

STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:

* **Settlement Tracking No.**
* **SA-AE-05-0017**

DELTECH CORPORATION
AI # 248

* **Enforcement Tracking No.**
* **AE-CN-04-0156**

PROCEEDINGS UNDER THE LOUISIANA
ENVIRONMENTAL QUALITY ACT
LA. R.S. 30:2001, ET SEQ.

* **Docket Tracking No.**
* **2005-6136-EQ**

SETTLEMENT

The following Settlement is hereby agreed to between Deltech Corporation (Respondent) and the Department of Environmental Quality (Department), under authority granted by the Louisiana Environmental Quality Act, La. R.S. 30:2001, et seq. (the Act).

I

Respondent is a corporation that owns and/or operates a chemical manufacturing facility, located at 11911 Scenic Highway in Baton Rouge, East Baton Rouge Parish, Louisiana (the Facility).

II

On September 13, 2004, the Department issued a Consolidated Compliance Order and Notice of Potential Penalty, Enforcement No. AE-CN-04-0156, to Respondent, which was based upon the following findings of fact:

The facility currently operates under Title V Permit Number 0840-00006-V1, issued on June 4, 2003. Prior to the current permit, the facility operated under Title V Permit Number 0840-00006-V0, issued on July 31, 2001.

On or about April 6 and April 7, 2004, an inspection was performed at the facility to determine the degree of compliance with the Act and the Air Quality Regulations.

The following violations were noted during the course of the inspection:

- A. The Respondent's Methyl Styrene Unit is subject to 40 CFR Part 63 Subpart H - National Emission Standards for Organic Hazardous Air Pollutants (HON) for Equipment Leaks. According to the Respondent's Annual Compliance Certification for the year 2003, weekly visual inspections on two pumps in the Methyl Styrene Unit were not performed during the calendar weeks of January 9, March 13, April 10, May 15, and May 29, 2003. Each missed inspection is a violation of Part 70 Specific Condition Number 2 and State Only Specific Condition Number 2c of Title V Air Permit Number 0840-00006-V0, LAC 33:III.501.C.4, 40 CFR 63.163(b)(3), and Section 2057(A)(2) of the Act.
- B. The Respondent's Methyl Styrene Unit is subject to 40 CFR Part 63 Subpart H - National Emission Standards for Organic Hazardous Air Pollutants (HON) for Equipment Leaks. According to the Respondent's Annual Compliance Certification for the year 2003, weekly visual inspections on two pumps in the Methyl Styrene Unit were not performed during the calendar weeks of June 5, June 12, July 10, July 31, August 21, September 18, October 16, October 30, November 20, November 27, December 4, December 11, and December 25, 2003. Each missed inspection is a violation of Part 70 Specific Condition Number 2 and State Only Specific Condition Number 2c of Title V Air Permit Number 0840-00006-V1, LAC 33:III.501.C.4, 40 CFR 63.163(b)(3), and Section 2057(A)(2) of the Act.
- C. The Respondent's Specialty Chemical Plant (SCP) is subject to Louisiana MACT Determination for Non-Hazardous Organic NESHAP (Non-HON) for Equipment Leaks dated March 30, 1995. According to the Respondent's Annual Compliance Certification for the year 2003, weekly visual inspections on thirty pumps in the SCP

were not performed during the calendar weeks of January 13 and January 20, 2003. Each missed inspection is a violation of Paragraph D.1.b of the Louisiana MACT Determination for Non-HON Equipment Leaks, Part 70 Specific Condition Number 2 of Title V Air Permit Number 0840-00006-V0, LAC 33:III.501.C.4, and Section 2057(A)(2) of the Act.

- D. The Respondent's Specialty Chemical Plant (SCP) is subject to Louisiana MACT Determination for Non-Hazardous Organic NESHAP (Non-HON) for Equipment Leaks dated March 30, 1995. According to the Respondent's Annual Compliance Certification for the year 2003, weekly visual inspections on thirty pumps in the SCP were not performed during the calendar week of August 18, 2003. Each missed inspection is a violation of Paragraph D.1.b of the Louisiana MACT Determination for Non-HON Equipment Leaks, Part 70 Specific Condition Number 2 of Title V Air Permit Number 0840-00006-V1, LAC 33:III.501.C.4, and Section 2057(A)(2) of the Act.
- E. According to the Respondent's Annual Compliance Certification for the year 2003, visible emissions were observed from the Flare System (Emission Point GQ-001) for periods exceeding five minutes in two consecutive hours on September 24, September 25, September 26, September 27, October 5, October 7, and October 17, 2003. Each is a violation of Part 70 Specific Condition Number 4 of Title V Air Permit Number 0840-00006-V1, LAC 33:III.501.C.4, 40 CFR 60.18(c)(1), and Sections 2057(A)(1) and 2057(A)(2) of the Act

On or about June 14, 2004, a file review of the same facility was performed to determine the degree of compliance with the Act and the Air Quality Regulations.

The following violations were noted during the course of the file review:

- A. According to the Respondent's Annual Compliance Certification for the year 2003, the floating roof on a storage tank (Emission Point MV-811) containing a small amount of benzene was resting on the leg supports for the duration of the year 2003. The benzene is used in the production of methyl styrene. The facility is considering options for the use of the leftover benzene, as the current demand for methyl styrene is low. This is a violation of Part 70 Specific Condition

Number 1 of Title V Air Permit Number 0840-00006-V1, LAC 33:III.501.C.4, 40 CFR 63.119(b)(1), and Sections 2057(A)(1) and (A)(2) of the Act.

- B. According to the Respondent's Annual Compliance Certification for the year 2003, Emission Point MV-811, a storage tank, was filled on June 14, 2002, and the internal floating roof inspection was performed on July 3, 2003. The facility failed to visually inspect the internal floating roof and seal at least once every twelve months after the initial fill. This is a violation of Part 70 Specific Condition Number 1 of Title V Air Permit Number 0840-00006-V0, LAC 33:III.501.C.4, 40 CFR 63.120(a)(2)(i), and Section 2057(A)(2) of the Act.
- C. According to the Respondent's Annual Compliance Certification for the year 2003, the required quarterly monitoring of cooling water to detect leaks in heat exchangers was not performed during the third quarter. This is a violation of Part 70 Specific Condition Number 1 of Title V Air Permit Number 0840-00006-V1, LAC 33:III.501.C.4, 40 CFR 63.104(c)(1)(iii), and Section 2057(A)(2) of the Act.

III

In response to the Consolidated Compliance Order and Notice of Potential Penalty, Respondent made a timely request for a hearing.

IV

On or about March 8, 2005, a file review of the Respondent's facility was performed to determine the degree of compliance with the Act and the Air Quality Regulations.

The following additional alleged violations were noted during the course of the file review:

- A. The Respondent's Methyl Styrene Unit is subject to 40 CFR Part 63 Subpart H - National Emission Standards for Organic Hazardous Air Pollutants (HON) for Equipment Leaks. According to the Respondent's Annual Compliance Certification for the year 2004, weekly visual inspections on two pumps in the Methyl Styrene Unit were not performed during the calendar weeks December 23, 2004, and weekly visual inspections on thirty pumps were not performed

during the calendar week of September 25, 2004. Each missed inspection is a violation of Part 70 Specific Condition Number 2 and State Only Specific Condition Number 2c of Title V Air Permit Number 0840-00006-V1, LAC 33:III.501.C.4, 40 CFR 63.163(b)(3), and Section 2057(A)(2) of the Act.

- B. The Respondent's Specialty Chemical Plant (SCP) is subject to Louisiana MACT Determination for Non-Hazardous Organic NESHAP (Non-HON) for Equipment Leaks dated March 30, 1995. According to the Respondent's Annual Compliance Certification for the year 2004, weekly visual inspections on eight pumps in the SCP were not performed during the calendar weeks of November 29, December 20, and December 27, 2004. Each missed inspection is a violation of Paragraph D.1.b of the Louisiana MACT Determination for Non-HON Equipment Leaks, Part 70 Specific Condition Number 2 of Title V Air Permit Number 0840-00006-V1, LAC 33:III.501.C.4, and Section 2057(A)(2) of the Act.
- C. According to the Respondent's Annual Compliance Certification for the year 2004 and additional information provided by the Respondent, visible emissions were observed from the Flare System (Emission Point GQ-001) for periods exceeding five minutes in two consecutive hours on January 27, March 31, April 1, April 2, April 3, April 14, September 28, September 29, September 30, October 1, December 16, December 17, and December 18, 2004, and January 7, 2005. Each is a violation of Part 70 Specific Condition Number 4 of Title V Air Permit Number 0840-00006-V1, LAC 33:III.501.C.4, 40 CFR 60.18(c)(1), and Sections 2057(A)(1) and 2057(A)(2) of the Act.
- D. According to the Respondent's Annual Compliance Certification for the year 2004, the internal floating roof inspections for 2004 for Emission Points MV-808 and MV-811 were performed on July 20, 2004, more than twelve months after the 2003 inspections on July 3, 2003. The facility failed to visually inspect the internal floating roof and seal at least once every twelve months after the initial fill. This is a violation of Part 70 Specific Condition Number 1 of Title V Air Permit Number 0840-00006-V0, LAC 33:III.501.C.4, 40 CFR 63.120(a)(2)(i), and Section 2057(A)(2) of the Act.

The Department has not issued any enforcement action to the Respondent for the violations discovered during the March 8, 2005 file review of the Respondent's facility set forth hereinabove, but these are being settled as part of this settlement agreement.

V

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

VI

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 FIFTEEN THOUSAND FOUR HUNDRED SEVENTY-FIVE AND 61/100 DOLLARS (\$15,475.61) of which Four Hundred Seventy-five and 61/100 Dollars (\$475.61) 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).

VII

In addition to the agreed upon cash payment, Respondent further agrees to undertake an emission reduction project, wherein certain vent gases from the Respondent's Alkylation Unit will be rerouted to the Boiler Unit. The Respondent believes that routing the vents from the Alkylation Unit to the boiler will eliminate the visible emissions that have been previously observed at the flare. A detailed description of the emissions reduction project is attached hereto as "Appendix A."

VIII

Respondent further agrees that the Department may consider the inspection report(s), the Consolidated Compliance Order and 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.

IX

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.

X

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 LSA- R. S. 30:2025(E) of the Act.

XI

The Respondent has caused a public notice advertisement to be placed in the official journal of the parish governing authority in East Baton Rouge Parish, Louisiana. The advertisement, in form, wording, and size 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 notices.

XII

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 A).

XIII

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

XIV

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

DELTECH CORPORATION

BY: Stanley J. Dobkewitch
(Signature)

Stanley J. Dobkewitch
(Print)

TITLE: Vice President & GM

THUS DONE AND SIGNED in duplicate original before me this 19 day of October, 20 09, at Baker LA.

Keegan M. Willis
NOTARY PUBLIC (ID # 623109) *Keegan M. Willis*
Keegan M. Willis
(Print)

STATE OF LOUISIANA

Peggy M. Hatch, Secretary
Department of Environmental Quality

BY: Paul D. Miller
Paul D. Miller, P.E., Assistant Secretary
Office of Environmental Compliance

THUS DONE AND SIGNED in duplicate original before me this 23^d day of March, 20 10, at Baton Rouge, Louisiana.

Christopher A. Ratcliff
NOTARY PUBLIC (ID 10149)
Christopher A. Ratcliff
(Print)

Approved: Peggy M. Hatch
Peggy M. Hatch, Assistant Secretary

Appendix A

Emissions Reduction Project

Deltech Corporation
ID No. 0840-00006

Summary

Deltech will complete a project to route certain vent gases to a boiler to recover their fuel value, rather than flaring such gases. In addition to recovering fuel value (energy savings), the project will result in a reduction in VOC (including an HRVOC component) emissions of approximately 1.7 tons per year of VOC emissions.

Present Condition

Deltech Corporation operates an Alkylation Unit to convert ethylene and toluene into ethyltoluene. A vent gas stream consisting of unreacted ethylene and non-condensable byproducts is vented from the unit during product recovery. This vent gas stream is combusted in a continuous flare fueled with natural gas. Deltech also operates Dehydrogenation Units to convert ethyltoluene to methylstyrene. A vent gas stream consisting of byproduct hydrogen is vented from these units during processing. This vent gas stream is also combusted in the flare. A smaller Dehydrogenation Unit vent and various process vents are also combusted in the flare. All vent streams may be sent to the flare, or during certain plant operations, the Alkylation vent gas and a portion of the Dehydrogenation vent gas are combusted as supplemental fuel in a furnace used to preheat the dehydrogenation steam. The Alkylation Unit and Dehydrogenation Units operate on campaigns to produce different plant products. When combusting these vents in the flare, Deltech does not recover the fuel value of the vent gas streams.

The flare combustion efficiency is 99% or greater when proper flare operating conditions and fuel sources are maintained.

Description of Project

Deltech Corporation operates steam generating boilers that supply process steam to plant operations. These boilers are fueled with a combination of natural gas and gas collected from the closed East Baton Rouge Parish Devils Swamp landfill, which is located adjacent to the Deltech plant site. At least one boiler is operating to produce steam at all times using the mixed gas fuel. These boilers are operated with burner controls to maintain the fuel/air ratio at a point where combustible components in the effluent gas are typically less than 0.25%.

Boiler effluent gases are continuously monitored for oxygen content and combustible content to verify that fuel is completely combusted.

USEPA's Publication AP42, Vol. 1, Ch. 1.4, states that in properly tuned boilers, nearly all of the fuel carbon (99.9%) in natural gas is converted to CO₂ during the combustion process. The vent streams proposed to be routed to the fuel gas mix drum are also expected to be combusted at a 99.9% efficiency. This conversion is relatively independent of boiler or combustor type.

Deltech will redirect the vent gas streams from the Alkylation unit and Ethyltoluene Dehydrogenation units to the existing boiler fuel gas mix drum to be mixed with natural gas and landfill gas for boiler fuel. The vent gas combustion efficiency of the boilers (99.9%) is greater than the vent gas combustion efficiency in the flare. Further, use of this vent gas as supplemental fuel will result in energy savings for the plant.

The vent gas streams will be collected from generation points and directed to the boiler gas mix drum through a new transport pipe and gas flow metered prior to drum entry. Use of vent gas as a boiler fuel component will increase plant energy efficiency as vent gas will now be used to generate steam. The cost of the system to collect and transport the vent gas to the boiler is estimated at \$45,000.00.

Construction of this system will commence within 30 days after receipt of an authorization to construct by the Department. It is anticipated that construction will be completed and the new system operational no later than 180 days after commencement of construction.

The project will result in the following emission changes shown on the attached table:

EIQ #	VOC's, tons/year		Change
	Before	After	
Boiler Cap	6.15	6.9	+ 0.75
GQ 001 (Flare)	3.64	2.41	- 1.23
HF 001	1.009	0.579	- 0.43
HF 004	1.009	0.579	- 0.43
HF 005	1.4	0.97	- 0.43