

STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:

THE DOW CHEMICAL COMPANY

AI # 1409

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

* **Settlement Tracking No.**
* **SA-WE-11-0005**
*
* **Enforcement Tracking No.**
* **WE-C-03-0483**
* **WE-CN-07-0596**
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SETTLEMENT

The following Settlement is hereby agreed to between The Dow 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 that owns and/or operates a chemical manufacturing facility located in Plaquemine, Iberville Parish, Louisiana (“the Facility”).

II

On July 24, 2003, the Department issued to Respondent a Compliance Order, Enforcement No. WE-C-03-0483, which was based upon the following findings of fact:

The Respondent owns and/or operates a chemical manufacturing facility located off Louisiana Highway 1 near Plaquemine in Iberville Parish, Louisiana. The Respondent is authorized to discharge certain quantities and/or qualities of wastewater into the Mississippi River and Bayou Bourbeaux under the terms and conditions of National Pollutant Discharge Elimination System (NPDES) permit LA0003301 issued October 12, 2001, and effective March

1, 2992, In accordance with the assumption of the NPDES program by the state, NPDES permit LA0003301 is considered a Louisiana Pollutant Discharge Elimination System (LPDES) permit.

Included within the Respondent's chemical manufacturing facility is the Cellulose Plant which manufactures methyl cellulose products. The Cellulose Plant is comprised of the Train 1, Train 2, and Cellulose Plant common facilities. The Respondent's Cellulose Plant discharges wastewater through several internal outfalls, including internal Outfall 211. The Respondent is authorized to discharge once through cooling water from the Train 1, the Train 2, and the Cellulose Plant common facilities through internal Outfall 211.

The Respondent met with the Department on or about July 7, 2003, to discuss recent methyl chloride exceedances at internal Outfall 211. To address the methyl chloride exceedances, the Respondent proposed to construct and operate a closed loop cooling water system with the Cellulose Plant. According to the Respondent, the construction and operation of the closed loop cooling water system will eliminate approximately ninety percent (90%) of the discharge at internal Outfall 211.

A file review conducted by the Department on or about July 7, 2003, revealed the following effluent violations for the monitoring periods from January 2003 through June 2003, as reported to the Department by the Respondent.

| Date | Outfall | Parameter | Permit Limit | Reported Value |
|-------------|----------------|--|----------------------------|-----------------------|
| Feb 2003 | 211 | Methyl Chloride | 110 pg/L (daily max) | 840 pg/L |
| Feb 2003 | 2001 | BOD, 5-Day | 13,787 lbs/day (daily max) | 22,044 lbs/day |
| Mar 2003 | 1051 | BOD, 5-Day | 78 lbs/day (daily max) | 87 lbs/day |
| Mar 2003 | 2001 | BOD, 5-Day | 13,787 lbs/day (daily max) | 18,029 lbs/day |
| Apr 2003 | 001 | pH range excursions 6.0-9.0 s.u. (occurrences per month greater than 60 minutes) | 0 | 1 |

| Date | Outfall | Parameter | Permit Limit | Reported Value |
|-------------|----------------|----------------------|----------------------|-----------------------|
| Apr 2003 | 3911 | Total Organic Carbon | 50 mg/L (daily max) | 1,000 mg/L |
| Apr 2003 | 211 | Methyl Chloride | 110 pg/L (daily max) | 231 pg/L |
| Jun 2003 | 211 | Methyl Chloride | 110 pg/L (daily max) | 118 pg/L |

Each exceedance is a violation of LPDES permit LA0003301 (Part I and Part III, Section A.2), La. R.S. 30:2076 (A) (1) (b), La. R.S. 30:2076 (A) (3), LAC 33:IX.501.A, LAC 33:IX.501.D, and LAC 33:IX.2355.A.

A file review conducted by the Department on or about July 7, 2003, revealed that the respondent failed to sample for the following parameters:

| Date | Outfall | Parameter | Permit Limit | Reported Value |
|-------------|----------------|------------------|---------------------|--------------------------|
| Jan 2003 | 3911A | Oil and Grease | 15 mg/L (daily max) | No sample value reported |
| Feb 2003 | 1841A | BOD, 5-Day | 92 mg/L (daily max) | No sample value reported |
| Feb 2003 | 1841A | BOD, 5-Day | 34 mg/L (daily avg) | No sample value reported |

Each failure to sample the effluent for the parameters listed is a violation of LPDES permit LA0003301 (part I and Part III, Section A.2), La. R.S. 30:2076 (A) (3), LAC 33:IX.501.A, and LAC 33:IX.2355.A.

On February 27, 2008, the Department issued to Respondent a Consolidated Compliance Order & Notice of Potential Penalty, Enforcement No. WE-CN-07-0596, which was based upon the following findings of fact:

The Respondent owns and/or operates a chemical manufacturing facility located on La. Hwy. 1 near Plaquemine, Iberville Parish, Louisiana. The Respondent was authorized to discharge certain qualities and quantities of wastewater into the Mississippi River and Bayou Bourbeaux, waters of the state, under the terms and conditions of Louisiana Water Discharge

Permit System (LWDPS) permit WP 1561, which was effective on November 23, 1987 and was administratively continued until March 1, 2002. As a result of a pending petition for a Fundamentally Different Factor (FDF) variance, transfer of National Pollutant Elimination System (NPDES) permit LA000 3301 issued by the United States Environmental Protection Agency (USEPA) on June 17, 1988, to the Louisiana Pollutant Discharge Elimination System (LDPES) program was deferred until resolution of that petition by the USEPA. Subsequently, the Respondent was issued NPDES permit LA0003301 by the USEPA effective on March 1, 2002, with an expiration date of February 28, 2007. Upon issuance, NPDES permit LA0003301 became LPDES permit LA0003301 with the same expiration date. The Respondent did submit a renewal application in a timely manner on or about May 23, 2006; therefore, LPDES permit LA0003301 has been administratively continued.

The Respondent was issued Compliance Order & Notice of Potential Penalty WE-CN-00-0085 on or about October 17, 2000; Amended Compliance Order & Notice of Potential Penalty WE-CN-00-0085A on or about December 17, 2001; and Compliance Order & Notice of Potential Penalty WE-CN-02-0258 on or about April 19, 2002, for violations of the Act and the Water Quality regulations. These actions were settled in an agreement between the Respondent and the Department effective July 23, 2003.

The Respondent was issued Compliance Order WE-C-03-0483 on or about July 24, 2003, for violations of the Act and the Water Quality regulations. The Respondent did submit a written response to this action in a timely manner on or about August 28, 2003. The Respondent did not request an administrative hearing; therefore, Compliance Order WE-C-03-0483 is a final action of the Department.

An inspection conducted by the Department on or about June 22, 2004 and a file review conducted by the Department on or about January 28, 2008, revealed that the Respondent failed to sample outfall 2241 for benzene, toluene, and ethylbenzene during an April 12, 2004, sampling event; failed to sample outfall 441A for BOD in July 2007; and failed to sample outfall 1531A for BOD in August 2007. Each failure to sample the above-referenced parameters is in violation of Compliance Order WE-C-03-0483, LPDES permit LA0003301 (Part I and Part III, Section A.2), La. R.S. 30:2076 (A)(3), LAC 33:IX.501.A, and LAC 33:IX.2701.A.

Inspections conducted by the Department on or about June 22, 2004, and June 20, 2005, revealed that records from the continuous flow measurement devices were not available for the following dates and outfalls:

| Outfall | Date(s) |
|----------------|----------------|
| 521 | 04/03/04 |
| 521 | 09/03/04 |
| 2001 | 11/02/04 |
| 001 and 531 | 03/21/05 |
| 521 | 04/25/05 |

The failure to maintain records of continuous flow measurement devices is in violation of Compliance Order WE-C-03-0483, LPDES permit LA0003301 (Part III, Sections A.2 and C.2), La. R.S. 30:2076 (A)(1)(b), La. R.S. 30:2076 (A)(3), LAC 33:IX.501.A, LAC 33:IX.2701.A, and LAC 33:IX.2701.J.2.

Inspections conducted by the Department on or about June 22, 2004, and June 20, 2005, and a subsequent file review conducted by the Department on January 28, 2008, revealed the following effluent violations, as reported by the Respondent on Discharge Monitoring Reports (DMRs):

| Date | Outfall | Parameter | Sample Value | Permit Limit |
|-----------------------------------|----------------|------------------------------------|---------------------|---------------------|
| 6/30/2003 | 251A | TOC Daily Maximum | 70 mg/L | 50 mg/L |
| | 751A | TSS Daily Average | 99 mg/L | 46 mg/L |
| 11/30/2003 | 441A | 1,2-Dichloropropane Daily Average | 265 ug/L | 196 ug/L |
| 1/31/2004 | 511A | 1,2-Dichloroethane Daily Maximum | 668 ug/L | 574 ug/L |
| | 531A | Carbon Tetrachloride Daily Average | 4.47 lbs/day | 3.86 lbs/day |
| | | Carbon Tetrachloride Daily Maximum | 26.31 lbs/day | 10.32 lbs/day |
| | | 1,1-Dichloroethane Daily Average | 2.1 lbs/day | 0.6 lbs/day |
| | | 1,1-Dichloroethane Daily Maximum | 12.7 lbs/day | 1.6 lbs/day |
| | | Tetrachloroethylene Daily Average | 2.79 lbs/day | 1.41 lbs/day |
| Tetrachloroethylene Daily Maximum | 15 lbs/day | 4.45 lbs/day | | |
| 2/29/2004 | 103Y | Chloroform Daily Average | 0.7 lbs/day | 0.06 lbs/day |
| | | Chloroform Daily Maximum | 0.66 lbs/day | 0.18 lbs/day |
| 6/30/2004 | 1531A | Methyl Chloride Daily Maximum | 3.0 lbs/day | 2.7 lbs/day |
| 7/31/2004 | 1531A | Methyl Chloride Daily Maximum | 2.9 lbs/day | 2.7 lbs/day |
| 8/31/2004 | 1521A | TSS Daily Average | 54 mg/L | 49 mg/L |
| 9/30/2004 | 1531A | Methyl Chloride Daily Average | 1.76 lbs/day | 1.11 lbs/day |
| | | Methyl Chloride Daily Maximum | 7.3 lbs/day | 2.7 lbs/day |
| 1/31/2005 | 2001A | TSS Daily Maximum | 26640 lbs/day | 25140 lbs/day |
| 2/28/2005 | 1031Y | Chloroform Daily Average | 0.3 lbs/day | 0.06 lbs/day |
| | | Chloroform Daily Maximum | 0.3 lbs/day | 0.18 lbs/day |
| | 2001A | BOD Daily Maximum | 14409 lbs/day | 13787 lbs/day |
| | | 1,2-Dichloropropane Daily Maximum | 42.04 lbs/day | 37.45 lbs/day |
| 5/31/2005 | 251A | TOC Daily Maximum | 70 mg/L | 50 mg/L |
| 6/30/2005 | 231A | Methyl Chloride Daily Average | 1700 ug/L | 110 ug/L |
| | | Methyl Chloride Daily Maximum | 8330 ug/L | 295 ug/L |
| | 531A | TSS Daily Average | 4339 lbs/day | 4016 lbs/day |
| 7/31/2005 | 2001A | BOD Daily Maximum | 13954 lbs/day | 13787 lbs/day |
| 9/30/2005 | 511A | 1,2-Dichloroethane Daily Maximum | 1460 ug/L | 574 ug/L |
| 12/31/2005 | 531A | Carbon Tetrachloride Daily Average | 4.91 lbs/day | 3.86 lbs/day |
| | | Carbon Tetrachloride Daily Maximum | 23.49 lbs/day | 10.32 lbs/day |
| 1/31/2006 | 251A | TOC Daily Maximum | 60 mg/L | 50 mg/L |
| 2/28/2006 | 441A | TSS Daily Average | 52 mg/L | 46 mg/L |
| | 1031Y | Chloroform Daily Average | 0.8 lbs/day | 0.06 lbs/day |
| | | Chloroform Daily Maximum | 0.85 lbs/day | 0.18 lbs/day |
| | 1531A | TSS Daily Average | 38 lbs/day | 33 lbs/day |
| 4/30/2006 | 251A | TOC Daily Maximum | 100 mg/L | 50 mg/L |
| 6/30/2006 | 251A | TOC Daily Maximum | 50.9 mg/L | 50 mg/L |
| | 531A | 1,1-Dichloroethane Daily Average | 1 lbs/day | 0.6 lbs/day |
| | | 1,1-Dichloroethane Daily Maximum | 5.2 lbs/day | 1.6 lbs/day |
| 7/31/2006 | 2001A | 1,2-Dichloropropane Daily Maximum | 40.97 lbs/day | 37.45 lbs/day |
| | 441A | 1,2-Dichloropropane Daily Average | 211 ug/L | 196 ug/L |
| | | 1,2-Dichloropropane Daily Maximum | 899 ug/L | 794 ug/L |
| 2/28/2007 | 1031Y | Chloroform Daily Average | 0.64 lbs/day | 0.06 lbs/day |
| | | Chloroform Daily Maximum | 0.64 lbs/day | 0.18 lbs/day |

| | | | | |
|-----------|-------|-------------------------------|---------------|--------------|
| 6/30/2007 | 1531A | Methyl Chloride Daily Average | 2.40 lbs/day | 1.11 lbs/day |
| | | Methyl Chloride Daily Maximum | 11.9 lbs/day | 2.7 lbs/day |
| | 531A | TSS Daily Average | 7659 lb/day | 4016 lbs/day |
| | | TSS Daily Maximum | 10901 lbs/day | 6836 lbs/day |
| 7/31/2007 | 531A | TSS Daily Average | 10046 lb/day | 4016 lbs/day |
| | | TSS Daily Maximum | 10046 lbs/day | 6836 lbs/day |
| 8/31/07 | 531A | TSS Daily Average | 12983 lb/day | 4016 lbs/day |
| | | TSS Daily Maximum | 12983 lbs/day | 6836 lbs/day |

Each effluent excursion is in violation of Compliance Order WE-C-03-0483, LPDES permit LA0003301 (Part I, and Part III, Section A.2), La. R.S. 30:2076 (A)(1)(b), La. R.S. 30:2076 (A)(3), LAC 33:IX.501.A, LAC 33:IX.501.D, and LAC 33:IX.2701.A.

A file review conducted by the Department on or about January 28, 2008, revealed an unauthorized discharge into waters of the state. Specifically, on May 31, 2006, approximately 35 gallons of Resin Oil was allowed to discharge into the Mississippi River. Documents submitted by the Respondent at the time of the discharge revealed that the Respondent was able to recover 30 gallons of the Resin Oil that was discharged into the River. This unauthorized discharge into waters of the state is in violation of Compliance Order WE-C-03-0483, LPDES permit LA0003301 (Part III, Section A.2), La. R.S. 30:2076 (A)(1)(b), La. R.S. 30:2076 (A)(3), LAC 33:IX.501.A, LAC 33:IX.501.D, and LAC 33:IX.2701.A.

A file review conducted by the Department conducted on or about January 28, 2008, revealed that the Respondent timely reported the following spills for the period January 2005-January 2008:

| Date | Material | Quantity |
|----------|---------------------|-----------|
| 03/25/05 | Ethylene glycol | 630 gals. |
| 09/26/05 | Ethylene dichloride | 112 lbs. |
| 06/07/06 | Diesel | 42 gals. |
| 09/12/06 | Brine | >500 lbs |
| 08/23/07 | Hydrochloric acid | 399 lbs. |

Although these spills were contained and remediated on-site with no off-site impacts, the reoccurring nature of these events indicates a lack of proper operation and maintenance. The lack of proper operation and maintenance is in violation of Compliance Order WE-C-03-0483, LPDES permit LA0005941 (Part III, Sections A.2 and B.3), La. R.S. 30:2076 (A)(1)(b), La. R.S. 30:2076 (A)(3), LAC 33:IX.501.A, LAC 33:IX.501.D, and LAC 33:IX.2701.A and E.

III

In response to the Consolidated Compliance Order & Notice of Potential Penalty, Enforcement No. WE-CN-07-0596, Respondent made a timely request for a hearing.

IV

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

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 THIRTY-TWO THOUSAND FIVE HUNDRED AND NO/100 DOLLARS (\$32,500.00), of which Five Hundred Ninety-Five and No/100 Dollars (\$595.00) 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).

VI

Respondent further agrees that the Department may consider the inspection report(s), the Compliance Order, the Consolidated Compliance Order & 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 La. R. S. 30:2025(E) of the Act.

IX

The Respondent has caused a public notice advertisement to be placed in the official journal of the parish governing authority in Iberville 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 notice.

X

Payment is to be made within ten (10) 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 or her respective party, and to legally bind such party to its terms and conditions.

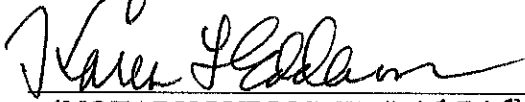
THE DOW CHEMICAL COMPANY

BY: 
(Signature)

W. Scott White
(Printed)


TITLE: Env S Responsible Care Director

THIS DONE AND SIGNED in duplicate original before me this 21th day of June, 20 13, at Plaquemine, LA.

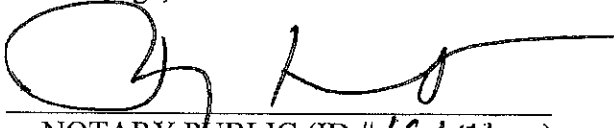

NOTARY PUBLIC (ID # 17548)
Karen L. Eddleman Bear Roll #
My commission expires @ death

(stamped or printed)


LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Peggy M. Hatch Secretary

BY: 
Cheryl Sonnier Nolan, Assistant Secretary
Office of Environmental Compliance

THIS DONE AND SIGNED in duplicate original before me this 26th day of Aug, 20 14, at Baton Rouge, Louisiana.


NOTARY PUBLIC (ID # 19181)

Perry Theriot
(stamped or printed)

Approved: 
Cheryl Sonnier Nolan, Assistant Secretary