STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:
NOVA CHEMICALS OLEFINS LLC
AI # 5565

PROCEEDINGS UNDER THE LOUISIANA ENVIRONMENTAL QUALITY ACT

SETTLEMENT

The following Settlement is hereby agreed to between Nova Chemicals Olefins LLC ("Respondent") and the Department of Environmental Quality ("DEQ" or "the Department"), under authority granted by the Louisiana Environmental Quality Act, L.a. R.S. 30:2001, ET Seq. ("the Act").

I

Respondent is a limited liability company that owns and/or operates a facility located in Geismar, Ascension Parish, Louisiana ("the Facility").

II

On October 5, 2018, the Department issued to Respondent a Consolidated Compliance Order & Notice of Potential Penalty, Enforcement Tracking No. AE-CN-15-01062 (Exhibit 1).

On May 5, 2020, the Department issued to Respondent an Amended Consolidated Compliance Order & Notice of Potential Penalty, Enforcement Tracking No. AE-CN-15-01062A (Exhibit 2).

The following violations, although not cited in the foregoing enforcement actions, are
included within the scope of this settlement:

A. According to the unauthorized discharge reports dated March 23, 2020, and April 24, 2020, and correspondence dated November 16, 2021, on or about March 16, 2020, at approximately 19:45 hours to March 17, 2020, at approximately 6:30 hours, the Respondent experienced an unauthorized discharge (Incident No. T196052). Specifically, on March 16, 2020, at approximately 19:45 hours, the Respondent had a non-emergency upset condition which resulted in a flaring event and caused the pressure relief device associated with the furnace to activate. The Respondent reported the equipment was being placed into service when a downstream valve was closed causing a pressure imbalance in the seal gas systems resulting in the compressor shutdown. The valve was closed due to human error and the event resulted in flaring. The following emissions resulted from the flaring event: 40 lbs of 1,3- Butadiene (RQ 10 lbs), 120 lbs of Benzene (RQ 10 lbs), 4 lbs of Toluene (RQ 1,000 lbs), 1,500 lbs of other VOC, 6 lbs of PM10/PM2.5, 3,466 lbs of NOx, and 11,183 lbs of CO. Following the flaring event, the facility experienced a release from a pressure relief device. The Respondent reported the pressure relief device release was caused by an open valve, which if closed would have isolated the pressure relief device from the furnace. The valve was left open due to human error. The following emissions resulted from the lifting of the pressure relief valve: 22,720 lbs of ethylene (RQ 5,000 lbs), 535 lbs of propylene (RQ 5,000 lbs), 610 lbs of 1,3- Butadiene (RQ 10 lbs), 430 lbs of Benzene (RQ 10 lbs), 55 lbs of Toluene (RQ 1,000 lbs), 50 lbs of Styrene (RQ 1,000 lbs), 675 lbs of other VOCs, and 19,055 lbs of Hydrogen, Methane, and Ethane. The failure to use and diligently maintain air pollution control facilities, any device or contrivance,
operating procedure or abatement scheme used to prevent or reduce air pollutants, in proper working order whenever any emissions are being made is a violation of LAC 33:III.905.A, La. R.S. 30:2057(A)(1), and La. R.S. 30:2057(A)(2).

B. In the 2019 Title V 1st Semiannual Monitoring Report dated September 25, 2019, the Respondent reported that on or about January 5, 2019, the Olefins Ground Flare (EQT 0067) had an average opacity greater than 20% for more than six minutes. The Respondent reported that the excess opacity was due to high levels in the knock-out pot due to malfunctioning level indicator and pump system. The event lasted for approximately 3.5 hours. This is a violation of Title V Air Permit No. 0180-00029-V14, Specific Requirements 89 and 91, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1), and 30:2057(A)(2).

C. On or about August 10, 2019, during a plant startup, the Respondent experienced an unauthorized discharge (Incident No. 192694) for approximately 10 minutes. Specifically, the Respondent observed a hydrocarbon gas leak from the head gasket of a process reboiler. The incident resulted in a release of 3,732 pounds of propylene, a VOC. The Respondent determined that the root cause of the incident was due to an overfill of propylene into the fractionation tower associated with the reboiler, which resulted in excess thermal stress on the reboiler gasket. The failure to use and diligently maintain air pollution control facilities, any device or contrivance, operating procedure or abatement scheme used to prevent or reduce air pollutants, in proper working order whenever any emissions are being made which can be controlled by the facility is a violation of LAC 33:III.905.A, La. R.S. 30:2057(A)(1), and La. R.S. 30:2057(A)(2).

To prevent reoccurrence, the Respondent modified the startup procedure for filling the
reboiler with propylene.

D. On or about August 21, 2019, during a plant startup, the Respondent experienced an unauthorized discharge (Incident No. 192900) for approximately 3 hours. Specifically, during startup, a hydrocarbon liquid leak was observed from a flange on a dry flare header. The light hydrocarbons were released to the air as a liquid and volatilized before pooling on the ground. Liquids accumulated in the flare header by flaring off-spec ethylene from the fractionator overhead. The incident resulted in a release of 6,494 pounds of Ethylene, a VOC. The Respondent determined the root cause of the incident was due to the flange bolts not meeting the minimum torque value due to excess thermal stress on the flange. The failure to use and diligently maintain air pollution control facilities, any device or contrivance, operating procedure or abatement scheme used to prevent or reduce air pollutants, in proper working order whenever any emissions are being made which can be controlled by the facility is a violation of LAC 33:III.905.A, La. R.S. 30:2057(A)(1), and La. R.S. 30:2057(A)(2). To prevent recurrence, the Respondent evaluated how to best ensure bolt joint integrity.

E. Unauthorized Discharge Incident No. T186444: The incident occurred on August 17, 2018. The Respondent stated the incident was due to an unforeseeable equipment malfunction from the bonnet of a gate valve. Operators resolved the incident by depressurizing the line with the valve. The malfunctioning valve was removed from service, and a replacement valve was installed on August 22, 2018. Additionally, the gate valve is a part of the facility’s Leak Detection and Repair (LDAR) Program and therefore is subject to routine leak checks. Prior to the incident that occurred on August 17, 2018, the valve was last inspected on June 7, 2018, and no leaks were detected. The
incident resulted in a release of 149 pounds of 1,3-butadiene.

F. Unauthorized Discharge Incident No. T197629: The incident occurred on July 5, 2020. The Respondent stated that during a severe weather event, the Respondent experienced an equipment malfunction believed to be related to an internal electrical power disruption caused by the severe weather. Specifically, a gas compressor that is critical for the manufacture of ethylene tripped offline. This resulted in off-spec ethylene production that had to be flared. The flare is a permitted control device and operated properly. The Respondent reduced production to the extent practical in an effort to return the plant to normal operation and cease flaring as quickly as possible. Normal operations resumed approximately 12 hours after the event began. The facility was being properly operated at the time of the incident, and the operator took all reasonable steps to minimize levels of emissions that exceeded the emissions standards and/or other permit requirements. The incident resulted in a release of 3,062 pounds of ethylene, 2 pounds of PM10/PM2.5, 901 pounds of NOx, and 3,852 pounds of CO.

G. Unauthorized Discharge Incident No. T198931: The incident occurred on September 17, 2020. The Respondent stated that they experienced an electrical power dip at the facility, which caused the plant to trip. The plant trip caused a flaring event at approximately 9:20 AM. Entergy’s root cause analysis stated the cause of the power dip, on September 17, 2020, at approximately 9:14 AM, was due to an arc flash and insulator damage, and two (2) dead birds were found directly under the insulator.

H. In the 2018 Title V 1st Semiannual Monitoring Report dated September 28, 2018, the Respondent reported that on June 28, 2018, at approximately 3:00 PM, a potential leak of hydrocarbon gas into the plant cooling water system was detected. The leaked gas
was subsequently released to the atmosphere through the cooling tower. The leak was secured approximately 24 hours after discovery. The permitted VOC limit for EQT0032 is 6.40 tons/year or 1.46 lb/hr. The Respondent estimated that the total amount released was 1.87 lb/hr, which exceeded the VOC limits stated in the Emission Rates table of Title V Permit No. 0180-00029-V14. The failure to comply with emission limits of Title V Permit No. 0180-00029-V14 is a violation of LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1), and La. R.S. 30:2057(A)(2).

I. In the 2018 Title V 2nd Semiannual Monitoring Report dated March 29, 2019, the calculated emissions estimates for the Olefins Plant Flare/TO System (EQT0011) shows that the annual 2018 emissions of 1,3 butadiene exceeded the rates specified in the Emission Rate table in the permit. The calculated 2018 actual emissions were 1.3 tons, the permitted limit is 0.42 tons/year. The higher than anticipated butadiene concentrations observed in the gas stream caused the emissions exceedances. The exceedance was above the limit stated in the Emission Rates table of Title V permit No. 0180-00029-V14. The failure to comply with emissions limits of Title V Permit No. 0180-00029-V14 is a violation of LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1), and La. R.S. 30:2057(A)(2). The Respondent stated the following events were identified as possible contributors to elevated levels of 1,3-butadiene in the flare system: a thermal relief valve discharged to the flare system following product loading, a control valve connected to the flare system was not completely closed when it should have been, de-pressuring a section of pipe to the flare system for repair of a piece of equipment, and de-pressuring a storage sphere following the malfunction of a root valve.
J. In the 2018 Title V 2nd Semiannual Monitoring Report dated March 29, 2019, the
Respondent reported the floating roof of DAC Storage Tank FB-802B (EQT0029) did
not float on the liquid stored in the tank and landed on its leg supports on October 1,
2018, for one (1) hour. This is a violation of Specific Requirement 2 of Title V Permit
No. 0180-00029-V14, 40 CFR 60.112b(a)(2)(iii), which language has been adopted as

III

In response to the Consolidated Compliance Order & Notice of Potential Penalty and
Amended Consolidated Compliance Order & Notice of Potential Penalty, Respondent made timely
requests for hearings.

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 FIFTEEN THOUSAND AND NO/100 DOLLARS ($15,000.00), of which One Thousand
Three Hundred Seventy and 39/100 Dollars ($1,370.39) 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), permit record(s), the Consolidated Compliance Order & Notice of Potential Penalty, Amended 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

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.
X

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 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.

XI

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).

XII

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

XIII

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.
NOVA CHEMICALS OLEFIN LLC

BY: ________________
(Signature)

Byron Roman
(Printed)

TITLE: Senior Vice President & General Counsel

THUS DONE AND SIGNED in duplicate original before me this 4th day of March, 2022, at Ames, IA.

Amy Ye
(NOTARY PUBLIC (ID #597009))

AMULYA K. SHARMA
Commission Number 797009
My Commission Expires
July 6, 2022
(stamped or printed)

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

BY: ________________
Celena J. Cage, Assistant Secretary
Office of Environmental Compliance

THUS DONE AND SIGNED in duplicate original before me this 8th day of June, 20____, at Baton Rouge, Louisiana.

NOTARY PUBLIC (ID #92509)

Amber G. Litchfield
Notary Public
State of Louisiana
Notary ID #92503
East Baton Rouge Parish
(stamped or printed)

Approved: ________________
Celena J. Cage, Assistant Secretary

11 SA-AE-21-0091
CERTIFIED MAIL (7004 2510 0006 3853 2066)
RETURN RECEIPT REQUESTED

NOVA CHEMICALS OLEFIN LLC
  c/o C T Corporation System
  Agent for Service of Process
  3867 Plaza Tower Drive
  Baton Rouge, LA 70816

RE: CONSOLIDATED COMPLIANCE ORDER
  & NOTICE OF POTENTIAL PENALTY
  ENFORCEMENT TRACKING NO. AE-CN-15-01062
  AGENCY INTEREST NO. 5565

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY is hereby served on WILLIAMS OLEFIN LLC (RESPONDENT) for the violations described therein.

Compliance is expected within the maximum time period established by each part of the COMPLIANCE ORDER. The violations cited in the CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY could result in the issuance of a civil penalty or other appropriate legal actions.

Any questions concerning this action should be directed to Madison Kirkland at (225) 219-3165 or Madison.Kirkland@la.gov.

Sincerely,

[Signature]

Celena J. Cage
Administrator
Enforcement Division

EXHIBIT

1

CJC/MLK/mlk
Alt ID No. 0180-00029
Attachment
c: NOVA Chemicals Olefins LLC
    c/o Brandon Lithgoe
    P.O. Box 470
    Geismar, LA 70734
STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE

IN THE MATTER OF

NOVA CHEMICALS OLEFINS LLC
ASCENSION PARISH
ALT ID NO. 0180-00029

ENFORCEMENT TRACKING NO.
AE-CN-15-01062

AGENCY INTEREST NO.
5565

PROCEEDINGS UNDER THE LOUISIANA
ENVIRONMENTAL QUALITY ACT,

CONSOLIDATED
COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY

The following CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY is issued to NOVA CHEMICALS OLEFINS LLC (RESPONDENT) by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2025(C), 30:2050.2 and 30:2050.3(B).

FINDINGS OF FACT

I.

The Respondent owns and/or operates the Geismar Ethylene Plant (the Facility), an Ethylene production plant, located at 5205 Louisiana Highway 3115 in Geismar, Ascension Parish, Louisiana. The Respondent underwent a name change from Williams Olefins, L.L.C. to Nova Chemicals Olefins LLC on or about July 6, 2017. The facility operates or has operated under the authority of the following Air Quality Permits:

<table>
<thead>
<tr>
<th>PERMIT</th>
<th>ISSUE DATE</th>
<th>EFFECTIVE EXPIRATION DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0180-00029-V10AA</td>
<td>1/27/2010</td>
<td>8/15/2013</td>
</tr>
<tr>
<td>0180-00029-V11</td>
<td>4/11/2012</td>
<td>8/15/2013</td>
</tr>
<tr>
<td>0180-00029-V12</td>
<td>5/13/2013</td>
<td>5/13/2018</td>
</tr>
</tbody>
</table>
II.

On or about July 8 through July 10, 2015, and July 16, 2015, the Department conducted a Chemical Accident Prevention Plan (CAPP) inspection and on or about October 3, 2017, the Department conducted a Partial Compliance Evaluation of the Respondent’s facility to determine the degree of compliance with the Act and the Air Quality Regulations. Additionally, on or about August 13, 2018, the Department conducted a subsequent file review.

While the Department’s investigation is not yet complete, the following violations were discovered during the course of the inspections and file review:

A. During the course of a Chemical Accident Prevention Plan (CAPP) inspections conducted on July 8 through July 10, 2015, and July 16, 2015, the inspector noted that the Respondent failed to ensure that the frequency of inspections on pipes and vessels were consistent with recognized and generally accepted good engineering practice. The inspector noted that there were no visual inspections as required by the API570 (American Petroleum Institute) standards for pipelines EA435, EA415, EA433, F404E and FD805B. API510 calculations were not conducted for vessels FA405 and 406 because they were not in the corrosion data analyzing tool. Each failure to ensure that the frequency of tests are consistent with good engineering practices is a violation of 40 CFR 68.73(d)(3), which language has been adopted as a Louisiana regulation in LAC 33:III.5901.A and La. R.S. 30:2057(A)(2).

B. The Respondent reported the following unauthorized releases:

<table>
<thead>
<tr>
<th>REPORT (date)</th>
<th>PERMIT NUMBER</th>
<th>EMISSION POINT</th>
<th>INCIDENT DATE (duration)</th>
<th>POLLUTANTS RELEASED</th>
<th>QUANTITY REPORTED (unit)</th>
<th>REPORTED CAUSE</th>
<th>REGULATORY or PERMIT REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Unauthorized Discharge Notification Report No. T-160289 (12/5/2014)</td>
<td>0180-00029-V13</td>
<td>Valve stem packing</td>
<td>(11/30/2014) 7mins</td>
<td>Propylene R100lbs</td>
<td>212lbs</td>
<td>A hydrocarbon leak was discovered on a valve stem packing. While attempting to tighten the stem packing of the 36” gate valve to stop the leak, it began to leak at a higher rate.</td>
<td>LAC 33:III.905</td>
</tr>
<tr>
<td>B. Unauthorized Discharge Notification Report No. T-161050 (1/16/2015)</td>
<td>0180-00029-V13</td>
<td>Heat exchanger head flange</td>
<td>(1/10/2015) 5mins</td>
<td>Benzene R10lbs</td>
<td>48.94lbs</td>
<td>Approximately 50 gallons of hydrocarbon process material leaked from the head flange of a heat exchanger that was being re-commissioned after being out of service for several months.</td>
<td>LAC 33:III.905</td>
</tr>
</tbody>
</table>
Each unauthorized release of emissions is a violation of any applicable permit and associated requirement(s) listed above, LAC 33:III.905, L.a. R.S. 30:2057(A)(1), and 30:2057(A)(2).

C. According to 1st Half 2015 Semiannual Monitoring Report dated September 25, 2015, the Respondent reported that on or about April 12, 2015, the Olefins Ground Flare (EQT 0067) had an average opacity greater than 20% for more than six minutes. The Respondent reported that the excess opacity was the result of olefins combusted in the flare system below the design pressure. The pressure drop was the result of excessive flare stages remaining open after a heavy flaring event which lasted for approximately 3 hours. This is a violation of Title V Air Permit No. 0180-00029-V13, Specific Requirements 88 and 90, LAC 33:III.501.C.4. L.a. R.S. 30:2057(A)(1), and 30:2057(A)(2). The opacity was reduced by returning the plant to normal operation as quickly and safely as possible and the flare system was returned to the design pressure.

**COMPLIANCE ORDER**

Based on the foregoing, the Respondent is hereby ordered:

I.

To take, immediately upon receipt of this COMPLIANCE ORDER, any and all steps necessary to meet and maintain compliance with the Act, the Air Quality Regulations, and all applicable permits.

II.

To submit to the Enforcement Division, within thirty (30) days after receipt of this COMPLIANCE ORDER, documentation demonstrating that that the frequency of inspections on
pipes and vessels are consistent with generally accepted good engineering practices and that visual inspection as required by the API 570 was conducted as referenced in paragraph III of the Findings of Fact.

III.

To submit to the Enforcement Division, within thirty (30) days after receipt of this COMPLIANCE ORDER, a written report that includes a detailed description of the circumstances surrounding the cited violations and actions taken or to be taken to achieve compliance with the Order Portion of this COMPLIANCE ORDER. This report and all other reports or information required to be submitted to the Enforcement Division by this COMPLIANCE ORDER shall be submitted to:

Office of Environmental Compliance
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Madison Kirkland
Re: Enforcement Tracking No. AE-CN-15-01062
Agency Interest No. 5565

THE RESPONDENT SHALL FURTHER BE ON NOTICE THAT:

I.

The Respondent has a right to an adjudicatory hearing on a disputed issue of material fact or of law arising from this COMPLIANCE ORDER. This right may be exercised by filing a written request with the Secretary no later than thirty (30) days after receipt of this COMPLIANCE ORDER.

II.

The request for an adjudicatory hearing shall specify the provisions of the COMPLIANCE ORDER on which the hearing is requested and shall briefly describe the basis for the request. This request should reference the Enforcement Tracking Number and Agency Interest Number, which are located in the upper right-hand corner of the first page of this document and should be directed to the following:
Department of Environmental Quality  
Office of the Secretary  
Post Office Box 4302  
Baton Rouge, Louisiana 70821-4302  
Attn: Hearings Clerk, Legal Division  
Re: Enforcement Tracking No. AE-CN-15-01062  
Agency Interest No. 5565

III.
Upon the Respondent's timely filing a request for a hearing, a hearing on the disputed issue of material fact or of law regarding this COMPLIANCE ORDER may be scheduled by the Secretary of the Department. The hearing shall be governed by the Act, the Administrative Procedure Act (La. R.S. 49:950, et seq.), and the Department's Rules of Procedure. The Department may amend or supplement this COMPLIANCE ORDER prior to the hearing, after providing sufficient notice and an opportunity for the preparation of a defense for the hearing.

IV.
This COMPLIANCE ORDER shall become a final enforcement action unless the request for hearing is timely filed. Failure to timely request a hearing constitutes a waiver of the Respondent's right to a hearing on a disputed issue of material fact or of law under Section 2050.4 of the Act for the violation(s) described herein.

V.
The Respondent's failure to request a hearing or to file an appeal or the Respondent's withdrawal of a request for hearing on this COMPLIANCE ORDER shall not preclude the Respondent from contesting the findings of facts in any subsequent penalty action addressing the same violation(s), although the Respondent is estopped from objecting to this COMPLIANCE ORDER becoming a permanent part of its compliance history.

VI.
Civil penalties of not more than twenty-seven thousand five hundred dollars ($27,500) for each day of violation for the violation(s) described herein may be assessed. For violations which occurred on August 15, 2004, or after, civil penalties of not more than thirty-two thousand five hundred dollars ($32,500) may be assessed for each day of violation. The Respondent's failure or refusal to comply with this COMPLIANCE ORDER and the provisions herein will subject the Respondent to possible enforcement procedures under La. R.S. 30:2025, which could result in the
assessment of a civil penalty in an amount of not more than fifty thousand dollars ($50,000) for each day of continued violation or noncompliance.

VII.

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

NOTICE OF POTENTIAL PENALTY

I.

Pursuant to La. 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.

II.

Prior to the issuance of additional appropriate enforcement action(s), 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 Madison Kirkland at (225) 219-3165 within ten (10) days of receipt of this NOTICE OF POTENTIAL PENALTY.

III.

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 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 violation(s) 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 that statement. If the Respondent chooses not to submit the requested most current annual gross revenues 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.

IV.
The Department assesses civil penalties based on LAC 33:1. Subpart 1. Chapter 7. To expedite closure of this NOTICE OF POTENTIAL PENALTY portion, 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 “CONSOLIDATED COMPLIANCE ORDER AND NOTICE OF POTENTIAL PENALTY REQUEST TO CLOSE” 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.

V.

This **CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY** is effective upon receipt.

Baton Rouge, Louisiana, this 5th day of **October**, 2018.

[Signature]

Lourdes Iturralde
Assistant Secretary
Office of Environmental Compliance

Copies of a request for a hearing and/or related correspondence should be sent to:

Louisiana Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
P.O. Box 4312
Baton Rouge, LA 70821-4312
Attention: Madison Kirkland
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE
ENFORCEMENT DIVISION
CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY
BATON ROUGE, LOUISIANA 70821-4312 REQUEST TO CLOSE

Enforcement Tracking No.  AE-CN-15-01062  
Agency Interest (AI) No.  5565  
Alternate ID No.  0180-00029  
Respondent:  Nova Chemicals Olefins LLC  
c/o C T Corporation System  
Agent for Service of Process  
3867 Plaza Tower Drive  
Baton Rouge, LA 70816  
Facility Name:  Geismar Ethylene Plant  
Physical Location:  5205 Louisiana Highway 3115  
City, State, Zip:  Geismar 70734  
Parish:  Ascension

STATEMENT OF COMPLIANCE

A written report was submitted in accordance with Paragraph III of the “Order” portion of the COMPLIANCE ORDER.

All necessary documents were submitted to the Department within 30 days of receipt of the COMPLIANCE ORDER in accordance with Paragraph II and III of the “Order” portion of the COMPLIANCE ORDER.

All items in the “Findings of Fact” portion of the COMPLIANCE ORDER were addressed and the facility is being operated to meet and maintain the requirements of the “Order” portion of the COMPLIANCE ORDER. Final compliance was achieved as of:

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:i.Subpart1.Chapter7.

- In order to resolve any claim for civil penalties for the violations in NOTICE OF POTENTIAL PENALTY (AE-CN-15-01062), 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-CN-15-01062), 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-CN-15-01062) 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>
<thead>
<tr>
<th>Respondent’s Signature</th>
<th>Respondent’s Printed Name</th>
<th>Respondent’s Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Respondent’s Physical Address</th>
<th>Respondent’s Phone #</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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: Madison Kirkland
CERTIFIED MAIL (7018 1130 0002 1720 3039)
RETURN RECEIPT REQUESTED

NOVA CHEMICALS OLEFIN LLC
 c/o C T Corporation System
   Agent for Service of Process
   3867 Plaza Tower Drive
   Baton Rouge, LA 70816

RE: AMENDED CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY
ENFORCEMENT TRACKING NO. AE-CN-15-01062A
AGENCY INTEREST NO. 5565

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached AMENDED CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY is hereby served on NOVA CHEMICALS OLEFIN LLC (RESPONDENT) for the violation described therein.

Any questions concerning this action should be directed to Madison Kirkland at (225) 219-3165 or Madison.Kirkland@la.gov.

Sincerely,

[Signature]
Celena J. Cage
Administrator
Enforcement Division

CJC/MLK/mlk
Alt ID No. 0180-000029
Attachment

c: NOVA Chemicals Olefins LLC
   c/o Scott Kay, Director
   P.O. Box 470
   Geismar, LA 70734

EXHIBIT 2

Post Office Box 4312 • Baton Rouge, Louisiana 70821-4312 • Phone 225-219-3715 • Fax 225-219-3708
www.deq.louisiana.gov
STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE

IN THE MATTER OF

NOVA CHEMICALS OLEFIN LLC
ASCENSION PARISH
ALT ID NO. 0180-00029

ENFORCEMENT TRACKING NO.
AE-CN-15-01062A

AGENCY INTEREST NO.
5565

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

AMENDED CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY

The Louisiana Department of Environmental Quality (the Department) hereby amends the CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY, ENFORCEMENT TRACKING NO. AE-CN-15-01062A issued to NOVA CHEMICALS OLEFIN LLC (RESPONDENT) on October 5, 2018 in the above-captioned matter as follows:

I.

The Department hereby edits Findings of Fact paragraphs II.A and II.B to read as follows:

“A. During the course of Chemical Accident Prevention Plan (CAPP) inspections conducted on July 8 through July 10, 2015, and July 16, 2015, the inspector noted that the Respondent failed to ensure that the frequency of inspections on pipes and vessels were consistent with recognized and generally accepted good engineering practice. The inspector noted that the API 510 calculations were not conducted for vessel FA-405. In correspondence dated November 12, 2018, the Respondent provided documentation of an internal inspection conducted on September 10, 2013. However, the inspection did not include remaining life or corrosion rate calculations which are required by API 520 to determine the appropriate inspection frequency for the vessel. Each failure to ensure that the inspections and tests are consistent with good engineering practices is a violation of 40 CFR 68.73(d)(3), which language has been adopted as a Louisiana regulation in LAC 33:III.5901.A and L. S. 30:2057(A)(2).
B. The Respondent reported the following unauthorized releases:

<table>
<thead>
<tr>
<th>REPORT (date)</th>
<th>PERMIT NUMBER</th>
<th>EMISSION POINT</th>
<th>INCIDENT DATE (duration)</th>
<th>POLLUTANTS RELEASED</th>
<th>QUANTITY REPORTED (unit)</th>
<th>REPORTED CAUSE</th>
<th>REGULATORY or PERMIT REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unauthorized Discharge Notification Report No. T 160269 (12/5/2014)</td>
<td>0180-00029-V13</td>
<td>Valve stem packing</td>
<td>(11/30/2014) 7mins</td>
<td>Propylene RQ100lbs</td>
<td>212lbs</td>
<td>A hydrocarbon leak was discovered on a valve stem packing. While attempting to tighten the stem packing of the 36&quot; gate valve to stop the leak, it began to leak at a higher rate</td>
<td>LAC 33:III.905</td>
</tr>
<tr>
<td>Unauthorized Discharge Notification Report No. T 161050 (1/16/2015)</td>
<td>0180-00029-V13</td>
<td>Heat exchanger head flange</td>
<td>(1/10/2015) 5mins</td>
<td>Benzene RQ10lbs</td>
<td>48.9lbs</td>
<td>Approximately 50 gallons of hydrocarbon process material leaked from the head flange of a heat exchanger that was being re-commissioned after being out of service for several months</td>
<td>LAC 33:III.905</td>
</tr>
</tbody>
</table>

Each unauthorized release of emissions is a violation of any applicable permit and associated requirement(s) listed above, LAC 33:III.905, La. R.S. 30:2057(A)(1), and 30:2057(A)(2). Additionally, each exceedance of a permit limit is a violation of LAC 33:III.501.C.4. ”

II.

The Department hereby adds paragraph II.D to the Findings of Fact section of the Compliance Order and Notice of Potential Penalty Enforcement Tracking No. AE-CN-15-01062 to read as follows:

“D. The Respondent failed to document the results of the inspection for pipelines EA-435 and EA-415. Specifically, in correspondence dated November 13, 2018, the Respondent provided documentation of a piping thickness and external visual inspection conducted on April 5, 2013, and documentation of an ultrasonic testing (UT) inspection for the year 2016; however, there was no documentation regarding the external condition of the piping in the inspection report for EA-435 piping. Additionally, the Respondent provided documentation of a piping thickness and external visual inspection conducted on September 28, 2010, and documentation of a UT inspection conducted on September 4, 2015; however, there was no documentation regarding the external condition of the piping in the inspection report for EA-415 piping. Each failure to document the results of the inspection is a violation of 40 CFR 68.73(d)(4), which language has been adopted as a Louisiana regulation in LAC 33:III.5901.A and La. R.S. 30:2057(A)(2).”
III.

To submit to the Enforcement Division, within thirty (30) days after receipt of this AMENDED CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY, a written report that includes a detailed description of the circumstances surrounding the cited violation added in this AMENDED CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY and actions taken or to be taken to achieve compliance with the Order Portion of this AMENDED CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY. This report and all other reports or information required to be submitted to the Enforcement Division by this AMENDED CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY shall be submitted to:

Office of Environmental Compliance
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Madison Kirkland
Re: Enforcement Tracking No. AE-CN-15-01062
Agency Interest No. 5565

IV.

The Department incorporates all of the remainder of the original CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY, ENFORCEMENT TRACKING NO. AE-CN-15-01062A and AGENCY INTEREST NO. 5565 as if reiterated herein.

V.

This AMENDED CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY is effective upon receipt.

Baton Rouge, Louisiana, this 5th day of May, 2020.

[Signature]

Lourdes Iturralde
Assistant Secretary
Office of Environmental Compliance
Copies of a request for a hearing and/or related correspondence should be sent to:

Louisiana Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
Post Office Box 4312
Baton Rouge, LA 70821-4312
Attention: Madison Kirkland