

**NORTH CAROLINA DIVISION OF  
AIR QUALITY  
Application Review**

**Issue Date:** TBD

**Region:** Wilmington Regional Office  
**County:** New Hanover  
**NC Facility ID:** 6500010  
**Inspector's Name:** Tony Sabetti  
**Date of Last Inspection:** 06/12/2023  
**Compliance Code:** 3 / Compliance - inspection

<b>Facility Data</b>	<b>Permit Applicability (this application only)</b>
<p><b>Applicant (Facility's Name):</b> CTI of North Carolina, Inc. - Wilmington Terminal</p> <p><b>Facility Address:</b>            CTI of North Carolina, Inc. - Wilmington Terminal            1312 South Front Street            Wilmington, NC 28401</p> <p><b>SIC:</b> 5989 / Fuel Dealers, Nec  <b>NAICS:</b> 454319 / Other Fuel Dealers</p> <p><b>Facility Classification: Before:</b> Synthetic Minor <b>After:</b> Title V  <b>Fee Classification: Before:</b> Synthetic Minor <b>After:</b> Title V</p>	<p><b>SIP:</b> 02Q .0317, 02Q .0504  <b>NSPS:</b> n/a  <b>NESHAP:</b> n/a  <b>PSD:</b> n/a  <b>PSD Avoidance:</b> VOC  <b>NC Toxics:</b> n/a  <b>112(r):</b> n/a  <b>Other:</b> n/a</p>

<b>Contact Data</b>			<b>Application Data</b>
<b>Facility Contact</b>	<b>Authorized Contact</b>	<b>Technical Contact</b>	<p><b>Application Number:</b> 6500010.23B  <b>Date Received:</b> 12/19/2023  <b>Application Type:</b> Modification  <b>Application Schedule:</b> State  <b>Existing Permit Data</b>  <b>Existing Permit Number:</b> 03467/R28  <b>Existing Permit Issue Date:</b> 01/12/2024  <b>Existing Permit Expiration Date:</b> 06/30/2030</p>
Philip Watts Terminal Manager (910) 251-1020 1002 South Front Street Wilmington, NC 28401	Rigel Rodriguez Vice President EHS (912) 443-6690 PO Box 576 Savannah, GA 31402	Tom Dolan Environmental Manager (912) 443-6645 PO Box 576 Savannah, GA 31402+0576	

Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2021	---	0.0100	22.86	0.0100	---	0.6837	0.1673 [Toluene]
2013	---	---	26.12	---	---	0.4994	0.1565 [Toluene]
2009	12.32	5.32	44.83	10.82	0.4100	2.75	0.7269 [Toluene]
2004	12.95	5.14	51.33	10.26	0.4300	3.08	0.9123 [Hexane, n-]

<p><b>Review Engineer:</b> Russell Braswell</p> <p><b>Review Engineer's Signature:</b> _____ <b>Date:</b> _____</p>	<p style="text-align: center;"><b>Comments / Recommendations:</b></p> <p><b>Issue</b> 03467/R29  <b>Permit Issue Date:</b> TBD  <b>Permit Expiration Date:</b> June 30, 2030</p>
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## **1. Purpose of Application**

CTI of North Carolina, Inc. - Wilmington Terminal (facility ID 6500010, formerly known as Buckeye Terminal, and hereafter referred to as “Buckeye” or “the facility”) currently operates a gasoline and fuel oil terminal in New Hannover County under synthetic minor permit 03467R28 (the existing permit).

Buckeye has been acquired by a neighboring facility (CTI of North Carolina, Inc, facility ID 6500261, Title V permit 05870T18; hereafter referred to as “CTI”), and the combined facility cannot comply with the limits of the synthetic minor permit. Therefore, Buckeye has applied to remove those limits as allowed by 15A NCAC 02Q .0315(c).

According to the application, Buckeye will submit an application to combine both the CTI and Buckeye permits into a single Title V permit within the 12-month time limit allowed by 15A NCAC 02Q .0315(c).

## 2. Application Chronology

<b>Date</b>	<b>Event</b>
December 19, 2023	Application received.
January 12, 2024	Permit revision R28 issued. This action changed the facility name on the permit to "CTI of North Carolina, Inc. - Wilmington Terminal."
January 16, 2024	Application addendum received.
February 8, 2024	Initial draft to DAQ Permits staff.
February 26, 2024	Revised draft to DAQ SSCB staff, DAQ WiRO staff, and Buckeye staff.
March 15, 2024	The public notice period began.
April 14, 2024	The public notice period ended.
TBD	Permit issued.

### 3. Discussion

#### 3.1 Facility description and reason for application

Buckeye is a fuel terminal on the banks of the Cape Fear River in Wilmington NC. The facility currently operates under the existing air permit, which includes Specific Condition A.22; this limits facility-wide VOC emissions to less than 100 tpy.

Buckeye is adjacent to CTI, which is a similar fuel terminal. Buckeye was acquired by CTI, and therefore the equipment at Buckeye and CTI are on adjacent properties and under common control. CTI concluded that Buckeye can no longer comply with Specific Condition A.22.

The application states that CTI plans to eventually incorporate the equipment at Buckeye into the Title V permit issued to CTI.

#### 3.2 15A NCAC 02Q .0315 “Synthetic Minor Facilities”

*Background:* In general, a facility is a Title V major source if it has potential emissions greater than 100 tpy of any air pollutant subject to regulation, 10 tpy of any individual hazardous air pollutant (HAP), or 25 tpy of total combined HAP (see 40 CFR 70.2 for Major source). Facilities that are major sources for Title V must comply with the permitting procedures under 02Q .0500. Facilities that are not major sources are minor sources, and must comply with 02Q .0300 instead.

*Co-located sources:* Under Title V, two facilities must be grouped together if they belong to the same SIC code, are located on contiguous or adjacent properties, and are under the same common control (see §70.2 for Major source). Buckeye shares a fence line with the neighboring CTI facility, and both Buckeye and CTI are fuel terminals. Now that Buckeye has been acquired by CTI, the two facilities are under common control, and therefore meet all the criteria for being a single stationary source.

*Synthetic minor:* Buckeye has potential emissions of VOC greater than 100 tpy. Normally, such a facility would be a Title V major source. However, a facility may avoid being designated a major source by accepting facility-wide emission limits. Buckeye has previously accepted a facility-wide emission limit of 100 tpy of VOC, and therefore is a minor source (sometimes referred to as a “synthetic minor” source). Buckeye demonstrates compliance with the VOC emission limit by limiting fuel loading throughput and operating a VOC control device (the vapor control unit).

*Removing terms and conditions:* As discussed above, now that Buckeye is part of a larger stationary source, Buckeye can no longer comply with a facility-wide 100 tpy VOC emission limit. Therefore, Buckeye has applied to remove the 100 tpy limit from the permit. As allowed by 02Q .0315(c), Buckeye has submitted an application for permit modification pursuant to 02Q .0300.

*Application requirement:* Per 02Q .0315(c), Buckeye must submit an application for permit modification pursuant to 02Q .0500 within 12 months of this permit being issued. Buckeye has stated that this application will also consolidate the CTI and Buckeye permits into a single Title V permit.

*Continued compliance:* In correspondence received after the application, CTI (the new owner of Buckeye) stated:

“[CTI] does not plan to make any changes to the facility with the permitting action requested in [this application] and will continue to comply with the requirements and

limitations under Permit No. 03467R27<sup>1</sup> until the Buckeye Facility is incorporated into the Title V permit for the CTI of NC Facility.” (Addendum at 3)

Therefore, the new permit will include the fuel throughput restrictions included in the existing permit. It is expected Buckeye will continue to comply with this requirement.

### 3.3 15A NCAC 02D .0530 “Prevention of Significant Deterioration” (PSD), and 15A NCAC 02Q .0317 “Avoidance Conditions”

*Background:* In general, a facility is a major stationary source for PSD if it has potential or actual emissions of a regulated NSR pollutant greater than the threshold in 40 CFR 51.166(b)(1)(i). The limit is either 100 tpy for the industries specifically named in (a), or 250 tpy for all other industries.

*Stationary source:* Under PSD, two facilities are considered a single stationary source if they belong to the same SIC code, are located on contiguous or adjacent properties, and are under the same common control (see §51.166(b)(5) and (6)). Note that this is essentially the same as under Title V, discussed above. The same reasoning applies as with Title V, and therefore Buckeye and CTI must be considered as a single stationary source.

Compliance for PSD (or avoidance thereof) for the combined facilities will be determined when Buckeye submits the required Title V permit application. Note that, based on the most recent emission inventory, Buckeye and CTI each emitted approximately 20 tons of VOC in the previous year, for a total of 40 combined tons of VOC.

*Major stationary source:* As noted above, the threshold for a major stationary source is either 100 or 250 tpy, depending on if the facility belongs to one of the specifically named industries in §51.166(b)(1)(i)(a). Notably, that list includes “petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.” The Buckeye terminal has storage capacity greater than 300,000 barrels, and the facility stores materials that are commonly referred to as “petroleum” or “petroleum products,” specifically fuel oil and gasoline. However, Buckeye states that this facility should not be considered part of that category.

*Petroleum storage and transfer units:* The term “petroleum” is not specifically defined under 40 CFR 51.166 (the PSD rules) or 02D .0530 (NC’s approved SIP rule that implements PSD). However, a definition of petroleum does appear under 40 CFR Part 60 (the NSPS rules). Specifically, NSPS Subpart J “Standards of Performance for Petroleum Refineries” includes the following two definitions:

#### § 60.101 Definitions.

(a) **Petroleum refinery** means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through redistillation, cracking or reforming of unfinished petroleum derivatives.

(b) **Petroleum** means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

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<sup>1</sup> This was the permit issued to CTI at the time this application was received. DAQ has subsequently issued permit no. 03467R28.

From these definitions, it is clear that for the purposes of NSPS, “petroleum” refers to crude oil. Gasoline and fuel oils are formed by refining petroleum and are not considered petroleum themselves. Using this reasoning, US EPA has, on multiple occasions, determined that the source category “petroleum storage and transfer units” for PSD and Title V refers exclusively to terminals that process crude oil, and does not refer to terminals that process gasoline or fuel oil.<sup>2</sup>

Therefore, DAQ agrees with Buckeye and concludes that this facility is not a 100 tpy source under §51.166(b)(1)(i)(a). Therefore, Buckeye’s threshold for a major stationary source is 250 tpy.

*PSD avoidance:* Although PSD is not addressed in the existing permit, Buckeye has effectively complied with a facility-wide emission limit to avoid being designated a major stationary source by demonstrating compliance with the existing synthetic minor emission limit for Title V purpose discussed above. Now that the synthetic minor limit is being removed, Buckeye’s status as a major stationary source must be reevaluated.

In Buckeye’s addendum to the application, Buckeye specifically requested that no limits be changed in the existing permit at this time. The existing permit includes a facility-wide limit of 100 tpy of VOC (in order to avoid Title V) and includes a VOC emission limit for the vapor control units and several throughput limits meant to demonstrate compliance with that 100 tpy limit. This limit is substantially smaller than the 250 tpy limit allowed by PSD. Therefore, by continuing to comply with the existing limits, Buckeye will continue to avoid PSD.

Note that, if the permit were to not include the VOC emission limit for the vapor control units and loading throughput limits, the potential emissions of VOC from this facility would far exceed the 250 tpy limit for PSD. Therefore, the permit must continue to include a specific condition for this PSD avoidance limit.

Buckeye may reevaluate throughput limits and PSD avoidance when submitting the application for a Title V permit as required by 02Q .0315(c).

*Changes to the existing permit:* The existing permit includes a 100 tpy emission limit to avoid Title V. This limit will be replaced with a 250 tpy emission limit to avoid PSD.<sup>3</sup> Note that the permit also includes throughput limits and control device requirements which will remain unchanged. Therefore, changing the avoidance limit will not cause an increase in potential emissions from the facility. No changes to recordkeeping or monitoring will be required as part of this change.

### **3.4 15A NCAC 02Q .0504 “Option for Obtaining Construction and Operation Permit”**

*Background:* In some cases, a facility may apply to modify a permit using a two-step process. In that circumstance, the facility initially submits an application for modification pursuant to 02Q .0300, and then the facility must submit an application for modification pursuant to 02Q .0500 within 12 months of completing the requested modification. In this case, where no physical modification is occurring, the facility

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<sup>2</sup> See [1] *Applicability Determination Request; Definition of a “Major Source” under 40 CFR 70.2* (issued February 18, 1998), available at [https://www.epa.gov/sites/default/files/2015-07/documents/apl\\_mek1.pdf](https://www.epa.gov/sites/default/files/2015-07/documents/apl_mek1.pdf), and [2] Letter to Nisha Sizemore (Chief, Permits Branch, Indiana Department of Environmental Management) from Pamela Blakley (Chief, US EPA Air Permits Section) (sent June 4, 2007), available at <https://www.epa.gov/sites/default/files/2015-07/documents/skleen.pdf>

<sup>3</sup> Although Buckeye specifically requested that no limits be changed in the new permit, it is necessary that the PSD avoidance limit in the permit accurately reflect §51.166(b)(1)(i)(b). This will prevent any future ambiguity regarding Buckeye’s status as a 250 tpy source under PSD.

must submit the second application within 12 months of the permit being issued marking the classification change from synthetic minor to Title V major source.

*Changes to the existing permit:* Because Buckeye submitted this application pursuant to 02Q .0315(c), Buckeye must submit a subsequent application within 12 months of issuing this Title V permit. A new specific condition will be added to the permit to address this requirement.

## **4. NSPS, MACT/GACT, CAM, PSD, and TAPs**

### **4.1 New Source Performance Standards (NSPS; 40 CFR Part 60)**

Buckeye is currently subject to two NSPS rules: Subpart Kb and Subpart XX.

Buckeye is not proposing any physical modifications, changes in the methods of operation, or increases in emissions as part of this new permit. Therefore, this new permit will not affect Buckeye's applicability to these NSPS rules.

### **4.2 Maximum/Generally Available Control Technology (MACT/GACT; 40 CFR Part 63)**

Buckeye is currently subject to two rules under Part 63: Subpart JJJJJ and Subpart BBBBBB.

Buckeye is not proposing any physical modifications, changes in the methods of operation, or increases in emissions as part of this new permit. Therefore, this new permit will not affect Buckeye's applicability to these MACT/GACT rules.

Note that both Buckeye and CTI are area sources of hazardous air pollutants (see §63.2). The combined facility is also expected to be an area source, and therefore no new MACT/GACT rules are expected to apply to the facility.

### **4.3 Compliance Assurance Monitoring (CAM; 40 CFR Part 64)**

*Background:* The compliance assurance monitoring (CAM) rule requires owners and operators to conduct monitoring to provide a reasonable assurance of compliance with applicable requirements under the act. Per 02D .0614(a), this rule potentially applies to any facility required to obtain a permit under 02Q .0500 (i.e., a Title V permit). This facility is required to obtain a permit under 02Q .0500. Therefore, CAM applicability must be examined.

*Plan submittal:* CAM plans must be submitted according to the schedule in §64.(5):

- For large pollutant-specific emissions units ("large PSEU;" i.e., units that have the potential to emit more than the major source threshold *after* controls are applied), a CAM plan is due when the first application for a Title V permit is submitted (see §64.5(a)). If any of the emission sources at this facility qualify as a large PSEU, Buckeye will be required to submit a CAM plan for those sources when Buckeye submits the permit application required by 15A NCAC 02Q .0315(c).
- For all other PSEUs, a CAM plan (if required) is due when a facility applies to renew a Title V permit.

Therefore, CAM applicability will be determined either when Buckeye submits the permit application required by 15A NCAC 02Q .0315(c) or when Buckeye first renews the Title V permit.

### **4.4 Prevention of Significant Deterioration (PSD)**

As discussed above, Buckeye is avoiding being designated as a major stationary source under PSD by limiting facility-wide VOC emissions to less than 250 tpy.



It is expected that, when combined with the neighboring CTI facility, the combined facility will also avoid being designated as a major stationary source. Note that, based on the most recent emission inventory, Buckeye and CTI each emitted approximately 20 tons of VOC in the previous year, for a total of 40 combined tons of VOC.

#### **4.5 Toxic Air Pollutants (TAP; 15A NCAC 02D .1100 and 02Q .0700)**

*Background:* The rules for toxic air pollutants (TAP) under 15A NCAC 02D .1100 and 02Q .0700 apply to facilities that emit toxic air pollutants. In general, if a facility would emit a TAP at rates greater than the TAP permitting emission rates (TPER) listed in 02Q .0711, the facility must first conduct an air dispersion modeling demonstration under 15A NCAC 02D .1104 and .1106. Several types of sources are exempt from TAP requirements; exempt sources are listed in 02Q .0702.

*Modifications:* Per 02Q .0706(b), a facility must submit an application (normally an air dispersion modeling demonstration) if a planned modification would increase the emission rate or ambient concentration of a TAP previously modeled by the facility, or if the planned modification would cause the facility to emit any TAP at a rate greater than the TPER in 02Q .0711.

Buckeye is not proposing any physical modifications, changes in the methods of operation, or increases in emissions as part of this new permit. Therefore, this new permit will not affect Buckeye's TAP emissions, and this new permit is not a modification per 02Q .0706.

## 5. Facility Emissions Review

*Emission changes based on modified sources:* Buckeye is not proposing any changes to emission limits or throughputs as part of this new permit. Although the synthetic minor limit for Title V purpose (100 tpy of VOC) is being replaced with a PSD avoidance limit (250 tpy of VOC), this change will not actually result in an increase in emissions because the underlying throughput limits in the permit will not change.

*Title V:* Buckeye was formerly a minor source for Title V. Now that the synthetic minor limit for VOC is being removed from the permit, Buckeye will be classified as a major source for Title V.

*HAP:* Buckeye is an area source of hazardous air pollutants (HAP) because it has actual emissions of HAP less than the major source threshold (10 tpy individually, 25 tpy total; see 40 CFR 63.2).

It is expected that, when combined with the neighboring CTI facility, the combined facility will avoid being designated as a major source of HAP. Note that, based on the most recent emission inventory, Buckeye emitted approximately 0.6 tons of HAP, and CTI emitted approximately 4.6 tons of HAP for a combined approximate total of 5.2 tons of HAP.

Note that on December 22, 2021, the US EPA added 1-bromopropane (1-BP) to the list of HAP.<sup>4</sup> Buckeye has not previously quantified 1-BP emissions from this facility. When Buckeye submits the permit application required by 02Q .0315(c), Buckeye will be required to address 1-BP emissions (if any).

*PSD:* Buckeye is not a major stationary source for PSD because the facility has accepted facility-wide emission limits such that the thresholds in thresholds in 40 CFR 51.166(b)(1)(i)(b) are not exceeded. It is expected that Buckeye will continue to avoid major stationary source status when Buckeye submits the permit application required by 02Q .0315(c).

*PSD Increment Tracking:* Buckeye is not proposing any change to actual emissions with this new permit. Therefore, PSD Increment Tracking will not be affected.

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<sup>4</sup> See 87 FR 393 (published January 5, 2022).

## 6. Compliance Status and Other Regulatory Concerns

*Compliance status:*

- This facility was most recently inspected on June 13, 2023 by Tony Sabetti. Buckeye appeared to be in compliance with the existing air permit at that time.
- Buckeye has not been issued any Notices of Violation within the previous five years.
- Buckeye was not required to include Form E5 “Title V Compliance Certification” with this application because Buckeye does not yet hold a Title V permit.

*Application fee:* Applications for modification under 02Q .0300 require an application fee. Buckeye paid the appropriate fee by ePay.

*PE Seal:* Pursuant to 15A NCAC 02Q .0112 “Application requiring a Professional Engineering Seal,” a professional engineer’s seal (PE Seal) is required to seal technical portions of air permit applications for new sources and modifications of existing sources as defined in 15A NCAC 02Q .0103 that involve the criteria in 02Q .0112(a)(1)-(3). Buckeye is not making any physical changes to the facility, so no PE Seal was required.

*Zoning:* Buckeye is not making any physical changes to the facility, so no zoning consistency determination was required.

## 7. Draft Permit Review, Public Notice, and EPA Review

*Initial draft:* An initial draft of this permit and application review were sent to DAQ Permits staff on February 8, 2024. Comments were received on February 26, 2024:

Permits Comment 1: The application review should specify that the facility has potential emissions greater than the PSD threshold, and therefore a PSD avoidance limit is justified.

Permits Comment 2: The application review should discuss the large PSEU submittal requirement for CAM.

Permits Comment 3: Typos in the application review and permit.

*Response:* The indicated issues were addressed.

*Revised draft:* A revised draft of this permit and this application review were sent to DAQ SSCB staff, DAQ WiRO staff, and Buckeye on February 26, 2024. No comments were received on this revised draft.

*Public Notice:* This application is being processed pursuant to 02Q .0300. Per 02Q .0306(a)(1), a public notice period is required for any source that the Director of DAQ determines based on public interest. Based on the NC Department of Environmental Quality's community mapping system,<sup>5</sup> Buckeye is located in a "potentially underserved" area. Furthermore, this proposed permit is removing a synthetic minor limit (the first step to issuing a Title V permit). Therefore, the Director has determined that a public notice period is needed for this project.

A notice of the draft Title V Permit shall be made pursuant to 15A NCAC 02Q .0307. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0307(g), a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Furthermore, DAQ voluntarily provides notice to each bordering State (Virginia, Tennessee, Georgia, and South Carolina).

- The Public Notice and EPA Review periods began on March 15, 2024.
- The Public Notice period ended on April 14, 2024
- XXXXXXXXXXXXXXXXXXXX

*EPA Review:* This facility is not (yet) a Title V facility, and therefore no specific EPA review period is required. Note that an EPA review period will be required when Buckeye submits the Title V application required by 02Q .0315(c).

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<sup>5</sup> See <https://www.deq.nc.gov/outreach-education/environmental-justice/deq-north-carolina-community-mapping-system> for more details.

## **8. Recommendations**

This permit application has been reviewed by NC DAQ to determine compliance with all procedures and requirements. NC DAQ has determined that this facility appears to be complying with all applicable requirements.

DAQ recommends issuance of Permit No. 03467R29. WiRO, SSCB, and Buckeye have received a copy of this permit and submitted comments that were incorporated as described in Section 7.