STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL
RICHARDSON & ROBBINS BUILDING
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

OFFICE OF THE
SECRETARY

PHONE
(302) 739-9000

NOTICE OF ADMINISTRATIVE PENALTY ASSESSMENT AND SECRETARY'S ORDER

Pursuant to 7 *Del. C.* § 6005

Order No. 2026-A-0017

VIA PERSONAL SERVICE

Issued To:
Delaware City Refining Company LLC
Attn: Michael Capone
Refinery Manager
4550 Wrangle Hill Road
Delaware City, DE 19706

Registered Agent:
The Corporation Trust Company
Corporation Trust Center
1209 Orange Street
Wilmington, DE 19801

This Assessment and Secretary's Order serves to notify Delaware City Refining Company LLC ("Respondent") that the Secretary of the Department of Natural Resources and Environmental Control ("Department") has found Respondent in violation of its permit. Accordingly, the Department is issuing this Notice of Administrative Penalty Assessment and Secretary's Order pursuant to 7 *Del. C.* § 6005(b)(3).

BACKGROUND

Respondent owns and operates a petroleum refinery located in Delaware City, Delaware, ("refinery" or "facility") where it manufactures various petroleum-based products, including gasoline, diesel, and jet fuels, and other marketable petroleum by-products. Respondent's operations have the potential to emit pollutants in excess of the major source threshold for New Castle County and requires a permit, ("Title V Permit") pursuant to 7 DE Admin. Code 1130 ("Title V State Operating Permit Program") of the State of Delaware's *Regulations Governing the Control of Air Pollution*.

On November 14, 2024, the Department issued a Title V Permit Renewal comprised of three parts ("permits"), Permit: AQM-003/00016 – Part 1 (Renewal 3)(Revision 2); Permit: AQM-003/00016 – Part 2 (Renewal 2)(Revision 2); and Permit: AQM-003/00016 – Part 3 (Renewal 3)(Revision 2). Permit: AQM-003/00016-Part 2 (Renewal 2)(Revision 2), (hereafter referred to as "TV Permit Part 2") is applicable to the violations identified in this Order.

One of the units that Respondent owns and operates at the facility is a Fluid Coking Unit ("Coker" or as set forth in Respondent's permit, "Emission Unit No. 22")[1]. The Coker is equipped with a carbon monoxide boiler ("COB") and wet gas scrubber ("WGS") train as pollution control devices to control carbon monoxide ("CO"), oxides of nitrogen ("NO_X"), sulfur dioxide ("SO_2"), and particulate matter ("PM") emissions. NO_X and SO_2 emissions are controlled by the Selective Non-Catalytic Reduction ("SNCR") system

[1] Note: Permit limits associated with the Coker apply to the standard operating configuration, where the FCU flue gas is routed through the COB and WGS/SNCR train and is inclusive of the FCU, FCU WGS, FCU SNCR, FCU Start Up Heater, FCU Selas Steam Superheater, FCU COB, and FCU BUI.

located in the Coker COB, and the downstream WGS train respectively. The Coker is also equipped with a Back-Up Incinerator ("BUI") which is allowed to operate during periods when the COB is down in order to control CO and PM emissions. During normal operation the Coker burner flue gas is routed to the Coker COB and WGS train via an open water seal drum ("22-D-20"). However, when the Coker COB and WGS train are bypassed, the Coker burner flue gas can be routed in one of two ways, i.e., either through the BUI via water seal drum 22-D-27, or through the bypass stack via water seal drum 22-D-21. The Coker permit is structured to require operation of the Coker with its flue gas routed though the COB and downstream WGS at all times. Routing the Coker burner flue gas to the BUI will control PM and CO emissions but will not control NO_X or SO_2 emissions. When the Coker flue gas is routed through the bypass stack, all pollutants are emitted uncontrolled. This uncontrolled release is also highly visible as the plume opacity may be above the 20% standard. It can take several hours to bring the BUI online in order to follow recommended BUI warm up procedures, when shorter duration unplanned outages occur, the Coker burner flue gas is not sent to the BUI but through the bypass stack.

Respondent's permits require it to report deviations from the permits. These reports, along with supplemental information provided by Respondent, are the basis for the factual assertions below related to the historical Coker and Fluid Catalytic Cracking Unit ("FCCU") COB outages and the Coker COB outage being addressed by this Order, that occurred between May 7, 2026, and May 30, 2026.

A Settlement Agreement was signed April 27, 2023, between the Department and Respondent which required Respondent to develop a COB Reliability Plan for the COBs associated with both the Coker and FCCU describing the inspection and/or maintenance activities that Respondent will perform during future planned maintenance outages. The settlement resolved compliance issues including those related to the COBs for the Coker and the FCCU at the Refinery. Respondent was to institute measures designed to enhance the operating reliability of the two COBs, thus minimizing the likelihood of further COB outages. Respondent developed and implemented the COB Reliability Plan; however, the continued reoccurrence of COB outages indicates that it has not adequately addressed the operational reliability of these units.[2]

On December 31, 2025, the Department issued Respondent Notice of Administrative Penalty Assessment and Secretary's Order No. 2025-A-39, that included a penalty assessment of $300,000, to address violations associated with certain flaring incidents as well as outages of both the Coker COB and FCCU COB. Secretary's Order No. 2025-A-39 addressed two Coker COB incidents. One occurred on March 13, 2025, that lasted 10.2 hours. Due to the shorter duration, the BUI was not used and the flue gas was directed to the unpermitted bypass stack. The second incident occurred between May 25, 2025, and June 11, 2025. Upon discovering a water leak from the economizer area in the COB on May 24, 2025, Respondent began the procedure to bring the BUI online. When the Coker COB was shutdown on May 25, 2025, and in the process of directing the flue gas to the BUI, the BUI tripped offline and the flue gas was directed to the unpermitted bypass stack. After bringing the BUI back online, the flue gas was directed back to the BUI on May 26, 2025. However, on May 30, 2025, the BUI tripped offline again, resulting in directing the flue gas back to the unpermitted bypass stack. The BUI was brought back online that same day, and the flue gas was returned to the BUI. In its Incident Report, Respondent indicated that there were leaks found in the economizer section of the Coker COB. Several tubes

[2] In addition to the Coker COB outages discussed in the next paragraph, there were three FCCU COB outages following the signing of the Settlement Agreement, occurring on June 5-6, 2024, June 10, 2024, and January 25, 2025.

were cut and weld capped. Corrective actions at the time included updating the Coker COB and FCCU COB maintenance plans to include an acid neutralization step for the economizer tubes. Additionally, the COB Reliability Plan was updated to include cleaning and visual inspection between the economizer banks of tubes. Finally, the Coker COB economizer was scheduled to be replaced during the next unit turnaround in 2027. During this lengthy unplanned outage of the Coker COB from May 25, 2025, and June 11, 2025, the BUI was utilized as the control device for the Coker flue gas. However, when Respondent experienced intermittent BUI failures, the unpermitted bypass stack was used, which resulted in the unpermitted emissions of certain pollutants, among them, SO_2. Respondent appealed Secretary's Order No. 2025-A-39, which was subsequently superseded by Amended Notice of Administrative Penalty Assessment and Secretary's Order on Consent, Order No. 2026-A-0016, signed July 5, 2026.

On May 3, 2026, operations personnel noticed a change in the steam/water balance for the Coker COB. Visual inspections conducted did not reveal any water leaks. During a visual inspection on May 4, 2026, operations personnel observed a water leak from the economizer area of the COB. At 5:00 p.m. on May 4, 2026, operations personnel began to bring the BUI up to temperature in preparation for a potential COB outage. On May 6, 2026, Respondent issued an advisory notice to the public that it would be shutting down the Coker COB for repairs. A planned outage of the COB to repair the leak was scheduled for May 9, 2026.

However, by 12:30 p.m. on May 7, 2026, the water to steam ratio had degraded such that operations personnel began a shutdown of the COB. Beginning at 1:30 p.m., two unsuccessful attempts were made to transition the flue gas from the COB to the BUI. They failed because of erratic temperature fluctuations in the BUI, which intermittently fell below the minimum temperature limit of 1700 °F reaching lows of 1380 °F. On the third attempt, flue gas was successfully transitioned into the BUI by 4:55 p.m., and the COB was shut down for inspection and repairs.

Following completion of repairs on May 29, 2026, which included replacement of the entire economizer assembly, operations personnel began startup of the COB. The COB temperature was restored to the required 1300 °F minimum at 1:00 a.m. on May 30, 2026. Flue gas was restored to the COB at 6:00 a.m. on May 30, 2026, ending the event which resulted in the release of 1,490,000 lbs. (745 tons) of SO_2 and 101,000 lbs. (50.5 tons) of NO_X. The NO_X remains below the facility wide 12-month rolling NO_X cap.

The violations described below are related to the shutdown of the Coker COB between May 7, 2026, and May 30, 2026, based on the information provided by Respondent in its Incident Report dated June 4, 2026, and supplemental information.

FINDINGS OF FACT

1. Respondent owns and operates a petroleum refinery located in Delaware City, Delaware whose operations are governed by a Title V Permit, issued pursuant to Regulation 1130, in three separate parts. Each part is renewed every 5 years following the prescribed permitting process. Revisions can occur as necessary and following the prescribed process. Respondent's Title V Permit number referenced in this Order includes the Part, Renewal and Revision in effect at the time of the violation.

2. Permit: AQM-003/00016-Part 2 (Renewal 2)(Revision 2) issued November 14, 2024, ("TV Permit Part 2") is applicable to the violations addressed by this Order.

3. Respondent has a Fluid Coking Unit (“Coker”) that is equipped with a CO Boiler (“COB”) with a downstream wet gas scrubber (“WGS”) train as pollution control devices to control CO, NO_X, SO_2, and PM emissions. NO_X and SO_2 emissions are controlled by the Selective Non-Catalytic Reduction (“SNCR”) system located in the Coker COB, and the WGS train (which cannot reduce pollution unless the upstream COB is functioning).

4. The Coker is also equipped with a Back-Up Incinerator (“BUI”) which controls CO and PM emissions during periods when the COB is inoperable. During normal operation, the Coker burner flue gas is routed to the Coker COB and WGS train. However, when the Coker COB and WGS train cannot be utilized, the Coker burner flue gas can be routed in one of two ways, i.e., either through the BUI, or through the bypass stack.

5. The permit requires operation of the Coker with its flue gas routed though the COB and downstream WGS at all times. Routing the Coker burner flue gas to the BUI will control PM and CO emissions but will not control NO_X or SO_2 emissions. However, it can take several hours to follow recommended BUI warm up procedures in order for the BUI to function safely and properly; therefore when shorter duration unplanned outages occur, the Coker burner flue gas is not sent to the BUI but through the unpermitted bypass stack. When the Coker flue gas is routed through the bypass stack, all pollutants are emitted uncontrolled. This uncontrolled release is also highly visible as the plume opacity may be above the 20% standard.

6. A Settlement Agreement signed April 27, 2023, between the Department and Respondent, required Respondent develop a

COB Reliability Plan describing inspection and/or maintenance activities it would perform during future planned maintenance outages as well as institute measures to enhance the operating reliability of the COB. However, since then, continued reoccurrence of COB outages indicates the COB Reliability Plan has not adequately addressed the operational reliability of the COBs.

7. On December 31, 2025, the Department issued Respondent Notice of Administrative Penalty Assessment and Secretary's Order No. 2025-A-39, that included a penalty assessment of $300,000, to address violations associated with certain flaring incidents as well as outages of both the Coker COB and FCCU COB. Respondent appealed Secretary's Order No. 2025-A-39, which was subsequently superseded by Amended Notice of Administrative Penalty Assessment and Secretary's Order on Consent, Order No. 2026-A-0016, signed July 5, 2026.

8. Beginning on May 3, 2026, Respondent noticed a change in the steam/water balance for the Coker COB, however visual inspections did not reveal any leaks.

9. On May 4, 2026, Respondent observed a water leak from the economizer area of the Coker COB. In anticipation of a potential COB outage to repair the leak, Respondent began the process of bringing the BUI up to temperature. Respondent scheduled a planned outage of the Coker COB for May 9, 2026.

10. On May 6, 2026, Respondent issued an advisory notice to the public that the Coker COB would be shut down for repair.

11. By 12:30 p.m. on May 7, 2026, the water to steam ratio had degraded such that Respondent began a shutdown of the Coker COB and after three attempts over the course of 3.5 hours, successfully transitioned the flue gas from the Coker COB to the BUI at 4:55 p.m.

12. Following completion of repairs on May 29, 2026, which included replacement of the entire economizer assembly, operations personnel began startup of the Coker COB. The Coker COB temperature was restored to the required 1300 °F minimum at 1:00 a.m. on May 30, 2026. Flue gas was restored to the Coker COB at 6:00 a.m. on May 30, 2026, ending the release event.

13. Respondent submitted an Incident Report dated June 4, 2026, to the Department as required. A total of 1,490,000 lbs. (745 tons) of SO_2 and 101,000 (50.5 tons) of NO_X were released uncontrolled through the use of the BUI between May 7, 2026, and May 30, 2026.

PERMIT REQUIREMENTS

1. In Condition 3–Table 1.da.1.i.C of TV Permit Part 2, it states:

   "The Belco pre-scrubber, the amine-based Cansolv regenerative WGS, the caustic polishing scrubber and SNCR system shall be operating properly at all times when the FCU is operating."

2. In Condition 3-Table 1.da.3.i.A of TV Permit Part 2, it states:

> *"SO_2 emissions shall not exceed 25 ppmvd @ 0% O2 on a rolling 365-day average, 50 ppmvd @ 0% O2 on a rolling 7-day average, and 182.3 TPY."*[3]

CONCLUSION

Based on the above, the Department has concluded that Respondent committed the following violations:

1. Respondent is found to be in violation of Condition 3-Table 1.da.1.i.C of TV Permit Part 2, for failing to operate the Belco pre-scrubber, the amine-based Cansolv regenerative WGS, the caustic polishing scrubber and SNCR while the Coker was operating between May 7, 2026, and May 30, 2026.

2. Respondent is found to be in violation of the annual SO_2 limit of 182.3 TPY for Emission Unit No. 22[2] found in Condition 3 – Table 1.da.3.i.A of TV Permit Part 2, as a result of the release of 1,490,000 lbs. (745 tons) of SO_2 uncontrolled through the use of the BUI stack between May 7, 2026, and May 30, 2026.

ASSESSMENT OF PENALTY

Pursuant to 7 *Del. C.* § 6005(b)(3), the Secretary may impose an administrative penalty of not more than $40,000 for each day of violation

[3] Note: The concentration limits apply to the standard operating configuration, where FCU flue gas is routed through the COB and WGS/SNCR train. The annual TPY limit applies to Emission Unit No. 22, inclusive of the FCU, FCU WGS, FCU SNCR, FCU Start Up Heater, FCU Selas Steam Superheater, FCU COB, and FCU Back Up Incinerator.

detailed in this Order. In assessing the administrative penalty, 7 *Del. C.* § 6005(b)(3) instructs the Secretary to consider the following factors: (1) the nature, circumstances, extent, and gravity of the violation, or violations; (2) the ability of the violator to pay; (3) any prior history of such violations; (4) the degree of culpability; (5) the economic benefit or savings (if any) resulting from each violation; and (6) such other matters as justice may require. A brief discussion of these factors is set out below.

Having considered these factors, the Secretary is assessing an administrative penalty of $960,000 for the violations identified in this Assessment and Order.

1. **The Nature, Circumstances, Extent and Gravity of the Violation, or Violations:**
   The nature, circumstances, extent, and gravity of the violations are significant. The May 2026 Coker COB outage detailed in this Order caused a total uncontrolled release of 1,490,000 lbs. (745 tons) of SO_2. The total amount emitted of this regulated pollutant is substantial. The maximum penalty of $40,000 per day was assessed.

2. **Respondent's Ability to Pay:**
   The record contains no information that the Respondent does not have the ability to pay the administrative penalty assessed.

3. **Prior History of Violations:**
   Respondent has had prior violations of these specific permit requirements related to Coker COB outages.

4. **Degree of Culpability:**

Factors the Department considered that impact Respondent's degree of culpability include whether it has employed reasonable measures to assure that violations that occur are brief in nature and have minimal impact on surrounding areas, and whether Respondent has taken sufficient measures to avoid repeat violations. Respondent's decision to extend the maintenance turn around schedule for the Coker has resulted in exceeding the practical turnaround needs of all of the Coker components including the Coker COB. The Coker and COB must be assessed as a single unit and turnaround scheduled for the duration reflective of the needs of all components.

5. **Economic Benefit or Savings Resulting from the Violation(s):**
The Respondent's decision to extend the Coker turnaround schedule and to continue operating the Coker instead of safely shutting it down during the COB maintenance event resulted in an economic benefit from maintaining refinery operations despite increased emissions of more than 700 tons of sulfur dioxide.

6. **Such Other Matters as Justice May Require:**
Lastly, considering such other matters as justice may require, the Secretary has determined that the penalty assessed is proportional to the violations and calculated so as to deter Respondent and those similarly situated from engaging in future violations.

SECRETARY'S ORDER ASSESSING ADMINISTRATIVE PENALTY

Pursuant to 7 *Del. C.* § 6005(b)(3), this is written notice to Respondent that on the basis of its findings, the Department is assessing Respondent an administrative penalty of $960,000 for the violations identified in this Secretary's Order.

Respondent shall submit a check to the payable to the "State of Delaware" in the amount of $960,000 within thirty (30) days of receipt of this Secretary's Order to: OTS Enforcement Processing, Department of Natural Resources and Environmental Control, Office of the Secretary, 89 Kings Highway, Dover, Delaware 19901.

PUBLIC HEARING AND APPEAL RIGHTS

This Secretary's Order affects Respondent's legal rights and is effective and final upon receipt by Respondent. Pursuant to 7 *Del. C.* § 6008, any person whose interest is substantially affected by this action of the Secretary may appeal to the Environmental Appeals Board within 20 days of the receipt of the Secretary's Order. In the alternative, Respondent may, pursuant to 7 *Del. C.* § 6005(b)(3), request a public hearing on the Secretary's Order, within 30 days of receipt of the Order. A public hearing pursuant to 7 *Del. C.* § 6005(b)(3) would be conducted pursuant to 7 *Del. C.* § 6006, and the Secretary's Order following the hearing would be subject to appeal, pursuant to 7 *Del. C.* § 6008, by any person substantially affected.

Respondent is further advised that the above assessed administrative penalty shall be due and owing within 30 days of Respondent's receipt of this Assessment and Order. In the event of nonpayment of the administrative penalty assessed above, and after Respondent has exhausted all legal appeals, if any, a civil action may be brought by the Secretary in Superior Court for collection of the administrative penalty, including interest, attorneys' fees and costs, and the validity, amount and appropriateness of such administrative penalty and/or costs shall not be subject to review pursuant to 7 *Del. C.* § 6005(b)(3).

To request a public hearing pursuant to 7 *Del. C.* § 6005(b)(3), please submit your request, in writing, to:

Department of Natural Resources and Environmental Control
Office of the Secretary
89 Kings Highway
Dover, DE 19901
Phone: (302) 739-9000

To submit an appeal to the Environmental Appeals Board pursuant to 7 *Del. C.* § 6008, you must file your written statement of appeal and submit a check, made payable to: "Environmental Appeals Board," for the $50.00 filing fee, to:

Department of Natural Resources and Environmental Control
Office of the Secretary
Attn: Assistant to the Environmental Appeals Board
89 Kings Highway
Dover, DE 19901
Phone: (302) 739-9000

For additional information on filing an appeal with the Environmental Appeals Board and what information you must include in your written statement of appeal, please refer to the Environmental Appeals Board Regulations, codified at 7 DE Admin. Code 105.

The Department, to the extent necessary, reserves the right to take additional enforcement actions regarding these and other violations by

Respondent, including but not limited to one or more of the following: an action under 7 *Del. C.* § 6005(b)(1) seeking penalties for past violations, an action under 7 *Del. C.* § 6005(b)(2) seeking penalties for continuing violations, an action in the Court of Chancery pursuant to 7 *Del. C.* § 6005(b)(2) seeking a temporary restraining order or an injunction, and the imposition of civil penalties and recovery of the Department's costs and attorney's fees pursuant to 7 *Del. C.* §§ 6005(b)(3) & (c)(1). Nothing in this document shall be deemed to estop, or in any way preclude, any additional enforcement action for these and any other violations, including administrative and civil penalties for each day of violation, or an action for the recovery of Department costs expended in abating these violations.

PRE-PAYMENT

Respondent may prepay the administrative penalty of $960,000 in the manner described in the attached "Waiver of Statutory Right to a Hearing." By doing so, Respondent waives its right to a hearing and the opportunity to appeal or contest this Secretary's Order.

If you have any questions, please contact, or have your attorney contact, Valerie S. Edge, Deputy Attorney General, at (302) 739-4636.

July 8, 2026

Date

Gregory Patterson, Secretary
Department of Natural Resources
and Environmental Control

cc: Valerie S. Edge, Deputy Attorney General

Angela Marconi, P.E., Director

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WAIVER OF STATUTORY RIGHT TO A HEARING

Delaware City Refining Company LLC hereby waives its right to a hearing and its opportunity to appeal or contest this Assessment and Order and agrees to the following:

1. **Delaware City Refining Company LLC** will pay the administrative penalty in the amount of $960,000 by sending a check payable to the "State of Delaware" within 30 days of receipt of this Assessment and Order. The check shall be directed to OTS Enforcement Processing, Department of Natural Resources and Environmental Control, Office of the Secretary, 89 Kings Highway, Dover, Delaware 19901.

Delaware City Refining Company LLC

Date: ___________________________ By: ____________________________

Title: ___________________________