STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:	*	**Settlement Tracking No.**
	*	**SA-AE-08-0020**
OCCIDENTAL CHEMICAL CORPORATION	*	
	*	**Enforcement Tracking No.**
AI # 3400	*	**AE-CN-05-0237**
	*	**AE-CN-05-0237A**
PROCEEDINGS UNDER THE LOUISIANA	*	
ENVIRONMENTAL QUALITY ACT	*	
LA. R.S. 30:2001, ET SEQ.	*	

SETTLEMENT

The following Settlement is hereby agreed to between Occidental Chemical Corporation ("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, Occidental Chemical Corporation, is a corporation who owns and/or operates an industrial organic and inorganic chemical manufacturing facility known as the Geismar Facility located at or near 8318 Ashland Road in Geismar, Ascension Parish, Louisiana. ("the Facility"). Basic Chemicals Company, to whom the enforcement actions were issued, had been a wholly-owned subsidiary of Occidental Chemical Corporation. Basic Chemicals Company merged with Occidental Chemical Corporation, effective December 31, 2006. Thus, this Settlement is agreed to between Occidental Chemical Corporation and the Louisiana Department of Environmental Quality.

II

On March 13, 2006, the Department issued to Respondent a Consolidated Compliance Order and Notice of Potential Penalty, Enforcement No. AE-CN-05-0237, which was based upon the

following findings of fact:

The Respondent owns and/or operates an industrial organic and inorganic chemical manufacturing facility known as the Geismar Facility located at or near 8318 Ashland Road in Geismar, Ascension Parish, Louisiana. The Geismar Facility had operated under Air Permit No. 0180-00011-V0 issued on October 5, 1998; Air Permit No. 0180-00011-V1 issued on June 26, 2000; Air Permit No. 0180-00011-V2 issued on February 15, 2001; and currently operates under Part 70 Operating Permit No. 0180-00011-V3 issued on April 19, 2001, and amended on May 30, 2002; and Part 70 Operating Permit No. 2821-V0 issued on December 12, 2002, and administratively amended on June 9, 2003, and February 13, 2004. The Geismar Plant was previously owned and/or operated by Vulcan Materials Company. A change of ownership from Vulcan Materials Company to Basic Chemicals Company, LLC of Delaware was effective June 7, 2005.

Vulcan Materials Company had met with the Department on or about October 29, 2002. During that meeting, Vulcan Materials Company informed the Department that in connection with preparing the renewal permit application for Air Permit No. 0180-00011-V3, certain air emission sources were identified that were either not included in the permit application or the emissions for certain permitted emission sources were not accurately quantified in the permit application due to inaccurate quantification of emissions and therefore, were not accurately included in the permit. Vulcan Materials Company submitted a letter to the Department dated April 14, 2003, documenting the noncompliance issues that had been previously reported in the October 29, 2002 meeting and following the Respondent's further review. Vulcan Materials Company noted in the letter that the emissions were not the result of a physical change or change in method of operation at the facility and should not trigger any federal or state applicable requirements.

Based upon a review of the information reported by Vulcan Materials Company, a Consolidated Compliance Order and Notice of Potential Penalty, Enforcement Tracking No. AE-CN-03-0117, was issued to Vulcan Materials Company on December 19, 2003, for the reported violations.

The Respondent submitted a letter dated August 25, 2005, which detailed potential violations discovered pursuant to a self-audit of the Geismar facility following the acquisition of it on or about June 7, 2005. According to the Respondent, the initial phase of the on-site portion of the audit was completed on August 5, 2005.

On or about October 26, 2005, representatives of the Respondent met with the Department to discuss the acquisition of the Geismar Plant from Vulcan Materials Company. During the meeting the Respondent expressed its desire to operate under the interim limits issued to Vulcan Materials Company contained in the Consolidated Compliance Order and Notice of Potential Penalty (CONOPP), Enforcement Tracking No. AE-CN-03-0117. The Respondent's representatives stated that the existing air permit was being reviewed and updated air permit revision applications were being prepared.

The Respondent submitted a letter dated December 5, 2005, in which the Respondent requested to continue operating the facility under the interim limits set forth in paragraphs II-V, VII-IX, and XI-XV of the Order portion of the CONOPP. In the letter, the Respondent noted that problematic or non-existent permit emission limits concerns had been discovered in addition to those included in the CONOPP, Enforcement Tracking No. AE-CN-03-0117. The Respondent provided requested interim emissions limits in the letter.

The Department found that the Respondent caused or allowed the violations listed below. These findings were based on the Respondent's letter dated December 5, 2005, conversations with a

representative of the Respondent, the fact that the Respondent had acquired ownership of the facility, and the fact that the violations cited in the CONOPP, Enforcement Tracking No. AE-CN-03-0117, had not been resolved.

A. Volatile organic compounds (VOC), particulate matter (PM/PM_{10}), perchloroethylene, 1,1,1-trichloroethane, and dichloromethane emissions from the following cooling towers at the Geismar Facility are not accurately reflected in Air Permit No. 0180-00011-V3: Perc/EDC Cooling Tower (Emission Point No. 021996), Methanes Cooling Tower (Emission Point No. 050696), MCF-II Cooling Tower (Emission Point No. 081796), 5CP Cooling Tower (Emission Point No. 120201), Cogen Cooling Tower (Emission Point No. 090396), and the Caustic Cooling Tower (Emission Point No. 060196). Emissions of each of the unpermitted pollutants from each cooling tower are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act. In addition, each exceedance of the individual pollutant limits on the Emissions Inventory Questionnaires for the permitted emissions points is a violation of General Condition II of Air Permit No. 0180-00011-V3, LAC 33:III.501.C.4, and Sections 2057(A)(1) and 2057(A)(2) of the Act.

B. Hydrochloric acid (HCl) and trace VOC emissions from the following acid tanks at the Respondent's Geismar Facility are not accurately reflected in Air Permit No. 0180-00011-V3: GM-057, ST-640, TK-630, TK-631, TK-632, D-1805, ST-1801-1, ST-1804-2, TK-607, ST-1808-3A, ST-1808-3B, TK-617, TK-1807, ST-702, ST-703, ST-701, ST-080-1A, TK-67, D-25A/B/C, D-112, D-215B, D-172A/B, D-174, D-176A/B, D-215B/C, D-516, and D-257. Emissions of each of the unpermitted pollutants from each emission source are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act. In addition, each exceedance of the individual pollutant limits on the Emissions Inventory Questionnaires for the permitted emissions points is a violation of General Condition II of Air Permit No. 0180-00011-V3, LAC 33:III.501.C.4, and Sections 2057(A)(1) and 2057(A)(2) of the Act.

C. The Respondent failed to route the TW-53B wastewater stripper (Emission Point No. F22587) to its Oxy Vent incinerator, known as the F-2 unit (Emission Point No. 100683). The unpermitted VOC and non-VOC toxic air pollutant (TAP) emissions from the TW-53B wastewater stripper (Emission Point No. F22587) are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act. The failure to route the TW-53B wastewater stripper to the Oxy Vent

incinerator is a violation of State Only Specific Condition 1 of Air Permit No. 0180-00011-V3 as referenced in Table 2, LAC 33:III.501.C.4, LAC 33:III.5109.A, and Sections 2057(A)(1) and 2057(A)(2) of the Act.

D. VOC, non-VOC TAP, and HCl emissions from certain wastewater tanks and collection sumps that are components of the Final Effluent Processing (FEP) system at the Respondent's Geismar Facility are not accurately reflected in Air Permit No. 0180-00011-V3. In particular, the following FEP wastewater tanks are not accurately reflected in Air Permit No. 0180-00011-V3: TK-77 (Acid/HCl storage tank), TK-38 (storm water tank), D-38 (high strength acid), ST-37 (NPDES Effluent), and TK-81 (NPDES Effluent "Pump Tank"). Emissions from the following additional FEP emission sources are not accurately reflected in Air Permit No. 0180-00011-V3: ST-35A (pH adjustment tank), ST-35B (pH adjustment tank), ST-36A (pH adjustment tank), ST-36B (pH adjustment tank), TK-76 (south sump header tank), and TK-53 (yard effluent tank). Emissions of each of the unpermitted pollutants from each emission source associated with the FEP are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act.

E. Chlorine emissions from scrubbers in the chlorine plant are not reflected in Air Permit No. 0180-00011-V3. The scrubbers primarily operate during startup of the chlorine plant and during malfunction events. Emissions of each of the unpermitted pollutants from each scrubber are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act.

F. VOC and non-VOC TAP emissions from TW-320 stripper bottoms in the MCI unit are not reflected in Air Permit No. 0180-00011-V3. Emissions of each of the unpermitted pollutants from the TW-320 stripper bottoms are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act.

G. VOC and non-VOC TAP emissions from certain sources in the groundwater recovery system at the Geismar Facility are not accurately reflected in Air Permit No. 0180-00011-V3. In particular, emissions from the following emission sources are not accurately reflected in Air Permit No. 0180-00011-V3: TK-0061 (sludge holding tank), TK-0062 (sludge holding tank), and CI-0060 (groundwater clarifier). Emissions of each of the unpermitted pollutants from each emission source are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act.

H. VOC, HCl, and carbon monoxide (CO) emissions from the TW-499 analyzer vent scrubber in the MCI unit, are not reflected in Air Permit

No. 0180-00011-V3. Emissions of each of the unpermitted pollutants from the TW-499 analyzer vent scrubber are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act.

I. Perchloroethylene emissions from the D-210 reflux drum (Emission Point No. 021272) in the Perc unit are not accurately reflected in Air Permit No. 0180-00011-V3. Emissions of each of the unpermitted pollutants from the D-210 reflux drum are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act. In addition, each exceedance of the individual pollutant limits on the Emissions Inventory Questionnaire for the permitted emissions point is a violation of General Condition II of Air Permit No. 0180-00011-V3, LAC 33:III.501.C.4, and Sections 2057(A)(1) and 2057(A)(2) of the Act.

J. VOC emissions from the D-223 A/B/C/D carbon tetrachloride check tanks (Emission Point Nos. 020472, 020572, 020672, and 020772) are not accurately reflected in Air Permit No. 0180-00011-V3. Emissions of each of the unpermitted emissions from each emission source are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act. In addition, each exceedance of the individual pollutant limits on the Emissions Inventory Questionnaires for the above listed permitted emissions points is a violation of General Condition II of Air Permit No. 0180-00011-V3, LAC 33:III.501.C.4, and Sections 2057(A)(1) and 2057(A)(2) of the Act.

K. VOC and perchloroethylene emissions from the E-204 perc flush pot (Emission Point No. 022396) in the Perc unit are not accurately reflected in Air Permit No. 0180-00011-V3. Emissions of each of the unpermitted pollutants from the E-204 perc flush pot are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act. In addition, each exceedance of the individual pollutant limits on the Emissions Inventory Questionnaire for the permitted emissions point is a violation of General Condition II of Air Permit No. 0180-00011-V3, LAC 33:III.501.C.4, and Sections 2057(A)(1) and 2057(A)(2) of the Act.

L. VOC and HCl emissions from the T-170 acid tower reflux drum (Emission Point No. 010387) in the EDC unit are not accurately reflected in Air Permit No. 0180-00011-V3. Emissions of each of the unpermitted pollutants from the T-170 acid tower reflux drum are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act. In addition, each exceedance of the individual pollutant limits on the Emissions Inventory Questionnaire for the permitted emissions point is a violation of General Condition II of Air Permit No. 0180-00011-V3, LAC 33:III.501.C.4, and Sections 2057(A)(1) and 2057(A)(2) of the Act.

M. Emissions of metals from the F-1 Furnace (Emission Point No. 100577), an industrial furnace in the Utilities unit are not accurately reflected in Air Permit No. 0180-00011-V3. Emissions of each of the unpermitted pollutants from the F-1 Furnace (Emission Point No. 100577) are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act. In addition, each exceedance of the individual pollutant limits on the Emissions Inventory Questionnaire for the permitted emissions point is a violation of General Condition II of Air Permit No. 0180-00011-V3, LAC 33:III.501.C.4, and Sections 2057(A)(1) and 2057(A)(2) of the Act.

The following violations were noted based upon a review of the information reported by the Respondent in the letter dated December 5, 2005, and in conversations with a representative of the Respondent:

The emissions from the following emission sources are not accurately reflected in Air Permit No. 0180-00011-V3. Emissions are not permitted for the emission sources and/or some pollutant emission limitations have been exceeded:

Emission Point Number	Equipment ID	Unpermitted Emissions and/or Pollutants Exceeding Emission Limit
120101	5CP Unit Fugitive Emissions	vinyl chloride
021896	Perc Unit Fugitive Emissions	ethylene
050796	ST-522	dichloromethane
020172	D-224A	carbon tetrachloride
020272	D-224B	chloroform
020372	D-224C	trichloroethylene
021372	D-224D	hexachloroethane
070596	GM-707	PM_{10}
100683	F-2 Furnace	benzene
		formaldehyde
		hexachloro-1,3-butadiene
		hexane
		methanol
		napthalene
		1,1,2,2-tetrachloroethane
		hexachloroethane
		1-bromo-2-chloroethane
		trans-1,2-dichloroethylene
		carbon tetrachloride
		dichloromethane

Emission Point Number	Equipment ID	Unpermitted Emissions and/or Pollutants Exceeding Emission Limit
		sulfur dioxide
010283	F-101 Dowtherm Boiler	carbon monoxide
020972	F-202 Dowtherm Boiler	carbon monoxide
		VOC
100577	F-1 Furnace	sulfur dioxide
		benzene
		formaldehyde
		hexane
		napthalene
		1,1,1,2-tetrachloroethane
		1-bromo-2-chloroethane
		hexachloroethane
		total PCBs
091498	D-28 Lab Waste Buggy	total VOC
		1,1,1-trichloroethane
		1,1,2-trichloroethane
		1,2-dichloroethane
		carbon tetrachloride
		chloroethane
		chloroform
		dichloromethane
		hexachloro-1,3-butadiene
		trichloroethylene
		vinyl chloride
		tetrachloroethylene
		1,1-dichloroethane
		1,2-dibromoethane
		hexachloroethane
		1,1-dichloroethylene
General Condition XVII	T-206/209 Scrubbing Tower	ethylene
		carbon tetrachloride
		1,1,2-trichloroethane
		ethylene dichloride

Emissions of each of the unpermitted pollutants from each emission source are violations of LAC 33:III.501.C.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act. Each exceedance of the individual pollutant limits on the Emissions Inventory Questionnaires (EIQ) for the permitted emissions points listed above is a violation of General Condition II of Air Permit No. 0180-00011-V3, LAC 33:III.501.C.4, and Sections 2057(A)(1) and 2057(A)(2) of the Act.

On July 19, 2006, the Department issued to Respondent an Amended Consolidated Compliance Order and Notice of Potential Penalty, Enforcement No. AE-CN-05-0237A, amending Consolidated Compliance Order and Notice of Potential Penalty, Enforcement Action No. AE-CN-05-0237, as follows:

The Department hereby adds paragraph IX to the Findings of Fact portion of Consolidated Compliance Order and Notice of Potential Penalty, Enforcement Tracking No. AE-CN-05-0237, which shall read as follows:

"IX.

The Respondent submitted a letter dated July 14, 2006, to the Department as required by paragraph V of the Order portion of Consolidated Compliance Order and Notice of Potential Penalty, Enforcement Tracking No. AE-CN-05-0237. In this letter the Respondent notified the Department that the emissions data provided to the Department as a basis for the interim limitations for the T-206/209 Scrubbing Tower was not the most accurate data available. The Respondent noted that while preparing revisions to, and following the submittal of the Part 70 renewal permit application dated March 31, 2006, it completed its reevaluation of the calculation basis for this source. The Respondent determined that the emissions calculations could be improved by the use of more detailed process data and more sophisticated process simulation. According to the Respondent's letter, its review and revised calculation basis were finalized on July 1, 2006. Based on the finalized calculations, the Respondent requested a revision to the interim limitations for the T-206/209 Scrubbing Tower to reduce the emissions of ethylene to 14.35 tons per year and increase the

emissions of 1,2-dichloroethane to 0.75 tons per year resulting in a corresponding decrease in total VOC (including VOC TAPs) while the other individual pollutants remained the same."

The Department hereby amends the interim limitations for the T-206/209 Scrubbing Tower only in the interim emissions limits table in paragraph II of the Order portion of Consolidated Compliance Order and Notice of Potential Penalty, Enforcement Tracking No. AE-CN-05-0237, which shall read as follows:

"

Emission Point Number	Equipment ID	Pollutant	Interim Maximum Hourly Emission Limit (lbs/hr)	Interim Annual Emission Limit (tons/year)
	T-206/209 Scrubbing Tower	**Total VOCs (includes VOC TAPs below)**	**1,416.0**	**15.62**
		ethylene*	1,350.0	14.35
		carbon tetrachloride	25.0	0.42
		1,1,2-trichloroethane	1.0	0.10
		1,2-dichloroethane	40.0	0.75

"

The Department incorporates all of the remainder of the original Consolidated Compliance Order and Notice of Potential Penalty, Enforcement Tracking No. AE-CN-05-0237, Agency Interest No. 3400, as if reiterated herein.

This Amended Consolidated Compliance Order and Notice of Potential Penalty is effective upon receipt.

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 FIVE THOUSAND AND NO/100 DOLLARS ($5,000.00), of which Three Thousand Six Hundred Twenty-eight and 41/100 Dollars ($3,628.41) represents DEQ'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 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 Consolidated Compliance Order and Notice of Potential Penalty, the Amended 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.

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

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

OCCIDENTIAL CHEMICAL CORPORATION

BY: _____
(Signature)

_____
(Print)

TITLE: _____

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

_____
NOTARY PUBLIC (ID #_____)

_____
(Print)

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Harold Leggett, Ph.D., Secretary

BY: _____
Peggy M. Hatch, 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 # _____)

_____
(Print)

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