

**STATE OF LOUISIANA**

**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**IN THE MATTER OF:**

**LYONDELL CHEMICAL COMPANY**

**AI # 27051**

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

\* **Settlement Tracking No.**  
\* **SA-AE-06-0045**  
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\* **Enforcement Tracking No.**  
\* **AE-PP-05-0140**  
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**SETTLEMENT**

The following Settlement is hereby agreed to between Lyondell Chemical Company ("Respondent") 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.**

Respondent is a corporation which operates a chemical plant facility located at 900 Interstate 10 West in Westlake, Calcasieu Parish, Louisiana ("the Facility").

**II.**

On January 27, 2006, the Department issued a Notice of Potential Penalty (NOPP), Enforcement Tracking No. AE-PP-05-0140, to Respondent, which was based upon the following findings of fact:

On or about September 21, 2004, an inspection of the Lake Charles Plant, owned and/or operated by Lyondell Chemical Company (Respondent), was performed to determine the degree of compliance with the Louisiana Environmental Quality Act (the Act) and the Air Quality

Regulations. The facility is currently authorized to operate under Title V Permit No. 2470-V0 issued on January 12, 2006, Title V Permit No. 2117-V0 issued on October, 17, 2005, Title V Permit No. 2311-V0 issued on October 17, 2005, Air Permit No. 2114 issued on February 14, 1992, Air Permit No. 2562 issued on August 24, 1998, and Air Permit No. PSD-LA-508 issued on December 27, 1982.

Respondent's facility was shut down on or about September 23, 2005, following the decision to suspend production at portions of the facility indefinitely. On October 19, 2005, the Respondent announced that it had decided to permanently cease TDI production at the facility.

The NOPP alleged that the following violations were noted during the course of the inspection:

- A. At the time of the inspection, the inspector noted that the Respondent exceeded production limits applied for in the application for approval of emissions dated June 30, 1995, and approved in Air Permit No. 2117 (M-2), issued July 14, 1995. The production data for the time period 1996 through 2004 was submitted at the request of the inspector in a letter dated October 4, 2004. The Permit exceedances are as follows:

Year	TDI Prod (MLB)	Phosgene Prod (MLB)	Muriatic Acid (tons)
1996	253,107	225,807	59,039
1997	211,915	270,675	42,729
1998	258,797	348,926	62,729
1999	242,929	322,419	56,499
2000	285,861	381,039	78,266
2001	<b>Compliant</b>	<b>compliant</b>	48,399
2002	273,105	343,461	69,343
2003	236,053	295,129	52,147
2004	<b>Compliant</b>	<b>compliant</b>	39,021
<b>Permitted Limit</b>	<b>191,872</b>	<b>248,348</b>	<b>32,900</b>

Each of Respondent's failures to operate the facility in accordance with proposed production levels is a violation of General Condition III of Air Permit No. 2117 (M-2), LAC 33:III.501.C.4, and Sections 2057(A)(1) and 2057(A)(2) of the Act.

- B. Respondent reported an incident on February 29, 2004, that resulted in a release of NO<sub>x</sub> to the atmosphere. The shutdown began at 4:49 PM and lasted till 5:24 PM. Also, as part of the shutdown activities, process gases were purged from the system from 7:04 PM to 7:53 PM. The Respondent attributed this release to a delay in the shipment of butane, which is the fuel for the Fumeabator. In reviewing the incident the inspector noted that there was a 10-hour delay from the time the operator switched to the back-up butane tank to the time the supplier was faxed the order. In an attempt to conserve fuel, operators began cutting back on nitric acid production, causing a swing in the ammonia-to-air ratio and ultimate unit trip. This led to the un-permitted release of 1,443 lbs of NO<sub>x</sub>. This is a violation of LAC 33:III.905 which states, "When facilities have been installed on a property they shall be used and diligently maintained in proper working order whenever any emissions are being made which can be controlled by facilities, even though the ambient air quality standards in affected areas are not exceeded." Control equipment as defined by LAC 33:III.111 is "any device or contrivance, operating procedure or abatement scheme used to prevent or reduce air pollution." This is also a violation of Sections 2057(A)(1) and 2057(A)(2) of the Act.
- C. During the inspection of the Ultra-Pure Hydrazine Plant, the inspector noted that operators at the Respondent's facility were not adhering to the written Standard Operating Instructions (SOI) of the facility. Specifically, the operators are not changing the scrubber water when the concentration of hydrazine is greater than 500 ppm and the proper logs are not being kept to document the fate of the scrubber water that has a concentration above 1000 ppm. The facility's SOI is an operating procedure or abatement scheme for controlling the concentration of hydrazine in the scrubber water. The Respondent's failure to follow procedures in the SOI is a violation of LAC 33:III.905 which states, "When facilities have been installed on a property they shall be used and diligently maintained in proper working order whenever any emissions are being made which can be controlled by facilities, even though the ambient air quality standards in affected areas are not exceeded." Control equipment as defined by LAC 33:III.111 is "any device or contrivance, operating procedure or abatement scheme used to prevent or reduce air pollution." This is also a violation of Sections 2057(A)(1) and 2057(A)(2) of the Act.

- D. Respondent's facility is subject to 40 CFR Part 63 Subpart H (HON). It was noted during the inspection that the facility was monitoring all valves, pumps, connectors, and agitators as required. According to the Respondent's Equipment Leak Detection & Repair HON Periodic report for the time period January 1, 2004, through June 30, 2004, there was no visual detection of leaks observed at the facility. A subsequent review of the facility's 2004 visual leak inspection logs showed that there were five (5) pumps found to be leaking during this time period. The Respondent's failure to report the number of pumps for which leaks were detected and the percent leakers is a violation of 40 CFR 63.182(d)(2)(iii) which language has been adopted as a Louisiana regulation in LAC 33:III.5122 and Section 2057(A)(2) of the Act.
  
- E. Respondent's facility is subject to 40 CFR 63 Subpart DD-National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations. Upon review of the Respondent's records the inspector noted that the information submitted to the Respondent for 1999 was actually sampled in 2000 and there was no data submitted to the Respondent for the 2001 calendar year. According to 40 CFR 63 Subpart DD, after the initial determination of the average Volatile Organic Hazardous Air Pollutant (VOHAP) concentration, the owner/operator must review and update the determination at least once a year. The Respondent did not have valid data to review for 1999 and 2001 to update the average VOHAP concentration determination. Each failure to update VOHAP concentrations is a violation of 40 CFR 63.683(b)(iii) which language has been adopted as a Louisiana regulation in LAC 33:III.5122 and Section 2057(A)(2) of the Act.
  
- F. According to the inspection report and the meeting held between the Department and Respondent on June 20, 2005, the following twenty-two (22) sources were not permitted to operate under an existing permit for the facility:

Source	Source Description	Proposed In:
201-92	o-TDA Storage Tank No. 1	Organic Chemical Manufacture/TDI Plant
202-92	o-TDA Storage Tank No. 2	Organic Chemical Manufacture/TDI Plant
228-96	m-TDA Storage Tank No.1	Organic Chemical Manufacture/TDI Plant
229-96	m-TDA Storage Tank No.2	Organic Chemical Manufacture/TDI Plant
230-96	m-TDA Tank Truck Loading	Organic Chemical Manufacture/TDI Plant
264-99	Product Rework Tank	Organic Chemical Manufacture/TDI Plant

Source	Source Description	Proposed In:
225-96	DNT Storage Tank No. 1	Organic Chemical Manufacture/TDI Plant
226-96	DNT Storage Tank No. 2	Organic Chemical Manufacture/TDI Plant
242-98	TDI Process Cooling Tower	Organic Chemical Manufacture/TDI Plant
249-99	Off Spec Tank	Organic Chemical Manufacture/TDI Plant
260-99	Gasoline Underground Storage Tank	Organic Chemical Manufacture/TDI Plant
298-04	Sulfuric Acid Tank	Organic Chemical Manufacture/TDI Plant
272-00	HyCO I Manufacturing Fugitive Emissions	Organic Chemical Manufacture/TDI Plant
274-00	West Spent Caustic Wash Tank	Organic Chemical Manufacture/TDI Plant
275-00	East Spent Caustic Wash Tank	Organic Chemical Manufacture/TDI Plant
268-99	Wastewater Inventory Tank	Organic Chemical Manufacture/TDI Plant
261-99	Non-Stationary Diesel Drivers	Organic Chemical Manufacture/TDI Plant
168-90*	DNT Tank Truck/Railcar Unloading	Organic Chemical Manufacture/TDI Plant
250-99	Wastewater /Rainwater Surge Tank	Organic Chemical Manufacture/TDI Plant
99-78**	HyCO I Flare	Organic Chemical Manufacture/TDI Plant
287-04	Incinerator Air Compressor East	TDI Process Incinerator
256-99	TDI Process Incinerator cooling tower	TDI Process Incinerator

\* Source operated without a permit from 1995 through 2004, when emissions were approved as part of a Closed Dome Project approved on July 7, 2004.

\*\* The venting of several streams was inadvertently omitted from previous permitting activities.

The construction, modification, or operation of a facility which may ultimately result in an initiation or increase in air contaminants prior to the approval by the permitting authority is a violation of LAC 33:III.501.C.2, and Sections 2057(A)(1) and 2057(A)(2) of the Act. Title V Permit Nos. 2117-V0 and 3211-V0 were issued on October 17, 2005, covering the above listed un-permitted pieces of equipment.

### III.

The Department received a response to the NOPP dated May 11, 2006. In the response, Respondent stated that an additional twelve (12) pieces of un-permitted equipment were discovered at the facility. Also, correspondence with a facility representative has identified nine (9) additional pieces of un-permitted equipment. The Respondent and the Department have agreed to address herein the following twenty-one (21) pieces of equipment in addition to the twenty-two (22) pieces identified in the NOPP:

Source	Source Description	Proposed In:
227-96	TDI Transloading Operations Carbon Bed Vent	Permit 2117-V0
259-99	Diesel Aboveground Storage Tank	Permit 2117-V0
273-00	Degreasing Operations	Permit 2117-V0
276-00	Stationary Diesel Driver	Permit 2117-V0
277-00	Stationary Diesel Driver	Permit 2117-V0
278-00	Stationary Diesel Driver	Permit 2117-V0
279-00	Stationary Diesel Driver	Permit 2117-V0
280-00	Stationary Diesel Driver	Permit 2117-V0
281-00	Stationary Diesel Driver	Permit 2117-V0
283-00	Stationary Diesel Driver	Permit 2117-V0
288-04	Stationary Diesel Driver	Permit 2117-V0
290-04	Stationary Diesel Driver	Permit 2117-V0
291-04	Stationary Diesel Driver	Permit 2117-V0
292-04*	Wastewater Treatment System	Organic Chemical Manufacture/TDI Plant
293-04	Stationary Diesel Driver	Permit 2117-V0
296-04	Diesel Dispensing Station	Permit 2117-V0
297-04	Gasoline Dispensing Station	Permit 2117-V0
300-05	TDA Knock-out Pot Vent	Permit 2117-V0
241-98	Nitric Acid Cooling Tower	Permit 2470-V0
26-71S	Nitric Acid Plant Vent Start-up/Shutdown Events	Permit 2470-V0
299-05	Nitric Acid Wastewater Collection System	Permit 2470-V0

\* This included the Wastewater Treatment Inventory Tank 268-99 as well as the Wastewater Rainwater Surge Tank, formerly included as line item 250-99.

IV.

Respondent denies it committed any violations or that it is liable for any fines, forfeitures and/or penalties. Respondent specifically denies the accuracy of the facts and conclusions of law discussed in Section II, above.

V.

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 FIFTY-THREE THOUSAND, FOUR HUNDRED FORTY-TWO AND NO/100 DOLLARS (\$53,442.00) of which Five Thousand Seven Hundred Seventy-two and 33/100 Dollars (\$5,772.33) represents DEQ enforcement costs, in settlement of the claims set forth in this agreement. The total amount of money expended by Respondent on cash payments to DEQ as described above, shall be considered a civil penalty for tax purposes, as required by La. R.S. 30:2050.7(E)(1).

VI.

Respondent further agrees that the Department may consider the inspection report(s), 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.

VII.

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.

VIII.

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.

IX.

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, 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 a proof-of-publication affidavit 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 A).

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/her respective party, and to legally bind such

party to its terms and conditions.

**LYONDELL CHEMICAL COMPANY**

BY: Randal Tatum  
(Signature)

RANDAL TATUM  
(Printed)

TITLE: PLANT MANAGER

THUS DONE AND SIGNED in duplicate original before me this 1<sup>st</sup> day of August, 20 07, at BEAUMONT, TEXAS.

Sharon Evans  
NOTARY PUBLIC (ID # 01005469-2)

SHARON EVANS  
(Printed)

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

Mike D. McDaniel, Ph.D., Secretary

BY: Harold Leggett  
Harold Leggett, Ph.D., Assistant Secretary  
Office of Environmental Compliance

THUS DONE AND SIGNED in duplicate original before me this 23<sup>rd</sup> day of October, 20 07, at Baton Rouge, Louisiana.

M. J.  
NOTARY PUBLIC (ID # 40839)

Ter H. Boyle, II  
(Printed)

Approved Harold Leggett  
Harold Leggett, Ph.D., Assistant Secretary

