



STATE OF DELAWARE
**DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**

RICHARDSON & ROBBINS BUILDING
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OFFICE OF THE
SECRETARY

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**AMENDED NOTICE OF CONCILIATION
AND SECRETARY'S ORDER ON CONSENT**

Pursuant to 7 *Del. C.* § 6005

Order No. 2026-A-0009

ELECTRONICALLY DELIVERED

Issued To:

Delaware City Refining Company LLC

Attn: Michael Capone

Refinery Manager

4550 Wrangle Hill Road

Delaware City, DE 19706

This Amended Notice of Conciliation and Secretary's Order on Consent 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 air permits. Accordingly, the Department is issuing this Amended Notice of Conciliation and Secretary's Order on Consent ("Amended Order on Consent") in an endeavor to obtain compliance with the requirements of 7 *Del. C.* Chapter 60. Upon the Secretary's signature of this Amended Order on Consent, it becomes final, and this Amended Order

on Consent will supersede and withdraw Notice of Conciliation and Secretary's Order No. 2025-A-0038, signed December 12, 2025.

BACKGROUND

Respondent owns and operates a petroleum refinery located in Delaware City, Delaware, ("refinery") 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. Respondent's Title V Permit is issued 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.

The Ether Plant Cooling Tower located in the refinery and relevant to the incident identified in this Order is governed by both a permit issued pursuant to 7 DE Admin. Code 1102, Permit: APC-91/0553 - OPERATION (Amendment 1) (LAER) dated April 23, 2013, and Title V Permit: AQM-003/00016 - Part 1 - Renewal 3 - Revision 2, dated November 14, 2024 ("TV Permit - Part 1 (Ren 3) (Rev 2)").

On November 27, 2025, Respondent notified the Department of a release of butane exceeding the reportable quantity threshold. At the time of the report, the facility indicated that the release exceeded 1,000 pounds per hour and the equipment that was the source of the release was isolated

and the release had been stopped. The total reported time from discovery of the leak until the equipment was isolated was 1 hour and 46 minutes.

On December 4, 2025, Respondent informed the Department that the release began much earlier, at approximately 9:02 p.m. on November 26, 2025, and continued until approximately 3:46 p.m. on November 27, 2025. Emissions were of butane and butane compounds. Respondent's final emissions calculations were 49,540 lbs. of butane, 69,350 lbs. of isobutane, 29,170 lbs. of isobutylene, 23,650 lbs. of cis-2-butene, 6,380 lbs. of butene, 41,050 lbs. of trans-2-butene, and 1,140 lbs. of isopentane resulting in total emissions of approximately 113 tons of VOCs.¹

Respondent's preliminary investigation indicates that the leak occurred due to the failure of previous repair in a heat exchanger associated with the Ether Plant. A plug in an exchanger tube gave way allowing butane and butane compounds to make their way through process equipment before reaching the atmosphere at the outlet of the Ether Plant Cooling Tower. The presence of a leak was identified when someone smelled the emission, at which time lower-explosive limit ("LEL") detectors were used to identify the source of the leak. The leak occurred during a power disturbance originating with Delmarva Power and Light Company. A number of pumps went off-line, including cooling water pumps for the Ether Plant Cooling Tower. While the power disturbance was relatively minor, with

¹ While the original Order estimated emissions were 49,500 lbs. of butane, 69,000 lbs. of isobutane, 29,000 lbs. of isobutylene, 23,000 lbs. of cis-2-butene, 6,000 lbs. of butene, and 41,000 lbs. of trans-2-butene, resulting in total emissions of approximately 108.75 tons of VOCs, this information has since been updated consistent with Respondent's December 24, 2025, 30-day written investigation report submitted pursuant to Section 2.5 of 7 DE Admin. Code 1203.

minimal facility wide impacts, it contributed to the extended duration of the discovery process. The affected exchanger tube was replugged, hydrotested to verify integrity, and returned to service.

Condition 3 – Table 1.g.1.i of TV Permit - Part 1 (Ren 3) (Rev 2) and Condition 2.2 of Permit: APC-91/0553 – OPERATION (Amendment 1) (LAER) set forth an annual VOC emission limit of 5.5 TPY for the Ether Plant Cooling Tower. The estimated emissions from the incident between November 26, 2025, and November 27, 2025, at the time of this Secretary's Order are 113 tons.

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.
2. Equipment covered by the Title V Permit have underlying permits issued pursuant to 7 DE Admin. Code 1102.
3. The Ether Plant Cooling Tower, located in the refinery, is relevant to the incident identified in this Secretary's Order.
4. The Ether Plant Cooling Tower is governed by Permit: AQM-003/00016-Part 1 (Renewal 3) (Revision 2) ["TV Permit - Part 1 (Ren 3) (Rev 2)"], dated November 14, 2024, and Permit: APC-91/0553 – OPERATION (Amendment 1) (LAER), dated April 23, 2013.

5. The Ether Plant Cooling Tower has an annual VOC limit of 5.5 TPY in TV Permit - Part 1 (Ren 3) (Rev 2) and Permit: APC-91/0553 – OPERATION (Amendment 1) (LAER).
6. On November 27, 2025, Respondent notified the Department of a release of butane exceeding 1,000 pounds per hour.
7. On December 4, 2025, Respondent informed the Department that the release began at approximately 9:02 p.m. on November 26, 2025, and continued until approximately 3:46 p.m. on November 27, 2025.
8. Respondent's preliminary investigation indicates that the leak occurred due to the failure of a previous repair in a heat exchanger associated with the Ether Plant.
9. Emissions were of butane and butane compounds. Final emissions were 49,540 lbs. of butane, 69,350 lbs. of isobutane, 29,170 lbs. of isobutylene, 23,650 lbs. of cis-2-butene, 6,380 lbs. of butene, 41,050 lbs. of trans-2-butene, and 1,140 lbs. of isopentane. These pollutants fall under the umbrella of VOCs and the total VOCs released during the incident was 113 tons.¹

PERMIT REQUIREMENTS

1. In Condition 3 – Table 1.g.1.i of TV Permit - Part 1 (Ren 3) (Rev 2) and Condition 2.2 of Permit: APC-91/0553 – OPERATION (Amendment 1) (LAER), it states:

"VOC emissions shall not exceed 5.5 TPY"

CONCLUSION

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

1. Respondent is found to be in violation of Condition 3 - Table 1.g.1.i of TV Permit - Part 1 (Ren 3) (Rev 2) and Condition 2.2 of Permit: APC-91/0553 - OPERATION (Amendment 1) (LAER) for the release of 113 tons of VOCs from the Ether Plant Cooling Tower between November 26, 2025, and November 27, 2025.

NOTICE OF CONCILIATION AND ORDER

It is the intent of the Department for Respondent to not only prevent, but to promptly identify similar situations in the future, both in the interest of public safety and safe operation of the refinery. In consideration of the foregoing findings, notice is hereby given that pursuant to 7 Del. C. § 6005(b)(2), Respondent is ordered to undertake the following actions to address the immediate concern for public and facility safety:

1. **Within 30 days of the date of this Amended Order on Consent**, Respondent shall submit a proposed plan (the "Proposed Plan") for installing a real-time fence-line air sensor system that will be used to measure total volatile organic compounds ("VOCs") as non-methane hydrocarbons ("NMHC"), hereafter, "the System." The Proposed Plan shall demonstrate that the System meets the following requirements:

- A. Provide real-time sensing data of total VOC as NMHC in both five-minute and one-hour averages, and wind speed/wind direction.
- B. Include at least five sensors that shall be placed along the fence-line from a selection of existing benzene monitoring locations 1, 2, 9, 10, 15, 20, 21, 22. The placement of the sensors shall be at Respondent's discretion but should reasonably cover 360 degrees surrounding the facility.
- C. Integrate with an electronic fenceline air monitoring portal to be created and maintained by Respondent (the "Portal"), using as a guide the existing Fenceline Air Monitoring Portal for the Torrance Refining Company (available at: <https://torc.data.spectrumenvsoln.com/data>).
The Portal shall:
 - 1. Be accessible to the public;
 - 2. Be written in English and be available in Spanish translation;
 - 3. Publish real-time sensing data;
 - 4. Include a map view of the sensing data; and
 - 5. Include a chronological list of any notifications made pursuant to this Paragraph 1.
- D. Offer a free subscription notification service that provides notifications of the following:
 - 1. Any total VOC concentration above 730 ppb on a block 1-hour basis (the "VOC Action Level"). The VOC Action Level has no legal or other effect beyond this Amended Order;
 - 2. Any planned or unplanned System instrument outages lasting for a full 1-hour block hour; and

3. Availability of Quarterly Reports as defined in Paragraph 7 below.

Within 10 days of receipt of the Proposed Plan, the Department will provide notice to Respondent whether or not it has concerns or comments the Department believes Respondent should address in its Proposed Plan. The Proposed Plan could also therefore include information at the Department's request in addition to that set forth in Paragraph 1 above.

2. **Within 10 days of receipt of the notice provided by the Department in the paragraph (not numbered) above,** Respondent shall address any concerns or comments and submit a revised Proposed Plan to the Department. If Respondent submits a revised Proposed Plan in accordance with this Paragraph 2, then within 10 days of the Department's receipt thereof, the Department will provide notice to Respondent that it either (i) has no additional concerns or comments with the Proposed Plan, or (ii) has additional concerns or comments the Department believes Respondent should address.
3. **Within 45 days of Department's notice to Respondent that it has no concerns or comments with the Proposed Plan,** Respondent shall enter into a contract with a vendor/provider for the System and promptly provide the Department with a copy of the contract. Unless infeasible, the contract shall require delivery of the selected technology to the refinery within 60 days of the effective date of the contract. If delivery is not within 60 days of the effective date of the contract, it shall be

completed as soon as possible thereafter. Upon delivery of the System to the refinery, Respondent shall promptly provide to the Department documentation of delivery of the System.

4. **Within 30 days of delivery of the System to the refinery,** Respondent will install the System and demonstrate that the equipment is operating properly, including a demonstration of data accuracy.
5. **As soon as practicable following demonstration that the System is operating properly, but no later than 30 days after delivery of the System to the refinery,** Respondent will commence operation of the System and promptly upload real-time sensing data to the Portal that is accessible to the public consistent with Paragraph 1 above.
6. **Upon commencing operation of the System,** Respondent shall undertake the following actions, whenever there is any detection of total VOC concentration above the VOC Action Level:
 - A. Using handheld monitors and/or other reasonable methods, identify potential upwind sources of the emissions above the VOC Action Level.
 - B. Evaluate each of the emission units identified as potential sources of the emissions above the VOC Action Level. This evaluation shall include, but is not limited to, a visual inspection; olfactory inspection; auditory inspection; and review of any associated process monitoring data (the "Investigation").

- C. Based on the results of the Investigation, begin corrective action(s) which shall be completed as expeditiously as possible.
 - D. Within two business days of the occurrence of emissions above the VOC Action Level, submit documentation identifying the source and estimated quantity of the emissions.
 - E. Submit reporting pursuant to permit or regulatory requirements, as applicable.
 - F. At any time following the commencement of operation of the System, Respondent may propose to adjust the VOC Action Level, in whole or in part, subject to approval by the Department.
7. **Within 30 calendar days of the end of each calendar quarter, beginning with the first partial calendar quarter following the commencement of operation of the System,** Respondent shall submit a quarterly report ("Quarterly Reports") to the Department with the following information:
- A. Any monitoring results showing total VOC above the VOC Action Level.
 - B. The results of any Investigation pursuant to Paragraph 6 of this Notice of Conciliation and Order Section.
 - C. Any monitoring System downtime lasting for a full 1-hour block period. Include a description of any cause of monitoring downtime and corrective actions made, and time the System was back online.
8. **Upon the acquisition of 2 years of monitoring data from the System,** Respondent may request that the Department

incorporate monitoring and reporting requirements that are substantively similar to those in this Amended Order on Consent into Respondent's then current 7 DE Admin. Code 1130 Operating Permit ("Title V Permit") by submitting an administrative amendment in accordance with Section 7.4 of 7 DE Admin. Code 1130. Once substantively similar monitoring and reporting requirements are incorporated into Respondent's Title V Permit, Respondent may then petition the Department to terminate the provisions of this Amended Order on Consent that require monitoring and reporting. The Department will act reasonably on such request by Respondent to terminate the provisions of this Amended Order on Consent as set out in this paragraph.

PUBLIC HEARING AND APPEAL RIGHTS

This Secretary's Order affects Respondent's legal rights and is effective and final upon signature by the Secretary having already been signed to and agreed to by Respondent.

MISCELLANEOUS PROVISIONS

Respondent shall abide by all the terms and conditions of this Amended Order on Consent, including:

1. Installation of a real-time fence-line air sensor System measuring total VOCs as NMHC, meeting the requirements set forth in Paragraph 1 under the "Notice of Conciliation and Order" Section of this Amended Order on Consent; and

