IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
VICTORIA DIVISION

UNITED STATES OF AMERICA, Plaintiff, v. Formosa Plastics Corporation, Texas, Formosa Plastics Corporation, Louisiana, Formosa Hydrocarbons, Inc., Defendants.	)	Civil Action No. 6:09-cv-00061 CONSENT DECREE

TABLE OF CONTENTS

Plaintiff United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), has, concurrently with the lodging of this Consent Decree, filed a Complaint in this action alleging that: Defendant Formosa Plastics Corporation, Texas ("FPC TX") has violated the Clean Air Act ("CAA"), 42 U.S.C. § 7401 *et seq.*; the Clean Water Act ("CWA"), 33 U.S.C. § 1251 *et seq.*; the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6901 *et seq.*; the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9601 *et seq.*; and the Emergency Planning and Community Right-to-Know Act ("EPCRA"), 42 U.S.C. § 11001 *et seq.*; Defendant Formosa Plastics Corporation, Louisiana ("FPC LA") has violated the CAA, CWA, and RCRA; and Defendant Formosa Hydrocarbons, Inc. ("FHC") has violated the CAA.

EPA conducted a Multi-Media Compliance Inspection of the FPC TX and FHC facilities, located in Point Comfort, Texas, in November 2003 and February 2004, and conducted a Multi-Media Compliance Inspection of the FPC LA facility in April 2004.

The Complaint in this action alleges violations of: the New Source Performance Standards ("NSPS") and the National Emissions Standards for Hazardous Air Pollutants ("NESHAPs") promulgated under the CAA, as well as Defendants' respective CAA Title V permits; effluent limitations promulgated under the CWA; CWA National Pollutant Discharge Elimination System ("NPDES") permits; hazardous waste identification, treatment, storage, and disposal requirements promulgated under RCRA; and toxic release inventory reporting obligations under EPCRA and CERCLA.

Defendants do not admit any liability arising out of the transactions or occurrences alleged in the Complaint.

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 between the Defendants and the United States 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 except as provided in Section I, 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; Section 113(b) of the CAA, 42 U.S.C. § 7413(b); Sections 301, 309 and 402 of the CWA, 33 U.S.C. §§ 1311, 1319 and 1342; Section 3008 of RCRA, 42 U.S.C. § 6928; Sections 304, 313 and 325 of EPCRA, 42 U.S.C. §§ 11004, 11023, and 11045; and Section 113 of CERCLA, 42 U.S.C. § 9613, and over the Parties. Venue lies in this District pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b); CWA Section 309(b), 33 U.S.C. § 1319(b); RCRA Section 3008(a), 42 U.S.C. 6928(a); EPCRA Section 325(b), 42 U.S.C. § 11045(b); and CERCLA Section 113(b), 42 U.S.C. § 9613(b), and 28 U.S.C. § 1391(b). For purposes of this Consent Decree, or any action to enforce this Consent Decree, Defendants consent to the personal jurisdiction of this Court and waive any objections to venue in this District.

2. For purposes of this Consent Decree, Defendants agree that the Complaint states claims upon which relief may be granted pursuant to Section 113(b) of the CAA, 42

U.S.C. § 7413(b); Sections 301, 309 and 402 of the CWA, 33 U.S.C. §§ 1311, 1319 and 1342; Section 3008 of RCRA, 42 U.S.C. § 6928; Sections 304, 313 and 325 of EPCRA, 42 U.S.C. §§ 11004, 11023, and 11045; and Section 113 of CERCLA, 42 U.S.C. § 9613.

II. APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon the United States and upon Defendants and any successors, assigns, or other entities or persons otherwise bound by law.

4. No transfer of ownership or operation of a Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve a Defendant of its obligations to ensure that the terms of the Decree are implemented. At least 30 Days prior to such transfer, Defendant shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written transfer agreement, to EPA Region 6 and the United States Department of Justice, in accordance with Section XIII of this Decree (Notices). Any attempt to transfer ownership or operation of a Facility without complying with this Paragraph constitutes a violation of this Decree.

5. Defendants shall provide a copy of this Consent Decree (by hard copy, by electronic copy, or by providing online access to it with notice to the affected personnel) 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. Defendant(s) shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

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

III. DEFINITIONS

7. Terms used in this Consent Decree that are defined in the following Acts or in regulations promulgated pursuant to those Acts shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree: the Clean Air Act (CAA), 42 U.S.C. § 7401 *et seq.*; the Clean Water Act (CWA), 33 U.S.C. § 1251 *et seq.*; the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 *et seq.*; the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601 *et seq.*; and the Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. § 11001 *et seq.* Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

a. "Complaint" shall mean the complaint filed by the United States in this action;

b. "Consent Decree" or "Decree" shall mean this Decree and all appendices attached hereto (listed in Section XXII);

c. "Day" 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 the close of business of the next business day;

d. "Date of Lodging" shall mean the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Southern District of Texas;

e. "Defendant" or "Defendants" shall mean, as appropriate in the context of the specific provision of this Decree, Formosa Plastics Corporation, Texas ("FPC TX"), Formosa Hydrocarbons, Inc. ("FHC"), and/or Formosa Plastics Corporation, Louisiana ("FPC LA");

f. "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies;

g. "Effective Date" shall have the definition provided in Section XIV;

h. "Existing," as used in the definition of "Facility" below, shall mean physically constructed or authorized by permit for construction as of the Date of Lodging of this Decree;

i. "Facility" or "Facilities" shall mean the existing FPC TX facility located at 201 Formosa Drive, Point Comfort, Texas, the existing FHC facility located at 103 Fannin Road, Point Comfort, Texas, and the existing FPC LA facility located on Gulf States Road, Baton Rouge, Louisiana, as appropriate in the context of the specific provision of this Decree;

j. "Paragraph" shall mean a portion of this Decree identified by an arabic numeral;

k. "Parties" shall mean the United States and Defendants;

l. "Section" shall mean a portion of this Decree identified by a roman numeral;

m. "United States" shall mean the United States of America, acting on behalf of EPA.

IV. CIVIL PENALTY

8. Payments.

a. First payment. Within 30 Days after the Effective Date of this Consent Decree, Defendants shall pay the sum of $1,400,000 as a civil penalty, together with interest accruing from the Effective Date, at the rate specified in 28 U.S.C. § 1961 as of the Effective Date.

b. Second Payment. Within 120 days after the Effective Date, Defendants shall pay the sum of $1,400,000 as a civil penalty, together with interest accruing from the Effective Date, at the rate specified in 28 U.S.C. § 1961 as of the Effective Date.

9. Defendants shall pay the civil penalty due by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be provided to Defendants, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of Texas, 919 Milam Street, Houston, Texas, 77208, (713) 567-9000. At the time of payment, Defendants shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States v. Formosa Plastics Corporation, Texas, et al.*, and shall reference the civil action

number and DOJ case number 90-5-2-1-08995, to the United States in accordance with Section XIII of this Decree (Notices); by email to acctsreceivable.CINWD@epa.gov; and by mail to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

10. Defendants shall not deduct or capitalize any penalties paid under this Decree pursuant to this Section or Section VII (Stipulated Penalties) in calculating their respective federal, state, or local income taxes or in calculating any other tax.

V. COMPLIANCE REQUIREMENTS

11. **Leak Detection and Repair**. Defendants must undertake an enhanced Leak Detection and Repair program as set forth in Appendix A of this Consent Decree in order to minimize or eliminate fugitive emissions of volatile organic compounds ("VOCs"), benzene, volatile hazardous air pollutants ("VHAPs"), and organic hazardous air pollutants ("HAPs") from equipment in light liquid and/or in gas/vapor service.

12. **Benzene Waste Operations NESHAP**. Defendant FPC TX must undertake the measures set forth in Appendix B of this Consent Decree to ensure continuing compliance with 40 C.F.R. Part 61, Subpart FF (the Benzene Waste Operations NESHAP), and to minimize or eliminate fugitive benzene waste emissions at FPC TX.

13. **Vinyl Chloride NESHAP**. Defendants FPC TX and FPC LA must undertake the enhanced Vinyl Chloride NESHAP Leak Detection and Elimination Program set forth in Appendix C of this Consent Decree to ensure continuing compliance with 40 C.F.R. § 61.65(b)(8) and to minimize fugitive vinyl chloride monomer (VCM) emissions regulated under

Subpart F's Leak Detection and Elimination (LDE) Program in the VCM and PVC units at the FPC TX facility and the VCM and PVC units at the FPC LA facility.

14. **Resource Conservation and Recovery Act**. Defendants FPC TX and FPC LA must undertake the RCRA injunctive relief set forth in Appendix D of this Consent Decree to ensure compliance with RCRA.

15. **Clean Water Act**. Defendants must undertake the CWA injunctive relief set forth in Appendix E of this Consent Decree to ensure compliance with the CWA.

16. **Emergency Planning and Community Right-to-Know**. Defendant FPC TX must undertake the EPCRA injunctive relief set forth in Appendix F of this Consent Decree to ensure compliance with EPCRA and that FPC TX TRI reporting is accurate.

17. Approval of Deliverables. Unless otherwise specified in this Decree, after review of any plan, report, or other item that is required to be submitted pursuant to this Consent Decree, EPA shall, 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. EPA shall state in detail in writing all reasons for any disapproval.

18. If the submission is approved pursuant to Paragraph 17.a, Defendant 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 17.b or .c, Defendant shall, upon written direction from EPA, take all actions required by the approved plan, report, or other item that EPA determines are technically severable from any disapproved portions, subject

to Defendant's right to dispute only the specified conditions or the disapproved portions, under Section IX of this Decree (Dispute Resolution).

19. If the submission is disapproved in whole or in part pursuant to Paragraph 17.c or .d, Defendant shall, within 45 Days of receipt of written disapproval from EPA 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, Defendant shall proceed in accordance with the preceding Paragraph.

20. Any stipulated penalties applicable to the original submission, as provided in Section VII of this Decree, shall accrue during the 45-Day period, or other agreed period, described in Paragraph 19 above, but shall not be payable unless the resubmission is untimely or is so deficient as to constitute a material breach of Defendant(s)' obligations under this Decree; provided that, if the original submission was so deficient as to constitute a material breach of Defendant(s)' obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

21. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA may again require Defendant to correct any deficiencies, in accordance with the preceding Paragraphs, subject to Defendant's right to invoke Dispute Resolution and the right of EPA to seek stipulated penalties as provided in the preceding Paragraphs.

22. Permits. Where any compliance obligation under this Section requires a Defendant to obtain a federal, state, or local permit or approval, Defendant shall submit timely

and complete applications and take all other actions required of Defendant by the permitting authority under applicable laws and regulations to obtain all such permits or approvals. Defendant(s) may seek relief under the provisions of Section VIII of this Consent Decree (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 Defendant(s) has submitted timely and complete applications and has taken all other actions required by the permitting authority under applicable laws and regulations to obtain all such permits or approvals.

VI. REPORTING REQUIREMENTS

23. Defendants shall submit to EPA an Annual Report. The first Annual Report shall be due 31 days after the first full calendar half-year after the Effective Date of this Consent Decree (*i.e.*, either: (i) January 31 of the year after the Effective Date, if the Effective Date is between January 1 and June 30 of the preceding year; or (ii) July 31 of the year after the Effective Date, if the Effective Date is between July 1 and December 31). The initial Annual Report shall cover the period between the Date of Lodging and the first full half-year calendar date (*i.e.*, June 30 or December 31) after the Date of Lodging (a "half-year" runs between January 1 and June 30 and between July 1 and December 31). Until termination of this Decree, each subsequent report will be due on the same date in the following year and shall cover the prior two half-years (*i.e.*, either January 1 to December 31 or July 1 to June 30). The Annual Report shall include:

a. all information required to be reported in the Annual Report under Appendices A through F of this Consent Decree (which may reference specific information previously submitted to EPA pursuant to this Consent Decree without re-submitting same);

b. a description of any noncompliance with the requirements of this Consent Decree and an explanation of the likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such noncompliance. If Defendant(s) violate, or have reason to believe that they will more likely than not violate, any requirement of this Consent Decree, Defendant(s) shall notify the United States of such violation and its likely duration, in writing, within 10 working Days of the Day Defendant(s) first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Defendant(s) shall so state in the report. In the event the cause of a violation cannot be fully explained at the time the report is due, Defendant(s) shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day Defendant(s) becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves Defendant(s) of its obligation to provide the notice required by Section VIII of this Consent Decree (Force Majeure).

24. Whenever any violation of this Consent Decree or any other event affecting any Defendant's or Facility's performance under this Decree, or the performance of the Facilities, may pose an imminent and substantial endangerment to the public health or welfare, or the environment, the Defendant shall notify EPA Region 6 orally or by electronic or facsimile

transmission as soon as possible, but no later than 24 hours after Defendant first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

25. Defendant(s) also shall submit all other reports required in Appendices A through F in accordance with the schedules provided therein.

26. All reports shall be submitted to the persons designated in Section XIII (Notices) of this Consent Decree.

27. Each report submitted by Defendant(s) 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 am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

28. The reporting requirements of this Consent Decree do not relieve Defendant(s) of any additional reporting obligations required by the Acts or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

29. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

VII. STIPULATED PENALTIES

30. Defendant(s) shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, ending with the date of correction, unless excused under Section VIII (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

31. Late Payment of Civil Penalty. If Defendants fails to pay the civil penalty required to be paid under Section IV of this Decree (Civil Penalty) when due, Defendants shall pay a stipulated penalty of $5,000 per Day for each Day that the payment is late. Defendants are jointly and severally liable for the civil penalty required to be paid under Section IV (Civil Penalty).

32. Compliance Requirements. The following stipulated penalties shall accrue for each violation of the requirements identified in Section V (Compliance Requirements) of this Decree:

Noncompliance with Requirements of Enhanced Leak Detection and Repair Program (Appendix A):

Violation	Stipulated Penalty
For failure to have a written LDAR program as required by Appendix A, Subsection B, paragraph 3	$7,500 per month (or portion thereof) for the first two months; $15,000 per month (or portion thereof) for the third month and beyond

For failure to implement the internal leak definitions as required in Appendix A, Subsection C, paragraph 4	$100 per component, but not greater than $25,000 per month per Covered Process Unit
For failure to implement monitoring frequencies as required in Appendix A, Subsection D	$100 per component, but not greater than $25,000 per month per Covered Process Unit
For failure to make repairs as specified in Appendix A, Subsection E, paragraphs 8 and 9	$250 per component, but not greater than $10,000 per month per Covered Process Unit
For failure to comply with the "drill and tap" requirements in Appendix A, Subsection E, paragraph 10	$5,000 per valve per incident
For failure to correct a leak found using the optical gas imaging equipment as specified in Appendix A, Subsection E, paragraphs 13 and 14	$5,000 per missed event
For failure to comply with delay of repair requirements in Appendix A, Subsection F, paragraph 15	$100 per missed component
For failure to provide a List of "Existing Valves" in VHAP Covered Process Units under Appendix A, Subsection G, paragraph 17 a.	$5,000 per month per VHAP Covered Process Unit (or portion thereof)
For failure to conduct and timely submit the Valve Technology Survey under Appendix A, Subsection G, paragraph 20	$5,000 per month (or portion thereof)
For failure to update the Valve Technology Survey in subsequent Compliance Status Reports pursuant to Appendix A, Subsection G, paragraph 20	$5,000 per month (or portion thereof)
For failure to install new valves or connectors in accordance with Appendix A, Subsection G, paragraphs 17.b. and 18.b.	$1,000 per valve (a determination by a Defendant regarding a "best performing connector" or the "commercial availability" of valve technology shall not be grounds for assessment of a stipulated penalty unless Defendant failed to conduct the required investigation to determine the "best performing connector" or "commercial unavailability")

For failure to timely replace, repack or improve leaking valves and connectors pursuant to Appendix A, Subsection G, paragraphs 17.c. and 18.c.	$1,000 per valve (a determination by a Defendant regarding a "best performing connector" or the "commercial availability" of valve technology shall not be grounds for assessment of a stipulated penalty unless Defendant failed to conduct the required investigation to determine the "best performing connector" or "commercial unavailability")
For failure to timely replace or repack chronic leakers pursuant to Appendix A, Subsection G, paragraph 19	$2,000 per valve (a determination by a Defendant regarding the "commercial availability" of valve technology shall not be grounds for assessment of a stipulated penalty unless Defendant failed to conduct the required investigation to determine the "commercial unavailability")
For failure to maintain documentation from valve manufacturers that demonstrates that the valve or packing meets the definition of "certified low leaking valve" technology and/or "certified low-leaking valve packing technology" pursuant to Appendix A, Subsection G, paragraph 21	$500 per missing record
For failure to implement the training program as required by Appendix A, Subsection H	$5,000 per month (or portion thereof)
For failure to implement quarterly QA/QC procedures described in Appendix A, Subsection I	$5,000 per month (or portion thereof)
For failure to timely submit a Corrective Action Plan, as required by Appendix A, Subsection J, paragraph 28	Period of Delay — Penalty per day 1st through 30th day after deadline — $1,250 31st through 60th day after deadline — $3,000 Beyond 60th day — $5,000
For failure to timely submit a schedule for Corrective Action, as required by Appendix A, Subsection L, paragraph 33	Period of Delay — Penalty per day 1st through 30th day after deadline — $1,250 31st through 60th day after deadline — $3,000 Beyond 60th day — $5,000
For failure to take Corrective Action as required by Appendix A, Subsection J, paragraph 30	$5,000 per failure

For failure to comply with any schedule for Corrective Action submitted pursuant to Appendix A, Subsection L, paragraph 33	Period of Delay — Penalty per day 1st through 30th day after deadline — $1,250 31st through 60th day after deadline — $3,000 Beyond 60th day — $5,000
For failure to timely add new Covered Equipment to the LDAR Program pursuant to Appendix A	If it is determined through a federal, state, or local investigation that Defendant has failed to add new Covered Equipment to its LDAR program pursuant to applicable federal, state, or local regulatory timelines, Defendant shall pay $2,000 per component not timely added. If Defendant determines (either on its own or through a third-party audit) that it has failed to add new Covered Equipment to its LDAR program pursuant to applicable federal, state, or local regulatory guidelines, Defendant shall pay $175 per component that it failed to timely add.
For failure to add existing Covered Equipment to the LDAR Program pursuant to Appendix A	If it is determined through a federal, state, or local investigation that Defendant has, by not later than one year after the Date of Lodging, failed to include any Existing Covered Equipment to its LDAR program, Defendant shall pay $2,000 per piece of Covered Equipment not included. If Defendant determines (either on its own or through a third-party audit) that it has, by no later than one year after the Date of Lodging, failed to include any Existing Covered Equipment in its LDAR program, Defendant shall pay $175 per piece of Covered Equipment that it failed to include.

Noncompliance with Benzene Waste Operations NESHAP Injunctive Relief (Appendix B):

Violation	Stipulated Penalty
For failure to conduct review and verification of TAB as required in Appendix B, paragraph 3	$7,500 per month (or any portion thereof) for the first two months; $15,000 per month (or portion thereof) for the third month and beyond
For failure to take actions necessary to correct non-compliance or come into compliance as required by Appendix B, paragraph 4	For each violation: $750 per day for the first 30 days of noncompliance, $1,500 per day from 31st to 60th day of noncompliance and $3,500 per day thereafter
For failure to review a benzene spill as required by Appendix B, paragraph 8	For each event review failure: $500

For failure to install primary and secondary carbon canisters as required by Appendix B, paragraph 5.a	For each violation, $250 per day for the first 30 days of noncompliance, $750 per day from the 31st to 60th day of noncompliance and $1,000 per day thereafter
For failure to conduct sampling as required by Appendix B, paragraph 10.a	For each violation, $250 per day for the first 30 days of noncompliance, $750 per day from the 31st to 60th day of noncompliance and $1,000 per day thereafter
For failure to take corrective action as required by Appendix B, paragraph 11	For each corrective action required: $7,500 per month (or portion thereof) for the first two months; $15,000 per month (or portion thereof) for the third month and beyond
For failure to comply with the miscellaneous inspection and monitoring requirements of Appendix B, paragraph 12	For each violation, $200 per day for the first 30 days of noncompliance, $350 per day from the 31st to 60th day of noncompliance, and $750 per day thereafter
For failure to establish an annual review program to identify new benzene waste streams as required by Appendix B, Paragraph 6	$2,500 per month
For failure to perform laboratory audits as required by Appendix B, Paragraph 7	$5,000 per month, per audit.
For failure to implement the training requirements as set forth in Appendix B, Paragraph 9	$10,000 per quarter

Noncompliance with VC NESHAP Leak Detection and Elimination Program Injunctive Relief (Appendix C):

Violation	Stipulated Penalty
For failure to submit current LDE plans to EPA pursuant to Appendix C, paragraph 2	$1,000 per month (or portion thereof)
For failure to set ambient air monitoring systems to alarm at 5 ppm VCM on a one-monitoring cycle basis pursuant to Appendix C, paragraph 3	$5,000 per month (or portion thereof)
For failure to conduct a field walk-through to determine whether a leak is present when the system goes into alarm at 5 ppm VCM or greater pursuant to Appendix C, paragraph 3	$1,000 per event
For failure to perform Audit in Appendix C, paragraph 7	$5,000 per month (or portion thereof)
For failure to perform quarterly Trend Analysis in Appendix C, paragraph 4	$1,000 per quarter (or portion thereof)

Violation	Stipulated Penalty
For failure to conduct recordkeeping pursuant to Appendix C, paragraph 10	For each violation, $250 per day for the first 30 days of noncompliance, $1000 per day from the 31st to 60th day of noncompliance, and $2000 per day thereafter
For failure to include specified information in quarterly reports pursuant to Appendix C, paragraph 11	$1,000 per quarter

Noncompliance with Resource Conservation and Recovery Act Injunctive Relief (Appendix D):

Violation	Stipulated Penalty
For failure to cease discharging EDC rinse used to clean the Tar Still to Tank NT-502 or any part of the FPC LA wastewater system pursuant to Appendix D, paragraph A.1.	$10,000 per day
For failure to include the hazardous waste codes of K019 and K020 on manifests for all waste materials removed from the Tar Still, and failure to send such waste materials off-site for disposal pursuant to Appendix D, paragraph A.2	$2,500 per day for the 1st through the 14th day of noncompliance; $3,000 per day for the 15th through the 31st day of noncompliance; and $4,000 per day thereafter
For failure to make a waste determination for the water discharged from the wastewater CPI into the process cooling towers pursuant to Appendix D, paragraph B.1.	$2,500 per day for the 1st through the 14th day of noncompliance; $3,000 per day for the 15th through the 31st day of noncompliance; and $4,000 per day thereafter
For failure to manage all wastewater sludge generated at and downstream from Unit TZT-07 under the hazardous waste codes U077, K019, and K020 pursuant to Appendix D, paragraph B.2	$2,500 per day for the 1st through the 14th day of noncompliance; $3,000 per day for the 15th through the 31st day of noncompliance; and $4,000 per day thereafter

Noncompliance with CWA Injunctive Relief (Appendix E):

Violation	Stipulated Penalty
For failure to perform the root cause investigations, or to take an necessary corrective actions, pursuant to Appendix E, paragraph 1	Per each violation: $1,000

Noncompliance with CERCLA/EPCRA Injunctive Relief (Appendix F):

Violation	Stipulated Penalty

Violation	Stipulated Penalty
For failure to timely complete the comprehensive internal review, or timely correct deficiencies identified during that review pursuant to Appendix F, paragraph 1	For each violation, $500 per day for the first 30 days of noncompliance, $1,000 per day from the 31st to 60th day of noncompliance, and $2,000 per day thereafter
For failure to correct and submit TRI reports under Appendix F, paragraph 2.a	For each violation, $250 per day for the first 30 days of noncompliance, $1,000 per day from the 31st to 60th day of noncompliance, and $2,000 per day thereafter
For failure to institute internal chemical review program required by Appendix F, paragraph 3	For each violation, $500 per day for the first 30 days of noncompliance, $1,000 per day from the 31st to 60th day of noncompliance, and $2,000 per day thereafter

33. Reporting Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the reporting requirements of Section VI (Reporting Requirements) of this Consent Decree:

Penalty Per Violation Per Day	Period of Noncompliance
$1,000	1st through 14th Day
$2,000	15th through 30th Day
$3,500	31st Day and beyond

34. Except as provided in paragraph 30 above, 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 the Consent Decree.

35. Defendant shall pay any stipulated penalty within 30 Days of receiving the United States' written demand, subject to the Dispute Resolution provisions of Section IX.

36. The United States may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

37. Stipulated penalties shall continue to accrue as provided in Paragraph 34, 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 EPA that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owing, together with interest, to the United States within 30 Days of the effective date of the agreement or the receipt of EPA's decision or order.

b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Defendant(s) shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in subparagraph c, below.

c. If any Party appeals the District Court's decision, Defendant shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

38. Obligations Prior to the Effective Date. Upon the Effective Date of this Consent Decree, the stipulated penalty provisions of this Decree shall be retroactively enforceable with regard to any and all violations of Section V that occurred between the Date of Lodging and prior to the Effective Date of the Consent Decree, provided that stipulated penalties that may have accrued prior to the Effective Date may not be collected unless and until this Consent Decree is entered by the Court.

39. Defendant(s) shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 9, 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.

40. If Defendant(s) fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant(s) 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 from seeking any remedy otherwise provided by law for Defendant(s)' failure to pay any stipulated penalties.

41. Subject to the provisions of Section XI of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States for Defendant(s)' violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Acts, or the Acts' implementing regulations, Defendant(s) shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

VIII. FORCE MAJEURE

42. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Defendant, of any entity controlled by Defendant, or of Defendant's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Defendant's best efforts to fulfill the obligation. The requirement that Defendants 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 such event (a) as it is occurring; and (b) after it has occurred, to prevent or minimize any resulting delay to the greatest extent possible. "Force Majeure" does not include Defendant's financial inability to perform any obligation under this Consent Decree.

43. 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, Defendant shall provide notice orally or by electronic or facsimile transmission to EPA within 96 hours of when Defendant(s) first knew that the event might cause a delay. Within seven (7) days after Defendant's notice to EPA, Defendant(s) shall provide in writing to EPA 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; Defendant(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 Defendant(s), such event may cause or contribute to an endangerment to public health, welfare or the environment. Defendant(s) 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 Defendant(s) 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. Defendant(s) shall be deemed to know of any circumstance of which Defendant(s), any entity controlled by Defendant(s), or Defendant(s) contractors knew or should have known.

44. If EPA agrees 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 by EPA 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, of itself, extend the time for performance of any other obligation; however, Defendant may request that the time be extended for performance of any other obligation that is affected by the force majeure event. EPA will notify Defendant in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

45. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Defendant in writing of its decision.

46. If Defendant elects to invoke the dispute resolution procedures set forth in Section IX (Dispute Resolution), it shall do so no later than 15 Days after receipt of EPA's notice. In the event that EPA does not notify Defendant of its decision within 60 Days, Defendant may invoke the dispute resolution procedures set forth in Section IX (Dispute Resolution) as if EPA had denied Defendant's Force Majeure submittal. In any such proceeding, Defendant 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 Defendant complied with the requirements of Paragraphs 42 and 43, above. If Defendant carries this burden, the

delay at issue shall be deemed not to be a violation by Defendant of the affected obligation of this Consent Decree identified to EPA and the Court.

IX. DISPUTE RESOLUTION

47. 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. Defendant's failure to seek resolution of a dispute under this Section shall preclude Defendant from raising any such issue as a defense to an action by the United States to enforce any obligation of Defendant arising under this Decree.

48. Informal Dispute Resolution. 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 Defendant sends the United States a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 20 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 shall be considered binding unless, within 60 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

49. Formal Dispute Resolution. Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States 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 Defendant's position and any supporting documentation relied upon by Defendant.

50. The United States shall serve its Statement of Position within 45 Days of receipt of Defendant's Statement of Position. The United States' 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. The United States' Statement of Position shall be binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.

51. Defendant may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XIII of this Consent Decree (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within 10 Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Defendant'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.

52. The United States shall respond to Defendant's motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

53. Standard of Review

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 48 pertaining

to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by EPA under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendant shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law or this Consent Decree.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 48, Defendant shall bear the burden of demonstrating by a preponderance of the evidence that its position complies with this Consent Decree.

54. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendants 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 this Section. If Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section VII (Stipulated Penalties).

X. INFORMATION COLLECTION AND RETENTION

55. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any Facility covered by this Consent Decree,

for any purpose in connection with 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 in accordance with the terms of this Consent Decree;

c. obtain samples and, upon request, splits of any samples taken by Defendant(s) or its representatives, contractors, or consultants;

d. obtain documentary evidence, including photographs and similar data; and

e. assess Defendant's compliance with this Consent Decree.

56. Upon request made prior to sampling, Defendant(s) shall provide EPA or its authorized representatives splits of any samples taken by Defendant(s). Upon request made prior to sampling, EPA shall provide Defendant(s) splits of any samples taken by EPA.

57. For five years after the termination of this Consent Decree, each Defendant shall: a) retain all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its possession or control, or that come into its possession or control, that directly relate to Defendant's performance of its obligations under this Consent Decree; and b) require 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 the contractor's or agent's possession or control, that directly relate to Defendant'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, Defendants shall provide copies of any documents, records, or other information required to be retained under this Paragraph.

58. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendants shall notify the United States 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, Defendants shall deliver any such documents, records, or other information to EPA. Defendants may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If a Defendant asserts such a privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Defendant. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

59. Defendants may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that Defendants seek to protect as CBI, Defendants shall follow the procedures set forth in 40 C.F.R. Part 2.

60. 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 pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendants to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XI. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

61. This Consent Decree resolves the civil claims of the United States through the Date of Lodging for: (a) the violations alleged in the Complaint filed in this action and (b)(i) all "Areas of Noncompliance" and "Areas of Concern" identified on Pages 10 through 25 of the EPA Inspection Report for the FPC TX and FHC facilities (NEICVP0614E01), dated April 2005; (ii) all "Areas of Concern" identified on Pages 11 through 12 of the EPA RCRA Compliance Inspection Report for the FPC LA facility (NEICVP0631E01), dated April 2005 (subject to the exceptions noted in this paragraph below); and (iii) all "Areas of Concern" identified on Pages 7 through 15 of the EPA Air Inspection Report for the FPC LA facility, dated October 20, 2004; HOWEVER, notwithstanding the foregoing, this Consent Decree does not resolve: any claims related to areas of concern, potential violations, or violations of 40 C.F.R. Part 82, subpart F governing the use of ozone depleting substances at any Defendant facility; AND, FURTHER, does not relieve Defendants of any existing or future corrective action obligations under any order or permit issued pursuant to RCRA, or any state hazardous waste program authorized pursuant to RCRA, whether arising before or after the Date of Lodging, at any Defendant Facility.

62. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 61. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal laws, regulations, or permit conditions, except as expressly specified in Paragraph 61. The United States further reserves 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, Defendant(s)' Facilities, whether related to the violations addressed in this Consent Decree or otherwise.

63. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, other appropriate relief relating to a Facility or Defendant(s)' violations, Defendant(s) 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 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 61 of this Section.

64. This Consent Decree is not a permit, or a modification of any permit under any federal, State, or local laws or regulations. Defendant(s) is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, permits, and orders; and Defendant(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 does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant(s)' compliance with any aspect of this Consent Decree will result in compliance with provisions of the Clean Air Act (CAA), 42 U.S.C. § 7401 *et seq.*; the Clean Water Act (CWA), 33 U.S.C. § 1251 *et seq.*; the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 *et seq.*; the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601 *et seq.*; and the Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. § 11001 *et seq.*, or with any other provisions of federal, state, or local laws, regulations, permits, or orders.

65. This Consent Decree does not limit or affect the rights of Defendant(s) or of the United States 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 Defendant(s), except as otherwise provided by law.

66. 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.

XII. COSTS

67. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States 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 Defendant(s).

XIII. NOTICES

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

To EPA only:

EPA Region 6
Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A)
Compliance Assurance and Enforcement Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202

-and-

EPA Headquarters
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

To the United States--to EPA as indicated above, and:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-2-1-08995

To Defendant(s):

Formosa Plastics Corporation, Texas
201 Formosa Drive
Point Comfort, TX 77978
Attn: Plant Manager

Formosa Plastics Corporation, Louisiana
Gulf States Road
Baton Rouge, LA 70805

-or-

P.O. Box 271
Baton Rouge, LA 70821
Telephone: (225) 356-3341

Formosa Hydrocarbons Company, Inc.
P.O. Box 769
103 Fannin Road
Point Comfort, TX 77978
Telephone: (361) 987-8900

With a copy to:

Robert T. Stewart
Kelly Hart & Hallman LLP
301 Congress Avenue, Suite 2000
Austin, Texas 78701
Telephone: (512) 495-6400
FAX: (512) 495-6401

69. Telephonic or facsimile notifications to EPA shall be made as follows:

VIA TELEPHONE: 214-665-2190 -or- 214-665-2129

VIA FACSIMILE: 214-665-3177

70. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

71. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XIV. EFFECTIVE DATE

72. 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; provided, however, that Defendant(s) hereby agrees that it shall be bound to perform duties scheduled to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter the Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall terminate.

XV. RETENTION OF JURISDICTION

73. 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 IX and XVI, or effectuating or enforcing compliance with the terms of this Decree.

XVI. MODIFICATION

74. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

75. Any disputes concerning modification of this Decree shall be resolved pursuant to Section IX of this Decree (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 53, 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).

XVII. TERMINATION

76. At any time five (5) years after the Effective Date of the Consent Decree, Defendants may serve upon the United States a Request for Termination, together with supporting documents, stating that: a) Defendants have completed the requirements of Section V (Compliance Requirements) of this Decree; b) have maintained satisfactory compliance with Section V of this Consent Decree for a period of five (5) years; c) have complied with all other requirements of this Consent Decree; and d) have paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree.

77. Following receipt by the United States of Defendants' Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Defendants have satisfactorily complied with the requirements for termination of this Consent Decree. If the United States agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

78. If the United States does not agree that the Decree may be terminated, Defendants may invoke Dispute Resolution under Section IX of this Decree. However, Defendants shall not seek Dispute Resolution of any dispute regarding termination, under Paragraph 48 of Section IX, until 75 Days after service of its Request for Termination.

XVIII. PUBLIC PARTICIPATION

79. 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. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappro-

priate, improper, or inadequate. Defendants consent to entry of this Consent Decree without further notice and agree 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 has notified Defendants in writing that it no longer supports entry of the Decree.

XIX. SIGNATORIES/SERVICE

80. Each undersigned representative of Defendants 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.

81. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. With respect to all matters arising under or relating to this Consent Decree, Defendants agree to accept service of process by certified mail, return receipt requested, to the addresses set forth in Section XIII (Notices) 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.

XX. INTEGRATION

82. 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, no other document, nor any representation,

inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

XXI. APPENDICES

83. The following appendices are attached to and part of this Consent Decree: Appendices A, B, C, D, E, and F.

XXII. FINAL JUDGMENT

84. 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 and Defendant(s). The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Federal Rules of Civil Procedure 54 and 58.

Dated and entered this __ day of _____, ____.

_____
UNITED STATES DISTRICT JUDGE
Southern District of Texas

Signature Page to Consent Decree in *U.S. v. Formosa Plastics Corporation, Texas, et al.*

Through their undersigned representatives, the Parties agree and consent to the entry of this Consent Decree subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

FOR PLAINTIFF, UNITED STATES OF AMERICA:

Date:

JOHN C. CRUDEN
Acting Assistant Attorney General
Environment and Natural Resources Division
United States Department of Justice

Date: 9/10/09

SCOTT M. CERNICH
Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
P.O. Box 7611
Washington, DC 20044-7611
(202) 514-0056
(202) 514-8395

TIM JOHNSON
United States Attorney
Southern District of Texas

DANIEL HU
Assistant United States Attorney
Southern District of Texas
Bar Nos.: Texas: 10131415
S.D. Tex.: 7959
P.O. Box 61129
919 Milam Street
Houston, TX 77208

Signature Page to Consent Decree in *U.S. v. Formosa Plastics Corporation, Texas, et al.*

Through their undersigned representatives, the Parties agree and consent to the entry of this Consent Decree subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

Date: 9/28/09

CYNTHIA GILES
Assistant Administrator
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency

Date: 9/25/09

ADAM M. KUSHNER
Director
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency

Date: 9/23/09

BERNADETTE M. RAPPOLD
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

OF COUNSEL FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY

CAROLINE B.C. HERMANN
Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Signature Page to Consent Decree in *U.S. v. Formosa Plastics Corporation, Texas, et al.*

Through their undersigned representatives, the Parties agree and consent to the entry of this Consent Decree subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 6:

Date: 9/25/09

LAWRENCE E. STARFIELD
Acting Regional Administrator
U.S. Environmental Protection Agency
Region 6
1445 Ross Ave., Suite 1200
Dallas, TX 75202

Date: 9/24/09

MARCIA ELIZABETH MONCRIEFFE
Assistant Regional Counsel
U.S. Environmental Protection Agency
Region 6
1445 Ross Ave., Suite 1200
Dallas, TX 75202

Signature Page to Consent Decree in *U.S. v. Formosa Plastics Corporation, Texas, et al.*

Through their undersigned representatives, the Parties agree and consent to the entry of this Consent Decree subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

FOR DEFENDANTS, FORMOSA PLASTICS CORPORATION, TEXAS AND FORMOSA HYDROCARBONS COMPANY, INC.:

Date: 9/17/09

Randall P. Smith
Vice President/ General Manager
Formosa Plastics Corporation, Texas

FOR DEFENDANT, FORMOSA PLASTICS CORPORATION, LOUISIANA:

Date: 9-17-09.

Jay Su
Vice President
Vinyl Division
Formosa Plastics Corporation, U.S.A.

APPENDIX A—ENHANCED LDAR PROGRAM

DEFINITIONS

The following definitions shall be used in Appendix A:

"Certified Low-Leaking Valves" shall mean valves for which a manufacturer has issued either: (i) a written guarantee that the valve technology will not leak above 100 ppm for five years; or (ii) a written guarantee, certification or equivalent documentation that the valve technology has been tested pursuant to generally-accepted good engineering practices and has been found to be leaking at no greater than 100 ppm.

"Certified Low-Leaking Valve Packing Technology" shall mean valve packing technology for which a manufacturer has issued either: (i) a written guarantee that the valve packing technology will not leak above 100 ppm for five years; or (ii) a written guarantee, certification or equivalent documentation that the valve packing technology has been tested pursuant to generally-accepted good engineering practices and has been found to be leaking at no greater than 100 ppm.

"Covered Equipment" shall mean all Covered Types of Equipment in all Covered Process Units.

"Covered Facilities" shall mean the following facilities:

1. FPC TX facility at 201 Formosa Drive, Point Comfort, Texas;
2. FHC facility at 103 Fannin Road, Point Comfort, Texas; and,
3. FPC LA facility at Gulf States Road, Baton Rouge, Louisiana.

"Covered Process Unit or Units" shall include the following manufacturing areas of the "Covered Facilities":

At Formosa Plastics Corporation, Texas ("FPC TX"), the term includes the:

1. Ethylene dichloride unit ("EDC");
2. Ethylene glycol unit ("EG");
3. Formosa hydrocarbons unit ("FHC");
4. High density polyethylene units ("HDPEI/HDPEII");
5. Liner low density polyethylene unit ("LLDPE");
6. Polypropylene units ("PPI/PPII");
7. Marine and inland traffic units ("Traffic");
8. Olefins units, including the gasoline hydrotreater unit and propylene purification unit ("OLI/ OLII");
9. Vinyl chloride monomer unit ("VCM"); and,
10. Suspension polyvinyl chloride unit ("PVC").

At Formosa Plastics Corporation, Louisiana ("FPC LA"), the term includes the:

1. Vinyl chloride monomer unit ("VCM"); and,
2. Suspension polyvinyl chloride unit ("PVC").

"Covered Types of Equipment" shall mean all valves, connectors, pumps, agitators, and open-ended line closure devices in light liquid, heavy liquid, or gas/vapor service as regulated under a federal,

state, or local leak detection and repair program.

"Directed Maintenance" shall mean the utilization of concurrent monitoring (or other method that indicates the relative size of the leak) to repair a leaking piece of equipment to achieve the best repair/lowest emission rate reasonably possible.

"DOR" shall mean Delay of Repair.

"ELP" shall mean the Enhanced Leak Detection and Repair Program specified in Appendix A of this Decree.

"Facility" shall have the meaning set forth in Section III, paragraph 7.i. of this Decree.

"LDAR" shall mean Leak Detection and Repair.

"LDAR Audit Commencement Date" or "Commencement of an LDAR Audit" shall mean the first day of the on-site inspection that accompanies an LDAR audit.

"Maintenance Shutdown" shall mean the partial or full shutdown of a Covered Process Unit that either is done for the purpose of scheduled maintenance or lasts longer than 14 calendar days. The following are not considered maintenance shutdowns: (1) an unscheduled work practice or unscheduled operational procedure that stops production from a process unit or part of a process unit for less than 24 hours; and (2) an unscheduled work practice or unscheduled operational procedure that would stop production from a process unit or part of a process unit for a shorter period of time than would be required to clear the process unit or part of the process unit of materials and start up the unit, and would result in greater emissions than delay of repair of leaking components until the next scheduled process unit shutdown.

"Method 21" shall mean the test method found at 40 C.F.R. Part 60, Appendix A, Method 21.

"New Valve" shall mean a valve that is not replacing an Existing Valve (as defined in Paragraph 17.a. of Subsection G of this Enhanced LDAR Program).

"Non-Volatile Hazardous Air Pollutant Covered Process Unit" or "Non-VHAP Covered Process Unit" shall mean a Covered Process Unit that does not meet the definition of a VHAP Covered Process Unit.

"OEL" or "Open-Ended Line" shall mean an open-ended valve or line, except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

"OELCD" shall mean an open-ended valve or line at the closure device (i.e., secondary valves, caps, blind flanges, or plugs on OELs, that are not considered connectors).

"Screening Value" shall mean the highest emission level that is recorded at each piece of equipment as it is monitored in compliance with Method 21.

"Subsection" shall mean a portion of this Appendix A identified by a capital letter.

"Volatile Hazardous Air Pollutant Covered Process Unit" or "VHAP Covered Process Unit" shall

mean:

For the FPC TX Facility, the EDC, EG, VCM, and PVC units, and

For the FPC LA Facility, the VCM and PVC units.

Subsection A (Applicability of ELP)

1. In order to minimize or eliminate fugitive emissions of volatile organic compounds ("VOCs"), benzene, volatile hazardous air pollutants ("VHAPs"), and organic hazardous air pollutants ("HAPs") from equipment in light liquid and/or in gas/vapor service, Defendants shall undertake the enhancements identified in this Section to its leak detection and repair ("LDAR") programs for each of the Covered Facilities under 40 C.F.R. Part 60, Subparts DDD, KKK, VV, and VVa; Part 61, Subparts F, J, and V; Part 63, Subparts F, H and UU; and applicable state and local LDAR requirements. The terms "equipment," "in light liquid service" and "in gas/vapor service" shall have the respective definitions set forth in the applicable provisions of 40 C.F.R. Part 60, Subpart VV; Part 61, Subparts F, J, and V; Part 63, Subparts F, H and UU and applicable state and local LDAR regulations.

2. The requirements of this ELP shall apply to all Covered Equipment except that the requirements of Paragraphs 3 and 31 (Subsection K (Certification of Compliance)) shall apply to all equipment at the Facility that is regulated under any federal, state, or local leak detection and repair program. The requirements of this ELP are in addition to, and not in lieu of, the requirements of any other LDAR regulation that may be applicable to a piece of Covered Equipment. If there is a conflict between a federal, state, or local LDAR regulation and this ELP, Formosa shall follow the more stringent of the requirements.

Subsection B (Written Facility-Wide LDAR Program Procedures)

3. By no later than three (3) months after the Date of Lodging of this Consent Decree, Defendants shall develop a written facility-wide LDAR Program, or modify its current written LDAR Program, to ensure compliance with all federal, state, and local LDAR regulations applicable to each of the Covered Process Units. Defendants shall review and update as necessary the LDAR Program on an annual basis by no later than December 31 of each year. The LDAR Program for each Covered Process Unit shall include, at a minimum:

a. an identification system of all equipment in light liquid and/or in gas/vapor service that is subject to periodic monitoring requirements via Method 21, or other methods, under any applicable federal, state, or local LDAR regulation;

b. procedures for identifying leaking equipment within each Covered Process Unit;

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

d. a tracking program (e.g., Management of Change) that ensures that new Covered Equipment added to the Facilities for any reason are integrated into the LDAR program and that Covered Equipment that is taken out of service is removed from the LDAR program;

e. procedures for quality assurance/quality control ("QA/QC") reviews of all data generated by LDAR monitoring technicians; and

f. a description of each Covered Facility's LDAR monitoring organization and a designation of the person or position responsible for LDAR management and who has the authority, consistent with Defendants' management authorities, to implement LDAR improvements at the Facility, as needed, including the roles and responsibilities of all employee and contractor personnel assigned to LDAR functions at the Facilities, and how the number of personnel dedicated to the LDAR functions is sufficient to satisfy the requirements of the LDAR program.

Subsection C (Leak Definitions)

4. By no later than six (6) months after the Date of Lodging of this Consent Decree, for all Covered Equipment, except for that Covered Equipment in heavy liquid service, Defendants shall use the following internal leak definitions, unless otherwise indicated herein, or unless more frequent monitoring is required by permit, or federal, state, or local laws or regulations.

a. Valves -- 250 ppm VOCs (except that in the FHC Unit, Defendants shall begin using an internal leak definition of 250 ppm VOCs within 24 months of the Date of Lodging of this Decree).

b. Connectors –

250 ppm VOCs for connectors that are currently regulated and required to be monitored by federal, state, or local law, or permit, or are voluntarily monitored at FPC LA, using EPA Method 21.

For connectors that are currently regulated but not required to be monitored using EPA Method 21 (*e.g.*, connectors regulated by 40 C.F.R. Part 60, Subpart VV), by no later than 18 months after the Date of Lodging of this Consent Decree, Defendants will determine which of the following compliance alternatives will be utilized at each Facility and report the alternative chosen in the next Annual Report:

Option A: Utilize the EPA Alternative Work Practice To Detect Leaks from Equipment (as per 73 Fed. Reg. 78199, December 22, 2008, or as amended) (the "EPA AWP"); or,

Option B: Utilize EPA Method 21 with an internal leak definition of 250 ppm VOC.

Notwithstanding the foregoing, for connectors in light liquid and/or gas/vapor service that are currently regulated but not required to be monitored using EPA Method 21, by no later than 18 months after the Date of Lodging of this Consent Decree, Defendants must monitor this affected equipment once using EPA Method 21 with an internal leak definition of 250 ppm VOC. After initial monitoring using EPA's Method 21, Defendants may use the compliance alternative chosen and reported upon (i.e., Option A or B) for subsequent monitoring.

c. Pumps -- 500 ppm. Reciprocating pumps shall retain their applicable regulatory leak definition.

d. Agitators -- 500 ppm.

e. Open-Ended Line Closure Devices. For open-ended line closure devices that are currently regulated but not required to be monitored using EPA Method 21, Defendants will determine which of the following compliance alternatives will be utilized in each Covered Process Unit at each Covered Facility and report the alternative chosen in the next Annual Report:

Option A: Utilize the EPA AWP; or,

Option B: Utilize EPA Method 21 with an internal leak definition of 250 ppm VOC.

Notwithstanding the foregoing, for open-ended line closure devices that are currently regulated but not required to be monitored using EPA Method 21, by no later than 18 months after the Date of Lodging of this Consent Decree, Defendants must monitor this affected equipment once using EPA Method 21 with an internal leak definition of 250 ppm VOC. After initial monitoring using EPA's Method 21, Defendants may use the compliance alternative chosen and reported upon (i.e., Option A or B) for subsequent monitoring.

5. Reporting of Valves, Connectors, Pumps and Agitators Based on the Internal Leak Definitions. For regulatory reporting purposes (*i.e.*, reports to federal, state, or local agencies not required by this Decree), Defendants may continue to report leak rates against the applicable regulatory leak definition or use the lower, internal leak definitions specified in this Subsection C. Defendants shall identify in the applicable report which definition is being used.

Subsection D (Monitoring Frequency and Equipment)

6. By no later than six (6) months after the Date of Lodging of this Consent Decree, and except as provided in paragraph 6.e., for all Covered Equipment, except for that Covered Equipment in heavy liquid service, the Facilities shall comply with the following periodic monitoring frequencies, unless more frequent monitoring is required by federal, state, or local laws or regulations:

a. Valves – Quarterly

b. Connectors -- Annually

c. Pumps/Agitators -- Monthly, except that monitoring shall not be required for pumps and agitators that are seal-less or that are equipped with a dual mechanical seal system that complies with the requirements of 40 C.F.R. §§ 63.163(e) or 63.173(d), as applicable.

d. Open-Ended Line Closure Devices (i.e., secondary valves, caps, blind flanges, or plugs on open-ended lines, that are not considered connectors) (monitoring will be done at the closure device; if a valve serves as the closure device, monitoring shall be done in the same manner as any other valve) – Annually

e. Any pieces of Covered Equipment that are designated as "unsafe-to-monitor" or "difficult-to-monitor" in accordance with the applicable provisions of 40 C.F.R. Part 60, Subparts DDD, KKK, VV, and VVa; Part 61, Subparts F, J, and V; or Part 63, Subparts F, H and UU, shall be exempt from the requirements of Subparagraphs 6.a. through 6.d., so long as Defendants satisfy the applicable conditions and requirements of 40 C.F.R. Part 60, Subparts DDD, KKK, VV, and VVa; Part 61, Subparts F, J, and V; or Part 63, Subparts F, H and UU. In the case of connectors that do not have applicable "unsafe-to-monitor" or "inaccessible" provisions (*e.g.*, connectors subject to 40 C.F.R. Part

60, Subpart VV), Defendants shall follow the "unsafe-to-monitor" and "inaccessible" provisions of 40 C.F.R. Part 63, Subpart H, for such connectors. In the case of OELCDs, which do not have applicable "unsafe-to-monitor" provisions, Defendants shall follow the "unsafe-to-monitor" and "inaccessible" provisions for connectors found in 40 C.F.R. Part 63, Subpart H, for such OELCDs. In no event shall any "difficult-to-monitor" provisions apply to any connectors or OELCDs.

7. Use of EPA AWP for Monitoring. Notwithstanding the monitoring frequency required by the immediately preceding Paragraph 6, where a Facility has chosen Option A (EPA AWP) in accordance with Subsection D for any Covered Process Unit, the Facility shall monitor connectors and/or OELCDs in VOC service once every two (2) months, after the initial Method 21 monitoring required by Subsection C. Each day that the Optical Gas Imaging instrument is used to demonstrate compliance with this Consent Decree, prior to beginning any leak monitoring work, Defendants will check and calibrate the instrument according to the manufacturer's instructions.

Subsection E (Repairs)

8. By no later than 5 days after detecting a leak (other than leaks from equipment not subject to regulation which are detected using Optical Gas Imaging instruments), the Facility shall perform a first attempt at repair. By no later than 15 days after detection, the Facility shall perform a final attempt at repair or may place the piece of equipment on the Delay of Repair list provided that Defendant has complied with all applicable regulations and with the requirements of Paragraphs 8-12 and 15.

9. The Facilities shall perform "Directed Maintenance" during all repair attempts.

10. Drill-and-Tap. By no later than nine (9) months after the Date of Lodging of this Consent Decree, for valves in light liquid service and/or gas/vapor service, when a valve is leaking above 2,500 ppm VOC, and other repair attempts have proven ineffective and/or the Facility is not able to remove the leaking valve from service, the Facility shall use the drill-and-tap repair method prior to placing the leaking valve on the "delay of repair" list unless there is a major safety, mechanical, product quality, or environmental issue with repairing the valve using this method. The Facility shall document the reason(s) why drill-and-tap repair was (were) not performed prior to placing any valve on the "delay of repair" list. The Facility shall attempt at least two drill-and-tap repairs (*e.g.*, two attempts at injecting the valve) before placing a valve on the "delay of repair" list. By no later than 18 months of the Date of Lodging of this Decree, the drill-and-tap procedures in this Paragraph shall apply to all valves leaking above 500 ppm VOC.

11. For each leak, Defendants shall record the following information: the date of all repair attempts; the repair methods used during each attempt; the date, time and Screening Values for all re-monitoring events, and the information required under Paragraph15 for Covered Equipment placed on the DOR list.

12. Nothing in Paragraphs 8-14 is intended to prevent Defendants from taking a leaking piece of Covered Equipment out of service; provided however, that prior to placing the leaking piece of Covered Equipment back in service, Defendants must repair the leak or must comply with the requirements of "Part F" (Delay of Repair) to place the piece of Covered Equipment on the DOR list.

13. Leaks from non-Covered Equipment. For any leaks detected from currently non-Covered Equipment (unless such non-Covered Equipment is "unsafe to repair" or "inaccessible" as those terms are used in 40 C.F.R. Part 63, Subpart H) using the EPA AWP, Defendants shall, unless a shorter time period applies under federal, state or local law: (a) make a first attempt at repair within fifteen (15) calendar days of identifying the leak and a second attempt at repair, if necessary, within forty-five (45) calendar days of identifying the leak; or (b) if necessary, place the equipment on the DOR list until the next turnaround at the relevant Covered Process Unit.

14. Additional Corrective Action. If optical gas imaging equipment is used for monitoring at a Covered Facility in accordance with this Subsection C, and Defendant(s) identify a leak from non-Covered Equipment at the time of the monitoring event, and such leak is an unauthorized release under federal, regional, state or local air and release reporting laws, Defendant(s) shall comply with all applicable release notification requirements, including, without limitation, release notification requirements under CERCLA §103 and EPCRA § 304, and, within 30 days of identifying such leak, take corrective action to eliminate the release caused by the leak. In the event that Defendant(s) cannot eliminate the release caused by the leak within 60 days of identifying such leak, Defendant(s) shall submit a written request no later than 90 days after identifying such leak to obtain authorization for the release from the appropriate governmental authority if the release is unauthorized, or will develop and implement a corrective action plan to eliminate the leak. Defendant(s) shall have up to two years from the date of the written request to obtain authorization. Notwithstanding the foregoing, Defendant(s) shall comply with all applicable federal, state, and local regulations regarding such leak. Compliance with the requirements of this Decree does not constitute compliance with laws or regulations that may be more stringent than the requirements of this Decree.

Subsection F (Delay of Repair)

15. Beginning no later than three (3) months after the Date of Lodging of this Consent Decree, for all Covered Equipment placed on the DOR list, Defendants shall:

a. Require sign-off from the relevant Covered Process Unit supervisor or person of similar authority that the piece of Covered Equipment is technically infeasible to repair without a process unit shutdown; and

b. Undertake periodic monitoring, at the frequency required for other pieces of Covered Equipment of that type in the process unit, of the Covered Equipment placed on the DOR list.

Subsection G (Equipment Replacement/Improvement)

16. Valve and Connector Replacement and Improvement Program. Commencing no later than six (6) months after the Leak Definitions of Subsection C are effective and continuing until termination of this Decree, Formosa shall implement the program set forth in Paragraphs 17 to 19 to replace, and/or improve the emissions performance of Subsection C affected valves and connectors in each VHAP and Non-VHAP Covered Process Unit.

17. Valves in VHAP Covered Process Units

a. List of All Valves in the VHAP Covered Process Units. By no later than 30 days after the Date of Lodging of this Decree, Formosa shall submit to EPA a list of all valves in each

VHAP Covered Process Unit that are in existence as of the Date of Lodging. The valves on this list shall be the "Existing Valves" for purposes of this Paragraph 17.

b. Installing New Valves. Except as provided in Paragraph 20, Formosa shall ensure that each new valve that it installs in any VHAP Covered Process Unit either is a Certified Low-Leaking Valve or is fitted with Certified Low-Leaking Valve Packing Technology. In the event that a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology is commercially unavailable for the service and operating conditions of the new valve, Formosa shall install a valve with the best performing (i.e., the least likely to leak) valve commercially available for the service and operating conditions of the valve.

c. Replacing or Repacking Existing Valves that Leak. Commencing no later than six (6) months after the Leak Definitions of Subsection C are effective, except as provided in Paragraph 20, for each Existing Valve in each VHAP Covered Process Unit that has a Screening Value at or above 250 ppm VOC during any two monitoring events during a rolling 12-month period, Formosa shall replace or repack the Existing Valve with a Certified Low-Leaking Valve or with Certified Low-Leaking Valve Packing Technology. In the event that a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology is commercially unavailable for the service and operating conditions of the valve, Formosa shall replace the valve with the best performing valve (i.e., the least likely to leak) commercially available for the service and operating conditions of the valve. Formosa shall undertake this replacement or repacking by no later than 30 days after the monitoring event that triggers the replacement or repacking requirement, unless the replacement or repacking requires a partial or full process unit shutdown. If the replacement or repacking requires a partial or full process unit shutdown, Formosa shall undertake the replacement or upgrade during the first Maintenance Shutdown that follows the monitoring event that triggers the requirement to replace or repack the valve. If Formosa completes the replacement or repacking within 30 days of detecting the leak, Formosa shall not be required to comply with Subsection E of this ELP. If Formosa does not complete the replacement or repacking within 30 days, or if, at the time of the leak detection, Formosa reasonably can anticipate that it might not be able to complete the replacement or repacking within 30 days, Formosa shall comply with all applicable requirements of Subsection E.

18. Connectors in VHAP Covered Process Units

a. Connector Replacement and Improvement Descriptions. For purposes of this Paragraph 18, for each of the following types of connectors, the following type of replacement or improvement shall apply:

Connector Type	Replacement or Improvement Description
Flanged	Replacement or improvement of the gasket
Threaded	Replacement of the connector
Compression	Replacement of the connector
CamLock	Replacement or improvement of the gasket

Quick Connect	Replacement or improvement of the gasket, if applicable, or replacement of the connector if there is no gasket
Any type	Eliminate, at Formosa's sole discretion (*e.g.*, through welding, pipe replacement, etc.)

b. Installing New Connectors. Formosa shall ensure that each new connector it installs in each VHAP Covered Process Unit is the best performing (*i.e.*, the least likely to leak) connector commercially available for the service and operating conditions that the connector is in.

c. Replacing or Improving Connectors. Commencing no later than six (6) months after the Leak Definitions of Subsection C are effective, for each connector in each VHAP Covered Process Unit that for two (2) out of three (3) consecutive monitoring periods occurring after implementation of this program has a Screening Value at or above 250 ppm VOC, Formosa shall replace or improve the connector in accordance with the applicable replacement or improvement described in Subparagraph 18.a. The replacement or improvement shall be with the best performing (*i.e.*, the least likely to leak) replacement/improvement commercially available for the service and operating conditions that the connector is in. Formosa shall undertake the replacement or improvement within 30 days after the monitoring event that triggers the replacement or improvement, except where the replacement or improvement requires a partial or full process unit shutdown. If the replacement or improvement requires a partial or full process unit shutdown, Formosa shall undertake the replacement or improvement during the first Maintenance Shutdown that follows the monitoring event that triggers the requirement to replace or improve the connector. If Formosa completes the replacement or improvement within 30 days of detecting the leak, Formosa shall not be required to comply with Subsection E of this ELP. If Formosa does not complete the replacement or improvement within 30 days, or if, at the time of the leak detection, Formosa reasonably can anticipate that it might not be able to complete the replacement or improvement within 30 days, Formosa shall comply with all applicable requirements of Subsection E.

19. Replacing or Repacking Valves that are Chronic Leakers in Non-VHAP Covered Process Units. Except as provided in Paragraph 20, Formosa shall replace or repack each valve in each Non-VHAP Covered Process Unit that is a "chronic leaker" with a Certified Low-Leaking Valve or with Certified Low-Leaking Valve Packing Technology. In the event that a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology is commercially unavailable for the service and operating conditions of the valve, Formosa shall replace the valve with the best performing valve (i.e., least likely to leak) commercially available for the service and operating conditions of the valve during the first Maintenance Shutdown that follows the monitoring event that triggers the replacement or repacking requirement. A valve in a non-VHAP Covered Process Unit is a "chronic leaker" under this Paragraph if it leaks above 1000 ppm VOC in any three (3) out of four (4) consecutive quarters (based on quarterly monitoring) after the valve was last repaired.

20. Commercial Unavailability of a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology. Formosa shall not be required to utilize a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology to replace or repack a valve if a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology is commercially unavailable for the service and operating conditions of the valve. Prior to claiming this commercial unavailability exemption, Formosa must contact a reasonable number of vendors of valves and obtain a written

representation or equivalent documentation from each vendor that the particular valve that Formosa needs is commercially unavailable for the service and operating conditions that the valve is in either as a Certified Low-Leaking Valve or with Certified Low-Leaking Valve Packing Technology. In the Compliance Status Reports due under Subsection N, Formosa shall: (i) identify each valve for which it could not comply with the requirement to replace or repack the valve with a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology; (ii) identify the vendors it contacted to determine the unavailability of such a Valve or Packing Technology; and (iii) include the written representations or documentation that Formosa secured from each vendor regarding the unavailability. Defendants may satisfy the commercial unavailability exemption by completing a valve survey no later than six (6) months after the Leak Definitions of Subsection C are effective to document the commercial unavailability of Certified Low-Leaking Valves or Certified Low-Leaking Valve Packing Technology ("Valve Technology Survey"). In such event, Defendants shall comply with the vendor inquiry requirements of this Paragraph 20 and submit the Valve Technology Survey with the first Compliance Status Report under Subsection M. Such survey shall include the information required in Subparagraphs 20(i) through (iii) above. Any changes in commercial unavailability will be updated thereafter within the next Compliance Status Report(s).

21. Records of Certified Low-Leaking Valves and Certified Low-Leaking Valve Packing Technology. Prior to installing any Certified Low-Leaking Valves or Certified Low-Leaking Valve Packing Technology, Formosa shall secure from each manufacturer documentation that demonstrates that the proposed valve or packing technology meets the definition of "Certified Low-Leaking Valve" and/or "Certified Low-Leaking Valve Packing Technology." Formosa shall retain that documentation for the duration of this Consent Decree and make it available upon request.

Subsection H (Training)

22. By no later than six (6) months after the Date of Lodging of this Consent Decree, the Facilities shall develop a training protocol and implement a training program at each Covered Facility which includes the following features:

a. for Defendants' personnel newly-assigned to LDAR responsibilities, Defendants shall require LDAR training prior to each employee beginning such work;

b. for all Defendant personnel assigned LDAR responsibilities; Defendants shall require completion of annual (*i.e.*, once each calendar year) LDAR training;

c. for all other Facility operations and maintenance personnel (including contract personnel) who have duties relevant to LDAR, Defendants shall provide and require completion of an initial training program that includes instruction on aspects of LDAR that are relevant to the person's duties. For the individuals covered by this Paragraph, "refresher" training in LDAR shall be performed at least annually during the term of this Consent Decree.

Subsection I (Quality Assurance ("QA")/Quality Control ("QC"))

23. Daily Certification by Monitoring Technicians. Commencing by no later than three (3) months after the Date of Lodging of this Consent Decree, on each day that monitoring occurs, at the end of such monitoring, Defendants shall ensure that each monitoring technician certifies that the data collected accurately represents the monitoring performed for that day by requiring the monitoring technician to sign a form that includes the following certification:

On [insert date], I reviewed the monitoring data that I collected today and that to the best of my knowledge and belief, the data accurately represents the monitoring that I performed today.

24. Commencing by no later than the first full calendar quarter after the Date of Lodging of this Decree, during each calendar quarter, at unannounced times, an LDAR-trained employee of the Defendants, who does not serve as an LDAR monitoring technician on a routine basis, shall undertake the following:

a. review whether any pieces of equipment that are required to be in the LDAR program are not included;

b. verify that equipment was monitored at the appropriate frequency;

c. verify that proper documentation and sign-offs have been recorded for all equipment placed on the DOR list;

d. verify that repairs have been performed in the required periods;

e. review monitoring data and equipment counts (e.g., number of pieces of equipment monitored per day) for feasibility and unusual trends;

f. verify that proper calibration records and monitoring instrument maintenance information are maintained; and

g. verify that other LDAR program records are maintained as required.

Defendants shall maintain logs that record the date and time that the actions in this Paragraph were undertaken.

Subsection J (LDAR Audits and Corrective Action)

25. Defendants shall conduct LDAR audits pursuant to the schedule in Paragraph 26 and the requirements of Paragraph 27. To the extent that, at any time prior to termination of this Consent Decree, Defendant(s) uses a third party to undertake its routine LDAR monitoring, Defendant(s) shall not use the same third party to undertake its LDAR audits.

26. Until termination of this Decree, Defendants shall ensure that an LDAR audit at each Facility is conducted every other year in accordance with the following schedule: the Initial LDAR Audit Commencement Date for each Facility shall be no later than six (6) months after the Date of Lodging of this Consent Decree. For each subsequent LDAR audit, the LDAR Audit Completion Date shall occur within the same calendar quarter that the first LDAR Audit Completion Date occurred. The initial LDAR audit shall be conducted by a third party. Following the initial audit, Defendants must conduct third party LDAR audits every two years (i.e., three (3) audits within five (5) years). Defendant personnel may accompany the third party audit team for educational purposes, but may not

undertake any responsibility for audit activities, except for providing requested information to the third-party audit team.

27. Each LDAR audit shall include but not be limited to reviewing compliance with all applicable LDAR regulations, observing LDAR monitoring technicians in the field to ensure monitoring is being conducted as required, reviewing and/or verifying the same items that are required to be reviewed and/or verified in Subparagraphs 24.a - 24.g (*i.e.*, reviewing whether any pieces of equipment required to be in the LDAR program are not included, verifying that equipment was monitored at the appropriate frequency, *etc*.), and performing the following activities:

a. Calculating Comparative Monitoring Audit Leak Percentages. Valves and pumps, except those valves and pumps in heavy liquid service, shall be monitored in order to calculate a leak percentage for each Covered Process Unit broken down by equipment type (*i.e.*, valves and pumps). The monitoring that takes place during the audit shall be called "comparative monitoring" and the leak percentages derived from the comparative monitoring shall be called the "Comparative Monitoring Audit Leak Percentages."

b. Calculating the Historic, Average Leak Percentage from Prior Periodic Monitoring Events. For each Covered Process Unit that is audited, the historic, average leak percentage from prior periodic monitoring events, broken down by equipment type (*i.e.*, valves and pumps), shall be calculated. The following number of complete monitoring periods immediately preceding the comparative monitoring audit shall be used for this purpose: valves - 4 periods; and pumps - 12 periods.

c. Calculating the Comparative Monitoring Leak Ratio. For each Covered Process Unit and each type of equipment (valves and pumps), the ratio of the comparative monitoring audit leak percentage from Paragraph 27.a to the historic periodic monitoring leak percentage from Paragraph 27.b shall be calculated. This ratio shall be called the "Comparative Monitoring Leak Ratio." If a calculated ratio yields an infinite result, it shall be assumed that one leaking piece of equipment was found in the process unit through routine monitoring during the 12-month period before the audit and the ratio shall be recalculated.

During each LDAR Audit, leak rates shall be calculated for each Covered Process Unit where comparative monitoring was performed. During each LDAR Audit, Defendants shall conduct comparative monitoring in at least four (4) Covered Process Units at FPC TX and in all Covered Process Units at FPC LA. Defendants shall monitor Covered Equipment at a statistically representative percentage in each process unit audited. Comparative monitoring audits at FPC TX shall rotate, such that a different process unit at the site is audited before a subsequent audit of a process unit is performed.

In addition to the foregoing items, LDAR audits after the Initial LDAR audit shall include reviewing the Facility's compliance with this ELP.

28. Initial Audit Report. Defendants shall submit an Initial Audit Report to EPA within 180 days of completing the Initial Audit, but in no event later than one (1) year after the Date of Lodging of this Decree. The Report shall describe the results of the Initial LDAR Audit, disclose all areas of identified

non-compliance, and certify Defendant's compliance, except for the identified deficiencies. Within the Report, Defendants shall certify to EPA that: (i) the Covered Facilities are in compliance with all applicable LDAR regulations; (ii) Defendants have completed all corrective actions, if applicable, or is in the process of completing all corrective actions pursuant to a Corrective Action Plan; and (iii) all equipment at the Covered Facilities that are regulated under a federal, state, or local LDAR program have been identified and included in the Covered Facilities' LDAR programs(s). Defendants shall submit a copy of the Corrective Action Plan with the Initial Audit Report.

29. When More Frequent Periodic Monitoring is Required. If a comparative monitoring audit leak percentage calculated pursuant to Paragraph 27 triggers a more frequent monitoring schedule under any applicable federal, state, or local law or regulation than the frequencies listed in the applicable Paragraph in Subsection C – that is, either Paragraph 4, 5, or 6 – for the equipment type in that Covered Process Unit, Defendants shall monitor the affected type of equipment at the greater frequency unless and until less frequent monitoring is again allowed under the specific federal, state, or local law or regulation. At no time may Defendants monitor at intervals less frequently than those in the applicable Paragraph in Subsection C.

30. Corrective Action

a. If the results of any of the LDAR Audits conducted pursuant to this Consent Decree identify any deficiencies, Defendants shall implement, as soon as practicable, all steps necessary to correct or otherwise address such deficiencies and to prevent, to the extent practicable, a recurrence of the cause of such deficiencies ("Corrective Action").

b. For purposes of this Paragraph, in addition to any areas of non-compliance with applicable laws or regulations, or specific LDAR provisions of this Consent Decree identified during the audit, a Comparative Monitoring Leak Ratio calculated pursuant to Paragraph 27.c of 3.0 or higher also shall be deemed cause for Corrective Action.

Subsection K (Certification of Compliance)

31. Within 180 days after the Initial LDAR Audit Completion Date, Defendants shall certify to EPA that: (i) the Facility is in compliance with all applicable LDAR regulations and this ELP; (ii) Defendant(s) has completed all corrective actions, if applicable, or is in the process of completing all required Corrective Action; and (iii) all equipment at the Facility that is regulated under a federal, state, or local leak detection and repair program has been identified and included in the Facility's LDAR program.

Subsection L (Recordkeeping)

32. Defendants shall keep all original records, including copies of all LDAR audits, to document compliance with the requirements of this ELP for at least two years after termination of this Decree, and shall maintain a written record of all Corrective Action that Defendants takes in response to any deficiencies identified in the LDAR Audits.

33. After the completion of any LDAR Audit, Defendants shall include the following information in the next Annual Report due under this Consent Decree: (i) a summary, including findings, of each such LDAR Audit; (ii) a list of corrective actions taken during the reporting period, if necessary; and (iii) any schedule for implementing future corrective actions, if necessary. Upon request by EPA,

Defendants shall make all such documents available to EPA and shall provide, in their original electronic format, all LDAR monitoring data generated during the life of this Consent Decree.

Subsection M (LDAR Reporting and Recordkeeping Requirements)

34. Compliance Status Reports. On the dates and for the time periods set forth in Paragraph 35, Defendants shall submit to EPA, in the manner set forth in Section XIV ("Notices") of this Decree, the following information:

a. An identification and description of any non-compliance with the requirements of this Appendix A;

b. An identification of any problems encountered in complying with the requirements of this Appendix A;

c. The information required in Subsection G, Paragraph 20;

d. A certification that LDAR trainings in accordance with this Consent Decree have been done;

e. Any deviations identified in the QA/QC performed under Subsection I of this Appendix A;

f. A summary of LDAR audit results including specifically identifying all areas of non-compliance; and

g. The status of all Corrective Action that was undertaken during the reporting period.

35. Due Dates. The first compliance status report shall be due thirty-one days after the first full half-year after the Date of Entry of this Consent Decree (*i.e.*, either: (i) January 31 of the year after the Date of Entry, if the Date of Entry is between January 1 and June 30 of the preceding year; or (ii) July 31 of the year after the Date of Entry, if the Date of Entry is between July 1 and December 31). The initial report shall cover the period between the Date of Entry and the first full half year after the Date of Entry (a "half year" runs between January 1 and June 30 and between July 1 and December 31). Until termination of this Decree, each subsequent report will be due on the same date in the following year and shall cover the prior two half years (*i.e.*, either January 1 to December 31 or July 1 to June 30).

36. Each report submitted under this Consent Decree shall be signed by the plant manager, a corporate official responsible for environmental management and compliance, or a corporate official responsible for plant engineering management, and shall 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 am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

APPENDIX B—BENZENE WASTE OPERATIONS NESHAP

1. Benzene Waste Operations NESHAP – FPC TX

In addition to continuing to comply with all applicable requirements of 40 C.F.R. Part 61, Subpart FF ("Benzene Waste Operations NESHAP," "BWON," or "Subpart FF"), FPC TX agrees to undertake the measures set forth in this Appendix B to ensure continuing compliance with Subpart FF and to minimize or eliminate fugitive benzene waste emissions at FPC TX.

2. Subpart FF Compliance Status.

As of the Date of Lodging, FPC TX has a Total Annual Benzene ("TAB") quantity that is greater than 10 Megagrams ("Mg"). No later than three (3) months after the Date of Lodging of this Decree, FPC TX will comply with the compliance option set forth at 40 C.F.R. § 61.342(c) (hereafter referred to as the "2 Mg Compliance Option").

3. One-Time Review and Verification of OLI/OLII's TAB and Compliance Status.

a. One-Time Review and Verification Process. FPC TX has retained a third party to complete a one-time review and verification of Olefins I and Olefins II's ("OLI/OLII") TAB. The one–time review and verification for OLI/OLII shall be completed by no later than three (3) months after the Date of Lodging of this Decree. The review and verification process for OLI/OLII shall include, but not be limited to:

(1) an identification of each waste stream that is required to be included in OLI/OLII's TAB (*e.g.*, slop oil, tank water draws, spent caustic, other sample wastes, maintenance wastes, and turnaround wastes);

(2) a review and identification of the calculations and/or measurements used to determine the flows of each waste stream for the purpose of ensuring the accuracy of the annual waste quantity for each waste stream;

(3) an identification of the benzene concentration in each waste stream, including sampling for benzene concentration, consistent with the requirements of 40 C.F.R. § 61.355(c)(1) and (3); provided, however, that previous analytical data or documented knowledge of waste streams may be used, pursuant to 40 C.F.R. § 61.355(c)(2), for streams not sampled;

(4) an identification of whether or not the waste stream is controlled consistent with the applicable requirements of Subpart FF; and

(5) an identification of any existing noncompliance with the requirements of Subpart FF.

No later than four (4) months after the Date of Lodging of this Decree, FPC TX shall submit to EPA a BWON compliance review and verification report ("Compliance Review and Verification Report") for OLI/OLII that sets forth the results of this review, including but not limited to, the items identified in Subparagraphs (1) through (5) of this Paragraph.

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

a. Amended TAB Reports. If the results of the BWON Compliance Review and Verification Report indicate that FPC TX's most recently filed TAB report required by 40 C.F.R. § 61.357(d) is inaccurate and/or does not satisfy the requirements of Subpart FF, FPC TX shall submit, by no later than 60 days after submission to EPA of the BWON Compliance Review and Verification Report, an amended TAB report to EPA. In the event that FPC TX has submitted an amended TAB report to EPA prior to the Date of Lodging of this Decree, FPC TX shall submit a copy of that amended TAB report with the BWON Compliance Review and Verification Report.

b. BWON Corrective Action Measures.

2 Mg Compliance Option. If the results of the BWON Compliance Review and Verification Report indicate that FPC TX is not in compliance with the 2 Mg Compliance Option, FPC TX shall submit to EPA for review and comment, by no later than 90 days after submission of the BWON Compliance Review and Verification Report(s), a BWON Corrective Action Plan that identifies with specificity (a) the compliance strategy and schedule that FPC TX shall implement to ensure that FPC TX complies with the 2 Mg Compliance Option as soon as practicable; or (b) a compliance strategy and schedule that FPC TX will implement to ensure that it complies with the 6 BQ Compliance Option set forth in 40 C.F.R. § 61.342(e). FPC TX shall implement the plan according to the schedule provided in such plan unless and until EPA comments on the plan.

c. Certification of Compliance. By no later than thirty (30) days after completion of the implementation of all corrective actions, if any, required pursuant to Corrective Action Measures subparagraphs to come into compliance with the 2 Mg Compliance Option, FPC TX shall submit a report to EPA certifying that FPC TX complies with the Benzene Waste Operations NESHAP.

5. Carbon Canisters

FPC TX shall comply with the requirements of this Paragraph at FPC TX where carbon canisters are utilized as a control device under the Benzene Waste Operations NESHAP.

a. By no later than six (6) months after the Date of Lodging of this Decree, FPC TX shall complete installation of primary and secondary carbon canisters at locations currently using single canisters and shall operate them in series. As part of the first Annual Report (Section VI of this Decree) due following completion of the installation of the dual canisters, FPC TX shall notify EPA that installation has been completed (if necessary). The report shall include a list of all locations in FPC TX where carbon canister systems are used as control devices under Subpart FF.

b. For dual carbon canister systems, "breakthrough" between the primary and secondary canister is defined as any reading equal to or greater than 50 ppm VOC or 1 ppm benzene (depending upon the constituent that FPC TX decides to monitor) when monitoring on a monthly frequency. If weekly monitoring is required pursuant to Subparagraph 5.d. below, "breakthrough" shall be defined as any reading equal to or greater than 5 ppm benzene. At its option, FPC TX may utilize a concentration for "breakthrough" that is lower than 50 ppm VOC or 1 ppm benzene.

c. FPC TX shall monitor for breakthrough between the primary and secondary carbon canisters monthly at times when there is actual flow to the carbon canister or in accordance with the frequency specified in 40 C.F.R. § 61.354(d), whichever is more frequent. This requirement shall

commence: (i) By no later than three (3) months after the Date of Lodging of this Decree, where dual carbon canisters are currently installed and put into service prior to the Date of Lodging; and (ii) within thirty (30) days after installation of any new dual carbon canister system subsequent to Date of Lodging. In the event there is no flow to the canister, FPC TX shall document the lack of flow and remonitor at the next monitoring period.

d. If FPC TX monitors a canister system for benzene and detects between 1 ppm and 5 ppm benzene between the primary and secondary canisters, then FPC TX shall begin monitoring for breakthrough (at 5 ppm benzene) between the primary and secondary carbon canisters weekly, or change out the canister.

e. FPC TX shall replace the original primary carbon canister (or route the flow to an appropriate alternative control device) immediately when breakthrough is detected between the primary and secondary canister. For purposes of this Subparagraph, "immediately" shall mean within eight (8) hours of the detection of a breakthrough for canisters of 55 gallons or less, and within twenty-four (24) hours of the detection of a breakthrough for canisters greater than 55 gallons. If FPC TX chooses to define breakthrough for primary carbon canister replacement at 5 ppm or lower VOC, FPC TX may replace primary canisters of 55 gallons or less within twenty-four (24) hours of detecting breakthrough. In lieu of replacing the primary canister immediately, FPC TX may elect to monitor the outlet of the secondary canister beginning on the day the breakthrough between the primary and secondary canister is identified and each calendar day thereafter. This daily monitoring shall continue until the primary canister is replaced. If the constituent being monitored (either benzene or VOC) is detected at the outlet of the secondary canister during this period of daily monitoring, both canisters must be replaced within eight (8) hours of the detection of a breakthrough.

f. Temporary Applications. FPC TX may utilize properly sized single canisters for short-term operations such as with temporary storage tanks or as temporary control devices. For canisters operated as part of a single canister system, breakthrough is defined for purposes of this Consent Decree as any reading equal to or greater than 50 ppm VOC or 1 ppm benzene. FPC TX shall monitor for breakthrough from single carbon canisters each calendar day that there is actual flow to the carbon canister.

g. FPC TX shall maintain a readily-available supply of fresh carbon canisters at all times where canisters are used as a control device or shall otherwise ensure that such canisters are readily available to implement the requirements of this Paragraph 5.a.

h. By no later than six (6) months after the Date of Lodging of this Decree, FPC TX will notify EPA of which breakthrough definition (50 ppm VOC or 1 ppm benzene) will be used.

6. Periodic Review of Process Information.

By no later than six (6) months after the Date of Lodging of this Decree, if necessary, FPC TX will modify existing management of change procedures or develop a new program to annually review process and project information at FPC TX, including but not limited to construction projects, to ensure that all new benzene waste streams are included in FPC TX's waste stream inventory during the term of this Consent Decree.

7. Laboratory Audits.

FPC TX will conduct audits of all laboratories that perform analyses of FPC TX's Benzene Waste Operations NESHAP samples to ensure that proper analytical and quality assurance/quality control procedures are followed.

a. By no later than nine (9) months after the Date of Lodging of this Decree, FPC TX will complete audits of all of the laboratories they use to perform analyses of Benzene Waste Operations NESHAP samples.

b. During the term of this Consent Decree, FPC TX will conduct subsequent laboratory audits, such that each laboratory is audited every two (2) years.

c. FPC TX may retain third parties to conduct these audits or use audits conducted by others as its own, but the responsibility and obligation to ensure that FPC TX complies with this Consent Decree and Subpart FF rest solely with FPC TX.

8. Benzene Spills.

Beginning no later than the Date of Entry of this Decree, for each spill at FPC TX, FPC TX shall review the spill to determine if any benzene waste, as defined by Subpart FF, was generated. For each spill involving the release of more than ten (10) pounds benzene in any twenty-hour (24) hour period, FPC TX shall include the benzene generated by the spill in the TAB, and, in the uncontrolled benzene quantity calculations for FPC TX in accordance with the applicable Compliance Option as required by Subpart FF, unless the benzene waste is properly managed in a controlled waste management unit.

9. Training.

a. By no later than six (6) months after the Date of Lodging of this Decree, FPC TX shall develop and implement a program for annual (i.e., once each calendar year) training for all employees who draw benzene waste samples for Benzene Waste Operations NESHAP purposes.

b. By no later than six (6) months after the Date of Lodging of this Decree, FPC TX shall complete the development of standard operating procedures (where they do not already exist) for all control devices and treatment processes used to comply with the Benzene Waste Operations NESHAP at FPC TX. By no later than nine (9) months after the Date of Lodging of this Decree, FPC TX shall complete an initial training program regarding these procedures for all operators assigned to the relevant equipment. Comparable training shall also be provided to any persons who subsequently become operators, prior to their assumption of this duty. "Refresher" training in these procedures shall be performed on a three-year cycle (i.e., once every three (3) years) during the term of the Consent Decree.

c. FPC TX shall assure that the employees of any contractors hired to perform any of the requirements of this Appendix B are properly trained to implement such requirements that they are hired to perform, as under Subparagraphs 9.a. and 9.b.

d. Training records shall be kept for a period of three (3) years.

10. Sampling.

FPC TX shall conduct sampling as described by this Paragraph at FPC TX for the purpose of calculating uncontrolled benzene quantities.

a. Sampling under the 2 Mg Compliance Option.

(1) By no later than six (6) months after the Date of Lodging of this Decree, FPC TX shall submit to EPA a BWON Sampling Plan. The plan is designed to identify the quarterly benzene quantity in uncontrolled benzene waste streams. The plan shall include, but need not be limited to: (i) proposed sampling locations and methods for flow calculations at the "end of line" of uncontrolled benzene waste streams; and (ii) all uncontrolled waste streams that count toward the 2 Mg/yr calculation and that contain greater than 0.05 Mg/yr of benzene. For sources of uncontrolled benzene waste streams that are non-routine or are otherwise difficult to collect, FPC TX shall provide written support to verify that assumptions made in calculating the TAB are reasonable and appropriate. The BWON Sampling Plan may identify commingled, exempt waste streams for sampling, provided FPC TX demonstrates that the benzene quantity of those commingled streams will not be underestimated.

(2) FPC TX shall commence sampling under its BWON Sampling Plan during the first full calendar quarter following submittal of the Plan. FPC TX shall take, and have analyzed, at least three (3) representative samples from each identified sampling location. FPC TX shall use the average of all samples taken and the identified flow calculations to determine its quarterly benzene quantity in uncontrolled waste streams and to estimate a calendar year value for FPC TX.

(3) At the end of each calendar quarter following the commencement of quarterly sampling, FPC TX shall calculate a quarterly uncontrolled benzene quantity and shall estimate a projected calendar year uncontrolled benzene quantity based on the quarterly end of line sampling results, non-end of line sampling results, and the flow calculations. FPC TX shall submit the uncontrolled benzene quantity in the Annual Reports due under Section VII of this Consent Decree. If the projected calendar year calculations demonstrate an uncontrolled benzene quantity of greater than 1.5 Mg/yr, FPC TX shall provide this information to EPA within 30 days of the end of the calendar quarter.

(4) After at least 8 quarters of sampling under the BWON Sampling Plan under this Paragraph 10, FPC TX may submit a report to EPA that requests a change in the monitoring frequency specified by Subparagraph 10.a. If EPA determines, after an opportunity for consultation with FPC TX, that the information presented in the report supports a change in the monitoring frequency, then the monitoring frequency requirement under Subparagraph 10.a. will be modified in accordance with Section XVII of the Decree (Consent Decree Modifications).

(5) If changes in processes, operations, or other factors lead FPC TX to conclude that the Sampling Plan may no longer provide an accurate basis for estimating FPC TX's quarterly benzene quantity, then by no later than thirty (30) days after FPC TX determines that the plan no longer provides an accurate measure, FPC TX shall submit to EPA a revised Sampling Plan for EPA approval. In the first full calendar quarter after submitting the revised plan, FPC TX shall implement the revised plan. FPC TX shall continue to implement the revised plan unless and until EPA disapproves the revised plan.

b. For purposes of calculating average benzene concentrations under any Compliance

Option, FPC TX shall include all sampling results in the calculation unless FPC TX provides an explanation as to why any sampling results should be excluded.

11. Implementation of Corrective Action.

a. Applicability.

2 Mg Compliance Option. If the calculations in Subparagraph 10.a (3) indicate that the projected calendar year uncontrolled benzene quantity exceeds 1.5 Mg at FPC TX, FPC TX shall submit a written BWON Sampling Report to EPA that evaluates all relevant information and identifies whether any action should be taken to reduce benzene quantities in its waste streams for the remainder of the calendar year. If FPC TX determines that additional actions are necessary to ensure compliance with the 2 Mg Compliance Option at FPC TX, FPC TX shall include in its report a BWON Corrective Action Plan that identifies with specificity (a) the compliance strategy and schedule that FPC TX shall implement to ensure that FPC TX complies with the 2 Mg Compliance Option as soon as practicable; or (b) a compliance strategy and schedule that FPC TX will implement to ensure that it complies with the 6 BQ Compliance Option. FPC TX shall implement the plan according to the schedule provided in such plan.

b. BWON Sampling Report and Corrective Action Plan. FPC TX shall, in any BWON Corrective Action Plan required by this Paragraph, identify: (i) the cause of the potentially elevated benzene quantities; (ii) all corrective actions that FPC TX has taken or plans to take to ensure that the cause will not recur; and (iii) an appropriate strategy and schedule that FPC TX shall implement to ensure that FPC TX remains in compliance with the 2 Mg Compliance Option or implements the 6 BQ Compliance Option. If FPC TX can identify the reason(s) in any particular calendar quarter that the quarterly and projected annual calculations result in benzene quantities in excess of those identified in this paragraph and states that it does not expect such reason to recur, then FPC TX may exclude the benzene quantity attributable to the identified reason from the projected calendar year quantity. If that exclusion results in no potential violation of the Benzene Waste Operation NESHAP, FPC TX will not be required to implement corrective measures. FPC TX will implement the plan unless and until EPA disapproves.

c. Third Party Assistance. If calculations indicate that the projected calendar year uncontrolled benzene quantity exceed 1.5 Mg at FPC TX, then FPC TX will retain a third-party contractor during the following quarter to undertake a TAB study and compliance review. By no later than 90 days after FPC TX receives the results of the third party TAB study, FPC TX will submit such results, along with a plan and schedule for remedying any deficiencies identified, to EPA. FPC TX will implement the plan unless and until EPA disapproves.

12. Miscellaneous Inspections and Monitoring.

By no later than six (6) months after the Date of Lodging of this Decree by FPC TX, FPC TX shall:

a. Conduct monthly visual inspections of and, if appropriate, refill all Subpart FF water traps within the FPC TX's Subpart FF affected individual drain systems;

b. If FPC TX utilizes conservation vents, visually inspect all Subpart FF conservation vents or indicators on Subpart FF affected individual drain systems (i.e., process sewers) for detectable leaks on a weekly basis, reset any vents where leaks are detected, and record the results of the

inspections. After six (6) months of weekly inspections, and based upon an evaluation of the recorded results, FPC TX may submit a request to EPA Region 6 to modify the frequency of the inspections. EPA shall not unreasonably withhold its consent to such modification. Alternatively, for conservation vents with indicators that identify whether flow has occurred, FPC TX may elect to visually inspect such indicators on a monthly basis and, if flow is then detected, FPC TX shall then visually inspect that indicator on a weekly basis for four (4) weeks. If flow is detected during normal operation any two of those four (4) weeks, FPC TX shall install a carbon canister or other environmentally equivalent controls on that vent until appropriate corrective action(s) can be implemented to prevent such flow. Nothing in this Subparagraph shall require FPC TX to monitor conservation vents on fixed roof tanks; and

c. Conduct quarterly monitoring and repair of the oil-water separators in benzene waste service consistent with the "no detectable emissions" provision in 40 C.F.R. § 61.347 or quarterly measurements of the oil-water separator secondary seal gap if using the alternative control requirements allowed under 40 C.F.R. § 61.352, if the separator is a control device under Subpart FF.

13. Recordkeeping and Reporting Requirements

a. As part of the Annual Reports required by Section VI or as otherwise required under this Subsection, FPC TX shall submit, as and to the extent required, the following information to EPA:

(1) BWON Compliance Review and Verification Report (under Subparagraph 3.a.), as amended, if necessary;

(2) Amended TAB Report, if necessary (under Subparagraph 4.a.);

(3) BWON Corrective Measures Plan, if necessary (under Subparagraph 4.b.);

(4) Certifications of Compliance, if necessary (under Subparagraph 4.c.) (Actions Necessary to Correct Non-Compliance, Certification of Compliance);

(5) notification, if necessary, that FPC TX has completed the installation of primary and secondary carbon canisters at locations using single canisters prior to the Date of Lodging, and is operating the primary and secondary carbon canisters in series (under Subparagraph 5.a. (Carbon Canisters));

(6) Initial and subsequent Laboratory Audit Reports (under Paragraph 7);

(7) a description of the measures taken, if any, during the preceding twelve (12) month period to comply with the training provisions of Paragraph 9;

(8) BWON Sampling Plan, and revised BWON Sampling Plan, if necessary (under Subparagraph 10.a.); and,

(9) a summary of the sampling results required under Subparagraph 10.a.

b. FPC TX shall retain records containing the following information during the time period that the Consent Decree remains in effect:

(1) monthly visual individual drain inspection results;

(2) conservation vent monitoring results and installation of alternative control equipment; and

(3) oil/water separator monitoring results.

APPENDIX C--VINYL CHLORIDE NESHAP

Leak Detection and Elimination Program

1. In addition to continuing to comply with all applicable requirements of 40 C.F.R. Part 61, Subpart F ("National Emission Standard for Vinyl Chloride"), Defendants agree to undertake the measures set forth in this Subsection to ensure continuing compliance with 40 C.F.R. § 61.65(b)(8) and to minimize fugitive vinyl chloride monomer ("VCM") emissions regulated under Subpart F's Leak Detection and Elimination ("LDE") Program in the applicable Covered Process Units, as defined in Appendix A.

Ambient Monitoring System

2. Defendants will submit its current LDE Plans to EPA by no later three (3) months after the Date of Lodging of this Decree, and will re-submit the plans for review as updates occur throughout the term of this Consent Decree.

Ambient Monitoring System Leak Definition

3. By no later than the Date of Entry, Defendants will set their ambient air monitoring systems to alarm at 5 ppm VCM on a one-monitoring cycle basis. When the system goes into alarm at 5 ppm VCM or greater, a field walk-through to determine if a leak, as defined in the LDE plan, is present will be conducted.

Trend Analysis

4. Quarterly, for the term of the Consent Decree, Defendants will evaluate the ambient monitoring data to identify plant areas with the greatest alarms (frequency and/or magnitude) by no later than three (3) months after the Date of Lodging of this Decree. After collecting 4 quarters of data, Defendants will develop a work plan to use the information to improve the location of monitors, number of monitoring points, number of fixed-point ambient air monitors and response to alarms, if necessary.

5. A summary of the results of the quarterly trend analysis will be included in the Annual Report.

6. If Defendants deem it necessary to modify any portion of the ambient monitoring system as a result of the trend analysis, Defendants shall update and re-submit the Leak Detection and Elimination Plan for approval to the appropriate state agency if the modification impacts the Plan.

LDE Audits

7. By no later than six (6) months after the Date of Lodging of this Decree, Defendants will perform an initial internal audit at each Covered Facility, as defined in Appendix A, that will include, but will not be limited to: (a) reviewing records to ensure that date, time, location and concentration of each confirmed leak is documented; (b) reviewing records to ensure that corrective actions are documented and implemented; (c) reviewing records to ensure that a field walk-through

investigation was conducted and documented for each alarm event greater than 5 ppm; (d) reviewing calculations of vinyl chloride emissions from confirmed leaks causing alarms to ensure that all appropriate reporting was completed (i.e., EPCRA, CERCLA, State and Local) for releases that exceeded the reportable quantity for vinyl chloride monomer (VCM); and, (e) reviewing emissions inventory and TRI reporting practices to ensure that confirmed sources of alarms and releases are included and accounted for in each Covered Facility's emission reports.

8. After the initial audit, Defendants will conduct an additional LDE audit prior to termination of the Consent Decree.

9. LDE Audit Reports will be submitted in the next Annual Report due under this Consent Decree.

Enhanced recordkeeping and reporting:

10. By Date of Entry, and until termination of this Consent Decree, Defendants will record:

a. The number of ambient monitoring system alarms greater than 5 ppm VCM;

b. The type of equipment and/or activity involved in alarms for confirmed leaks greater than 5 ppm VCM;

c. The location of each VCM alarm;

d. The date and approximate time of each VCM alarm;

e. Any corrective actions taken; and

f. System downtime for each ambient air monitor.

11. By Date of Entry, and until termination of this Consent Decree, FPC TX (within its quarterly Ambient Monitoring Report required by the State) and FPC LA (within its quarterly VCM NESHAP Report) will report upon:

a. The number of ambient monitoring system alarms at a level greater than 5 ppm VCM;

b. The type of equipment and/or activity involved in alarms for confirmed leaks greater than 5 ppm VCM;

c. The concentration of the alarm event;

d. Any corrective action taken in response to these alarms; and

e. System downtime for each ambient air monitor.

APPENDIX D—RESOURCE CONSERVATION AND RECOVERY ACT

A. Management of Waste From Cleaning of Unit NE-107 A/B (the "Tar Still") Within the Baton Rouge, Louisiana VCM Unit:

1. No later than three (3) months from the Date of Lodging of this Decree, FPC LA shall cease discharging the ethylene dichloride ("EDC") rinse that is used to clean the Tar Still to the organic water separator tank (Tank NT-502) or any other part of the FPC LA facility's wastewater system.

2. No later than three (3) months from the Date of Lodging of this Decree, FPC LA shall include the hazardous waste codes of K019 and K020 on all waste manifests for all waste materials removed from the Tar Still during the Tar Still cleaning process and shall send such waste materials off-site for disposal.

B. FPC TX:

1. FPC TX shall undertake the following sampling to make a hazardous waste determination of the water that is discharged from the wastewater CPI into the process cooling towers.

   a. Within six (6) months from the date of the lodging of this Consent Decree, FPC TX shall make an initial hazardous determination of the water that is discharged from the wastewater CPI into the process cooling towers. This initial hazardous waste determination shall be made by using the results from a minimum of four (4) samples.

   b. Beginning six (6) months from the date of the lodging of this Consent Decree, FPC TX shall continue to collect one sample per calendar quarter to analyze for the toxicity characteristic of hazardous waste.

   c. At a minimum, the samples shall be analyzed for benzene. The results from samples analyzed by the EPA methods SW 846 Method 8240 or SW 846 Method 8260 may be used in lieu of the TCLP methods required by 40 C.F.R. § 261.24(a).

   d. FPC TX shall immediately cease all water discharges from the CPI into the process cooling water system if any of the sample results determines that the water displays any of the hazardous waste characteristics of toxicity listed in 40 C.F.R. § 261.24(b) Table 1, and shall manage that water consistent with such toxicity characteristic.

   e. FPC TX shall provide notification to EPA within seven (7) days of receiving sample results for any sample where the analysis determines that the water from the CPI displays a characteristic of toxicity listed in 40 C.F.R. § 261.24(b) Table 1.

   f. FPC TX shall report all sampling results in the Annual Report that is required under this Consent Decree.

2. Immediately upon the lodging of this Consent Decree, FPC TX shall manage all wastewater sludge generated at and downstream from Unit TZT-07 under the hazardous waste codes U077, K019, and K020.

3. Immediately upon the lodging of this Consent Decree, FPC shall comply with the hazardous waste storage requirements of 40 C.F.R. § 262.34.

APPENDIX E--CLEAN WATER ACT

1. Incident Investigation and Corrective Action. Within twenty-four (24) hours after discovering an exceedance of an applicable NPDES permit limit ("permit exceedance"), Defendants shall commence a root cause investigation to determine the cause of the permit exceedance. Within forty-five (45) days after discovery of the permit exceedance, Defendants shall complete the root cause investigation and take any corrective action necessary to prevent a recurrence of the permit exceedance. To the maximum extent possible, corrective action shall be completed within forty-five (45) days after the discovery of the permit exceedance. The results of the root cause investigation shall be documented in a written report that includes, but is not limited to, an identification of any corrective action taken or to be taken and the schedule for completing such corrective action if it cannot be completed within forty-five (45) days after discovery of the permit exceedance.

2. Channel Marker 22 of Upper Lavaca Bay. FPC TX shall continue to implement the Standard Operating Procedure approved by the Texas Commission on Environmental Quality ("TCEQ") by correspondence dated June 12, 2008, for the measurement of water depth in the vicinity of Channel Marker 22 of Upper Lavaca Bay under the terms of the FPC TX NPDES Permit.

APPENDIX F--EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT

1. Within 90 days of the Date of Lodging, FPC TX shall complete a comprehensive internal review of its training procedures to ensure that all personnel involved in carrying out FPC TX's responsibilities to report releases are adequately trained to ensure compliance with EPCRA Section 313, CERCLA Section 103, and EPCRA Section 304. FPC TX shall identify any deficiencies discovered during this review, and any deficiencies noted in this review shall be corrected and the training procedures updated within 120 days of the Effective Date of the Consent Decree.

2. Within nine (9) months of the Date of Lodging, FPC TX shall conduct a comprehensive review of previously submitted Form Rs (Reporting Years 2003 - 2007) to determine if the releases to air, land, and water, and all waste management activities were accurately calculated, i.e., data quality checks. In the event a submitted Form R was inaccurate:

a. No later than nine (9) months after the Date of Lodging, FPC TX shall submit the appropriate new or revised Toxic Release Inventory ("TRI") reporting form to the EPCRA 313 Reporting Center, and to the State of Texas (Texas Commission on Environmental Quality).

b. As part of the first Annual Report required under this Decree, FPC TX shall submit a written report to EPA summarizing the findings from this evaluation and detailing the FPC TX's corrective actions.

3. No later than 180 days before FPC TX's next TRI Annual Report is due, FPC TX shall institute an internal program evaluation to determine:

a. The types and quantities of chemicals manufactured, processed, or otherwise used, on-site. This evaluation shall include a Material Safety Data Sheet ("MSDS") review. The MSDS review shall determine if any TRI chemicals are used onsite in quantities greater than the reporting thresholds, and if releases of these chemicals have gone unreported. For any TRI chemicals identified as having been or being used over the reporting thresholds where no reporting has been completed, FPC TX shall submit the appropriate TRI forms within ninety (90) days of identification.

b. FPC TX shall also standardize calculation methods, where appropriate, to ensure accurate and timely reporting. Each May 31 following the Date of Lodging, the FPC TX reporting officials shall meet to review the chemicals reported, types and quantities of releases reported, and calculation methods used. Discrepancies in this comparison shall be investigated and inaccuracies shall be corrected prior to filing the TRI reporting forms in July.

c. The internal program review shall also determine:

(i) The extent to which the presence of any chemicals identified in Paragraph 3.a and b. above trigger reporting obligations under EPCRA or other federal statutes;

(ii) Whether FPC TX's procedures for detecting reportable releases under CERCLA Section 103 and EPCRA Section 304 are adequate to ensure timely and accurate reporting; and

(iii) Whether FPC TX's procedures for calculating thresholds and emissions for

purposes of EPCRA Section 313 are adequate to ensure accurate and timely reporting.