

STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:

EXXON MOBIL CORPORATION

AI # 286

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

* Settlement Tracking No.
* SA-AE-09-0068
*
* Enforcement Tracking No.
* AE-PP-09-0338
*
*
*
*

SETTLEMENT

The following Settlement is hereby agreed to between Exxon Mobil 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 is a corporation that owns and/or operates a synthetic organic chemical manufacturing facility located at 4999 Scenic Highway in Baton Rouge, East Baton Rouge Parish, Louisiana (“the Facility”).

II

On June 4, 2009, the Department issued to Respondent a Notice of Potential Penalty, Enforcement No. AE-PP-09-0338, which was based upon the following findings of fact:

On or about May 14, 2009, a file review of the Baton Rouge Chemical Plant, owned and/or operated by Exxon Mobil Corporation (Respondent), was performed to determine the degree of compliance with the Louisiana Environmental Quality Act (the Act) and the Air Quality Regulations. The Respondent owns and/or operates the Baton Rouge Chemical Plant (BRCP), a synthetic organic

chemical manufacturing facility, located at 4999 Scenic Highway in Baton Rouge, East Baton Rouge Parish, Louisiana. The Respondent's facility currently operates under approximately twenty-eight (28) individual Title V permits.

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

- A. According to the Letter of Notification dated March 4, 2005, a preventable release occurred on February 25, 2005. The release was discovered when an internal odor complaint was reported. The release lasted approximately 88 minutes and released approximately 235.7 lbs of butenes, approximately 70.6 lbs of isoprene, approximately 8.4 lbs of Highly Reactive Volatile Organic Compounds (HRVOC), approximately 69 lbs of isobutylene oligamers, and approximately 339 lbs of polymers. Following a turnaround a bleeder valve was left open on a tower when the unit was returned to service. 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 the 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 Title V Permit No. 2166- V1, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1) and 30:2057(A)(2).
- B. According to the Letter of Notification dated July 19, 2007, there was an unauthorized discharge on July 12, 2007. There were two leaks that occurred on this day. The first one had been on going since January 18, 2007 (previously reported and would be ongoing until the next TA which was July 15, 2007) and approximately 15.8 lbs of propylene were released. Failure to timely fix a leak is a violation of Title V Permit 2390-V1, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2).
- C. According to the Letter of Notification dated February 5, 2008, an unauthorized discharge was experienced by the Respondent on January 29, 2008. An operator found a leak around the filter housing lid. During the one hour and twelve minute release approximately 4,700 lbs of flammable vapors and 3,230 lbs of n-hexane were released. The lead indicator of the leak is an O ring was not seated properly between the filter housing lid and filter. This is indicative of the O ring not being properly installed. 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 the 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 Title V Permit No. 2216-V1, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2).

- D. According to the Letter of Notification dated February 11, 2008, an unauthorized discharge was experienced by the Respondent on February 4, 2008. A control valve with the furnace fuel gas system malfunctioned. This control valve normally maintains pressure in the fuel gas system to several furnaces in the chemical plant. The release lasted about 5 hours and 9 minutes and released approximately 19 lbs of NO. The control valve was rebuilt and put back into service. The Respondent states that the release was unpreventable and that there was not an early indicators that the positioner in the valve was near failure. In order to supply adequate fuel flow to the furnaces, the bypass around the failed control valve was open. Excess fuel gas that was not needed in the furnaces and was sent to the flare system to control the furnace fuel gas pressure. This is a violation of Title V Permit No. 2031-V5, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1) and 30:2057(A)(2).
- E. According to the Letter of Notification dated February 13, 2008, two events occurred at the Respondent’s Facility within a twenty-four hour period on February 6-7, 2008. The combined emissions from these events exceeded the reportable quantity for benzene. An event occurred on February 7, 2008, when all three pilots on the #16 flare extinguished and it was visually confirmed that no flame was present. As a result, uncombusted hydrocarbons were released to the atmosphere. A total of 3.5 lbs of benzene were released during the incident. The flare pilots were relit ending the release. It is suspected that the natural gas flow to the flare pilots was momentarily lost due to a single fuel regulator which supplies all three pilots. Failure to keep a flame present at all times is a violation of Specific Requirements 129, 133, 167, and 169 of Title V Permit No.2390-V1, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2).
- F. According to the Unauthorized Discharge Notification Report dated March 10, 2008, the Respondent experienced a flaring incident on March 3, 2008. The Respondent states that this was a preventable incident. At approximately 12:45 p.m. on March 3, 2008, a control valve which purges off-spec ethylene gas to the flare was found open. Trends of the control valve position indicated that the valve initially opened at 9:23 a.m. when the pressure in the system went above the valve setpoint. As a result, purge gas was sent to the flare and approximately 13.6 lbs of NO_x were released. This control valve is usually used to prevent contamination of the downstream ethylene system with off spec material. At the time of the incident, tests were underway to raise the pressure in this system for energy savings. However, the setpoint of this valve was not modified as part of the test plan. 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 the 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 Title V Permit No. 2031-V5, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2).

- G. According to the Letter of Notification dated March 26, 2008, a flaring incident occurred at the Respondent's facility on March 19, 2008. A twenty-five minute event occurred on March 19, 2008, when all three pilots on the #16 flare extinguished and it was visually confirmed that no flame was present. As a result, uncombusted hydrocarbons were released to the atmosphere. A total of 72 lbs of 1,3 butadiene and 167 lbs of HRVOC were released during the incident. The flare pilots were relit ending the release. Failure to keep a flame present at all times is a violation of Specific Requirements 129, 133, 167, 169 of Title V Permit No. 2390-V1, LAC 33:III.501.C.4, LAC 33:III.905, and La. R.S. 30:2057(A)(2).
- H. According to the Letter of Notification dated July 23, 2008, there was an incident at the Respondent's facility on June 29, 2008. The pressure in the feed tanks at the WILA unit exceeded the pressure vacuum vent setting. As a result, hydrocarbons were released to the atmosphere to relieve the pressure in the tanks. The source of the high pressure was determined to be material that was sent to WILA from a flare knockout drum at the Olefins unit. The Depropanizer tower at Olefins was taken out of service and the material remaining in the tower was drained to the flare knock out drum. The volatility of the material in the knockout drum was not anticipated to high enough to negatively impact WILA operations. During the 6 minute release approximately 244 lbs of 1,3 butadiene, 123 lbs of benzene and 1,050 lbs of flammable vapor were released to the atmosphere. The Respondent states that the incident was not preventable. The Respondent stated in a follow up email dated June 2, 2009, that there is no online method for measuring the volatility and vapor pressure of the materials being vented to the WILA tanks. The materials that are routed to the tanks consist of a wide variety of liquids from throughout the facility. The composition of the material varies depending on the operations and other unit conditions. 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 the 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 Title V Permit No. 2390-V1, LAC 33:III.504.C.4, and La. R.S. 30:2057(A)(2).
- I. According to the Letter of Notification dated September 24, 2008, the Respondent experienced a release on September 17, 2008. The pressure in the feed tanks at the WILA unit exceeded the pressure vacuum vent setting for 10 minutes. A second excursion occurred on September 18, 2008 and

lasted for 3 minutes. In both instances, hydrocarbons were released to the atmosphere. The amounts released are 48 lbs of 1,3 butadiene, 40 lbs of benzene, and 4,029 lbs of flammable vapors. This incident occurred shortly after Hurricane Gustav. Each exceedence of the pressure vacuum vent setting 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 the 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 Title V Permit No. 2390- V1, LAC 33:III.504.C.4, and La. R.S. 30:2057(A)(2).

- J. According to the Letter of Notification dated September 30, 2008, the Respondent experienced an unauthorized release on September 23, 2008. The pressure in the feed tanks at the Wastewater Improvement (WILA) unit exceeded the pressure vacuum vent setting for 14 minutes. As a result, hydrocarbons were released to the atmosphere to relieve the pressure in the tanks. During the 14 minutes approximately 36 lbs of 1,3 butadiene, 548 lbs of benzene, 3,139 lbs of flammable vapors, 415 lbs of isoprene, and 191 lbs of 1,3 pentadiene were released. The source of pressure excursion was due to light material sent to WILA from a flare knockout drum at the Olefins unit. The light material entered the flare knockout drum via a safety valve bypass that was inadvertently left open during a start up following Hurricane Gustav. The exceedence of the pressure vacuum vent setting 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 the 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 Title V Permit No. 2390- V1, LAC 33:III.504.C.4, and La. R.S. 30:2057(A)(2).
- K. According to the Letter of Notification dated November 4, 2008, on October 29, 2008 the Ethylene Purification unit began to flare for approximately one (1) hour. During the one hour incident, approximately 104 lbs of ethylene were released. The Respondent performed an investigation to find the source of the flaring because no alarms alerted the operators of abnormal operating conditions. It was determined that the flaring occurred due to an incorrect pressure set point of the flare relief valve on the charge gas compressor suction. This was a preventable release. According to the Respondent the pressure set point was lowered during a previous upset and was inadvertently overlooked when the unit was being returned to normal operational conditions. 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 the 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 violation of Title V Permit No. 2031-V6, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2).

- L. According to the Letter of Notification sent to the Department, dated February 24, 2009, the Respondent experienced an unauthorized discharge on February 17, 2009. The incident occurred due to a small fire from an unexpected leak. The charge gas compressor for the Olefin's Maintrain furnaces tripped due to failed overspeed wiring. The wiring failed because a small lube oil leak from the steam driver of the compressor caught fire. When the compressor tripped the effluent gas was routed to the flare. In addition to the flaring, the EPLA-W compressor also trip caused liquid to be sent to the hydrogen compressor at the Benzene Hydrotreating unit. The following table contains the amounts and the chemicals released during the incident:

Compounds	Amount released (lbs)
Sulfur Dioxide	3774
Ethylene	3463
Benzene	339
Nitrogen Oxide	2362
1, 3 Butadiene	20
Propylene	1417

All of the chemicals released were above the reportable quantity. According to the Respondent there were three compliance excursions due to opacity >20% from the flares 10, 25 and 26. Each exceedence is a violation of Specific Requirement 7, 213 and 316 of Title V Permit 2390-V1, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2).

- M. According to the Letter of Notification sent to the Department, dated March 16, 2009, the Respondent experienced an unauthorized discharge on March 9, 2009. On March 9, 2009, two tanks were overpressured for 17 minutes. During the 17 minutes approximately 15 lbs of benzene were released, which is above the reportable quantity of 10 lbs. The release was caused by the pumping of low flash material into WILA Tanks 8 and 9. The material evolved a greater amount of vapor than the tank's vapor recovery system could manage. The evolution of the vapor caused the pressure in the tanks to exceed that of the pressure vent set point, resulting in the release of hydrocarbon. The Respondent states that there was no reasonable way to verify that the flashpoint of the material was low enough to cause overpressure went into Tanks 8 and 9. 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 the 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 violation of Title V Permit 2031-V6, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2).

The following violations, although not cited in any enforcement action issued to the Respondent, are included herein and made a part of this settlement agreement.

- A. According to an Unauthorized Discharge Report dated March 24, 2009, the Respondent had an unauthorized discharge on March 18, 2009. The Hydrocarbon Emissions (HCE) compressor tripped off, resulting in a release of benzene to the atmosphere. The release lasted approximately two and a half (2.5) hours releasing 69 lbs of benzene. This is above the reportable quantity This is a violation of Title V Permit No. 229-V4, LAC 33:III.504.C.4, La. R.S. 30:2057(A)(1) and 30:2057(A)(2).
- B. According to an Unauthorized Discharge Report dated April 2, 2009, the Respondent had a leak occurred at the Aromatic Unit on March 29, 2009. Prior to the leak, steam was introduced to the exchanger, per procedure, to free the exchanger of hydrocarbons before beginning mechanical work on the exchanger. When steam was introduced, the channel box gasket failed, causing a release of 10 gallons of hydrocarbon to the concrete. The composition of the material that reached the concrete was 60% Benzene. It is assumed all the benzene evaporated into the air, resulting in a release of 44 lbs of benzene to the air, thus exceeding the reportable quantity. This is a violation of Title V Permit No. 2299-V4, LAC 33:III.504.C.4, La. R.S. 30:2057(A)(1) and 30:2057(A)(2).
- C. According to an Unauthorized Discharge Report dated April 13, 2009, the Respondent experienced a flaring incident and an atmospheric safety valve release on April 6, 2009. The incident occurred due to a computer control card failing. When the card failed a series of control valves failed in the closed position, which resulted in an increase in pressure in the overhead system. This resulted in flaring and the lifting of the atmospheric safety valve on this system. The flaring event resulted in the release of approximately release of 3,470 lbs of propylene, 2,348 lbs of ethylene, and 13,380 lbs flammable vapor to the air. All of these are above the Reportable Quantity. This is a violation of Title V Permit No. 2390-V1 LAC 33:III.504.C.4, La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

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 FIFTEEN THOUSAND AND NO/100 DOLLARS (\$15,000.00), of which Two Thousand Four Hundred Twenty-One And 42/100 Dollars (\$2,421.42) 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 above mentioned letters and reports, 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 LSA- R. S. 30:2025(E) of the Act

VIII

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 notice.

IX

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).

X

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

XI

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.

EXXON MOBIL CORPORATION

BY: *David Schuessler*
(Signature)

DAVID SCHUESSLER
(Print)

TITLE: BECP PLANT MGR.

THUS DONE AND SIGNED in duplicate original before me this 30 day of June, 20 10, at Baton Rouge.

Marguerite M. Moffatt
033508
Notary for Life

M. M. Moffatt
NOTARY PUBLIC (ID #)

(Print)

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Peggy M. Hatch, Secretary

BY: *B. J. Brock*
Beau James Brock, Assistant Secretary
Office of Environmental Compliance

THUS DONE AND SIGNED in duplicate original before me this 12th day of October, 20 10, at Baton Rouge, Louisiana.

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

Preliminary Approval: *Paul D. Miller*
Paul D. Miller, P.E., Assistant Secretary