

No. GV301473

STATE OF TEXAS,

Plaintiff

v.

HUNTSMAN PETROCHEMICAL
CORPORATION,

Defendant

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IN THE DISTRICT COURT OF

TRAVIS COUNTY, TEXAS

98th

JUDICIAL DISTRICT

PLAINTIFF'S ORIGINAL PETITION

TO THE HONORABLE JUDGE OF SAID COURT:

COMES NOW the State of Texas, by and through Texas Attorney General Greg Abbott, on behalf of the people of Texas and the Texas Commission on Environmental Quality ("TCEQ" or "Commission")¹, and files this original petition, and for cause of action would respectfully show the Court the following:

**I.
Discovery**

1.1 Discovery is intended to be conducted under a Level 3 discovery control plan pursuant to TEX. R. CIV. P. 190.

**II.
Parties and Service**

2.1 Plaintiff State of Texas is authorized to bring this suit through its Attorney General at the request of the Commission pursuant to the Texas Clean Air Act (the "Act") and the

¹Effective September 1, 2002, the Texas Natural Resource Conservation Commission ("TNRCC") changed its name to the Texas Commission on Environmental Quality. In this original petition, references to the TCEQ or Commission include reference to the TNRCC, where applicable.

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enforcement provisions of the Texas Water Code. The Act is codified in chapter 382 of the Texas Health and Safety Code.

2.2 Defendant Huntsman Petrochemical Corporation (“Huntsman”) is a Delaware corporation authorized to do business in Texas, and may be served with process by serving its registered agent, C.T. Corporation System, 350 N. St. Paul Street, Dallas, Texas 75201.

**III.
Jurisdiction and Venue**

3.1 This Court has jurisdiction over this case. TEX. WATER CODE §§ 7.002 and 7.105(a) (Vernon 2001).

3.2 Venue is proper in Travis County, Texas. TEX. WATER CODE § 7.105(c) (Vernon 2001).

**IV.
Judicial Enforcement Authority**

4.1 This Court may assess a civil penalty of not less than \$50 or more than \$25,000 for each day of each violation, as the Court or jury considers proper. TEX. WATER CODE § 7.102 (Vernon 2001 & Supp. 2003).²

**V.
Policy and Purpose of the Texas Clean Air Act**

5.1 It is the policy of the State of Texas and the purpose of the Act to safeguard the air resources of the state from pollution by controlling and abating air pollution and the emissions of air contaminants, consistent with the protection of public health, general welfare, and physical property of the people, including esthetic enjoyment of the air resources by the people and the

² Prior to September 1, 1997, the civil penalty provisions were found in Section 382.085(c) of the Texas Health and Safety Code. See note 10 *infra*.

maintenance of adequate visibility. The Texas Legislature intended that the provisions of the Act should be vigorously enforced and that violations of the Act or any rule or order of the Commission should result in the expeditious initiation of enforcement actions as provided for in the Act. TEX. HEALTH & SAFETY CODE § 382.002 (Vernon 2001).

VI.
Regulatory Authority of the Commission

6.1 The Commission has the duty and responsibility to administer the provisions of the Act, to establish the level of quality to be maintained in the state's air, and to control the quality of the state's air. TEX. HEALTH & SAFETY CODE § 382.011 (Vernon 2001).

6.2 The Commission has the power to make rules and regulations consistent with the general intent and purposes of the Act. TEX. HEALTH & SAFETY CODE § 382.017 (Vernon 2001).

6.3 Members, employees, and agents of the Commission have the right to enter any public and private property at any reasonable time, other than property designated for and used exclusively as a private residence housing not more than three (3) families, for the purpose of inspecting and investigating conditions relating to emissions of air contaminants to, or concentrations of air contaminants in, the atmosphere. TEX. HEALTH & SAFETY CODE § 382.015 (Vernon 2001).

6.4 The Executive Director of the Commission is authorized to make, or cause to be made, investigations as he may deem advisable in administering the provisions of the Act and the rules, orders, and determinations of the Commission, including without limitation, investigations of violations and general air pollution problems or conditions. TEX. HEALTH & SAFETY CODE § 382.022 (Vernon 2001).

6.5 The Commission may initiate an action under the Texas Water Code to enforce the provisions of the Texas Health and Safety Code within the Commission's jurisdiction. TEX. WATER CODE § 7.002 (Vernon 2001).

6.6 At the request of the Commission or its Executive Director, the Attorney General shall institute and conduct a suit in the name of the State of Texas for injunctive relief and/or civil penalties. TEX. WATER CODE § 7.105(a) (Vernon 2001).

VII.
Nature of Defendant's Operations
and Air Contaminant Emissions

7.1 Defendant Huntsman owns and operates an Aromatics and Olefins petrochemical production plant at the intersection of State Highway 73 and Savannah Avenue in Port Arthur, Jefferson County, Texas. Huntsman acquired this plant from Texaco, Inc., and accepted control and operation of the plant on April 21, 1994. The plant consists of two major units: the Light Olefins Unit and the Aromatics Unit.

7.2 The Light Olefins Unit ("LOU") consists of facilities and equipment for thermally cracking a variety of feedstocks, recovering heat from the cracked gases, quenching these gases, recovering fuel oil and pyrolysis gasoline, compressing and treating the cracked gases, and recovering and purifying ethylene, propylene and other products. The LOU produces ethylene as its primary product with a production capacity of 1.2 billion pounds of ethylene per year. Other products produced at the LOU include fuel gas, chemical grade propylene, crude butadiene, aromatic distillate, pyrolysis gasoline, and pyrolysis fuel oil. Ethylene is a colorless, flammable gas delivered by pipeline at high pressure. Some of the end products of ethylene are plastics, fiber, detergents, solvents, and antifreeze.

7.3 The Aromatics Unit (“AU”) consists of facilities and equipment for the processing of domestic and imported light straight run gasoline-type feedstocks rich in aromatic precursors. The AU produces benzene as its primary product with a production capacity of 1.1 million barrels per year. Other products produced at the AU include toluene extract, raffinate, blending condensate, and fuel gas. The AU produces toluene at an annual rate of 2.2 million barrels per year.

7.4 The air contaminants emitted by Huntsman consist primarily of oxides of nitrogen (“NO_x”), particulate matter with an aerodynamic diameter of less than ten (10) microns (“PM₁₀” or “PM”), sulfur dioxide (“SO₂”), carbon monoxide (“CO”), and volatile organic compounds (“VOCs”) which include benzene. The summary data contained in the Commission’s point source database (“PSDB”), reflecting information derived from required annual emissions inventories, shows that Huntsman represented the following actual emissions from its Port Arthur, Texas plant in its 1997 emissions inventory:

- 7.4.a 21.32 tons per year (“tpy”) of total suspended particulate (“TSP”);
- 7.4.b 0.0 tpy of PM₁₀;
- 7.4.c 4.0 tpy of SO₂;
- 7.4.d 646.1 tpy of NO_x;
- 7.4.e 630.25 tpy of non-methane organic compounds (“NMOC”); and,
- 7.4.f 71.97 tpy of CO.

For the calendar year 1997, Huntsman reported the following total mass emissions for its Port Arthur, Texas plant: 155.57 tpy of air contaminants that it claims are authorized pursuant to Texas Health and Safety Code § 382.0518(g), which are also known as “grandfathered” emissions; 220.18 tpy of air contaminants under authorization of one or more Permits by Rule which are sometimes

called standard exemptions (*see* 30 TEX. ADMIN. CODE ch. 106 (West 2002)); and, 976.42 tpy of permitted air contaminant emissions.³

7.5 As described in more detail below, Huntsman has violated the Act, the Commission rules, and the requirements of its air quality permits.

VIII. Statutes and Rules Applicable to Huntman's Operation of the Port Arthur Plant

8.1 As used in the Texas Health and Safety Code, "person" includes corporations. TEX. HEALTH & SAFETY CODE § 382.003(10) (Vernon 2001).

8.2 Prior to beginning work on the construction of a new facility or the modification of an existing facility that may emit air contaminants, a person planning the construction or modification must obtain authorization from the Commission. TEX. HEALTH & SAFETY CODE § 382.0518 (Vernon 2001 & Supp. 2003).

8.3 Any person is prohibited from causing, suffering, allowing, or permitting the emission of any air contaminant or the performance of any activity in violation of the Act, chapter 382 of the Texas Health and Safety Code, or of any Commission rule or order. TEX. HEALTH & SAFETY CODE § 382.085(b) (Vernon 2001).

³ Permit No. 16989 for Huntsman's Port Arthur, Texas plant contains hosts of emission limitations for the various air contaminants. Limits are frequently, but not exclusively, expressed in an hourly emission rate limitation and in an annual total mass emission limitation for specific point sources. Limitations may also be expressed as operational limits (*e.g.* average firing rates for furnaces), as a measure of the quantity of a contaminant emitted per a measured amount of fuel usage (*e.g.* pounds of NO_x per million BTU's of gas consumed), in the mass quantities of a contaminant in fuel consumed (*e.g.* grains of hydrogen sulfide per cubic foot of gas used), or in the concentration of a contaminant in fuel consumed (*e.g.* percentage of sulfur in fuel oil). Thus, there is not a singular facility-wide "emission limit" expressed in Permit No. 16989. Actual annual emission limits may also vary depending on operating run rates.

8.4 Before August 5, 1997, a “major upset”, under the Texas upset rule, 30 TEX. ADMIN. CODE § 101.6 (West 1994), was defined as “[a]n unscheduled occurrence or excursion of a process or operation that results in an emission of air contaminants that contravenes the Texas Clean Air Act and that is beyond immediate control, or a release that is initiated to protect life in the immediate or adjacent areas.” 30 TEX. ADMIN. CODE § 101.1 (West 1994). Since August 5, 1997, an “upset” under the Texas upset rule, is defined as “[a]n unscheduled occurrence or excursion of a process or operation that results in an unauthorized emission of air contaminants.” 30 TEX. ADMIN. CODE § 101.1(102) (West 2000).

8.5 Section 101.6 of Title 30 of the Texas Administrative Code sets forth the requirements for the reporting of upsets. Until August 5, 1997, section 101.6 required reporting “as soon as possible” of any major upset condition which causes or may cause an excessive emission that contravenes the Act or the Commission rules and regulations. Effective August 5, 1997, section 101.6 required that for “reportable upsets,” as soon as practicable, but not later than twenty (24) hours after the discovery of an upset, the owner or operator shall: (A) determine if the upset is a reportable upset; and (B) notify the Commission regional office for the region in which the facility is located and all appropriate local air pollution control agencies.⁴ The notification of reportable upsets shall identify: (A) the process and equipment involved; (B) the date and time of the upset; (C) the duration or expected duration of the upset; (D) the compound descriptive type of the individually

⁴ A reportable upset includes any upset resulting in an unauthorized emission, during a twenty-four (24) hour period, of a reportable quantity as defined in section 101.1(82). For purposes of this proceeding, the relevant substances and applicable reportable quantities or “RQs” are as follows: benzene, ten (10) pounds per day; ethane and xylene, 100 pounds per day; ethylene benzene and toluene, 1,000 pounds per day; acetone, ethylene, propane, and propylene, 5,000 pounds per day; and for any mixture known to contain any of the above, but about which the relative portions are not known, the lowest RQ for any known constituent is applied to the entire mixture. 30 TEX. ADMIN. CODE § 101.1(83) (West 2000).

listed compounds or mixtures of air contaminants in the definition of reportable quantity which are known through common process knowledge or past engineering analysis or testing to exceed the reportable quantity; (E) the estimated quantities for those compounds or mixtures described in subparagraph (D) except in the case of upsets determined on opacity only; and (F) the actions taken or being taken to correct the upset and minimize the emissions. 30 TEX. ADMIN. CODE § 101.6(a)(2) (West 2000).

8.6 “All pollution emission capture equipment and abatement equipment shall be maintained in good working order and operated properly during normal facility operations. Emission capture and abatement equipment shall be considered in good working order and operated properly when operated in a manner such that the facility is operating within air emission limitations established by permit, rule, or order of the commission or as authorized by the [Texas Health and Safety Code] § 382.0518(g).” 30 TEX. ADMIN. CODE § 101.7(a) (West 2002).

8.7 Each year, a regulated entity must submit an emissions inventory. The inventory is to be certified by the owner or operator of a facility as true and accurate to the best of the knowledge of the certifying official. 30 TEX. ADMIN. CODE §101.10 (West 2002).

8.8 Pursuant to the 1997 version of the upset emission rule set forth in Paragraph 8.5 above, emissions from upset events are exempt from compliance with air emission limitations established in permits, rules, and orders of the Commission, or as authorized by the Texas Health and Safety Code § 382.0518(g) if: (A) the owner or operator properly complies with the requirements of Title 30 of the Texas Administrative Code § 101.6; (B) the upset was not reasonably avoidable; and (C) appropriate corrective actions were taken as soon as practicable after initiation of the upset.

30 TEX. ADMIN. CODE § 101.11(a) (West 2000). This exemption is not automatic and requires the approval of the Executive Director.

8.9 Any person owning or operating a source of air contaminants must comply with any applicable new source performance standards promulgated by the EPA pursuant to the Federal Clean Air Act, 42 U.S.C. § 7411, as amended. 30 TEX. ADMIN. CODE § 101.20(1) (West 2002).

8.10 Any person owning or operating a source of air contaminants must comply with any applicable emissions standard for hazardous air pollutants promulgated by the EPA pursuant to the Federal Clean Air Act, 42. U.S.C. § 7412, as amended. 30 TEX. ADMIN. CODE § 101.20(2) (West 2002).

8.11 Effective on July 16, 1997, Section 113.130 of Title 30 of the Texas Administrative Code incorporated by reference the *Organic Hazardous Air Pollutants for Equipment Leaks Maximum Achievable Control Technology* standard as specified in 40 C.F.R. 63, Subpart H, as amended through January 17, 1997.

8.12 A person shall not place, store, or hold in any stationary tank, reservoir, or other container any VOC unless the container is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere, or is equipped with at least the control device specified in the rules. 30 TEX. ADMIN. CODE § 115.112(a)(1) (West 2002).

8.13 A submerged fill pipe and vapor recovery system are required for tanks larger than 25,000 gallons used to store substances with vapor pressures equal to or greater than 11.0 psia. 30 TEX. ADMIN. CODE § 115.112(a)(1)[Table I(a)] (West 2002).

8.14 All openings in an internal or external floating roof, except for automatic bleeder vents and rim space vents, must provide a projection below the liquid surface or be equipped with

a cover, seal or lid. 30 TEX. ADMIN. CODE § 115.112(a)(2)(A) (West 2002). Any cover, seal, or lid must be in a closed position at all times except when the device is in actual use. *Id.*

8.15 Annual inspections are required for internal floating roof tanks, and any required repairs must be completed within sixty (60) days of the inspection. 30 TEX. ADMIN. CODE § 115.114(a)(1) (West 2002).

8.16 Every valve in VOC service is required to be monitored quarterly to detect leaks. 30 TEX. ADMIN. CODE § 115.334(1)(B) (West 2002).⁵ All affected persons shall also measure the emissions from all pump seals and all pressure relief valves in gaseous service with a hydrocarbon gas analyzer each calendar quarter. *Id.*

8.17 Before any actual work has begun on a facility, any person who plans to construct any new facility or to engage in the modification of any existing facility which may emit air contaminants into the air of this state shall either: (1) obtain a permit under Title 30 of the Texas Administrative Code § 116.111 (relating to General Application); (2) satisfy the conditions for a standard permit; (3) satisfy the conditions for a flexible permit; or (4) satisfy the conditions for facilities permitted by rule under Chapter 106 of this title (relating to Permits by Rule). 30 TEX. ADMIN. CODE § 116.110(a) (West 2002).

8.18 In the event of a change of ownership of a facility, the new owner shall comply with all permit conditions and all representations made in the permit application and any amendments and alterations. 30 TEX. ADMIN. CODE § 116.110(d)(2) (West 2002).

⁵ Currently codified at 30 TEX. ADMIN. CODE § 115.354(2) (West 2002).

8.19 All permit holders shall comply with the general and special conditions of the permit and the maximum allowable emission rate table (“MAERT”) contained in the permit. 30 TEX. ADMIN. CODE § 116.115 (West 2002).

8.20 Representations concerning construction plans and operation procedures in an application for a permit, special permit, or special exemption, and any general and special conditions attached to the permit, special permit, or special exemption itself, are the conditions upon which the Commission issues a permit, special permit, or special exemption. 30 TEX. ADMIN. CODE § 116.116(a) (West 2002).

8.21 A permit holder shall not vary from any representation or permit condition without obtaining a permit amendment if the change will cause: (1) a change in the method of control of emissions; (2) a change in the character of the emissions; or (3) an increase in the emission rate of any air contaminant. 30 TEX. ADMIN. CODE § 116.116(b) (West 2000).

8.22 EPA is required to promulgate standards of performance for new stationary sources, or NSPS.⁶ 42 U.S.C. § 7411 (West 1995).

8.23 The EPA is required to promulgate National Emission Standards for Hazardous Air Pollutants (“NESHAP[s]”). 42 U.S.C. § 7412 (West 1995).

8.24 A primary theme of the Federal Clean Air Act is that regulated entities are subject to scrutiny to measure and verify compliance with the requirements implemented under the Act. Section 114 of the Federal Clean Air Act contemplates that regulated entities will sample, test,

⁶ The standards are called New Source Performance Standards (“NSPS”). In general terms, they impose engineering and record keeping requirements on any new source of emissions or any existing source that is modified resulting in any increased emissions of air contaminants.

monitor, audit, create and maintain records, make reports, and certify compliance with the NSPS and NESHAPs. 42 U.S.C. § 7414(a) (West 1995).

8.25 The NSPS for reporting quarterly excess emissions requires the owner or operator to submit required excess emission reports within thirty (30) days following the end of the reporting quarter. 40 C.F.R. § 60.7(c).

8.26 The NESHAP for sampling connection systems provides that the owner or operator shall demonstrate compliance for each flare in accordance with section 61.349(a)(2)(iii), which in turn requires compliance with Part 40 of the Code of Federal Regulations § 60.18. 40 C.F.R. § 61.349(d). The owner or operator is also required to conduct performance testing within sixty (60) days of achieving maximum production, but no later than 180 days after initial start-up, and to furnish the Administrator of the EPA a written report of the results of the performance test. 40 C.F.R. § 60.8(a) (relating to performance tests for new stationary sources).

8.27 The NSPS for compressors provides that each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere. 40 C.F.R. § 60.482-3(a).

8.28 The NSPS for sampling connection systems provides that each sampling connection system in VOC service shall be equipped with a closed-purge, closed-loop, or closed-vent system. 40 C.F.R. § 60.482-5(a).

8.29 The NSPS for open-ended valves or lines provides that each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. 40 C.F.R. § 60.482-6(a)(1). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. 40 C.F.R. § 60.482-6(a)(2).

8.30 The NESHAPs contain an emission testing provision. Every new source subject to a NESHAP is required to conduct initial emission testing within ninety (90) days after initial start-up. Existing sources that become subject to a NESHAP are also required to conduct initial emission testing within ninety (90) days after the effective date of the NESHAP. 40 C.F.R. § 61.13(a).

8.31 The NESHAPs provide that each piece of equipment subject to 40 C.F.R. Part 61, Subpart V shall be marked in such a manner that it can be distinguished readily from other pieces of equipment. 40 C.F.R. § 61.242-1(d).

8.32 The NESHAPs require owners and operators to monitor each pump monthly to detect leaks. 40 C.F.R. § 61.242-2(a)(1).

8.33 The NESHAPs require owners and operators to monitor each pressure relief valve in gas/vapor service to detect leaks. 40 C.F.R. § 61.242-4(a).

8.34 The NESHAP for sampling connection systems provides that each sampling connection system in benzene service shall be equipped with a closed-purge, closed-loop, or closed-vent system. 40 C.F.R. § 61.242-5(a).

8.35 The NESHAP for open-ended valves or lines provides that each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. 40 C.F.R. § 61.242-6(a)(1). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow in the open-ended valve or line. 40 C.F.R. § 61.242-6(a)(2).

8.36 The NESHAPs require valves to be monitored monthly to detect leaks. 40 C.F.R. § 61.242-7(a).

8.37 The Benzene Waste NESHAP found in 40 C.F.R. § 61.340, *et seq.*, imposes requirements on operators who use certain equipment that emit benzene into waste streams. Each

owner or operator subject to the NESHAP must comply with subparts (c) through (h) of the section, 40 C.F.R. § 61.342(b), and further comply with 40 C.F.R. §§ 61.343 through 61.347. 40 C.F.R. § 61.342(c)(1). Each owner or operator of a facility is subject to the NESHAP if the total annual benzene quantity from facility waste is equal to or greater than ten (10) megagrams per year (“Mg/yr”). A waste stream is exempt from 40 C.F.R. § 61.342(c)(1) provided that the owner or operator demonstrates initially and, thereafter, at least once per year that the flow-weighted annual average benzene concentration for the waste stream is less than ten (10) parts per million by weight (“ppmw”) as determined by the procedures specified in 40 C.F.R. §§ 61.355(c)(2) or (c)(3). 40 C.F.R. § 61.342(c)(2).

8.38 The Benzene Waste NESHAP set forth in 40 C.F.R. §§ 61.344 (surface impoundments), 61.346 (individual drain systems), and 61.347 (oil/water separators) requires such facilities to be operated with a cover and closed vent systems routed to control devices as set forth in 40 C.F.R. § 61.349.

8.39 The Benzene Waste NESHAP relating to individual drain systems, requires the owner or operator to install, operate, and maintain on each drain system opening a cover and closed-vent system that routes all organic vapors vented from the drain system to a control device. 40 C.F.R. § 61.346(a)(1). The owner or operator shall install, operate, and maintain on each drain system opening, a cover and closed-vent system that routes all organic vapors from the drain system to a control device, and the cover and all openings (*e.g.*, access hatches, sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument initially and thereafter at least once per year. 40 C.F.R. § 61.346(a)(1)(i)(A). The owner or operator must also maintain each opening in the closed-vent system in a closed, sealed position at all times that waste is in the drain

system, except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair. 40 C.F.R. § 61.346(a)(1)(i)(B).

8.40 The Benzene Waste NESHAP requires that each cover seal, access hatch, and all other openings be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access hatches and other openings are closed and gasketed properly. 40 C.F.R. § 61.346(a)(2).

8.41 The Benzene Waste NESHAP requires the owner or operator to install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors from the oil-water separator to a control device, and that the cover and all openings (*e.g.*, access hatches, sampling ports, and gauge wells) to be designed to operate with no detectable emissions as indicated by an instrument initially and thereafter at least once per year. 40 C.F.R. § 61.347(a)(1)(i)(A). Each cover seal, access hatch, and all other openings on an oil-water separator shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur between the cover and the oil-water separator wall and that access hatches and other openings are closed and gasketed properly. 40 C.F.R. § 61.347(b).

8.42 For carbon adsorption control systems, the Benzene Waste NESHAP requires the system to recover or control the organic emissions vented to it with an efficiency of ninety-five (95) weight percent or greater (or ninety-eight (98) weight percent of the benzene emissions vented to it). 40 C.F.R. § 61.349(a)(2)(ii). In addition to the requirement that carbon control devices be 95% effective in removing volatile organic compounds, or 98% effective in removing benzene, an owner is required to demonstrate that each container device achieves the required efficiencies by means of either engineering calculations or a performance test. 40 C.F. R § 61.349(c).

8.43 The Benzene Waste NESHAP requires each closed-vent system and control device to be visually inspected initially and quarterly thereafter. The visual inspection shall include inspection of duct work and piping and connections to covers and control devices for evidence of visible defects such as holes in duct work or piping and loose connections. 40 C.F.R. § 61.349(f).

8.44 For a carbon adsorption system that does not regenerate the carbon bed directly on site in the control device, the Benzene Waste NESHAP requires the owner to monitor on a regular basis either the concentration level of the organic compounds or the concentration of benzene in the exhaust vent stream from the carbon adsorption system. The existing carbon shall be immediately replaced with fresh carbon when carbon breakthrough is indicated. 40 C.F.R. § 61.354(d). An owner is also required to monitor the carbon adsorption system exhaust vents at least daily. *Id.*

8.45 The Benzene Waste NESHAP requires the owner to maintain the engineering design documentation required by 40 C.F.R. § 61.356(f). This required documentation includes maintaining a statement signed and dated by the owners certifying that the system is designed to operate at the documented performance level when the unit vented to the control device is operating at the expected levels, and either (1) a design analysis that considers the vent stream composition, consistent concentration, flow rate, volatile humidity, and temperature or (2) the performance test and testing process parameters. 40 C.F.R. § 61.356(d).

8.46 The Benzene Waste NESHAP requires each owner or operator of a carbon adsorption control device which does not regenerate the carbon directly on site to maintain records of the dates and times when the control device is monitored, when breakthrough is measured, and the date and time the existing carbon is replaced with fresh carbon. 40 C.F.R. § 61.356(j)(10).

8.47 The reporting requirements in the Benzene Waste NESHAP relating to the owners and operators of chemical plants, petroleum refineries, and coke by-product recovery plants are set forth in 40 C.F.R. § 61.357. The NESHAP requires owners and operators to submit an annual report that summarizes all inspections required by 40 C.F.R. §§ 61.342 through 61.354 during which detectable emissions are measured or a problem that could result in benzene emissions is identified, including information about repairs or corrective action taken. 40 C.F.R. § 61.357(d)(8).

8.48 The National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks provide that each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except where a determination of alternative emissions limitation has been made. 40 C.F.R. § 63.166(a).

8.49 The National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks requires each open-ended valve or line to be equipped with a cap, blind flange, plug, or a second valve. 40 C.F.R. § 63.167(a)(1). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. 40 C.F.R. § 63.167(a)(2).

IX.
Inaccurate Reporting of Emissions of Air Contaminants
from the Light Olefins Unit Cooling Tower

9.1 Texaco, Inc. originally constructed the LOU cooling tower under authorization of Permit No. 2923, issued by the Commission on March 13, 1975. Texaco commenced operation of the LOU on December 29, 1978. Permit No. 16989, issued on May 19, 1986, replaced Permit No. 2923.

9.2 In its original permit application submitted in 1974, Texaco represented that the LOU cooling tower would constitute an emissions point source (point 1234), but did not represent any emissions of air contaminants to the atmosphere from that source. By March 2, 1976, Texaco, Inc. submitted documentation to the Commission representing the LOU cooling tower, emission point 1234, as “Cooling Tower (Emergency vents)” with the pounds per hour of emissions represented by a footnote providing for “Emergency venting of HC gases on rupture tube in process heat exchanger using cooling water.” The permit has been revised a number of times since the original permit was issued.

9.3 In its application for the LOU modernization project dated January 14, 1986, Huntsman’s predecessor Texaco represented that it would achieve a reduction of 42.1 tons per year of VOC emissions from the LOU cooling tower and utilized this reduction to avoid non-attainment review of its modernization project.⁷ The initial application contained the same “Emergency venting” language for the LOU cooling tower as set forth in the March 2, 1976, document referenced in paragraph 9.2. In addition, internal documents furnished by Huntsman to the Commission in November 1997 and represented to constitute “Permit authorization for the Flare Gas Recovery System” demonstrate that the basis for the 42.10 ton per year claimed reduction in LOU cooling tower VOC emissions was the flow reduction of LOU cooling tower water from a rate of

⁷ Non-attainment review is generally described as a process required by the Federal Clean Air and Texas Clean Air Acts, and the regulations promulgated thereunder, for emission sources in non-attainment areas (which include Port Arthur) to undergo a comprehensive permit review for construction projects that may increase emissions by forty (40) tons or more per year of certain specified pollutants. If the expected increased emissions exceed that threshold, the source must undergo the review and provide emission reductions or credits to offset the new emissions. Texaco (now Huntsman) avoided a non-attainment review of the LOU modernization project by claiming a net increase of approximately thirty-six (36) tons per year of VOCs. Texaco (now Huntsman) calculated the increase by subtracting 42.10 tons per year of VOC emissions resulting from operational changes to the LOU cooling tower from the total estimated seventy-eight (78) tons per year increase in VOC emissions it expected from the LOU modernization project.

110,000 gallons per minute to 83,300 gallons per minute. Applying the AP-42 emission factor⁸ for an uncontrolled cooling tower, the claimed reduction would result in lowering VOC emissions from the LOU cooling tower from 173.45 tons per year of VOCs to 131.35 tons per year, a reduction of 42.10 tons per year as claimed in the 1986 application for a permit to modernize the LOU.

9.4 A Commission inspection in December 1994 identified the LOU cooling tower as a source of VOC and benzene emissions into the air. Subsequent investigation revealed that, in fact, Huntsman did not operate the LOU cooling tower at a flow rate of 83,300 gallons per minute, but rather at rates of 110,000 to 125,000 gallons per minute. In addition, testing conducted in December 1994 demonstrated that the actual emissions from the LOU cooling tower far exceeded the AP-42 estimate of six (6) pounds per million gallons of water.

9.5 Huntsman did not apply for an amendment to its permit to authorize the emissions from the LOU cooling tower until October 13, 1997. The Commission issued a new permit with specific emission limits for both benzene and VOCs from the LOU cooling tower on November 4, 1998.

9.6 In response to the Commission's discovery of emissions escaping from LOU cooling tower return water, Huntsman alleged that excepting the LOU cooling tower emissions accounted

⁸ The AP-42 emission factors are a series of factors used by EPA to estimate emission rates from sources where emissions are not measured. For cooling towers, the AP-42 factors estimate six (6) pounds of VOCs will be emitted per million gallons of water passing through the tower where the cooling tower is uncontrolled. For controlled cooling towers, the AP-42 factor is 0.7 pounds of VOCs per million gallons of water of throughput. Controls for cooling towers are generally considered to be routine inspection, maintenance, and repair of heat exchangers in contact with the cooling tower water and routine testing for VOC concentrations in the cooling tower influent and effluent. Where sampling is not performed on a cooling tower to determine actual emissions, AP-42 factors are applied to a source's cooling tower throughput to estimate total VOC emissions for annual emission reporting purposes.

for by AP-42 factors, all such emissions were upset emissions, and should, therefore, be exempt under the provision of section 101.11(a) of Title 30 of the Texas Administrative Code.

9.7 Huntsman violated Title 30 of the Texas Administrative Code § 101.6 by failing to report, or by inaccurately reporting, the avoidable and routine leaks in heat exchangers that occurred on what was apparently an almost continuous basis. Huntsman did not sample and test each and every day the LOU cooling tower influent or effluent for all VOC constituents.

9.8 Huntsman further alleged on each upset emission report it sent to the Commission that, under Title 30 of the Texas Administrative Code § 101.6, the upset emissions should be exempt. Huntsman sought such exemptions for the period from December 14, 1994, to January 20, 1995, for the period of May 8, 1995, to June 3, 1995, for the period of June 9, 1995, to August 14, 1995, and again from November 6, 1995, to October 3, 1997. Huntsman improperly claimed such exemptions even though the emissions were so regular as to be continuous, were the result of Huntsman's day-to-day operations, and were both reasonably avoidable and repairable. The Executive Director has not approved Huntsman's requested exemptions, in whole or in part, and therefore the excess emissions alleged by Huntsman as exemptible upset emissions, and those emissions during periods for which Huntsman did not submit any upset reports, are neither excused nor exempted and are unauthorized emissions in violation of Section 382.085(b) of the Texas Health and Safety Code.

9.9 For the calendar year 1994, Huntsman violated Title 30 of the Texas Administrative Code §101.10 by reporting actual VOC and benzene emissions utilizing the AP-42 factor for uncontrolled cooling towers when it knew that the actual emissions were greater, and by reporting actual VOC and benzene emissions measured above the AP-42 emission factor rates as upset

emissions when Huntsman knew such emissions were reasonably avoidable, continuing, and not exempt.

9.10 For the calendar year 1995, Huntsman violated Title 30 of the Texas Administrative Code §101.10 by reporting actual VOC and benzene emissions utilizing the AP-42 factor for controlled cooling towers when the LOU cooling tower was not controlled, and by reporting actual VOC and benzene emissions measured above the AP-42 emission factor rates as upset emissions when Huntsman knew such emissions were reasonably avoidable, continuing, and not exempt.

9.11 For the calendar year 1996, Huntsman violated Title 30 of the Texas Administrative Code §101.10 by reporting actual VOC and benzene emissions utilizing the AP-42 factor for controlled cooling towers when the LOU cooling tower was not controlled, and by reporting actual VOC and benzene emissions measured above the AP-42 emission factor rates as upset emissions when Huntsman knew such emissions were reasonably avoidable, continuing, and not exempt.

9.12 For the calendar year 1997, Huntsman violated Title 30 of the Texas Administrative Code §101.10 by reporting actual VOC and benzene emissions utilizing the AP-42 factor for controlled cooling towers when the LOU cooling tower was not controlled, and by reporting actual VOC and benzene emissions measured above the AP-42 emission factor rates as upset emissions when Huntsman knew such emissions were reasonably avoidable, continuing, and not exempt.

X.

Failure to Properly Operate and Maintain Carbon Canister Pollution Control Equipment at the API Separator

10.1 Huntsman elected to install carbon adsorption canisters and drums that do not regenerate the carbon on site as the means to satisfy the control device requirement for its API separator, API analyzer building, and flare skid.

10.2 Huntsman failed to make the demonstrations required by the Benzene Waste NESHAP or, alternatively, failed to properly document the demonstrations for each of the following control devices:

- 10.2.a API separator carbon canister system;
- 10.2.b API flare skid carbon canister system; and
- 10.2.c API analyzer building carbon canister system.

For each of the three (3) carbon canister systems, Huntsman violated 40 C.F.R. § 61.349(c) by failing to perform the required calculations or tests or, alternatively, Huntsman violated 40 C.F.R. § 61.356(d) by failing to maintain documentation of such calculations or tests.

10.3 Huntsman also furnished to the Commission documentation for the API separator showing some design calculations specifically noting “Only Benzene is reduced by Carbon Canisters at 90% Efficiency” contrary to the required 98% removal efficiency. In addition, Huntsman altered the system design for each carbon canister by intentionally flowing water into the carbon in the canisters, thus altering, *inter alia*, operating temperature and relative humidity. The alterations reduced the carbon canister control efficiency. Operation of the carbon canisters at less than the required recovery efficiencies constitutes a violation of 40 C.F.R. § 61.349(a)(2)(ii) and of section 382.085(b) of the Texas Health and Safety Code.

10.4 Huntsman violated Title 30 of the Texas Administrative Code §101.7 and the Texas Health and Safety Code § 382.085(b) by failing to properly operate and maintain its pollution capture and abatement equipment, including, without limitation, the following particulars:

10.4.a By failing to design and operate the equipment at ninety-five (95) weight percent removal efficiency for VOCs (or ninety-eight (98) weight percent efficiency of benzene) for

the operating conditions under which the pollution control equipment would be operated at the Huntsman facility;

10.4.b By operating the equipment when it was leaking both gaseous and liquid volatile organic compounds and benzene;

10.4.c By failing to monitor emissions from leaks in the control devices;

10.4.d By intentionally adding substantial quantities of water to the carbon in the control device, contrary to good operating practices and design parameters, and thereby reducing the ability of the carbon to capture and reduce emissions of benzene and volatile organic compounds;

10.4.e By operating the control equipment, which generates heat during operation, in the presence of water as alleged in Paragraph 10.4.d above, Huntsman operated the equipment at a relative humidity far in excess of the humidity at which the carbon fill in the canister performed optimally in VOC and benzene adsorption and in excess of the design parameters for the control system, thus greatly reducing the efficiency of the control device;

10.4.f By failing to routinely determine and monitor the removal efficiency of the carbon adsorption system and to properly monitor the emissions from the carbon canisters to determine when breakthrough occurred.

10.5 The violations identified in Paragraph 10.4 immediately above, continued for each day on which that Huntsman failed to properly operate and maintain pollution capture and abatement equipment.

10.6 Huntsman violated the monitoring requirements for carbon adsorption systems in at least the following particulars:

10.6.a By failing to monitor the exhaust vents on the carbon canisters, on and from April 3, 1995, to April 9, 1995, at the following locations:

10.6.a.1 API separator;

10.6.a.2 API analyzer building; and,

10.6.a.3 API flare skid.

10.6.b By failing to monitor at the API separator on July 16, 1995; and,

10.6.c By utilizing improper and unsound testing techniques and sample locations, by using improperly maintained equipment, and by utilizing improper equipment for the sampling conditions and locations, all in contravention of good sampling and measurement techniques.

10.7 Before January 1, 1997, Huntsman kept a log with daily measurements of the carbon canisters; some log entries identified the dates and times at which operation of the API separator carbon canisters were switched from the north to south banks, the dates and times at which daily sampling occurred, and the dates and times carbon was changed in the canisters. Huntsman changed the log format on or about January 1, 1997. Neither log format lists all of the dates and times on which the carbon banks were switched nor when Huntsman replaced carbon. The log also does not routinely list the time at which daily measurements were taken nor does it list all of the times at which Huntsman determined that breakthrough had occurred. Moreover, daily operating reports and shift supervisor's logs produced for selected dates by Huntsman for March and July 1997 reflect information that is not contained in the monitoring logs regarding canister changes and bank switches. The shift supervisor's logs further evidence monitoring undertaken by Huntsman and breakthroughs identified by Huntsman that occurred without accurate notation in the monitoring logs, and in some cases, that contradicts data in the monitoring logs.

10.8 Huntsman violated 40 C.F.R. § 61.356(j)(10) for each date in which the records are defective in one or more of the particulars identified in Paragraph 10.7 above by failing to accurately, completely, and consistently record the required data. Regardless of whether the log book maintained by Huntsman contains accurate data for some daily monitoring and control system maintenance, it is incomplete and/or inaccurate on many days with the result being that the entire log is materially inaccurate.

10.9 Huntsman violated 40 C.F.R. § 61.357(d)(8) by failing to include in its 1996 annual report all the information required by the regulation. Specifically, Huntsman's 1996 Annual NESHAP Subpart FF Report does not contain summaries of the inspections of the carbon absorption system for the API separator during which detectable emissions were measured, occasions when repairs were made, or corrective actions taken.

XI.

Hazardous Organic Emissions from Loading Tank No. 5560 without the use of the Vapor Recovery Unit

11.1 Special Condition No. 9 of Permit No 21023 requires that under no condition shall Huntsman fill Tank No. 5560 if the vapor recovery unit ("VRU") becomes inoperable. During such times when the VRU is inoperable, breathing losses associated with Tank No. 5560 shall be routed to a carbon adsorption system.

11.2 Huntsman violated Special Condition No. 9 of Permit No. 21023; Title 30 of the Texas Administrative Code § 116.115; and the Texas Health and Safety Code § 382.085(b) by loading Tank No. 5560 while the VRU was not in operation on the following dates:

11.2.a From January 21, 1998, at 2:00 a.m. until January 22, 1998, at approximately 12:48 a.m.;

11.2.b From January 24, 1998, at approximately 3:48 a.m. until January 24, 1998, at 6:00 a.m.

By loading Tank No. 5560 without the VRU in operation, Huntsman caused the release of excessive hazardous organic vapors.

XII.
Failure to Maintain Working Pressure
to Prevent VOC Emissions from Tank Nos. 33752 and 33755

12.1 Huntsman violated the requirements of Title 30 of the Texas Administrative Code § 115.112(a)(1) and the Texas Health and Safety Code § 382.085(b) by storing C₃ and lighter hydrocarbon in Tank No. 33752. Huntsman stored product in Tank No. 33752 that had a vapor pressure greater than 11.0 psia which resulted in the release of excessive emissions to the atmosphere through the floating roof seals on the tank on each of the following dates:

12.1.a April 26, 1994; and,

12.1.b February 9, 1996.

Tank No. 33752 does not have the pollution control devices specified in Title 30 of the Texas Administrative Code § 115.112(a)(1)[Table I(a)].

12.2 Huntsman violated Title 30 of the Texas Administrative Code § 101.7(a) and the Texas Health and Safety Code § 382.085(b) by failing to maintain all pollution emission capture and abatement equipment in good working order and by failing to properly operate the equipment, thereby causing excessive emissions of VOCs from Wastewater Tank No. 33752 at the Olefins facility on April 26, 1994; February 9, 1996; April 17, 1996, through May 18, 1996; and August 15, 1997, through September 3, 1997.

12.3 Huntsman violated Title 30 of the Texas Administrative Code § 115.112(a)(1) by allowing the storage in Tank No. 33755 of hydrocarbon feed with vapor pressure greater than 11.0 psia. Due to the high vapor pressure, the stored substance was too light to prevent the release of emissions to the atmosphere through the floating roof seals on the tank. Huntsman released unauthorized emissions to the atmosphere on each of the following dates:

- 12.3.a January 31, 1997;
- 12.3.b February 1, 1997;
- 12.3.c February 2, 1997;
- 12.3.d September 5, 1998;
- 12.3.e September 7, 1998;
- 12.3.f September 9, 1998;
- 12.3.g September 21, 1998;
- 12.3.h October 3, 1998;
- 12.3.i October 4, 1998;
- 12.3.j November 22, 1998;
- 12.3.k November 23, 1998; and,
- 12.3.l November 31, 1998.

Tank No. 33755 does not have the pollution control devices specified in Title 30 of the Texas Administrative Code § 115.112(a)(1)[Table I(a)].

12.4 Huntsman violated Title 30 of the Texas Administrative Code § 101.7(a) by failing to ensure that all pollution emission capture and abatement equipment is maintained in good working order and by failing to properly operate the equipment during normal facility operations.

Specifically, Huntsman either failed to equip storage Tank No. 33755 with, or failed to maintain, the control requirements specified in Chapter 115 of Title 30 of the Texas Administrative Code.

12.5 Special Condition No. 1 of Permit No. 16989 provides that the total emissions of air contaminants from any of the sources shall not exceed the values on the MAERT attached to and incorporated in the permit. For the Tank No. 33752 emission point, EPN LOUT33752, the MAERT emission limits for VOCs are 8.63 pounds per hour and 3.52 tpy (7,040 pounds per year).

12.6 Huntsman violated Permit No. 16989, Special Condition No. 1; Title 30 of the Texas Administrative Code § 116.115; and the Texas Health and Safety Code § 382.085(b) by causing, suffering, allowing, and/or permitting the emission of VOCs from Wastewater Tank No. 33752 at the Olefins facility in excess of the maximum allowable emission rate in Permit No. 16989 on the following days:

12.6.a April 26, 1994;

12.6.b February 9, 1996;

12.6.c April 17, 1996, through May 18, 1996; and,

12.6.d August 15, 1997, through September 3, 1997.

12.7 Huntsman violated Permit No. 16989, Special Condition No. 1; Title 30 of the Texas Administrative Code § 116.115; and the Texas Health and Safety Code § 382.085(b) by causing, suffering, allowing, and/or permitting the emission of VOCs from Wastewater Tank No. 33752 at the Olefins facility in excess of the maximum allowable emission rate in Permit No. 16989. As of the end of November 1997, Huntsman reported that annual emissions for the first eleven (11) months of 1997 totaled 7,048 pounds of VOCs. Thus, on November 30, 1997, Huntsman had exceeded its annual VOC emission limit yet it continued to operate Tank No. 33752. All emissions in excess of

3.52 tpy of VOCs occurring on and from November 30, 1997, were unauthorized and in violation of Permit No. 16989.

12.8 Huntsman violated Permit No. 16989, Special Condition No. 1; Title 30 of the Texas Administrative Code §§ 116.115 and 116.116(b); and the Texas Health and Safety Code § 382.085(b) by causing, suffering, allowing, or permitting emissions of air contaminants, specifically benzene and other VOCs, from Tank No. 33755 in excess of those emissions Huntsman represented for Tank No. 33755 in the application for Permit No. 16989, and in excess of those emissions authorized by Permit No. 16989, on each of the following dates:

- 12.8.a January 31, 1997;
- 12.8.b February 1, 1997;
- 12.8.c February 2, 1997;
- 12.8.d September 5, 1998;
- 12.8.e September 7, 1998;
- 12.8.f September 9, 1998;
- 12.8.g September 21, 1998;
- 12.8.h October 3, 1998;
- 12.8.i October 4, 1998;
- 12.8.j November 22, 1998;
- 12.8.k November 23, 1998; and,
- 12.8.l December 31, 1998.

XIII.

Failure to Maintain Working Pressure to Prevent VOC Emissions from Tank No. 21644 and Failure to Repair Seals and Conduct Required Inspections on Tank Nos. 33799, 4882, and 4881

13.1 Huntsman violated Title 30 of the Texas Administrative Code § 115.112(a)(2)(A) and the Texas Health and Safety Code § 382.085(b) by allowing four (4) hatchway covers in Cyclohexane Tank No. 21644 to remain in the open position. Allowing the hatchway covers to remain open caused the release of excessive cyclohexane emissions to the atmosphere through the floating roof hatches during 1993 and 1994, resulting in further violations of Permit No. 16989; Title 30 of the Texas Administrative Code § 116.115; and the Texas Health and Safety Code § 382.085(b). Huntsman is responsible for such emissions on and from April 21, 1994.

13.2 Huntsman violated Title 30 of the Texas Administrative Code § 115.114(a)(1) by failing to repair seals that allowed organic liquid to remain on top of the internal floating roof of Tank No. 33799 from March 28, 1996, until October 8, 1998. Huntsman's failure to repair this tank in the required time frame further resulted in excessive emissions of pyronaphtha and cyclohexane in violation of Permit No. 16989; Title 30 of the Texas Administrative Code § 116.115; and the Texas Health and Safety Code § 382.085(b).

13.3 Huntsman violated Title 30 of the Texas Administrative Code § 115.114(a)(1) by failing to close the gauge cover of Tank No. 4882 that Huntsman initially discovered on September 11, 1996, and did not repair until September 18, 1998. Huntsman's failure to repair this tank in the required time frame further resulted in excessive emissions of pyronaphtha and cyclohexane in violation of Permit No. 16989; Title 30 of the Texas Administrative Code § 116.115; and the Texas Health and Safety Code § 382.085(b).

13.4 Huntsman violated Title 30 of the Texas Administrative Code § 115.114(a)(1) by failing to repair a tear in the internal floating roof seal of Tank No. 4881 that Huntsman initially discovered on March 20, 1996, and did not repair until January 15, 1999. Huntsman's failure to repair this tank in the required time frame further resulted in excessive emissions of pyronaphtha and cyclohexane in violation of Permit No. 16989, Title 30 of the Texas Administrative Code § 116.115; and the Texas Health and Safety Code § 382.085(b).

XIV.

Failure to Properly Conduct Benzene and Volatile Organic Compound (VOC) Fugitive Monitoring Requirements

14.1 Huntsman violated 40 C.F.R. §§ 60.482-6(a) and 61.242-6(a) by failing to equip each open-ended valve or line with a cap, blind flange, plug, or a second valve that seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. In addition, each valve, line, cap, flange, or opening that was not promptly repaired resulted in emissions of benzene and/or VOCs to the atmosphere in violation of section 382.085(b) of the Texas Health and Safety Code. Specifically, Huntsman failed to comply as follows as documented on the dates indicated:

14.1.a Valve No. 1166 dripped benzene in the Pyronaphtha Hydrogenation Unit ("PHU"), as documented by a Commission Beaumont Regional Office Investigator during an inspection on September 17, 1997. The line was double valved, but, the second valve was open with benzene dripping into the drain.

14.1.b Tag No. 0723 leaked 250 part per million benzene around the cap as monitored with a Gas Chromatograph/Mass Spectrometer ("GC/MS") instrument, as documented

by a Commission Beaumont Regional Office Investigator during an inspection on September 17, 1997.

14.1.c Valve No. 0831 in the PHU dripped benzene onto the ground, as documented by a Commission Beaumont Regional Office Investigator during an inspection on July 24, 1997.

14.1.d The oil drain line from the LOU elevated separator did not have a plug or second valve in the line, as documented by a Commission Beaumont Regional Office Investigator during an inspection on July 21, 1997.

14.1.e A bleeder valve in a Udex Extraction ("UDEX") system in the AU charge line coming from Tank No. 1597 was uncapped and leaking on November 27, 1996, as documented by a Commission Beaumont Regional Office Investigator during a records review concluded on or about May 6, 1999.

14.1.f A line in the Gasoline Hydrogenation Unit ("GHU") consisting of a half screwed-in plug on the process-out side of F300 was open-ended on November 25, 1996, as documented by a Commission Beaumont Regional Office Investigator during a records review concluded on or about May 6, 1999.

14.1.g Valve Nos. E0902, E0080, E1243, E1240, E0842, E5179, E0912, E5268, E0933, E0931, E0904, and E0131 in the LOU were leaking, as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on and about June 10, 1996.

14.1.h Valve Nos. 15000 and 15003 in the LOU-GHU sump were open-ended, as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on December 14-16, 1994. The valves were in benzene service.

14.1.i Valve Nos. N0229, N0211, and N0216 in the LOU were open-ended, as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on December 16, 1998. The valves were in VOC service.

14.1.j Valve Nos. 24129 and O-0142 in the PDU were open-ended, as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on December 16, 1998. The valves were in VOC service.

14.1.k Valve No. 34030 on Tank No. 34030 was open-ended, as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on January 11, 1999. This valve was in VOC service.

14.1.l Valve Nos. 30420 and 30004 in the GHU were open-ended, as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on December 16, 1998. These valves were in benzene service.

14.2 Huntsman violated 40 C.F.R. § 61.242-1(d) in the following manner:

14.2.a By failing to mark or tag valves at the API separator in the LOU in such a manner that the valves could be distinguished readily from other pieces of equipment, as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on December 14-16, 1994; and,

14.2.b By failing to mark or tag valves in the Benzene Wastewater Stripping Unit in such a manner that the valves could be readily distinguished from other pieces of equipment, as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on December 14, 1994.

14.3 Huntsman violated Title 30 of the Texas Administrative Code § 115.334(1)(B) and 40 C.F.R. § 61.242-7(a) in the following particulars:

14.3.a By failing to properly monitor valves at the API separator in the LOU as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on December 14-16, 1994.

14.3.b By failing to properly monitor valves at the Benzene Wastewater Stripping Unit as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on December 14-16, 1994.

14.4 Huntsman violated Title 30 of the Texas Administrative Code § 115.334(1)(B) and 40 C.F.R. § 61.242-4(a) by failing to monitor pressure relief valves at the Benzene Wastewater Stripping Unit as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on December 14-16, 1994.

14.5 Huntsman violated 40 C.F.R. § 61.242-2(a)(1) and Title 30 of the Texas Administrative Code § 115.334(1)(B) by failing to monitor pump seals at the Benzene Wastewater Stripping as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on December 14-16, 1994.

14.6 Huntsman violated 40 C.F.R. §§ 63.167(a)(1) and 63.167(a)(2) by failing to provide for each open-ended valve or line, a cap, blind flange, plug, or a second valve that seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. Specifically, valves in the AU and Tag No. 02671 were each single-blocked and did not have plugs in their end as documented by a Commission Beaumont Regional Office Investigator during an inspection conducted on December 16, 1998.

XV.
**Failure to Maintain Sampling Connection
Systems with Closed-Purge or Closed-Vent System**

15.1 Huntsman violated 40 C.F.R. § 60.482-5(a) by operating thirty-seven (37) sampling systems at the plant that were in VOC service and did not have a closed-purge or closed-vent system, as documented during a record review conducted by a Commission Beaumont Regional Office Investigator that concluded on or about May 6, 1999.

15.2 Huntsman violated 40 C.F.R. § 61.242-5(a) by operating two (2) sampling systems in the PHU that were in benzene service and did not have a closed-purge or closed-vent system, as documented by a Commission Beaumont Regional Office Investigator during an inspection in July 1997.

15.3 Huntsman violated 40 C.F.R. § 61.242-5(a) by operating forty-two (42) sampling systems at the plant that were in benzene service and did not have a closed-purge or closed-vent system. They were documented during a record review conducted by a Commission Beaumont Regional Office Investigator that concluded on or about May 6, 1999.

15.4 Huntsman violated 40 C.F.R. § 63.166 by failing to equip two (2) sampling connections in benzene service with a closed-purge, closed-loop, or closed-vent system, and without a determination of alternative emissions limitations, as documented by a Commission Beaumont Regional Office Investigator during an inspection on January 11, 1999.

XVI.
**Failure to Inspect Closed-Vent Systems and Control Devices,
API Separators, and Individual Drain Systems**

16.1 Huntsman violated 40 C.F.R. §§ 61.346(a)(1)(i)(A) and (a)(2); Title 30 of the Texas Administrative Code § 101.20(2); and the Texas Health and Safety Code § 382.085(b), by failing

to conduct initial instrument monitoring of the cover and all openings at sumps in and around the LOU (“LOU sumps”).

16.2 Huntsman violated 40 C.F.R. § 61.346(a)(2); Title 30 of the Texas Administrative Code § 101.20(2); and the Texas Health and Safety Code § 382.085(b), by failing to conduct initial and quarterly visual inspections of the cover and all openings at the LOU sumps.

16.3 Huntsman violated 40 C.F.R. § 61.347(a)(1)(i)(A); Title 30 of the Texas Administrative Code § 101.20(2); and the Texas Health and Safety Code § 382.085(b), by failing to conduct initial instrument monitoring of the cover and all openings at the API separator.

16.4 Huntsman violated 40 C.F.R. § 61.347(b); Title 30 of the Texas Administrative Code § 101.20(2); and the Texas Health and Safety Code § 382.085(b), by failing to conduct initial and quarterly visual inspections of the cover and all openings at the API separator.

16.5 Huntsman violated the requirements of 40 C.F.R. § 61.349(f); Title 30 of the Texas Administrative Code § 101.20(2); and the Texas Health and Safety Code § 382.085(b), by failing to conduct initial and quarterly visual inspections of the closed-vent piping at the API separator.

XVII.

Failure to Maintain a Closed-Vent Drain System to Route Organic Vapors to a Pollution Control Device

17.1 Huntsman violated 40 C.F.R. § 61.346(a)(1); Title 30 of the Texas Administrative Code §§ 101.7 & 101.20(2); and the Texas Health and Safety Code § 382.085(b) due to leaking drains. Huntsman’s reports, pursuant to 40 C.F.R. § 61.357 (“FF Reports”), for the period from August 31, 1996, through April 30, 1998, document forty-six (46) leaking drains monitored by Huntsman.

XVIII.
Excessive Emissions from the Cracking Furnaces

18.1 Special Condition No. 1 of Permit No. 16989 provides that the total emissions of air contaminants from any of the sources shall not exceed the values on the MAERT attached to the permit.

18.2 Special Condition No. 5⁹ of Permit No. 16989 provides that the NO_x emissions from Cracking furnace “H” shall not exceed 0.104 pounds per million British thermal units (“MMBTU”), averaged daily, except during maintenance activities.

18.3 Special Condition No. 25 of Permit No. 16989 requires that the fired heating duty for Cracking furnace “D”, on a lower heating value basis, shall not exceed a three (3) hour average of 244.8 MMBTU per hour.

18.4 Huntsman violated Permit No. 16989, Special Condition No. 25; Title 30 of the Texas Administrative Code § 116.115(c); and the Texas Health and Safety Code § 382.085(b) by exceeding the three (3) hour average of 244.8 MMBTU per hour from the Cracking furnace “D” in the LOU a total of 110 times over seven (7) separate days, which includes three (3) times on September 10, 1997; and 107 times from December 23, 1997, through December 28, 1997.

18.5 Huntsman violated Special Condition No. 1 of Permit No. 16989; Title 30 of the Texas Administrative Code § 116.115(c); and the Texas Health and Safety Code § 382.085(b) by causing, suffering, allowing, and/or permitting the emission of CO from the Cracking furnace “H” in the LOU in excess of the maximum allowable emission rates in Permit No. 16989 for a total of seventy-eight (78) hours over fourteen (14) separate days.

⁹ Permit No. 16989 of November 4, 1998. In earlier versions of the Permit, the language may be located in other special conditions, such as Special Condition No. 4.

18.6 Huntsman violated Special Conditions Nos. 1 and 5 of Permit No. 16989; Title 30 of the Texas Administrative Code § 116.115(c); and the Texas Health and Safety Code § 382.085(b) by causing, suffering, allowing, and/or permitting NO_x emissions from the Cracking furnace “H” in the LOU in excess of the maximum allowable emission rates in the Permit No. 16989 for a total of fifty-nine (59) hours over nine (9) separate days.

XIX.

**Failure to Prevent Emissions to the Atmosphere
from the Cracked Gas Compressor**

19.1 Huntsman violated 40 C.F.R. § 60.482-3(a) by failing to equip the cracked gas compressor in VOC service in the LOU with a seal system that prevented leakage of VOCs to the atmosphere.

XX.

Non-permitted Leaks in the Dilution Steam Generator Tankage and System

20.1 In 1992, Huntsman’s predecessor Texaco, Inc. submitted to the Commission a permit amendment application that represented there were no emissions from the Dilution Steam Generator (“DSG”) and requested that the Commission remove EPN T4-LOU, representing the DSG, from its Permit No. 16989. Huntsman is now responsible for compliance with all permit conditions and representations made in permit applications and amendments.

20.2 On or about November 11, 1992, Texaco began routing all condensate from the DSG to Tank No. 33752. Huntsman is responsible for operation of the condensate from the DSG to Tank No. 33752 on and from April 21, 1994. The condensate from the DSG contains air contaminants, including benzene and other VOCs, which volatilize into the atmosphere. Additionally, the condensate retains large amounts of heat from the DSG and the added heat only accelerates

volatilization of air contaminants into the atmosphere, in excess of the maximum allowable emission rates represented in Permit No. 16989.

20.3 By routing condensate from the DSG to Tank No. 33752, Huntsman also violated Title 30 of the Texas Administrative Code §§ 116.110, 116.115, and 116.116(b) and the Texas Health and Safety Code 382.085(b) by causing, suffering, allowing, and/or permitting emissions of air contaminants from Tank No. 33752 in excess of those emissions represented in the application for Permit No. 16989, and in excess of the emissions authorized by Permit No. 16989.

20.4 During a September 1997 sampling event, Commission Beaumont Regional Office Investigators took samples of the emissions associated with steam leaks from the DSG System. Laboratory analysis of these samples revealed concentrations of the following air contaminants: 922 parts per billion (“ppb”) benzene; 3,260 ppb acetone; 2,260 ppb toluene; 1,790 ppb ethyl benzene; 3,440 ppb styrene; and 3,800 ppb total xylene.

20.5 Huntsman violated Title 30 of the Texas Administrative Code §§ 116.110(a) and (d), and 116.116(a) and (b), and Texas Health and Safety Code §§ 382.0518 and 382.085(b) by causing, suffering, allowing, and/or permitting the unauthorized emissions of VOCs, including benzene, from the DSG system during September 1997.

XXI.

Failure to Properly Permit Operating Units

The Aromatics and UDEX Units

21.1 In July 1984, Texaco modified the AU and UDEX operating units by increasing the benzene tower capacity without authorization from the Texas Air Control Board. Huntsman further modified the UDEX in August 1996 and May 1997 by increasing feed capacities. By modifying the

UDEX and AU to increase the tower and feed capacities, Huntsman increased both units' potential to emit air contaminants into the air.

21.2 Huntsman violated Title 30 of the Texas Administrative Code § 116.110(a) and Texas Health and Safety Code §§ 382.0518 and 382.085(b) by modifying the AU and UDEX units without authorization.

The LOU Flare

21.3 In the fall of 1991, Texaco, Inc. replaced the flare tip on the LOU flare which constitutes a modification of the LOU. The modifications changed the character and quantity of emissions from the flare. Huntsman became responsible for the LOU flare on April 21, 1994.

21.4 Huntsman violated Title 30 of the Texas Administrative Code § 116.110(a)(1) and Texas Health and Safety Code § 382.085(b) by continuing to operate the flare tip on the LOU flare without first obtaining authorization.

The Light Olefin's Unit Flare Skid

21.5 In 1986, Texaco constructed the LOU flare skid during the LOU modernization project, and in 1993, installed new compressors and pumps on the LOU flare skid. These modifications were undertaken without first obtaining authorization. Huntsman became responsible for operating the LOU flare skid on April 21, 1994.

21.6 Huntsman violated Title 30 of the Texas Administrative Code § 116.110(a)(1) and the Texas Health and Safety Code § 382.085(b) by operating the LOU Flare Skid without first obtaining authorization.

XXII.

**Failure to Report Benzene and VOC Sampling Data
Required by LOU Permit No. 16989**

22.1 Special Condition No. 29 of Permit No. 16989 requires Huntsman to provide, by the 25th day of each month, notification to the Commission Regional Office of the sample schedule for the upcoming month. Special Condition No. 29 also requires Huntsman to afford the Commission Regional Office the opportunity to observe the sampling required by Special Condition No. 30 for a period of six (6) months following the approval of the November 1998 amendment to Permit No. 16989. The permit also requires Huntsman to submit, by the 25th day of each month, a report of the data obtained during the previous month's sampling to the Commission's Office of Air Quality, New Source Review Permits Division, and the Regional Office.

22.2 Huntsman violated Special Condition No. 29 of Permit No. 16989; Title 30 of the Texas Administrative Code § 116.115(c); and the Texas Health and Safety Code § 382.085(b) by failing to provide notification and sampling results by March 25, 1999, and again before April 25, 1999.

XXIII.

**Failure to Manage and Treat Waste from
the Cyclohexane Sump and AU Sump Waste Streams**

23.1 Huntsman submitted information to the Commission indicating that it intended to claim the 40 C.F.R. § 61.342(c)(2) exemption for both the Cyclohexane Sump and the AU Sump. Specifically, Huntsman failed to submit flow weighted annual average benzene concentrations. Further, the data Huntsman presented to Commission was not on an annual basis as required. Huntsman did not submit sufficient information to support the exemption until October 1, 1996.

23.2 Huntsman violated 40 C.F.R. § 61.342(c)(1); Title 30 of the Texas Administrative Code § 101.20(2); and Texas Health and Safety Code § 382.085(b), by failing to submit to the Commission sufficient information as required by 40 C.F.R. § 61.342(c)(2) to support the claimed exemptions.

XXIV.
**Failure to Timely Submit Quarterly Excess Emission Reports
for the Cracking furnace "H" in the LOU**

24.1 Huntsman violated 40 C.F.R. § 60.7(c); Title 30 of the Texas Administrative Code § 101.20(1); and the Texas Health and Safety Code § 382.085(b), by failing to submit the required quarterly excess reports for Cracking furnace "H" in the LOU within thirty (30) days after the end of the fourth quarter of 1997 (December 31, 1997) and the first quarter of 1998 (March 31, 1998). Huntsman submitted the following reports late:

24.1.a For the fourth quarter 1997, Huntsman submitted the report on May 20, 1998.

24.2.b For the first quarter of 1998, Huntsman submitted the report on June 19, 1998.

XXV.
**Failure to Report Upset Conditions; Unauthorized
Emissions of Air Contaminants**

25.1 Huntsman violated Permit No. 16989; Title 30 of the Texas Administrative Code §§ 101.6(a) and 116.115; and the Texas Health and Safety Code § 382.085(b), by failing to properly report upsets and upset emissions from Tank No. 33756 on each of the following occasions:

25.1.a November 2 through November 9, 1995; and,

25.1.b May 8 through May 21, 1996.

Each unreported upset constitutes a separate violation and for upsets continuing longer than one day, the violation continued day-to-day.

25.2 Huntsman violated Permit No. 16989; Title 30 of the Texas Administrative Code §§ 101.6(a) and 116.115; and the Texas Health and Safety Code § 382.085(b), by failing to report upsets and upset emissions from the Cracking furnace “H” in the LOU for the period August 2, 1995, through September 27, 1996, (thirty-four (34) separate occasions comprising twenty-seven (27) days).

25.3 Huntsman violated Permit No. 16989; Title 30 of the Texas Administrative Code §§ 101.6(a) and 116.115; and the Texas Health and Safety Code § 382.085(b), by failing to properly report upsets and upset emissions relating to the Cracking furnace “H” in the LOU by failing to list the compound-specific types and quantities of emissions released during the upset, actions taken to minimize the upset, and/or failing to reporting the upset within twenty-four (24) hours as required on January 24, 1996, through June 9, 1997, (fourteen (14) separate occasions comprising twenty-two (22) days).

XXVI. **AU / LOU Flare Testing**

26.1 Huntsman violated Title 30 of the Texas Administrative Code § 101.20(2); 40 C.F.R. § 61.349(d); 40 C.F.R. § 60.8(a); and 40 C.F.R. § 61.13, by failing to conduct a timely performance and/or emission test on the AU flare, and by failing to furnish the Administrator a written report of the results.

26.2 Huntsman violated Title 30 of the Texas Administrative Code § 101.20(2); 40 C.F.R. § 61.349(d); 40 C.F.R. § 60.8(a); and 40 C.F.R. § 61.13, by failing to conduct a timely performance and/or emission test on the LOU flare, and by failing to furnish the Administrator a written report.

XXVII.
Request for Civil Penalties

27.1 Plaintiff requests that, upon final hearing, this Court assess a civil penalty of not less than \$50, nor more than \$25,000, for each day of violation and for each act of violation, as alleged in this petition, as the Court or jury may deem proper. TEX. WATER CODE § 7.102 (Vernon 2001 & Supp. 2003); TEX. HEALTH & SAFETY CODE § 382.085(c) (Vernon 2001).¹⁰

XXVIII.
Request for Attorney's Fees

28.1 Plaintiff requests that, upon final hearing, this Court award Plaintiff its reasonable attorneys fees and court costs, to be recovered from the Defendants. TEX. GOV'T CODE. § 402.006(c) (Vernon 1998).

WHEREFORE, PREMISES CONSIDERED, Plaintiff State of Texas prays for the following relief:

1. That Defendant be cited to appear and answer herein;
2. That upon final trial of this cause, civil penalties be assessed against Defendant within the statutory range, plus interest at the legal rate from the date of judgment until paid;
3. That Plaintiff recover from Defendant all of its costs in this action, including reasonable attorney's fees; and

¹⁰ The 75th Legislature reorganized and recodified the Commission's enforcement authority, including the authority governing the violations alleged in this enforcement action, in Chapter 7 of the Texas Water Code. Act of May 31, 1997, 75th Leg., R.S., ch. 1072, 1997 Tex. Gen. Laws 4094 (S.B. 1876), codified at TEX. WATER CODE § 7.00, *et seq.* However, the new citations to Chapter 7 of the Texas Water Code apply only to violations that occurred on or after September 1, 1997, and the legislation requires application of the prior laws to all violations occurring before September 1, 1997. *Id.* at p. 4142. Therefore, the citations in this Petition refer to the applicable statutes recognizing that the alleged violations occurred both before and after September 1, 1997.

4. That Plaintiff be granted all other relief, general and special, at law and in equity, to which it may show itself to be justly entitled.

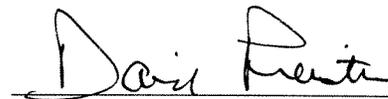
Respectfully submitted,

GREG ABBOTT
Attorney General of Texas

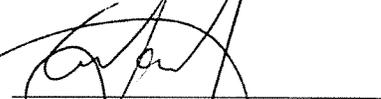
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