# NORTH CAROLINA DIVISION OF AIR QUALITY

## **Application Review**

#### Issue Date:

Region: Winston-Salem Regional Office

County: Guilford NC Facility ID: 4100272

**Inspector's Name:** Davis Murphy **Date of Last Inspection:** 08/26/2021

**Compliance Code:** 3 / Compliance - inspection

### **Facility Data**

Applicant (Facility's Name): Colonial Pipeline Company

Facility Address:

Colonial Pipeline Company 411 Gallimore Dairy Road Greensboro, NC 27409

**SIC:** 4613 / Refined Petroleum Pipe Lines

**NAICS:** 48691 / Pipeline Transportation of Refined Petroleum Products

Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V

### Permit Applicability (this application only)

SIP: 02D,0925,.0927,.1806

NSPS:

**NESHAP:** Subparts R, ZZZZ, and GGGGG

PSD: NA

PSD Avoidance: NA NC Toxics: NA 112(r): NA Other: NA

#### **Contact Data Application Data Facility Contact Authorized Contact** Technical Contact **Application Number:** 4100272.21A **Date Received:** 08/30/2021 Brian Smith Brian Smith Brian Smith **Application Type:** Renewal Operations Manager Operations Manager Operations Manager **Application Schedule:** TV-Renewal (336) 931-6027 (336) 931-6027 (336) 931-6027 **Existing Permit Data** 411 Gallimore Dairy 411 Gallimore Dairy 411 Gallimore Dairy Existing Permit Number: 02939/T23 Road Road Road Existing Permit Issue Date: 06/20/2017 Greensboro, NC 27409 Greensboro, NC 27409 Greensboro, NC 27409 Existing Permit Expiration Date: 05/31/2022

| Total Actual | emissions in | TONS/ | YEAR: |
|--------------|--------------|-------|-------|
|--------------|--------------|-------|-------|

| CY   | SO2    | NOX  | voc    | СО   | PM10   | Total HAP | Largest HAP       |
|------|--------|------|--------|------|--------|-----------|-------------------|
| 2020 | 0.2000 | 3.03 | 472.33 | 2.56 | 0.2400 | 27.65     | 8.43<br>[Toluene] |
| 2019 | 0.2000 | 3.02 | 445.85 | 2.54 | 0.2400 | 26.54     | 8.23<br>[Toluene] |
| 2018 | 0.2000 | 3.02 | 367.05 | 2.56 | 0.2400 | 21.14     | 6.48<br>[Toluene] |
| 2017 | 0.2000 | 3.04 | 358.92 | 2.59 | 0.2400 | 21.71     | 6.76<br>[Toluene] |
| 2016 | 0.2000 | 3.07 | 336.46 | 2.62 | 3.51   | 20.53     | 6.44<br>[Toluene] |

Review Engineer: Eric L. Crump, P.E. Comments / Recommendations:

Review Engineer's Signature:

Date:

Bsue 02939/T24

Permit Issue Date:
Permit Expiration Date:

### 1. Purpose of Application

Colonial Pipeline Company (hereinafter referred to as Colonial) is a refined petroleum pipeline breakout station located in Greensboro, Guilford County, North Carolina. The facility currently operates under Title V Permit No. 02939T23 with an expiration date of May 31, 2022. Colonial has applied for renewal of their Title V air quality permit with modification. The renewal application was received August 30, 2021, or at least six months prior to the expiration date as required by General Condition 3.K of the current permit. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

Through permit application No. 4100272.21A, Colonial included the following changes to the existing permit:

- Replacement of Tank 851 external floating roof with an internal floating roof (with no change to the tank capacity or contents); and
- Replacement of liquid petroleum gas-fired emergency generator IES-26 with a larger generator.

### 2. Facility Description

Colonial is a gasoline and distillate pipeline breakout station that operates 24 hours a day, seven days a week. Gasoline and distillate lines enter the site through two pipelines, a 40-inch diameter line and a 36-inch diameter line. Products are pumped into a tank farm at this site and are either reintroduced into two outgoing north-east bound pipelines (32 and 26-inch diameter) or piped to nearby bulk gasoline/distillate terminals.

Tanks 810-818, 820-826, and 830-845 are gasoline storage tanks of varying capacities with geodesic dome-style roofs and internal floating roofs. Tanks 885 through 898 also have domed external roofs with internal floating roofs, but are listed on the permit for storing transmix<sup>1</sup> rather than gasoline. Tanks 850-857, 860-864, 870-877, and 879-883 store distillate.<sup>2</sup> Tank 878 stores biodiesel which is brought on site via tank truck and unloaded at two truck unloading stations (I27) located on the eastern edge of the property and blended into some diesel fuels prior to distribution. Five liquid petroleum gas-fired emergency generators provide backup power at this site.

A decommissioned remediation system (ES-REM) is on site for remediation of a contaminated soil plume. The system removed product and routed vapors from the process to a catalytic oxidizer (CD-REM) but is no longer operable. Colonial has not requested at this time to have the system removed from their permit.

### 3. Application Chronology

June 20, 2017 Division of Air Quality (DAQ) issues Permit No. 02939T23 to Colonial as a Title V renewal.

<sup>&</sup>lt;sup>1</sup> "Trans mix" is a mixture of refined products that form when transported in pipelines. This mixture is typically a combination of gasoline, diesel, and/or jet fuel.

<sup>&</sup>lt;sup>2</sup> Petroleum "distillate" means any mixture of volatile organic compounds extracted from crude oil by a distillation process including, but not limited to, naphthas, aviation gasoline, motor vehicle gasoline, kerosene, diesel oil, and domestic fuel oil.

| November 12, 2019 | DAQ receives letter dated November 7, 2019 from Colonial requesting an applicability determination for a new propane/liquid petroleum gas (LPG) emergency generator (45 kW hp) to replace an existing 21.7 kW emergency generator (ID No. IES-26). |
|-------------------|--|
| November 15, 2019 | DAQ issues Permit Applicability Determination No. 3492 to Colonial, stating that the replacement of the propane/LPG emergency generator (ID No. IES-26) qualifies as an insignificant activity and does not require an air quality permit.         |
| August 30, 2021   | DAQ receives permit renewal application (No. 41000272.21A) from Colonial.  |
| November 15, 2021 | Draft permit and review submitted for internal DAQ supervisory review.   |
| December 9, 2021  | Comments received from DAQ supervisor.   |
| December 17, 2021 | DAQ sends draft permit to Colonial and Winston-Salem Regional Office (WSRO) for review and comment.  |
| January 4, 2022   | DAQ receives comments on draft permit from Colonial.   |
| January 4, 2022   | DAQ receives comments on draft permit from WSRO.   |
| xxx               | Permit renewal notice published, 30-day public notice and comment period begins, and 45-day EPA comment period begins.   |
| xxx               | 30-day public notice and comment period ends.  |
| xxx               | 45-day EPA comment period ends.  |

### 4. Changes to Permit and Title V Equipment Editor (TVEE) Discussion

The following table summarizes changes made to the current Colonial permit (02939T23) as a result of this permit renewal:

| Page No.                         | Section           | Description of Changes  |
|----------------------------------|-------------------|---|
| Cover and throughout             |                   | <ul> <li>Updated all dates and permit revision numbers</li> <li>Changed all citations of 15A NCAC 2D to 15A NCAC 02D</li> <li>Changed all citations of 15A NCAC 2Q to 15A NCAC 02Q</li> </ul>   |
| Insignificant<br>Activities List | Attachment        | <ul> <li>List moved to new Section 2.3 of permit with the following changes:</li> <li>Deleted each occurrence of the word "Subpart" from the Emission Source ID column of the table</li> <li>Updated description of source ID No. IES-26</li> <li>Changed "hp" to "Hp" in descriptions of source ID Nos. IES-9, IES-10, IES-11, IES-21, and IES-26 to match TVEE</li> </ul> |
| Coverpage                        |                   | <ul><li>Corrected mailing address of Permittee</li><li>Updated application number</li></ul>   |
| 2                                | Table of Contents | Added new Section 2.3, Insignificant Activities per 15A NCAC 02Q .0503(8)   |
| 3                                | List of Acronyms  | Moved from end of permit to follow Table of Contents  |

| Page No. | Section           | Description of Changes  |
|----------|-------------------|---|
| 4-6      | 1                 | <ul> <li>Deleted each occurrence of the word "Subpart" from the Emission<br/>Source ID No. column of the table</li> <li>Updated description of source ID No. 851</li> </ul> |
|          | 2.1 A.1.a         | Changed "psia" to "pounds per square inch"  |
| 7        | 2.1 A.1.b         | Added subparagraph iii (additional requirement in 02D .0925)  |
|          | 2.1 A.1.d         | Added reference to Section 2.1 A.b and c  |
| 8        | 2.1 A.2.d         | Consolidated former subparagraphs e and f into existing subparagraph d  |
|          | 2.1 A.2.i         | Added reference to Section 2.1 A.2.g  |
|          | 2.1 C             | Inserted" Recordkeeping and" before "Notification requirements" in table  |
| 9        | 2.1 C.1.a         | Inserted "40 CFR" before "63.7881(c)"   |
|          | 2.1 C.1.c         | Added reference to 2.1 C.1.a.ii and iii   |
|          | 2.2 A.1.a, b, c   | Added the headings "Applicability", "Definitions and Nomenclature", and "General Provisions" to paragraphs a, b, and c, respectively  |
| 10       | 2.2 A.1.d         | Removed "40 CFR 63.423" from heading for paragraph d  |
|          | 2.2 A.1.e         | Removed "40 CFR 63.424" from heading for paragraph e  |
| 11       | 2.2 A.1.f         | Removed "40 CFR 63.425" from heading for paragraph f  |
|          | 2.2 A.1.f.i       | Clarified the acronym"VOL" means "volatile organic liquid   |
| 12       | 2.2 A.1.g         | <ul> <li>Removed "40 CFR 63.427 Continuous" from heading for paragraph g</li> <li>Changed "60.17" to "40 FR 60.17" throughout paragraph g</li> </ul>                        |
|          | 2.2 A.1.g.v       | Reworded to match wording in 40 CFR 63.427  |
| 13       | 2.2 A.1.h         | Removed "40 CFR 63.428" from heading for paragraph h  |
| 13       | 2.2 A.1.h.ii – iv | Added CFR citations for subparagraphs ii through iv   |
|          | 2.2 A.1.h.iv      | Clarified the acronym"CMS" means "continuous monitoring system"   |
|          | 2.2 A.1.i         | Added reference to Sections 2.2.A.1.g and h   |
| 14       | 2.2 B.1           | Updated section to reflect the most current stipulations for 15A NCAC 02D .1806   |
| 15       | 2.3               | New Section 2.3, Insignificant Activities per 15A NCAC 02Q .0503(8)   |
| 16-24    | 3                 | Updated General Conditions to Version 6.0 dated January 7, 2022   |

The following changes to the TVEE were made as a result of this renewal:

• Change description for Source ID No. IES-26 from "One LPG-fired emergency generator (21.7kW, 29.1 hp)" to "One LPG-fired emergency generator (45 kW; 60.3 Hp)".

- Change description for Source ID No. IES-9 from "One LPG-fired emergency generator (112 kW; 150 Hp)" to "One LPG-fired emergency generator (112 kW; 150 hp)"
- Change description for Source ID No. IES-10 and IES-11 from "Two LPG-fired emergency generators (12.5 kW; 17 Hp, each)" to "Two LPG-fired emergency generators (12.5 kW; 17 hp, each)"
- Change description for Source ID No. IES-21 from "One LPG-fired emergency generator (94 kW; 126 Hp)" to "One LPG-fired emergency generator (94 kW; 126 hp)"
- Change description for Source ID No. IES-26 from "One LPG-fired emergency generator (45 kW, 60.3 Hp)" to "One LPG-fired emergency generator (45 kW, 60.3 hp)"
- Change description for source ID No. 851 from "One external floating roof distillate storage tank (218,000 barrel capacity)" to "One internal floating roof distillate storage tank (218,000 barrel capacity)".

### 5. Description of Changes and Estimated Emissions

The following changes will be made at the Colonial facility:

Replacement of Tank 851 external floating roof with an internal floating roof: Tank 851 is one of the 26 distillate storage tanks at the Colonial facility. These tanks currently have no applicable regulatory requirements. Because the tanks were built in the early to mid-1960's they are not subject to 40 CFR 60 Subparts K, Ka, or Kb, which apply to tanks built in later time periods. The change from an external to an internal floating roof did not subject Tank 851 to Subpart Kb because the distillates stored in Tank 851 have a vapor pressure below the applicability level of 3.5 kilopascals (0.5 pounds per square inch).

Replacement of liquid petroleum gas (LPG)-fired emergency generator IES-26. The former 21.7 kW LPG-fired control room emergency generator has been replaced with a 45 kW (60.3 hp) LPG-fired generator. Because both the former and replacement generators were installed after 2006, they are considered new generators under 40 CFR Part 60, Subpart JJJJ. The new generator will continue to be classified as an emergency generator under Subpart JJJJ, and under 40 CFR Part 63, Subpart ZZZZ, which limits its usage as described in Section 7 of this review. The increase in emissions will be minimal, as the potential to emit is based on the assumption that a typical emergency generator operates no more than 500 hours per year—and still low enough for the generator to be classified as an insignificant activity under 15A NCAC 02Q .0503(8) because its emissions would not violate any applicable emissions standard, its potential uncontrolled criteria pollutant emissions are no more than five tons per year and its potential uncontrolled HAP emissions are below 1000 pounds per year. For this reason, the replacement generator will not be subject to any permit conditions.

### 6. Regulatory Review

The Colonial facility is subject to the following state regulations under Title 15A of the North Carolina Administrative Code (NCAC), in addition to the requirements in the General Conditions of the permit:

15A NCAC 02D .0521, Control of Visible Emissions. As noted in an earlier permit review (B. Gatano, Nos. 4100272.16A and 4100272.17A, June 20, 2017), the LPG-fired emergency generators (ID Nos. IES-9 though IES-11, IES-21, and IES-26) are subject to 02D .0521, Control of Visible Emissions, However, these generators were found to meet the definition of insignificant activities under 15A NCAC 02Q .0503(8). This permit renewal does not affect this status. Continued compliance is expected.

15A NCAC 02D .0524, New Source Performance Standards. Two emergency engines (ID Nos. IES-21 and IES-26) are subject to "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines," 40 CFR Part 60, Subpart JJJJ. As discussed above, these engines are insignificant activities under 15A NCAC 02Q .0503(8). More discussion on NSPS is provided in Section 8.

15A NCAC 02D .0925, Petroleum Liquid Storage in Fixed Roof Tanks. This rule addresses VOC emissions from fixed roof storage vessels with capacities exceeding 39,000 gallons that contain volatile petroleum liquids with a true vapor pressure greater than 1.52 pounds per square inch. Exemptions to the rule are volatile petroleum liquid storage vessels (1) equipped with external floating roofs; or (2) with capacities less than 416,000 gallons that store produced crude oil and condensate prior to lease custody transfer.

Under this rule, each fixed roof storage tank at Colonial—the 32 gasoline tanks (Nos. 810 through 818, 820 through 826, 830 through 845) and the 16 transmix tanks (Nos. 885 through 898)—must be retrofitted with an internal floating roof with seal(s) that close the space between the roof edge and tank wall. All tank openings (except stub drains) must have covers, lids, or seals such that:

- The covers, lids, and seals are always closed except when in use;
- Automatic bleeder vents are closed, except when the roof is floated off or landed on the roof leg supports; and
- Any rim vents are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

Each storage vessel must be maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials.

Colonial is required to conduct monthly visual inspections of the tanks through the roof hatches and conduct complete inspections of the floating roofs and seals whenever the tank is emptied, or whenever excessive vapor leakage is observed. Colonial must also maintain a logbook with reports of the inspection results, the average monthly storage temperature, true vapor pressures of the liquids being stored, and the throughput amounts and types of petroleum liquids for each tank. No changes to the permit are required under this permit renewal. Continued compliance is expected.

15A NCAC 02D .0927, Bulk Gasoline Terminals. This rule addresses VOC emissions from bulk gasoline terminals and the related equipment necessary to load the cargo tank compartments. Under this rule, gasoline shall not be discarded in sewers or stored in open containers or handled in any way that would result in evaporation. Colonial is a gasoline and distillate pipeline breakout station; as such it does not load gasoline into trucks, so the vapor control system provisions of 02D .0927 do not apply to the gasoline tanks. Furthermore, the 32 gasoline storage tanks (Nos. 810 through 818, 820 through 826, 830 through 845) and 16 transmix storage tanks (Nos. 885 through 898) at Colonial are required to:

- Be painted white or silver;
- Be equipped with:
  - o a self-supporting roof, such as a geodesic dome, if it has an inside diameter of 100 feet or less,
  - o rim-mounted secondary seals,

- o welded seams where possible, otherwise gaskets on roof and deck fittings, and
- o floats in the slotted guide poles with a gasket around the cover of the poles.

To ensure compliance, Colonial is required to inspect the tanks monthly and maintain them in accordance with the manufacturers' recommendations, including a monthly external inspection of the structural integrity of the tanks. Colonial must also maintain a logbook of the results of the required inspections and any maintenance performed on the tanks. No changes to the permit are required under this permit renewal. Continued compliance is expected.

15A NCAC 02D .1111, Maximum Achievable Control Technology. This rule states that in general, sources subject to national emission standards for hazardous air pollutants (NESHAP) for source categories promulgated in 40 CFR Part 63 shall comply with the provisions of those NESHAP, rather than with any otherwise-applicable rule in 15A NCAC 02D. The applicability of NESHAP to sources at Colonial are discussed in Section 7 of this review.

15A NCAC 02D .1806, Control and Prohibition of Odorous Emissions. This regulation provides for the control and prohibition of objectionable odorous emissions. It applies facility-wide and is State-enforceable only. This rule requires Colonial to implement management practices or install and operate odor control equipment sufficient to prevent odorous emissions from causing or contributing to objectionable odors beyond the facility's boundary. This permit renewal does not affect this status. Continued compliance is expected.

It should be noted that for the sake of clarity, the permit specifically states in Section 2.1 B that there are no applicable state requirements for the following emission sources, used for non-gasoline products:

- Twenty-six distillate storage tanks (ID Nos. 850 through 857, 860 through 864, and 870 through 877, and 879 through 883)
- One vertical fixed roof biodiesel fuel storage tank (ID No. 878)

No state regulations will be added to or removed from the permit as a result of this renewal application.

The permit will be updated to reflect the most current stipulations for all applicable regulations.

# 7. National Emission Standards for Hazardous Air Pollutants (NESHAPS): Maximum and/or Generally Achievable Control Technology (MACT/GACT)

Colonial is subject to the following MACT standards under 40 CFR Part 63:

Subpart R, National Emission Standards for Gasoline Distribution Facilities. This rule establishes standards for storage vessels, loading racks, and equipment leaks at gasoline distribution facilities. While Colonial is a breakout station and has no gasoline loading racks, its gasoline and transmix storage tanks, along with their associated fugitive components (valves, flanges, connectors, etc.) are subject to Subpart R. Under this NESHAP, Colonial must maintain an internal floating roof and seals on each of these storage tanks, conduct monthly leak inspections, and make appropriate repairs of the fugitive components when required. The rule also specifies associated recordkeeping and reporting requirements. As noted in an earlier permit review (B. Gatano, Nos. 4100272.16A and 4100272.17A, June 20, 2017), DAQ approved minor alternatives to the out of service inspections procedures in accordance with 40 CFR 63.8(f)(2), (see memorandum "Alternative Gasoline Tank Inspection

Methods," dated September 2, 2003) which were incorporated into Air Permit No. 02939T23. This renewal does not affect this status. Continued compliance is expected.

<u>Subpart ZZZZ</u>, <u>NESHAP for Stationary Reciprocating Internal Combustion Engines</u>. The five emergency generators (ID Nos. IES-9, IES-10, IES-11, IES-21, and IES-26) at Colonial are subject to Subpart ZZZZ. The requirements under MACT Subpart ZZZZ are summarized in the following table.

| Emission<br>Source ID | Requirements  |
|-----------------------|---|
| IES-9 through         | • Install a non-resettable hour meter on the engine   |
| IES-11                | Change oil and filter every 500 hours of operation or annually  |
|                       | <ul> <li>Inspect all hoses and belts every 500 hours of operation or annually and replace if<br/>necessary</li> </ul>   |
|                       | • Inspectair cleaner every 1,000 hours of operation or annually   |
|                       | Operate no more than 100 hours for maintenance and readiness testing  |
|                       | Conduct as sociated recordkeeping and reporting requirements  |
| IES-21 and IES-<br>26 | Per 40 CFR 63.6590(c)(6), a new or reconstructed emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions complies with MACT Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, |
|                       | Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under MACT Subpart ZZZZ.   |

These engines meet the definition of insignificant activities under 15A NCAC 02Q .0503(8) and are listed as such in the current permit. This renewal does not affect this status. Continued compliance is expected.

Subpart GGGG, National Emission Standards for Hazardous Air Pollutants for Site Remediation. This NESHAP establishes national emissions limitations and work practice standards for HAPs emitted from site remediation activities. The remediation system for soil vapor extraction and treatment (ID No. ES-REM) at Colonial is exempt from all requirements of Subpart GGGGG—except for the recordkeeping requirements in 40 CFR 63.7881(c)—because Colonial was able to demonstrate the total annual quantity of HAP contained in the remediation material does not exceed 1 Mg per year.

In permit renewal application No. 4100272.16A, Colonial provided estimates of 16.7 tons per year of uncontrolled VOC from the remediation activities (ID No. ES-REM) and 0.789 megagram (Mg) HAP/yr. Colonial is required to maintain written documentation (including methodology and data used) supporting the determination that the total HAP quantity in the remediation materials for the year is less than 1 Mg, and must perform a new determination if the extent of changes to the quantity or composition of the remediation material placed in the remediation system (ID No. ES-REM) could cause the total annual HAP content in the remediation material to exceed 1 Mg/yr. This renewal does not affect this status. Continued compliance is expected.

### 8. New Source Performance Standards (NSPS)

Two of the LPG-fired emergency generators at the Colonial facility (IES-21 and IES-26) are subject to 40 CFR Part 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The requirements for these engines under NSPS Subpart JJJJ are summarized in the following table.

| Emission<br>Source ID | Requirements   |
|-----------------------|--|
| IES-21                | Engine construction commenced after June 12, 2006, but the engine was manufactured prior to January 1, 2009, the applicability date in 40 CFR 60.4230(a)(4)(iv). Therefore, this engine has no requirements under NSPS Subpart JJJJ.   |
| IES-26                | Engine construction commenced after June 12, 2006, and the engine was manufactured after January 1, 2009, the applicability date in 40 CFR 60.4230(a)(4)(iv). Colonial complies with Subpart JJJJ by purchasing an engine certified in accordance with the rule. The facility would also be required to conduct associated recordkeeping and reporting as required under Subpart JJJJ. |

As discussed earlier, both engines meet the definition of insignificant activities under 15A NCAC 02Q .0503(8) and are listed as such in the permit. This permit renewal does not change this status. Continued compliance is expected.

### 9. New Source Review (NSR)/Prevention of Significant Deterioration (PSD)

Colonial is a major facility under PSD but is not currently subject to any PSD regulations. As a petroleum storage and transfer facility with total storage capacity above 300,000 barrels, Colonial is classified as one of the listed stationary source categories with a potential to emit 100 tpy or more of a regulated pollutant (in this case, VOC), including fugitive emissions. This permit renewal does not affect this status.

### 10. Risk Management Plan (RMP) Requirements

40 CFR Part 68 requires stationary sources storing more than threshold quantities of regulated substances to develop a RMP in accordance with Section 112(r) of the Clean Air Act. The RMP lists the potential effects of a chemical accident at the facility, steps the facility is taking to prevent an accident, and emergency response procedures to be followed if an accident should occur.

Colonial is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule. This permit renewal does not affect the 112(r) status of the facility.

### 10. Compliance Assurance Monitoring (CAM)

The CAM rule (40 CFR Part 64 and 15A NCAC 02D .0614) applies to each pollutant specific emissions unit located at a major source that is required to obtain a Title V, Part 70 or 71 permit if it meets all of the following criteria:

- It is subject to an emission limitation or standard, and
- It uses a control device to achieve compliance, and
- It has potential pre-control emissions that equal or exceed the major source threshold (i.e., either 100 tpy for criteria pollutants, 10 tpy of any individual HAP, or 25 tpy of any combination of HAP).

The following emission limitations or standards are exempted from the CAM rule:

- NSPS or NESHAP standards proposed after November 15, 1990;
- Stratospheric ozone protection requirements under Title VI of the Clean Air Act
- Acid rain program requirements;
- Emission limitations or standards or other requirements that apply solely under an approved emissions trading program;
- An emissions cap that meets requirements of 40 CFR 70.4(b)(12) or 71.6(a)(13);
- Emission limitations or standards for which a Part 70 or 71 permit specifies a continuous compliance determination method, as defined in 40 CFR 64.1, unless the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device (e.g., a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test; in this example, this part would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage).
- Certain municipally-owned utility units, as defined in 40 CFR 72.2.

Please note that the emission unit is not exempted from the CAM rule if nonexempt emission limitations or standards (e.g. a state rule or an older NSPS emission limits) apply to the emissions unit.

Most of the sources at the Colonial facility—the tanks—are not required to have control devices in order to comply with emission limitations. While Colonial employs internal roofs and seals on its tanks to comply with 02D .0925 and 02D 0927, these measures are not considered control devices. The definition of control device in 40 CFR 64.1 does not include "passive control measures that act to prevent pollutants from forming, such as the use of seals, lids, or roofs to prevent the release of pollutants. . . ." The only source at the Colonia facility with an emissions control device—the remediation system for oil vapor extraction and treatment (ID No. ES-REM)—is not required by any emission standards to use a control device for compliance. For these reasons, CAM has not been applicable to the Colonial facility. This permit renewal does not affect the facility's status with respect to CAM.

### 11. Facility-wide Air Toxics Review

Colonial is not currently subject to North Carolina air toxics regulations, as all emissions of toxic air pollutants have been below the toxic pollutant emission rates listed in 15A NCAC 02Q .0711. This permit renewal does not affect this status.

### 12. Facility Emissions Review

The table in the header page of this review summarizes emissions Colonial has reported in the annual emissions inventories for the years 2016 through 2020 after application of required emission controls.

Annual emissions of  $SO_2$ ,  $NO_X$ , CO, and  $PM_{10}$  have held fairly steady over this time period. Emissions of VOCs have increased from 336.46 tons in 2016 to 472.33 tons in 2020. HAP emissions have also increased from 20.53 tons in 2016 to 27.65 tons in 2020. Toluene is the largest quantity of single HAP emitted, increasing from 6.44 tons in 2016 to 8.43 tons in 2020. An increase in annual throughput of fuel may account for the increase in emissions. Colonial reported an annual throughput of 564,307,842 gallons

for 2019, and 7,187,124 gallons for 2018.<sup>3</sup> No throughputs were included in the emission inventory submittals for the years 2016, 2017, or 2020.

### 13. Compliance History and Status

The following chronology dates from when the Colonial permit was last renewed on June 20, 2017.

| July 25, 2017     | Davis Murphy, WSRO conducts facility compliance inspection. Colonial appeared to be operating in compliance with all permit requirements.  |
|-------------------|--|
| September 7, 2018 | Davis Murphy, WSRO conducts facility compliance inspection. Colonial appeared to be operating in compliance with all permit requirements.  |
| February 19, 2019 | WRSO issues Notice of Violation (NOV) to Colonial for landing the floating roof of a gasoline storage tank (ID No. 831) when the tank was not being completely emptied prior to refill, in violation of Section 2.2 A.1.d of Air Quality Permit No. 0293T23.         |
| March 4, 2019     | Colonial responds to WRSO regarding the NOV, stating the reason for the violation and that they would add it to their annual compliance certification.   |
| July 23, 2019     | Hunter Johnson, WSRO conducts facility compliance inspection. Colonial appeared to be operating in compliance with all permit requirements.  |
| August 18, 2020   | Mohammad Khan, WSRO conducts facility compliance inspection. Colonial appeared to be operating in compliance with all permit requirements.   |
| December 2, 2020  | WRSO issues NOV to Colonial for storing a volatile petroleum liquid with a true vapor pressure of greater than 1.52 psia in a storage vessel lacking an internal floating roof and closure seal, in violation of Section 2.1 A.1 of Air Quality Permit No. 02939T23. |
| December 16, 2020 | Colonial responds to WRSO regarding the NOV, stating the reason for the violation, actions taken to rectify the situation, and steps taken to prevent repeat violations in the future.   |
| August 26, 2021   | Davis Murphy, WSRO conducts facility compliance inspection. Colonial appeared to be operating in compliance with all permit requirements.  |

In summary, Colonial has been issued two NOV since its air quality permit was last renewed in 2017. The facility has taken corrective action to prevent these violations from occurring in the future. Continued compliance is expected.

### 14. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A

 $<sup>^3</sup>$  Source: Colonial Pipeline Company air pollutant points ource emission inventory certification forms submitted to DAQ on 6/28/2019 and 6/30/2020.

NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above.

Virginia is an affected state within 50 miles of the facility, and Forsyth County Office of Environmental Assistance and Protection is an affected local program.

Notice of the DRAFT Title V Permit to Affected States ran from XXXX YY, 2021, to XXXX YY, 2021. Discuss any comments received from affected states or local programs.

Public Notice of the DRAFT Title V Permit ran from XXXX YY, 2021, to XXXX YY, 2021. Discuss any public comments received.

EPA's 45-day review period ran concurrent with the 30-day Public Notice, from XXXX YY, 2021, to XXXX YY, 2021. Discuss any comments received from EPA and U.S. EPA Region 4 regarding the DRAFT Title V permit.

### 15. Other Regulatory Considerations

The following items were not required in Permit Application No. 4100272.21A:

- Professional Engineer's seal
- Zoning consistency determination
- Permit fee.

### 16. Recommendations

DAQ has reviewed the permit application for Colonial Pipeline Company located in Greensboro, Guilford County, North Carolina to determine compliance with all procedures and requirements. DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. DAQ recommends the issuance of Air Permit No. 02939T24.