STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:

UOP LLC

AI # 17846

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

* Settlement Tracking No.
  * SA-AE-19-0050
  * Enforcement Tracking No.
  * AE-PP-16-00970

SETTLEMENT

The following Settlement is hereby agreed to between UOP LLC ("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 limited liability company that owned and/or operated a catalyst manufacturing facility located in Shreveport, Caddo Parish, Louisiana ("the Facility").

II

On March 24, 2017, the Department issued to Respondent a Notice of Potential Penalty, Enforcement No. AE-PP-16-00970 (Exhibit 1).

The following violation, although not cited in the foregoing enforcement action, is included within the scope of this settlement:

On or about November 30, 2016, the Respondent self-reported a NOx release from the facility's DeNOx Unit (EQT 152). Approximately 12.7 lbs of NOx was released during the event. The maximum limit of 5.66 lbs NOx per hour was exceeded from 8:08 PM to 8:54 PM. Emissions
in excess of the permit limit is a violation of LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2). Correspondence dated December 6, 2016 stated the release was preventable and was due to the loss of the DeNOx burner.

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 SEVEN THOUSAND AND NO/100 DOLLARS ($7,000.00), of which Two Thousand Three Hundred Seventy-Three and 41/100 Dollars ($2,373.41) 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 permit record(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.

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

VIII

As required by law, the Department has submitted this Settlement Agreement to the Louisiana Attorney General for approval or rejection. The Attorney General's concurrence is appended to this Settlement Agreement.

IX

The Respondent has caused a public notice advertisement to be placed in the official journal of the parish governing authority in Caddo Parish, Louisiana. The advertisement, in form and wording 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.
UOP LLC

BY: ______________________
   (Signature)

Jose R. Crescencio Mack
   (Printed)

TITLE: Vice President & General Counsel

THUS DONE AND SIGNED in duplicate original before me this 17th day of January, 2020, at East Baton Rouge, Louisiana.

[Signature]
   NOTARY PUBLIC (ID # )

OFFICIAL SEAL

ROBERT H. RACHFORD
Notary Public - State of Illinois
My Commission Expires 10/23/2022
(stamped or printed)

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Chuck Carr Brown, Ph.D., Secretary

BY: ______________________
   Lourdes Iturralde, Assistant Secretary
Office of Environmental Compliance

THUS DONE AND SIGNED in duplicate original before me this 8th day of April, 2020, at Baton Rouge, Louisiana.

[Signature]
   NOTARY PUBLIC (ID # )

(stamped or printed)

Approved: ______________________
   Lourdes Iturralde, Assistant Secretary

5

SA-AE-19-0050
CERTIFIED MAIL (7004 2510 0006 3852 8311)
RETURN RECEIPT REQUESTED

UOP LLC
C/o Corporation Service Company
Agent for Service of Process
501 Louisiana Avenue
Baton Rouge, LA 70802

RE: NOTICE OF POTENTIAL PENALTY
ENFORCEMENT TRACKING NO. AE-PP-16-00970
AGENCY INTEREST NO. 17846

Dear Sir:

On or about April 17, 2012, May 18, 2012, July 12, 2016, August 19, 2016, August 30, 2016, and September 12, 2016, incident investigations of SHREVEPORT PLANT, a catalyst manufacturing facility (the Facility), owned and/or operated by UOP LLC (RESPONDENT), were performed to determine the degree of compliance with the Louisiana Environmental Quality Act (the Act) and the Air Regulations. The facility is located at 8725 Old Mooringsport Road in Shreveport, Caddo Parish, Louisiana.

The Facility operates or has operated under the authority of the following Title V Air Permits:

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<th>PERMIT</th>
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<td>0500-00020-V9</td>
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While the investigation by the Louisiana Department of Environmental Quality (the Department) is not yet complete, the following violations were noted during the course of the incident investigations and subsequent file reviews:

A. On or about April 6, 2012, the Respondent self-reported hydrogen chloride (HCl) release from line 3 oxidizer caustic scrubber stack (Emission Point No. RLP 0022) that occurred on April 5, 2012. According to the follow-up letter received on April 11, 2012, a high temperature switch failure caused the Oxidizer Caustic Scrubber to go into bypass for about 1 hour and 11 minutes during the event. Approximately 40.6 lbs. of HCl were released through the bypass. The HCl emission did not exceed the reportable quantity (RQ) for this chemical; however, the permit limit of 15.9 lb/hr was exceeded by 24.7 lbs. This exceedance is a violation of the Title V Permit No. 0500-00020-V9, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1), and 30:2057(A)(2). In correspondence dated June 29, 2012, the Respondent stated as a result of this release, the site would reevaluate its Preventative Maintenance Program to include a thermocouple replacement program for thermocouples that are input to the emission control device bypass temperature switches.

B. On or about May 16, 2012, the Respondent self-reported a chlorine (Cl) release from Emission Point RLP 0022 that occurred on May 14, 2012. Approximately 38.3 lbs. of Cl was released during a 5.5 hour time frame and the RQ for Cl is 10 lbs. Notification to SPOC in accordance with LAC 33:1.3923 was made 44.5 hours after the incident occurred. The Respondent’s failure to notify the Department of an unauthorized discharge of Cl within 24 hours is a violation of LAC 33:1.3917, LAC 33:III.5107.B.2, and La. R.S. 30:2057(A)(2).

C. On or about May 18, 2012, the Facility representative stated approximately 38.3 lbs of chlorine gas (Cl) was released during a 5.5 hour time frame of the May 14, 2012 incident because the caustic flow rate dropped, causing the pH to drop below permitted level of 9 standard units. Failure to maintain the pH at a level of 9 standard units or greater is a violation of Specific Requirement No. 459 of Title V Permit No. 0500-00020-V9 and La. R.S. 30:2057(A)(2). The pH drop resulted in oversaturation of the caustic scrubber and eventually emission of excess chlorine gas. The caustic scrubber unit is permitted to emit 3 lbs/hr of Cl. The emissions of Cl in excess of the permit limit is a violation of LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

D. On or about July 11, 2016, the Respondent self-reported a nitrogen oxide (NOx) release from the DenNox Unit (EQT 152). The event occurred on July 3, 2016. According to the Facility’s representative, the Respondent’s environmental team was not aware of the exceedance until data was reviewed on July 11, 2016; hence, the notification was delayed.
A total of 12.16 lbs. of NOx was released during the event and the RQ for NOx is 10 lbs. The Respondent’s failure to notify the Department of an unauthorized discharge of NOx within 24 hours is a violation of LAC 33:III.5107.B.2, LAC 33:1.3917, and La. R.S. 30:2057(A)(2).

E. The Respondent submitted an unauthorized discharge written report on or about July 12, 2016, nine (9) days after learning about the discharge. The Respondent’s failure to submit a written report within seven (7) days of learning of the discharge is a violation of LAC 33:III.5107.B.3, LAC 33:1.3925, and La. R.S. 30:2057(A)(2).

F. Emissions from EQT 152, DeNOX Vent due to a closed manual valve, exceeded the NOx permit limits on July 3, 2016. Permit No. 0500-0020-V13 allows for a maximum NOx emission rate of 3.44 lb/hr. The maximum limit was exceeded from 8:53 am to 9:37 am, a total of 45 minutes. A total of approximately 12.16 lbs NOx was released during the event. Emissions in excess of the permit limit is a violation of LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2). Correspondence dated July 19, 2016 stated the release was preventable and the Respondent will update its startup procedure to include verifying all valves are open prior to introducing NOx to the system to prevent this type of incident.

G. On or about August 25, 2016, the Respondent self-reported a NOx release from EQT 152 DeNOx Unit (EQT 152) that occurred between August 18, 2016 and August 19, 2016. According to the report, three (3) unrelated incidents caused a NOx release from EQT 152 occurred within a 24 hour period. The Respondent stated that during the first incident, which lasted for 207 minutes, the air valve that actuates the pneumatic ammonia valve closed without any indication, causing the NOx level to rise: the permit limit of 3.44 lbs/hour was exceeded at approximately 1:34 pm on August 18, 2016 and the RQ of 10 lbs. was exceeded at approximately 12:04 pm on August 19, 2016. During the second incident, which lasted for 167 minutes, the DeNOx SmartFire burner lost flame, causing the temperature to drop below the required minimum temperature of 490 degrees Fahrenheit and eventually the ammonia valves to lock closed; the permit level was exceeded at approximately 3:50 AM and the RQ was exceeded at approximately 4:32 PM on August 19, 2016. The third permit exceedance started at approximately 7:19 AM on August 19, 2016 and lasted for 64 minutes. The total NOx released during the three unrelated events was 77.4 lbs. Emissions of NOx in excess of the permit limit is a violation of LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2). According to the report dated August 25, 2016, the releases were preventable and the system was back in total control after the air valves were opened. The report further stated that two (2) new screens were added in the Control Room to show DeNOx and DeNOx reporting as well as a manual log book for operators to record the NOx outlet every 15 minutes.

H. On or about September 4, 2016, the Respondent self-reported a NOx release from the DeNOx Unit (EQT 152) that occurred on September 3, 2016. Approximately 33.7 lbs of NOx was released during the event, which exceeded the maximum permit emission rate of 3.44 lb/hr for EQT 152. The Respondent reported the duration of the event was 91 minutes. Emissions in excess of the permit limit is a violation of LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2). Correspondence dated September 9, 2016 stated the release was caused by plugged ammonia fine nozzles and was preventable. The
correspondence further stated filters were and will be added to the ammonia injection line to stop and prevent unauthorized discharge.

Pursuant to L.a. R.S. 30:2050.3(B), you are hereby notified that the issuance of a penalty assessment is being considered for the violation(s) described herein. Written comments may be filed regarding the violation(s) and the contemplated penalty. If you elect to submit comments, it is requested that they be submitted within ten (10) days of receipt of this notice.

Prior to the issuance of any additional appropriate enforcement action, you may request a meeting with the Department to present any mitigating circumstances concerning the violation(s). If you would like to have such a meeting, please contact Dr. Jacqueline A. Prudent at (225) 219-3378 or via email at Jackie.Prudent@la.gov within ten (10) days of receipt of this NOTICE OF POTENTIAL PENALTY.

The Department is required by La. R.S. 30:2025(E)(3)(a) to consider the gross revenues of the Respondent and the monetary benefits of noncompliance in order to determine whether a penalty will be assessed and the amount of such penalty. Please forward the Respondent’s most current annual gross revenue statement along with a statement of the monetary benefits of noncompliance for the cited violations to the above named contact person within ten (10) days of receipt of this NOTICE OF POTENTIAL PENALTY. Include with your statement of monetary benefits the method(s) you utilized to arrive at the sum. If you assert that no monetary benefits have been gained, you are to fully justify this statement. If the Respondent chooses not to submit the requested most current annual gross revenue statement within ten (10) days, it will be viewed by the Department as an admission that the Respondent has the ability to pay the statutory maximum penalty as outlined in La. R.S. 30:2025.

For each violation described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

The Department assesses civil penalties based on LAC 33:1.Subpart1.Chapter7. To expedite closure of this NOTICE OF POTENTIAL PENALTY, the Respondent may offer a settlement amount to resolve any claim for civil penalties for the violation(s) described herein. The Respondent may offer a settlement amount, but the Department is under no obligation to enter into settlement negotiations. The decision to proceed with a settlement is at the discretion of the Department. The settlement offer amount may be entered on the attached "NOTICE OF POTENTIAL PENALTY REQUEST TO SETTLE" form. The Respondent must include a justification of the offer. DO NOT submit payment of the offer amount with the form. The Department will review the settlement offer and notify the Respondent as to whether the offer is or is not accepted.

The NOTICE OF POTENTIAL PENALTY will not be closed if the Respondent owes outstanding fees to the Department. Please contact the Financial Services Division at 225-219-3865 or via email at _DEQ-WWWFinancialServices@la.gov to determine if you owe outstanding fees.
To reduce document handling, please refer to the Enforcement Tracking Number and Agency Interest Number on the front of this document on all correspondence in response to this action.

Sincerely,

Lourdes Iturralde  
Assistant Secretary  
Office of Environmental Compliance

LI/JAP/jap  
Alt ID No. 0500-00020

c: UOP LLC-Shreveport Plant  
c/o Mark Salih, HSE Manager  
8725 Old Mooringsport Road  
Shreveport, LA 71107
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE  
ENFORCEMENT DIVISION  
POST OFFICE BOX 4312  
BATON ROUGE, LOUISIANA  70821-4312  

NOTICE OF POTENTIAL PENALTY  
REQUEST TO SETTLE (OPTIONAL)  

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<th>Contact Name</th>
<th>Dr. Jacqueline A. Prudente</th>
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<tr>
<td>Agency Interest (AI) No.</td>
<td>17846</td>
<td>Contact Phone No.</td>
<td>(225) 219-3378</td>
</tr>
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<td>Alternate ID No.</td>
<td>0500-00020</td>
<td>Facility Name:</td>
<td>Shreveport Plant</td>
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<td>UOP LLC</td>
<td>Physical Location:</td>
<td>8725 Old Mooring Road</td>
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<td></td>
<td>c/Corporation Service Company</td>
<td>City, State, Zip:</td>
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<td></td>
<td>Agent for Service of Process</td>
<td>Parish:</td>
<td>Caddo</td>
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<td></td>
<td>501 Louisiana Avenue</td>
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<tr>
<td></td>
<td>Baton Rouge, LA 70802</td>
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**SETTLEMENT OFFER (OPTIONAL)**  
(check the applicable option)

- The Respondent is not interested in entering into settlement negotiations with the Department with the understanding that the Department has the right to assess civil penalties based on LAC 33:1. Subpart 1. Chapter 7.
- In order to resolve any claim for civil penalties for the violations in NOTICE OF POTENTIAL PENALTY (AE-PP-16-00970), the Respondent is interested in entering into settlement negotiations with the Department and would like to set up a meeting to discuss settlement procedures.
- In order to resolve any claim for civil penalties for the violations in NOTICE OF POTENTIAL PENALTY (AE-PP-16-00970), the Respondent is interested in entering into settlement negotiations with the Department and offers to pay $____________ which shall include LDEQ enforcement costs and any monetary benefit of non-compliance.
  - Monetary component = $____________
  - Beneficial Environmental Project (BEP) component (optional) = $____________
  - DO NOT SUBMIT PAYMENT OF THE OFFER WITH THIS FORM: the Department will review the settlement offer and notify the Respondent as to whether the offer is or is not accepted.
- The Respondent has reviewed the violations noted in NOTICE OF POTENTIAL PENALTY (AE-PP-16-00970) and has attached a justification of its offer and a description of any BEPs if included in settlement offer.

**CERTIFICATION STATEMENT**

I certify, under provisions in Louisiana and United States law that provide criminal penalties for false statements, that based on information and belief formed after reasonable inquiry, the statements and information attached and the compliance statement above, are true, accurate, and complete. I also certify that I do not owe outstanding fees or penalties to the Department for this facility or any other facility I own or operate. I further certify that I am either the Respondent or an authorized representative of the Respondent.

<table>
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<tr>
<th>Respondent’s Signature</th>
<th>Respondent’s Printed Name</th>
<th>Respondent’s Title</th>
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MAIL COMPLETED DOCUMENT TO THE ADDRESS BELOW:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821  
Attn: Dr. Jacqueline A. Prudente