STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:	*	**Settlement Tracking No.**
	*	**SA-AE-15-0043**
WESTLAKE PETROCHEMICALS LP	*	
WESTLAKE POLYMERS CORPORATION	*	**Enforcement Tracking Nos.**
WESTLAKE STYRENE LLC	*	**AE-CN-03-0068**
	*	**AE-CN-05-0075**
AI # 27518, 9061,18070 and 17904	*	**AE-PP-07-0073**
	*	
PROCEEDINGS UNDER THE LOUISIANA	*	
ENVIRONMENTAL QUALITY ACT	*	
LA. R.S. 30:2001, ET SEQ.	*	

SETTLEMENT

The following Settlement is hereby agreed to between Westlake Petrochemicals LP, Westlake Polymers Corporation, Westlake Styrene LLC ("Respondents"), and the Department of Environmental Quality ("DEQ" or "the Department"), under authority granted by the Louisiana Environmental Quality Act, La. R.S. 30:2001, et seq. ("the Act").

I

Respondents are corporations that own and/or operate chemical production facilities located in Calcasieu Parish, Louisiana ("the Facilities").

II

On December 2, 2005, the Department issued to Westlake Petrochemicals LP a Consolidated Compliance Order & Notice of Potential Penalty, Enforcement No. **AE-CN-03-0068**, which is attached as Exhibit A.

On June 29, 2005, the Department issued to Westlake Polymers Corporation a Consolidated Compliance Order & Notice of Potential Penalty, Enforcement No. **AE-CN-05-0075**, which is attached as Exhibit B.

On March 16, 2010, the Department issued to Westlake Styrene LLC a Notice of Potential Penalty, Enforcement No. **AE-PP-07-0073**, which is attached as Exhibit C.

The following violations, although not cited in the foregoing enforcement actions, are included within the scope of this settlement.

Violations at AI#s 27518, 9061, 18070 and 17904 from 2005 – 2009

1. During calendar year 2009, the emissions for the styrene monomer unit flare exceeded the allowable emissions rates for VOC, NOx and CO. During this year, the amount of material sent to the flare exceeded the permitting basis.

2. During calendar year 2009, at the Styrene Monomer Unit, the LDAR contractor identified a number of components that were not included in the fugitive emission database.

3. During calendar year 2008, the emissions for the Styrene Monomer Unit Figitives Emission Source exceeded the allowable emissions rates. Permitted VOC limit was 2.37 tpy; 2007 emissions were 3.97 tpy.

4. During calendar year 2007, some discrepancies were identified in the LDAR contractor's list of pumps subject to weekly AVO inspection and monthly monitoring.

5. The Title V Permit issued on January 12, 2006 required continuous organic monitoring for the AS-208 Hotwell Vent and the AS-402 Absorber, or to have approved Parametric Monitoring Plans in place. At the time the Permit was issued, the Styrene Monomer Unit did not have the continuous organic monitoring or the approved parametric monitoring plans in place.

Supplemental Violations at the Ethylene Manufacturing Facility - AI 6164

1. The Ethylene Unit Number 2 experienced a process upset on August 30, 2004, which resulted in flaring. The root cause was an operator input error on the process control system.

2. The Petro 2 Flare Pilot went out on May 9, 2007, May 17, 2007, July 31, 2007, November 7, 2008, December 15, 2008, January 30, 2009, and February 7, 2010 causing a release of flammable gas to the atmosphere.

3. The Petro 1 Unit had a flaring event following a process compressor system trip on November 14, 2007. The PGC compressor was getting high vibration readings from vibration probes. When I&E technicians bypassed the first probe to begin troubleshooting, the second probe shut down the unit.

4. Furnace Number 1 at Petro 2 had a fire inside the firebox as a result of a ruptured tube in the heater on August 27, 2008. The fire resulted in smoke from the Furnace stack

5. The Petro 1 Unit had a process upset, flaring, and smoking flare on April 12, 2007, caused by the Process Gas Compressor trip.

6. In May 2008, 5 open ended lines were found without caps or plugs at the end of the line.

7. In May 2008, it was determined that the facility had 4.7% of the valves identified as Difficult to Monitor, which is above the 3% DTM limit.

8. The initial Furnace Burner upgrades in the Petro 1 Kellogg Furnaces did not meet the emissions limitations in the Title V Permit 0520-00145-V4. With replacement and upgraded burners, and the use steam injection, the Furnaces are able to meet the emissions limitations in the Title V Permit.

9. The Petro 2 Cooling Tower exceeded the allowable annual emission rate for VOC in calendar year 2010 as a result of leaking heat exchangers in the Unit.

10. During calendar year 2009, at the Petro 1 Unit, the LDAR contractor identified a number of components that were not included in the fugitive emission database.

11. The Petro 2 Ground Flare Pilot went out on February 20, 2006, February 25, 2006, May 5, 2006, December 13, 2006, February 16, 2007, April 4, 2007, May 21, 2007, April 18, 2007, July 2, 2007, August 31, 2007, April 22, 2008, May 28, 2008, June 15, 2008, September 8, 2008, and July 2, 2009.

12. The Petro 2 Ground Flare annual emissions (NO_x and CO) exceeded the permit allowable in 2009.

13. The Petro 1 Thermal Oxidizer annual emissions (NOx and benzene) exceeded the permit allowable in 2008 and 2009.

14. In 2008, open ended lines were found without caps or plugs at the end of the line in both Petro 1 and Petro 2.

15. The Petro 2 Ground Flare was smoking on September 16 and 17, 2008.

16. In the 1st and 2nd Quarter of 2008, agitators were not monitored in accordance with regulatory requirements. These components were inadvertently dropped during site contractor training.

17. The Petro 1 Flare was smoking on August 20, 2007.

18. During the Petro 1 Unit Turnaround in the 1st Quarter of 2009, upgrades were made to unit monitoring system requiring data historians to be taken off line. The Petro 1

Thermal Oxidizer routine continuous data recording for temperature was replaced by manual data recording during the turnaround.

19. The Petro 2 Storm Water Tank annual emissions exceeded the permit allowable for VOC in 2008 due to a damaged tank.

20. The Petro 2 IGF Effluent Tank was taken out of service for cleaning and maintenance in 2008. While the IGF Effluent Tank was out of service, a temporary tank was utilized in its place, with activated carbon adsorption system for emissions control.

21. The Petro 1 Cooling Tower exceeded the allowable maximum emission rate for VOC on January 8, 2006 and July 31, 2007, as a result of leaking exchangers in the Unit.

22. In the 1st Quarter of 2007, it was determined that the facility was using the incorrect leak definition (1,000ppm vs 500 ppm).

23. The Petro 1 Oily Sludge Processing Equipment was permitted as a case-by-case insignificant activity, with the emission controlled by the thermal oxidizer. The installation operating in the 4th Quarter of 2006 and the 1st Quarter of 2007 by Westlake's contractor had the emissions controlled by an activated carbon adsorption unit.

24. The Petro 1 Flare Pilot went out on February 17, 2007 causing a release of flammable gas to the atmosphere.

25. The Petro 1 Furnace 4 maximum allowable Carbon Monoxide emissions were exceeded January 18-19, 2006.

26. The Petro 1 Thermal Oxidizer annual emissions exceeded the permit allowable in 2006 for 1,3-butadiene.

27. The Co products Flare was smoking on October 20, 2005.

Supplemental Violations at the Polyethylene Manufacturing Facility - AI 9061

1. The Poly 2 K Line Unit had a compressor trip and release to the atmosphere on February 6, 2005. The compressor tripped while performing maintenance on the compressor's temperature recorder.

2. The Poly 1 B Line Unit had a release to the atmosphere from the vent on the B Line High Pressure Separator on November 8, 2005. The vent opened while changing the UPS battery source on the vent's solenoid valve.
3. The Poly 2 Unit had a release of 159 pounds of ethylene during a maintenance project on a heat exchanger on June 29, 2007. A plug was inadvertently pulled from a gas outlet of a heat exchanger causing ethylene to be released to the atmosphere.

4. The Poly 1 B Line High Pressure Separator had a release to atmosphere of 1,499 pounds of ethylene on April 1, 2009. A breaker was accidentally tripped by a technician.

5. A Poly 2 K Line Release occurred on October 18, 2007. The required follow up letter was submitted to the LDEQ on October 29, 2007, a period of greater than 7 days.

6. The Poly 2 Area had a release to the atmosphere and a smoking flare on October 17, 2007, which was caused by a line breaker trip and power outage. The breaker trip occurred while a technician was working on the Polycit Substation.

7. In January 2008, it was observed that the piping and new valves associated with the J Line Compressor Seal Project had not been included in the LDAR program.

8. The Poly 2 Cooling Tower exceeded the allowable annual emission rate for VOC calendar year 2009 as a result of leaking heat exchangers in the Unit.

9. In 2008, it was observed that some components associated with the Purifiction Area had been inadvertently identified as out of service and were not being monitored on a quarterly basis.

10. In 2008, open ended lines were found without caps or plugs at the end of the line.

11. The Poly 2 area had a boiler upset and a smoking flare on October 26, 2007, which was caused by a power outage.

12. The Poly 1/2 daily visual monitoring was not conducted on a number of days in 2006 and 2007. The Poly 1/2 unit is operated and staffed 24 hours a day, 365 days per year. The baghouses are in plain sight and any possible problems with visible emissions would be readily apparent to operators on site. These baghouses, however, are not in harsh service and are not prone to failure. Westlake feels that these baghouses are checked on a daily basis for visible emissions, however, on these days, no records were available to document the inspections.

13. The monthly pump monitoring for the Poly 1 F Line was not conducted in September 2006. A Unit turnaround was initiated on September 15, 2006, but our LDAR contractor had scheduled the pump monitoring for the last week of the month. Thus, the pumps were only in operation for a period of time in the month and the monthly monitoring was not conducted.

14. The release reports for Poly 1/2 were being submitted without a signature from the Responsible Official

15. The monthly pump monitoring for the Poly 1 F Line was not conducted in November 2005 due to contractor error.

Supplemental Violations at the Styrene Marine Terminal Facility - AI 17904

1. A railcar at the Styrene Marine Terminal was overfilled with Styrene Monomer on November 14, 2009.

2. The monthly pump monitoring for the Styrene Marine Terminal was not conducted in February 2008. A Unit shutdown occurred on February 14, 2008 and our LDAR contractor had scheduled the pump monitoring for the last week of February 2008. Thus, the pumps were only in operation for 14 days of the month and the monthly monitoring was not conducted.

3. During calendar year 2009, the LDAR contractor identified a total of 99 components (13 valves and 86 connectors) that were not included in the fugitive emission database.

4. During calendar year 2009, the number of railcars loaded at the Marine Terminal exceeded the permitting basis. EQT 0001 Railcar loading exceeded the annual loading limit for Permit 0520-00156-V2, which resulted in an exceedance of the annual permitted VOC emissions. The permitted VOC limit was 0.08 tpy; the facility released 0.096 tons in 2009.

Supplemental Violations at the Poly III Polyethylene Manufacturing Facility - AI 27518

1. The Poly III Difficult to Monitor components for calendar year 2005 were not monitored. According to Westlake's monitoring schedule, the DTM components for Poly III were scheduled to be monitored each year in October. For the 2005 calendar year, the monitoring schedule was interrupted by Hurricane Rita. While Westlake made every attempt to restart, recover, and reestablish their compliance programs, the October DTM components for Poly III were not monitored.

2. The Poly III daily visual monitoring was not documented on 5/14/06, 5/15/06, 5/20/06, 5/21/06, 6/18/06, 8/23/06, 8/24/06, and 9/19/06. The Poly III unit is operated and staffed 24 hours a day, 365 days per year. The baghouses are in plain sight and any possible problems with visible emissions would be readily apparent to operators on site. These baghouses, however, are not in harsh service and are not prone to failure. Westlake feels that these baghouses are checked on a daily basis for visible emissions, however, on these days, no records were available to document the inspections.

3. The annual tank inspection for the internal floating roof in the Hexene Tank for 2007 was conducted 14 months after 2006 inspection. The Hexene Tank (EPN 11-96) has an internal floating roof for emissions control. The annual inspections had been conducted in July of each calendar year. In calendar year 2006, the 10-year internal inspection was conducted in March in conjunction with the dual Train Outage for Poly III. This interrupted the normal annual inspection routine, as the July 2006 annual inspection was not conducted, and then the 2007 inspection was conducted more than 12 months after the previous inspection.

4. During calendar year 2009, the LDAR contractor identified a number of components that were not included in the fugitive emission database. These components were found and identified during a clean up and enhancement project conducted in the Unit.

5. In April 2009, one leaking component in the Poly III Unit was identified as leaking, but no first attempt at repair was completed within 5 days of discovery.

6. The Poly III Low Pressure Flare had low heat content on January 3, 2006, May 4, 2006, July 6, 2006, July 15, 2006, July 9, 2008, and September 5, 2008, based on the Unit's on-line calorimetric analyzer.

7. The Poly III High Pressure Flare was smoking while the Low Pressure Flare was out of service on July 7-8, 2008.

8. The Poly III Cooling Tower exceeded the allowable maximum emission rate for VOC on July 24, 2005, October 26, 2006, October 23, 2007, November 18, 2007, and November 19, 2007 as a result of leaking heat exchangers in the Unit.

9. The Poly III High Pressure Flare Pilot went out on December 1, 2005, October 18, 2006, May 30, 2007, June 4, 2007, August 31, 2007, November 12, 2008, and May 24, 2009.

10. In May 2007, two control valves in the Poly III Unit were identified as leaking but the final repairs were not completed within 15 days of discovery. The Unit was waiting on parts to complete the repairs.

III

Respondent denies it committed any violations or that it is liable for any fines, forfeitures and/or penalties.

IV

Nonetheless, Respondent, without making any admission of liability under state or federal statute or regulation, agrees to pay, and the Department agrees to accept, a payment in the amount of NINETY FIVE THOUSAND AND NO/100 DOLLARS ($95,000.00), of which Two Thousand Five Hundred Twenty-Seven and 63/100 Dollars ($2,527.63) represents the Department's enforcement costs, in settlement of the claims set forth in this agreement. The total amount of money expended by Respondent on cash payments to the Department as described above, shall be considered a civil penalty for tax purposes, as required by La. R.S. 30:2050.7(E)(1).

V

Respondent further agrees that the Department may consider the inspection report(s)/permit record(s), the Consolidated Compliance Orders & Notices of Potential Penalty, the Notice of Potential Penalty and this Settlement for the purpose of determining compliance history in connection with any future enforcement or permitting action by the Department against Respondent, and in any such action Respondent shall be estopped from objecting to the above-referenced documents being considered as proving the violations alleged herein for the sole purpose of determining Respondent's compliance history.

VI

This agreement shall be considered a final order of the Secretary for all purposes, including, but not limited to, enforcement under La. R.S. 30:2025(G)(2), and Respondent hereby waives any right to administrative or judicial review of the terms of this agreement, except such review as may be required for interpretation of this agreement in any action by the Department to enforce this agreement.

VII

This settlement is being made in the interest of settling the state's claims and avoiding for both parties the expense and effort involved in litigation or an adjudicatory hearing. In agreeing to the compromise and settlement, the Department considered the factors for issuing civil penalties set forth in La. R. S. 30:2025(E) of the Act.

VIII

As required by law, the Department has submitted this Settlement Agreement to the Louisiana Attorney General for approval or rejection. The Attorney General's concurrence is appended to this Settlement Agreement.

IX

The Respondent has caused a public notice advertisement to be placed in the official journal of the parish governing authority in Calcasieu Parish, Louisiana. The advertisement, in form and wording approved by the Department, announced the availability of this settlement for public view and comment and the opportunity for a public hearing. Respondent has submitted an original proof-of-publication affidavit and an original public notice to the Department and, as of the date this Settlement is executed on behalf of the Department, more than forty-five (45) days have elapsed since publication of the notice.

X

Payment is to be made within thirty (30) days from notice of the Secretary's signature. If payment is not received within that time, this Agreement is voidable at the option of the Department. Payments are to be made by check, payable to the Department of Environmental Quality, and mailed or delivered to the attention of Accountant Administrator, Financial Services Division, Department of Environmental Quality, Post Office Box 4303, Baton Rouge, Louisiana, 70821-4303. Each payment shall be accompanied by a completed Settlement Payment Form (Exhibit D).

XI

In consideration of the above, any claims for penalties are hereby compromised and settled in accordance with the terms of this Settlement.

XII

Each undersigned representative of the parties certifies that he or she is fully authorized to execute this Settlement Agreement on behalf of his or her respective party, and to legally bind such party to its terms and conditions.

WESTLAKE PETROCHEMICALS LP

BY: _____
(Signature)

_____
(Printed)

TITLE: _____

THUS DONE AND SIGNED in duplicate original before me this _____ day of _____, 20 _____, at _____.

_____
NOTARY PUBLIC (ID #_____)

_____
(stamped or printed)

WESTLAKE POLYMERS CORPORATION

BY: _____
(Signature)

_____
(Printed)

TITLE: _____

THUS DONE AND SIGNED in duplicate original before me this _____ day of _____, 20 _____, at _____.

_____
NOTARY PUBLIC (ID #_____)

_____
(stamped or printed)

WESTLAKE STYRENE LLC

BY: _____
(Signature)

_____
(Printed)

TITLE: _____

THUS DONE AND SIGNED in duplicate original before me this _____ day of _____, 20 _____, at _____.

_____
NOTARY PUBLIC (ID #_____)

_____
(stamped or printed)

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Chuck Carr Brown, Ph.D.

BY: _____
Lourdes Iturralde, Assistant Secretary
Office of Environmental Compliance

THUS DONE AND SIGNED in duplicate original before me this _____ day of _____, 20_____, at Baton Rouge, Louisiana.

_____
NOTARY PUBLIC (ID # _____)

_____
(stamped or printed)

Approved: _____
Lourdes Iturralde, Assistant Secretary