6
Benzyl chloride	100-44-7
Bis(2-ethylhexl) phthalate	117-81-7
Bromochloromethane	74-97-5
Bromodichloromethane	75-27-4
Bromomethane/Methyl bromide	74-83-9
1,3-Butadiene	106-99-0
2-Butanone (MEK)	78-93-3
n-Butyl alcohol	71-36-3
n-Butylbenzene	104-51-8
sec-Butylbenzene	135-98-8
Carbon Disulfide	75-15-0
Carbon tetrachloride	56-23-5
Chlorobenzene	108-90-7
Chloroethane	75-00-3
2-Chloroethyl vinyl ether	110-75-8
Chloroform	67-66-3
Chloromethane/Methyl chloride	74-87-3
o-Chlorotoluene	95-49-8
p-Chlorotoluene	106-43-4
Crotonaldehyde	4170-30-3
Cyclohexane	110-82-7
p-Cymene	99-87-6
1,2-Dibromo-3-chloropropane	96-12-8
Dibromochloromethane	124-48-1
1,2-Dibromoethane	106-93-4
Dibromomethane	74-95-3

Substance	CAS
cis-1,4-Dichloro-2-butene	1476-11-5
trans-1,4-Dichloro-2-butene	110-57-6
1,2-Dichlorobenzene	95-50-1
1,3-Dichlorobenzene	541-73-1
1,4-Dichlorobenzene	106-46-7
Dichlorodifluoromethane	75-71-8
1,1-Dichloroethane	75-34-3
1,2-Dichloroethane	107-06-2
1,2-Dichloroethene	540-59-0
trans-1,2-Dichloroethene	150-60-5
1,1-Dichloroethylene	75-35-4
cis-1,2-Dichloroethylene	156-59-2
1,2-Dichloropropane	78-87-5
1,3-Dichloropropene	542-75-6
cis-1,3-Dichloropropene	10061-01-5
trans-1,3-Dichloropropene	10061-02-6
Diethyl ether	60-29-7
Diethyl pthtalate	84-66-2
Diisopropylether	108-20-3
2,4-Dimethylphenol	105-67-9
1,4-Dioxane	123-91-1
Epichlorohydrin	106-89-8
Ethanol	64-17-5
Ethyl acetate	141-78-6
Ethyl methacrylate	97-63-2
Ethylbenzene	100-41-4
Ethylene oxide	75-21-8
Ethyltertbutylether (ETBE)	637-92-3
Flourene	86-73-7
n-Heptane	142-82-5
Hexachlorobutadiene	87-68-3
Hexachloroethane	67-72-1
n-Hexane	110-54-3
2-Hexanone (MEK)	591-78-6
Iodomethane	74-88-4

Substance	CAS
Isobutyl alcohol	78-83-1
Isoprene	78-79-5
Isopropanol	67-63-0
Isopropylbenzene	98-82-8
m-Diethylbenzene	141-93-5
Methacrylonitrile	126-98-7
Methanol	67-56-1
Methyl acetate	79-20-9
Methyl acrylate	96-33-3
Methyl methacrylate	80-62-6
4-Methyl-2-pentanone (MIBK)	108-10-1
2-Methyl-2-propanol	75-65-0
Methylcyclohexane	108-87-2
Methylene chloride	75-09-2
2-Methylnapthalene	91-57-6
2-Methylpentane	107-83-5
3-Methylphenol	108-39-4
4-Methylphenol	106-44-5
Methyltertbutylether (MTBE)	1634-04-4
Napthalene	91-20-3
Nitrobenzene	98-95-3
2-Nitropropane	79-46-9
n-Nitroso-di-n-butylamine	924-16-3
n-Nitrosodiphenylamine	86-30-6
Pentachloroethane	76-01-7
n-Pentane	109-66-0
2-Pentanone	107-87-9
Phenanthrene	85-01-8
Phenol	108-95-2
2-Picoline	109-06-8
1-Propanol	71-23-8
n-Propylbenzene	103-65-1
Pyrene	129-00-0
Pyridine	110-86-1
Styrene	100-42-5

Substance	CAS
tertamylmethylether (TAME)	994-05-8
tert-Butylbenzene	98-06-6
1,1,1,2-Tetrachloroethane	630-20-6
1,1,2,2-Tetrachloroethane	79-34-5
Tetrachloroethylene	127-18-4
Tetrahydrofuran	109-99-9
Toluene	108-88-3
o-Toluidine	95-53-4
Tribromomethane/Bromoform	75-25-2
1,2,3-Trichlorobenzene	87-61-6
1,2,4-Trichlorobenzene	120-82-1
1,1,1-Trichloroethane	71-55-6
1,1,2-Trichloroethane	79-00-5
Trichloroethene	79-01-6
Trichlorofluoromethane	75-69-4
1,2,3-Trichloropropane	96-18-4
1,1,2-Trichlorotrifluoroethane	76-13-1
1,2,3-Trimethylbenzene	526-73-8
1,2,4-Trimethylbenzene	95-63-6
1,3,5-Trimethylbenzene	108-67-8
2,2,4-Trimethylpentane	540-84-1
Vinyl acetate	108-05-4
Vinyl chloride	75-01-4
m-Xylene	108-38-3
o-Xylene	95-47-6
p-Xylene	106-42-3

**APPENDIX C**Deer Park Facility Map



**APPENDIX D**Vopak Terminal Deer Park Diagram

