Fiscal Note for Readoption of Group 6 Rules

Rule Citation Number: 15A NCAC 02D .0403, .0500, .0615 .0900, .1400, .1700 and .2615

Rule Topic: Readoption of Rules in 15A NCAC 02D .0403, .0500, .0900, .1400, .1700 and .2615
Repeal of Rules 15A NCAC 02D .0536 and .0615

DEQ Division: Division of Air Quality

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Impact Summary:
State government: Yes
Local government: No
Substantial impact: Yes
Private Sector: Yes

Authority: G.S. 143-215.3(a)(1); 143-215.65; 143-215.66

Necessity: The readoption of Rules in 15A NCAC 02D .0403, .0500, .0900, .1400, .1700 and .2615 and repeal of 02D .0536 and .0615 pursuant to the requirements of S.L. 2013-413 and G.S. 150B.
I. Purpose

The purpose of this document is to provide a fiscal and regulatory impact analysis addressing the economic impacts associated with the readoption and amendments to rules in 15A NCAC 02D .0403, Total Suspended Particulates; 15A NCAC 02D .0500, Emission Control Standards; 15A NCAC 02D .0900, Volatile Organic Compounds; 15A NCAC 02D .1400, Nitrogen Oxides; 15A NCAC 02D .1700, Municipal Solid Waste Landfills; and 15A NCAC 02D .2615, Determination of Leak Tightness and Vapor Leaks, and readoption as a repeal of 15A NCAC 02D .0536, Particulate Emissions from Electric Utility Boilers, and .0615, Delegation, pursuant to requirements of S.L. 2013-413 and G.S. 150B.

Amendments within this rule package address include changes to the fuel transport cargo tank leak testing program as well as a variety of non-substantive edits for clarity. Relying on the existing Federal Motor Carrier Safety Administration (FMCSA) program for cargo tank leak testing and eliminating the duplicative state-specific program is expected to reduce fuel transport delays during emergency response efforts and reduce costs to the agency and regulated community without negatively impacting the achievement of air quality improvements. Additional amendments made to these Rules include the removal of requirements that provide little or no environmental benefit, the removal of outdated or obsolete Rule language, and the clarification of requirements. A summary of the substantive and non-substantive changes to the Rules are found in Section III, and the expected economic impact of the changes is discussed in Section IV.

II. Background

N.C. Gen. Stat. §150B-21.3A, adopted in 2013, requires state agencies to review existing rules every 10 years. Following an initial review, rules will be reviewed on a 10-year review cycle. The initial review comment period on all of the air quality rules in 15A NCAC 02D, Air Pollution Control Requirements, and 15A NCAC 02Q, Air Quality Permits Procedures, was held from March 13, 2015 through June 19, 2015. On November 4, 2015, the Environmental Management Commission (EMC) approved the report on the review of the rules and comments received. The report was approved by the Rules Review Commission (RRC) on December 17, 2015. The Administrative Procedures Oversight Committee of the state legislature met on January 5, 2016, and the report became final. The rules determined to be unnecessary (15A NCAC 02D .2400, .2500, and .2600) expired effective February 1, 2016. On May 19, 2016, the RRC established December 31, 2020 as the date by which the EMC must readopt the rules in subchapters 02D and 02Q designated as necessary.

III. Description of Proposed Changes to Existing Rules

There are 108 total rules in this group of Rules that are being proposed for readoption pursuant to the requirements of S.L. 2013-413 and G.S. 150-B. This includes: 15A NCAC 02D .0403; 35 Rules in 15A NCAC 02D .0500; 43 Rules in 15A NCAC 02D .0900; 16 Rules in 15A NCAC 02D .1400; 10 Rules in 15A NCAC 02D .1700; and Rule 15A NCAC 02D .2615. Two rules 15A NCAC 02D .0536 and .0615 are proposed for repeal. The following is a summary of the changes for each set of rules for this group.
15A NCAC 02D .0403 – TOTAL SUSPENDED PARTICULATES

This Rule specifies the ambient air quality standards for total suspended particulates. This Rule is being proposed for readoption without substantive changes to format the reference to the EPA Code of Federal Regulations sampling and analysis requirements.

15A NCAC 02D .0500 – EMISSION CONTROL STANDARDS

This Section consists of 36 Rules that provide the emission control standards for both combustion and non-combustion air pollution sources. In this set of rules, 3 Rules are being proposed for readoption with substantive changes and one rule is being proposed for repeal.

A summary of the changes for the three Emission Control Standards Rules that are being proposed for readoption with substantive changes and one rule proposed for repeal is provided below.

15A NCAC 02D .0504, Particulates from Wood Burning Indirect Heat Exchangers, is proposed for readoption with substantive changes to update the applicability requirements, update the equation for the emission limit calculation, and provide clarification of the emission limit for the removal of a wood-burning heat exchanger. Other changes include updates to APA grammar, formatting, and references.

15A NCAC 02D .0530, Prevention of Significant Deterioration, is proposed for readoption with substantive changes to update the incorporation by reference date. The changes also include clarifying that condensable particulate matter is included when determining total particulate matter emissions, and clarifying the reporting and recordkeeping requirements in Paragraph (u). Other changes include updates to APA grammar, formatting, and references.

15A NCAC 02D .0532, Sources Contributing to an Ambient Violation, is proposed for readoption with substantive changes to remove the reference to the repealed 15A NCAC 02D .0800 Rules and to update the format of the emission limits. Other changes include updates to APA grammar, formatting, and references.

15A NCAC 02D .0536, Particulate Emissions from Electric Utility Boilers, is proposed to be repealed. The annual average opacity (AAO) limits and their associated particulate matter limits found in .0536 are outdated and obsolete.

15A NCAC 02D .0615 – DELEGATION

The purpose of this rule was to allow the Director to delegate his administrative and approval functions to other officials in the Division of Air Quality. This rule is unnecessary and is proposed for repeal to be consistent with General Statute §150B-2(8a)(a).

15A NCAC 02D .0900 – VOLATILE ORGANIC COMPOUNDS

These rules regulate sources that emit greater than or equal to 15 pounds of volatile organic compounds per day unless specified otherwise in this Section. Four rules are being proposed for readoption with
substantive changes. Included in this Section are the certification requirements for gasoline cargo tanks in 15A NCAC 02D .0932 and .0960 which are proposed for modification to eliminate the NC state-certification requirement for facilities subject to this Rule.

A summary of the changes for the four Volatile Organic Compounds (VOC) Rules that are being proposed for readoption with substantive changes is provided below.

15A NCAC 02D .0926, Bulk Gasoline Plants, is proposed for readoption with substantive changes to clarify one definition, remove obsolete language, clarify some requirements, and update APA grammar and formatting.

15A NCAC 02D .0927, Bulk Gasoline Terminals, is proposed for readoption with substantive changes to clarify the definitions, remove obsolete language, update format of references, and update APA grammar and formatting.

15A NCAC 02D .0932, Gasoline Cargo Tanks and Vapor Collection Systems, is proposed for readoption with substantive changes to update definitions, revise the method for certification, revise the recordkeeping requirements, remove obsolete language, update format of references, and update to APA grammar and formatting.

15A NCAC 02D .0960, Cargo Tank Leak Tester Report, is proposed for readoption with substantive changes to revise the certification requirements for cargo tanks. This includes removing the North Carolina specific gasoline cargo tank leak tightness certification requirements using EPA Method 27, instead allowing these cargo tanks to be certified using either EPA Method 27 or the US Department of Transportation (USDOT) Title 49 CFR 180.407 test method by federally certified inspection facilities. Other changes include updates to APA grammar, formatting, and references.

15A NCAC 02D .1400 – NITROGEN OXIDES

The 16 rules in this Section regulate sources of nitrogen oxides. The rules are proposed for readoption without substantive changes.

15A NCAC 02D .1700 – MUNICIPAL SOLID WASTE LANDFILLS

These 10 Rules regulate North Carolina’s implementation of federal regulations including Standards of Performance for Municipal Solid Waste Landfills and Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills.

Nine rules in this Section are proposed for readoption without substantive changes. Rule 15A NCAC 02D .1702, Applicability, is proposed for readoption with substantive changes to update rule references, resulting in minor administrative changes to respective permits.
15A NCAC 02D .2615 – DETERMINATION OF LEAK TIGHTNESS AND VAPOR LEAKS

This Rule outlines the procedures and test methods to be used in determining leaks from gasoline cargo tanks for compliance with 15A NCAC 02D .0932. The Rule also provides the test methods that are to be used for annual certification of these gasoline cargo tanks.

This Rule is being proposed for readoption with substantive changes to allow the use of the USDOT method (49 CFR Part 180.407) for determining the leak tightness of gasoline cargo tanks for annual certification. In addition, the changes include general formatting, updates to the format of references, and updates of requirements to be consistent with Federal regulations.

IV. Estimating the Fiscal Impacts

As described in the sections above, there are 108 total rules in 15A NCAC 02D .0403, .0500, .0615, .0900, .1400, .1700, and .2615 that are being proposed for readoption pursuant to the requirements of S.L. 2013-413 and G.S. 150-B. For the 92 Rules that are being proposed for readoption without substantive changes, the two Rules that are proposed for repeal, and the five Rules that are being proposed for readoption without any changes, no fiscal impact is expected as a result of the changes. Changes to these rules include APA grammar and formatting updates, general formatting, updates to acronyms, removal of obsolete language and requirements, updates to the format of references, and updates of requirements to be consistent with Federal regulations.

A summary of the fiscal impacts for the 9 Rules that are being proposed for readoption with substantive changes and two rules proposed for readoption as repeal are provided below.

A. Regulatory Costs and Cost Savings

1. 15A NCAC 02D .0504, Particulates from Wood Burning Indirect Heat Exchangers.

The proposed changes to this Rule provide clarification and align 02D .0504(e) with 02D .0503(e). The proposed rule language neither introduces new requirements nor relaxes standards; therefore, there are no changes to the day-to-day permitting, compliance, and enforcement activities. The proposed language does not create any additional burden and there are no fiscal impacts to the regulated community.

2. 15A NCAC 02D .0530, Prevention of Significant Deterioration.

The proposed Rule language is clarification and is updated to include language to clarify to the regulated community that condensible particulate matter is included in the determination of total quantity of particulate matter. Condensible particulate matter has already been included through the source test methods in 15A NCAC 02D .2600. Revision to Paragraph (u) language to align the rule more closely with federal language and allow use of minor permitting methods for sources with less than 50% significant emissions increase. This change requires recordkeeping for facilities with a less than 50% significant emissions increase and recordkeeping and reporting for facilities with a greater than or equal to 50% significant emissions increase. The existing rule language required all facilities to keep records and report. There are minimal cost savings to a facility with less than 50% significant emissions increase.
by not having to submit an annual report. It is estimated the report should take less than one hour to compile. There is minimal cost savings to the State to review the annual reports and is estimated to take less than one hour to review. Additionally, the DAQ proposed changes includes updates to CFR references that have been incorporated without subsequent amendments. The DAQ compared the versions and does not attribute any substantive differences between the versions. Therefore, minimal fiscal impacts to the State or to the public and private sectors of North Carolina are expected as result of the proposed changes to the rule.

3. **15A NCAC 02D .0532, Sources Contributing to an Ambient Violation.**

The substantive change to this Rule is the removal of the reference to the repealed 15A NCAC 02D .0800, Complex Sources Rules and update value to align with the National Ambient Air Quality Standards (NAAQS). The Clean Air Act requires states to submit state implementation plan (SIP) that implement, maintain and enforce a new or revised NAAQS within three years of EPA issuing the standard. The EPA updated Section III of Appendix S of 40 CFR Part 51 and approved North Carolina’s SIP submittal regarding Particulate Matter and therefore making the NAAQS values contained in 02D .0532(c)(4) federal and state enforceable. Furthermore North Carolina is in Attainment statewide for PM2.5, therefore, there are no fiscal impacts to facilities, DEQ, or the citizens of North Carolina associated with the propose change in 02D .0532(c)(4). The 02D .0800 Rules regulated the construction or modification of a transportation facility or highway projects which may result in an ambient air quality standard being exceeded. Currently, the emissions from highway projects in areas of concern are now effectively covered under Section 15A NCAC 2D .2000, Transportation Conformity. Furthermore, nearly all transportation facilities and highway projects of any significance (i.e., any project large enough to be covered under this Rule), are covered under the National Environmental Policy Act or the North Carolina Environmental Policy Act. A requirement of these Acts is a demonstration that the project will not cause any ambient air quality standard to be violated. Therefore, there are no fiscal impacts to facilities, DEQ, or the citizens of North Carolina associated with the removal of this obsolete reference. Additionally, the DAQ proposed changes includes updates to CFR references that have been incorporated without subsequent amendments. The DAQ compared the versions and does not attribute any substantive differences between the versions. Therefore, no fiscal impacts to the State or to the public and private sectors of North Carolina are expected as result of the proposed changes to the rule.

4. **15A NCAC 02D .0536, Particulate Emissions from Electric Utility Boilers**

*Background*

15A NCAC 02D .0536 was adopted by the EMC over 40 years ago in order to create a variance for existing coal-fired utility boilers in North Carolina. The variance permitted an increase in the allowable emission rate by coupling it with an equivalent annual average opacity.
Proposed Rule and Reason for Rule Change

15A NCAC 02D .0536, Particulate Emissions from Electric Utility Boilers, is proposed to be repealed without replacement. The annual average opacity, or AAO, limits and their associated particulate matter (PM) limits found in 15A NCAC 02D .0536 are obsolete and outdated.

Many of the emission units listed in 15A NCAC 02D .0536 no longer exist and the remaining emission units subject to 15A NCAC 02D .0536 have updated control equipment, installed monitoring systems, and currently comply with more stringent State rules and federal regulations.

Estimating the Fiscal Impacts

The fiscal impacts for the proposed changes to 15A NCAC 02D .0536 are broken up into three sectors: State Government; Private Sector; and Local Government. The fiscal impacts for each of the sectors are presented in the following sections:

State Government Entity

The DAQ would benefit from this proposed repeal because they would no longer need to review AAO reports. The monetary savings as result of this change are estimated to be $1,970 per year. This assumes 40 hours of time per year for a DAQ Compliance Engineer II earning $49/hour.

Private-sector Entities

As the result of the proposed repeal, the DAQ is reducing the burden on regulated sources. The source would save $119,200 per year from not performing an annual particulate emission test. This benefit includes the costs associated with preparing, reviewing and submitting protocols, contractor expenses to conduct the tests, onsite personnel to support the test teams and ensure safety measures are followed, reviewing draft results, and preparing a final test report.

The owner or operator would also be able to streamline periodic reporting at a cost savings of $12,800 per year.

In addition to the cost savings from not having to perform an annual source test, one facility also estimated a potential cost savings of $64,800 to $145,800 per year because of the timing of the test. Many electric generating stations have other electric generating sources in addition to electric generating boilers to generate electricity. Electric utility boilers are not as efficient at generating electricity as these other electric generating sources and are only operated during peak electricity demand. However, if a

1 To estimate total compensation, assumed years of service for the following work title categories on an average 5 years for Engineer I, 10 years for Engineer II, 20 years for Supervisor. Also, an estimated 2080 works hours per years was used. Total Compensation is estimated from https://oshr.nc.gov/state-employee-resources/classification-compensation/total-compensation-calculator. State government employees will receive a 2.5% raise in 2020. Assuming 2% inflation, this is a real cost increase of 0.5%. Since any further raises are unknown, assumed employee costs will raise with inflation thereafter.

2 Cost savings provided by Duke Energy | Permitting and Compliance, Carolinas
particulate matter test is scheduled at a time when the electric utility boiler is not cost effective to operate, the facility will incur additional costs by producing costlier electricity. However, because of the unpredictability of determining efficient electricity generation, the DAQ did not include this annual estimate in its overall NPV analysis.

Local Government Entities:

DAQ does not anticipate any local government impact from the proposed changes to the Rule.

5. 15A NCAC 02D .0615, Delegation

The purpose of this rule was to allow the Director to delegate his administrative and approval functions to other officials in the Division of Air Quality. This rule is unnecessary and is proposed for repeal to be consistent with General Statute §150B-2(8a)(a). No fiscal impacts to facilities, DEQ, or the citizens of North Carolina are assessed due to proposed repeal.

6. 15A NCAC 02D .0926, Bulk Gasoline Plants.

The majority of changes to this Rule are administrative or provided for clarification. These changes do not add or remove any requirements and the fiscal impacts to facilities, DEQ, or the citizens of North Carolina are expected to be zero.

7. 15A NCAC 02D .0927, Bulk Gasoline Terminals.

The majority of changes to this Rule are administrative or provided for clarification. These changes do not add or remove any requirements and the fiscal impacts to facilities, DEQ, or the citizens of North Carolina are expected to be zero.

8. 15A NCAC 02D .0932, Gasoline Cargo Tanks and Vapor Collection Systems,
9. 15A NCAC 02D .0960, Cargo Tank Leak Tester Report, and
10. 15A NCAC 02D .2615, Determination of Leak Tightness and Vapor Leaks.

The proposal for modifying rules 15A NCAC 02D .0932, .0960, and .2615 centers on eliminating the NC certification requirement for facilities. This proposed change allows gasoline cargo tanks receiving either the EPA Method 27 or the US Department of Transportation (USDOT) tank leak tightness test to load or unload fuel throughout the state. The Division estimates no appreciable increase in VOC resulting from this change because the cargo tanks will still be required to receive a comparable annual inspection to detect tank VOC leaks. The Division will continue to require maintenance of records, including leak related repairs performed on the tank.

The US EPA Method 27 and USDOT leak tests were developed independently during the same time frame of the early 1990’s. The primary purpose for both tests was the detection of tank leaks while under pressure from their loading of the product. Both tests are performed by certified inspectors which require regular training and are held to strict record keeping practices. In later years, the Federal Motor Carrier’s Safety Administration (FMCSA) incorporated Method 27 as an alternative method to the USDOT test.
method for cargo tanks dedicated to the transportation of gasoline type petroleum distillates. While state and jurisdictional environmental agencies provide the training and enforcement of the Method 27 test, the FMCSA provides rigorous compliance to all on-road cargo tanks nationwide at every certified inspection facility. The primary change proposed for the DAQ cargo tank certification program is the reliance of the certification by the FMCSA to ensure that cargo tanks do not leak.

**Background**

In August of 1999, NC Senate Bill 953\(^3\) was passed directing EMC to “develop and adopt rules governing the certification of persons who inspect vehicle-mounted tanks used to transport motor fuel and to require that inspection of these tanks be performed only by certified personnel.” Performing cargo tank leak tightness tests to prevent fugitive emissions of VOCs reduces the amount of these compound available to react with NOx to form ground-level ozone, which can trigger human health problems and impact sensitive vegetation. These tests also reduce the risk of injury or property damage from these explosive compounds.

Prior to the 1999 legislation, the Mecklenburg County Department of Environmental Protection (MCDEP) certified the facilities that intended to conduct the annual leak tightness testing of the cargo tanks according to Environmental Protection Agency (EPA) Method 27. When the facility was certified by an official from Mecklenburg County, the gasoline cargo tank tested by a certified facility (and determined to pass) was then allowed to dispense gasoline in Mecklenburg County. The MCDEP also conducted random checks of cargo tanks while they were loading at the terminals. The Division of Air Quality (DAQ) modeled the state program similar in nature to the local program that existed in Mecklenburg County. After DAQ established a state-wide program in 2003, Mecklenburg County honored the State program and no longer required a separate inspection for Mecklenburg County.

There are several federal, state, and local programs addressing the testing of cargo tanks (also referred to as “gasoline tank trucks and tank trailers” or “tank”) for vapor tightness. USDOT and DAQ cargo tank inspection programs both require gasoline cargo tanks to be tested annually and certified leak tight. The tests are comparable in identifying repairs necessary to correct leaks. The USDOT 49 CFR Part 180 Subpart E “Qualification and Maintenance of Cargo Tanks” requires a pressure test; the state specific program requiring the EPA Method 27 includes both a pressure test and a vacuum test (15A NCAC 02D .2615). The USDOT test allows the EPA Method 27 test as a substitute in lieu of the 49 CFR § 180.407 hazardous materials pressure test for cargo tanks exclusively transporting gasoline fuels. The sticker affixed to the gasoline cargo tank upon passing completion of the USDOT test does not specify whether the EPA Method 27 test was performed or the standard USDOT 49 CFR § 180.407. Therefore, the EMC approved a North Carolina specific certification program requiring a separate state specific sticker indicating the EPA Method 27 inspection was performed.

Ensuring the cargo tanks received annual leak tests to prevent fugitive VOC emissions around the state at refueling locations required innumerable state personnel hours educating, training, implementing, and

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\(^3\) Senate Bill 953 S.L. 1999-328 Page 9 § 143-215.107(a)(13) Air Quality Standards and Classifications. Criteria for Standards – “to improve ambient air quality in the State… achieve attainment or preclude violations of state or national ambient air quality standards [NAAQS]...”
enforcing the state specific cargo tank leak test program. Importantly, the permitted bulk gasoline terminals across the state require mobile cargo tank drivers provide proof of inspection compliance before connecting. Cargo tank freight drivers are required to keep proof of inspection compliance paperwork with the tank at all times. This ensures the cargo tank to be loaded will not contribute to fugitive VOC emissions while transferring fuel between points within North Carolina. This requirement will continue. Cargo tanks will continue to display a sticker, but the sticker will identify a comparable USDOT certification of passing a leak test.

**Reason for Rule Change**

The DAQ staff has spent considerable resources traveling to the facilities in North Carolina and seven other states (Georgia, Kentucky, Ohio, Maryland, South Carolina, Virginia and Tennessee) to certify these facilities each year. Currently, NC is the only state in EPA Region 4 requiring state specific facility certifications. Virginia previously required facility certifications, but staff did not travel to the facilities to perform certifications. Instead, Virginia certified facilities based off of the NC certification. As of September 7, 2018, EPA Method 27 for vapor tightness testing and USDOT 49 CFR § 180.409 testing facility registration requirements both satisfy Virginia DEQ’s compliance requirements for testing cargo tanks.4

Additionally, when there is the potential for disruptions in fuel supplies to NC either due to the Colonial Pipeline being offline or a natural disaster, the Governor of NC must issue temporary exemptions to allow cargo tanks without a NC certification to deliver gasoline from surrounding states to supply impacted communities.5 In recent years, North Carolina experienced pipeline supply emergencies in September and November 2016, Hurricane Harvey in August 2017, Hurricanes Florence and Michael in September 2018, and Hurricane Dorian in August 2019.

During Hurricanes Florence and Michael in 2018, Governor Cooper issued executive orders6 ahead of both storms, waiving the gasoline cargo tank and vapor system requirements to allow tanks from out-of-state to transport additional fuel to NC without undue delay. Despite this preparation, gasoline bulk terminals in NC were not able to make use of the intended relief of the executive orders unless NC DAQ also received a No Action Assurance letter from the US EPA. These steps are necessary for each natural disaster because the State Implementation Plan (SIP), subject to federal enforcement action, incorporates North Carolina’s specific cargo tank rules. Securing these “No Action Assurance” letters takes up significant DAQ personnel time in communicating with US EPA staff, drafting letters, and securing signatures from agency heads, when circumstances often limit communications and coordination. In the

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4 ACG-013: Air Compliance Guidance for the Testing, Monitoring, and Certification Provisions of 9 VAC 5 Chapter 40 Part II Article 37, Requiring Approval or Acceptance by the Board
6 Executive Order No. 53 September 10, 2018 “Waiver of Fuel Vapor Regulations to Ensure Adequate Supply of Fuel as Hurricane Florence Approaches” & NC DAQ Director Letter to EPA for Hurricane Florence September 13, 2018 “No Action Assurance for the Use of Vapor Recovery Systems in North Carolina Related to Hurricane Florence”
case of Hurricane Michael, the US EPA declined NC DAQ’s request for a No Action Assurance letter even though Governor Cooper issued the executive order waiving the cargo tank requirements in NC during and after the storm. This created confusion in the regulated community about which cargo tanks may or may not transfer fuel within the state during the natural disaster preparation and aftermath.

Disruptions in the fuel supply not only affect the citizens and businesses in NC, but to a larger degree could adversely impact emergency personnel when they are needed the most. Modifying the state specific cargo tank sticker requirements alleviates this burden without negatively impacting the achievement of air quality improvements. The Division continues its mission to work with the state’s citizens to protect and improve ambient air quality for the health, benefit, and economic well-being of all.7

**Proposed Rule**

The DAQ is proposing modifying the cargo tank certification rules within the North Carolina Administrative Code (15A NCAC 02D .0932, .0960 and .2615). The Division proposes the elimination of DAQ staff certification of cargo tank inspection facilities and requirement for tanks to maintain an up to date state-specific certification sticker to gain access to fuel distribution facilities within NC. The cargo tank rules will continue to require an annual leak tightness inspection for cargo tanks, record keeping, and indication of all repairs performed related to leak tightness. Previously, repair data was not captured by the record requirements within the cargo tank rules, but the proposed 15A NCAC 02D .0932(c)(5)(G) requires corrective repairs to be identified and described within the leak test record.

The current NC cargo tank rules go beyond federal requirements for cargo tanks at gasoline distribution facilities. The EPA’s emission factor for actual overall emissions under a vapor tight cargo tank program is 0.8 percent of the total vapor displaced or 8 mg of VOC/liter, regardless of test method performed. Cargo tanks will still be required to receive an annual certified leak tight test per either EPA Method 27 or USDOT inspections (49 CFR § 180.407). Finally, the terminals, bulk plants, and gas stations will continue to require the cargo tank operators (freight drivers) to provide a copy of the cargo tank’s annual leak tightness test before they may connect to the fuel loading rack.

**Estimating the Fiscal Impacts**

The fiscal impacts for the proposed changes to 15A NCAC 02D .0932, .0960 and .2615 are divided up into three sectors: State Government; Private Sector; and Local Government. The fiscal impacts for each of the sectors are presented in the following sections.

**State Government Entity**

The total annual cost of operating the certification program by the DAQ is presented in the table below. This cost includes the salary of personnel to ensure compliance with the certification program, the cost of travel to the certified facilities, and the purchasing of certification stickers. By modifying the Rules, the

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7 [https://deq.nc.gov/about/divisions/air-quality](https://deq.nc.gov/about/divisions/air-quality)
DAQ would benefit by not having to administer the gasoline cargo tank certification program. This benefit is estimated to be $147,520 per year. A summary of the methodology for estimating the individual values is provided in the following subsections.

Table 1. Total Annual DAQ Administrative Costs (2021 dollars, inflation adjusted)

<table>
<thead>
<tr>
<th>Description</th>
<th>Annual Program Operating Cost</th>
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<tbody>
<tr>
<td>Personnel Salary</td>
<td>$137,229</td>
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<tr>
<td>Personnel Travel</td>
<td>$8,276</td>
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<tr>
<td>Sticker Decals</td>
<td>$2,014</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>$147,520</strong></td>
</tr>
</tbody>
</table>

a. DAQ Benefits for Personnel Including Working Hours and Travel Expenses

The impact to Division personnel centers on the activities of the Technical Services Section Mobile Sources Compliance Branch (MSCB). Currently two positions are designated to support program compliance. Due to upcoming new programmatic burdens on the immediate horizon of 2020 for the MSCB, the addition of a third position dedicated to the data entry and training requirements for the cargo tank program will be necessary for the workgroup to meet its service goals. The positions spend portions of their work time managing the stickers, providing training, processing applications, certifying stations, data entry of the inspection records, and traveling to facilities and training sites.

Table 2. State Staffing Estimate (2021 dollars)

<table>
<thead>
<tr>
<th>#</th>
<th>Position</th>
<th>GN #</th>
<th>Total Compensation</th>
<th>% Time</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Env. Specialist I</td>
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<td>$69,956.88</td>
<td>10%</td>
<td>$6,996</td>
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<tr>
<td>2</td>
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<td>$90,873</td>
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<td>$39,360</td>
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<td></td>
<td><strong>Total:</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$137,229</strong></td>
</tr>
</tbody>
</table>

Travel by personnel primarily centers on certification and recertification of inspection facilities which are completed every other year, where half of the facilities are visited each year. Travel expenses range in value from in-state travel to out-of-state travel authorizations. In-state travel typically is completed as a day trip where staff utilize Department resources by checking out a state vehicle. About two-thirds of the facility locations require overnight accommodation out-of-state as depicted in Table 5 below. This type of travel requires authorization through the budget office. A recent out-of-state representative example of a two-day trip to Pikeville, KY for staff included vehicle mileage, hotel rate, and food expenses calculated to $376.58 total.

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8 Defined and Foreseeable burdens to the work group include the addition of the Volkswagen Settlement Funds Distribution Program and VOC emission leak compliance inspections for every permitted gas station previously performed by the Department of Agriculture.
State personnel conduct about 30 facility visits annually, 10 in-state and 20 out-of-state. The in-state travel is estimated to be $744.81 per year, and the out-of-state travel is estimated to be $7,531.61 per year. Therefore, the Division spends an estimated $8,276.42 total per year on program related travel.

b. Sticker Decal Benefit

The state specific certification cargo tank program does not charge a fee to the certified inspection facility or to the owners of cargo tanks receiving leak tightness testing. NC DAQ personnel order stickers for the upcoming year in September-October timeframe. For the upcoming 2020 program year, the production estimate for an order of 5,000 stickers is $1,985 with the least expensive shipping method estimate is $29 totaling $2,014 for a completed order. The Sticker decals provide notice to North Carolina vapor recovery permitted fuel storage facilities the cargo tank may connect and refuel at their facility. The program will continue to require cargo tanks display an up to date USDOT test sticker decal, but the Division will no longer provide them or keep track of the sticker number assigned to each cargo tank.

Private-sector Entities

For the private sector, the costs and benefits for the rule implementation breaks down into two areas; cargo tank owner compliance benefits and facility compliance inspection revenue costs. Table three provides the net cost-benefit of the proposed rule as well as the absolute total impact for the private sector. Analysis and data for these calculations are provided in the following sections.

Table 3. Total Private-Sector Costs and Benefits (2021 dollars)

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Owner Annual Benefit</td>
<td>- $1,895,000</td>
</tr>
<tr>
<td>Average North Carolina Facility Revenue</td>
<td>+ $541,050</td>
</tr>
<tr>
<td>Net Benefit to Private Sector</td>
<td>- $1,353,950</td>
</tr>
<tr>
<td>Absolute Total Impact</td>
<td>$2,436,050</td>
</tr>
</tbody>
</table>

a. Tank Owner Compliance Benefits

Owners of cargo tanks must pay certified inspection facilities for the State specific inspection in addition to the federally required inspection. Subsequently owners pay for their cargo tanks to receive redundant testing each year for leak tightness. It is common for these inspections to be performed either simultaneously or within a month or two of each other. Therefore, the potential delay in detection of a leak is minimal given the proximate timeframe. By amending the Division’s cargo tank inspection program, the owners will only have to submit their cargo tank for a single annual certification of leak tightness. Regardless of the test performed, the identification of leak repairs remains comparable. The owner of a cargo tank will still have to pay for repairs identified by the inspection no matter which test is used. Furthermore, the owners and operators are required by USDOT and FMCSA rules to retest the cargo tanks if any visible sign or cause for concern is detected prior to the regularly scheduled annual test. Because of this, the Division does not anticipate an increase in costs nor a benefit in costs to cargo tank owners with respect to leak repairs.
Thus, the savings to the owner will be the direct expense of the redundant inspection, in this instance the EPA Method 27 state specific testing requirements. Industry provided a range of inspection values to cover the expense of an annual certification for the facility’s equipment, space in the bay, and inspector’s work time. The low to high range provided by the National Tank Truck Carriers (NTTC) in August of 2019 was $200 to $400 per cargo tank with an average cost of $300. This value closely resembles the estimated calculated value of the inspection based on the time for a proper inspection to take place and salary of a cargo tank welder whom often is the certified inspector and repairer at a certified facility.

Lastly the owner will gain back the value of time the cargo tank would otherwise be occupied receiving an inspection. This is true because the pressure test takes several hours to perform, and prior to inspection the cargo tank must be kept in a sheltered inspection facility occupying a repair bay to achieve ambient temperature. This process may require the cargo tank to be out of service for one to two days.

Table 4. Owner Benefits for Cargo Tank NC Inspection

<table>
<thead>
<tr>
<th>Range</th>
<th>Inspection $</th>
<th>Rental Value $</th>
<th>Number of Cargo Tanks*</th>
<th>Cost $</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>$400.00</td>
<td>$126.33</td>
<td>5,000</td>
<td>$2,631.667</td>
</tr>
<tr>
<td>Low</td>
<td>$200.00</td>
<td>$31.67</td>
<td>5,000</td>
<td>$1,158,333</td>
</tr>
<tr>
<td>Average</td>
<td>$300.00</td>
<td>$79.00</td>
<td>5,000</td>
<td>$1,895,000</td>
</tr>
</tbody>
</table>

*The number of cargo tanks equals the average number of stickers issued by the Division annually. The number of stickers issued for 2019 is nearly 5,000 and projected to exceed 5,000 by the end of December. This trend has held for the past few years.

b. Certified Inspection Facility Costs

The number of certified inspection facilities changes based on market demand. As of September 2019, there were 61 certified inspection facilities by the Division performing the EPA Method 27 leak tightness test across seven states. These facilities typically also perform any needed repairs identified during the DOT and state inspections.

Table 5. Certified Facility Locations

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Certified Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Carolina</td>
<td>22</td>
</tr>
<tr>
<td>Georgia</td>
<td>2</td>
</tr>
<tr>
<td>Kentucky</td>
<td>3</td>
</tr>
<tr>
<td>Ohio</td>
<td>1</td>
</tr>
<tr>
<td>South Carolina</td>
<td>14</td>
</tr>
<tr>
<td>Tennessee</td>
<td>4</td>
</tr>
<tr>
<td>Virginia</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>61</strong></td>
</tr>
</tbody>
</table>
The inspection facilities will lose revenue by removing the state specific inspection requirement, although the facilities will continue to perform repairs. This revenue cost to facilities will equal the calculated savings of the inspection benefit realized by the cargo tank owners. Some large cargo tank fleet owners self-inspect their equipment so they will experience a net benefit from the inspection time savings and regained truck operation time. Self-inspectors are not currently distinguished among the records entered into the IBEAM data system from program management. Therefore, the portion of self-inspectors cannot be ascertained, and the value accounted for exactly. The percentage of North Carolina facilities makes up 36 percent (22 out of 61) of the total facilities, therefore the estimated loss of revenue to North Carolina certified inspection facilities will equal the percentage of the average $300 inspection fees for an estimated value of $541,050.

Local Government Entities

The origin of the DAQ program implemented in 2003 was designed based on its progenitor developed by the Mecklenburg County of Environmental Protection (MCDEP). Due the ongoing statewide requirement of a comparable annual cargo tank leak test with record keeping requirements, the MCDEP has shown no interest in reinstituting a local requirement for the inspection of gasoline cargo tanks.

Total Program Amendment Benefit

The total impact for elimination of DAQ staff certification of cargo tank inspection facilities is estimated to be $2.58 million per year. This includes a savings benefit of $147,520 to the DAQ for not having to administer a facility certification program, a savings benefit of $1,895,000 to the cargo tank owners, and a loss of revenue cost by the in-state certification facilities of $541,050. Local governments are not expected to incur any costs as a result of the proposed changes to the Rules.

Table 6. Annual Total Impact

<table>
<thead>
<tr>
<th>Entity</th>
<th>Absolute Value Cost-Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Government Benefits</td>
<td>- $147,520</td>
</tr>
<tr>
<td>Private-sector Benefits</td>
<td>- $1,895,000</td>
</tr>
<tr>
<td>Private-sector Costs</td>
<td>+ $541,050</td>
</tr>
<tr>
<td>Local Government</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>- $1,501,470</strong></td>
</tr>
<tr>
<td><strong>Absolute Value:</strong></td>
<td><strong>$2,583,570</strong></td>
</tr>
</tbody>
</table>

11. 15A NCAC 02D .1702 Applicability

*Background*

This rule affects landfills that have accepted waste at any time since November 8, 1987, and commenced construction, modification or reconstruction on or before July 17, 2014. Currently, landfills are required to test, but not control, emissions of non-methane organic compounds (NMOC) until they reach specified
thresholds. The current rule requires landfills of at least 2.5 million Mg capacity and 2.5 million cubic meters in size with estimated NMOC emissions of 50 Mg/year or greater, to collect and control landfill gas.

**Proposed Rule and Reason for Rule Change**

15A NCAC 02D .1702 is proposed for readoption with substantive changes to update the reference to the federal requirements in the facility’s permit. Upon the effective date of the proposed rule, the DAQ will notify facilities that they will be making an administrative change to their permit. To make this administrative change, the DAQ will reopen respective permits for cause pursuant to 15A NCAC 02Q .0517. The sources will have the opportunity to respond pursuant to 15A NCAC 02Q .0517. The proposed changes to the Rule are simple administrative rule reference changes to the permit and does not impact the source’s current permit conditions.

**Estimating the Fiscal Impacts**

In terms of cost impacts, the facilities will not have to spend any time or money to modify their respective permits. Because of the nature of the change and minimal DAQ resources will be spent for the 12 affected facilities. In terms of labor costs, we estimate the DAQ costs for modifying the permits to be $9,757. This includes 120 hours by a DAQ Permit Engineer II at $49 per hour and 60 hours by a Permit Supervisor at $63 per hour. This spending is accounted for in permits operating budget and covered by the DAQ’s revenue streams. The DAQ doesn’t anticipate any impact to local government entities and there are no impacts to public health or the environment as a result of the proposed rule.

**B. Public Health, Safety, and Environmental Impacts**

Public health benefits as a result of the proposed changes to the 15A NCAC 02D .0500 Rules are anticipated to be unchanged. Only five of the Rules have substantive changes and the majority of these changes are administrative or removes language that is obsolete. Therefore, the department does not anticipate any impact for either public health or the environment.

For the changes to the 15A NCAC 02D .0900 Rules pertaining to cargo tank leak testing, the primary expected benefits are to public safety during disaster events. Eliminating the State-specific certification and testing program will reduce fuel transport delays associated with securing No Action Assurance letters from the EPA, increasing the efficiency and effectiveness of emergency response efforts.

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9 Number of facilities provided by DAQ permit staff. Permit staff ran an IBEAM report to see which facilities were subject to WWW, the staff evaluated the report and determined that number to be 12.

10 To estimate total compensation, assumed years of service for the following work title categories on an average 5 years for Engineer I, 10 years for Engineer II, 20 years for Supervisor. Also, an estimated 2080 works hours per years was used. Total Compensation is estimated from [https://oshr nc gov/state employee resources/classification compensation/total compensation calculator](https://oshr nc gov/state employee resources/classification compensation/total compensation calculator) State government employees will receive a 2.5% raise in 2020. Assuming 2% inflation, this is a real cost increase of 0.5%. Since any further raises are unknown, assumed employee costs will raise with inflation thereafter.
The cargo tank testing rules relate to fugitive VOC emissions. These volatile compounds can ignite, creating a risk of injury or property damage. The USDOT regulates cargo tanks transporting hazardous materials by requiring the 407(h) leak test among other safety focused requirements. It is possible by eliminating the redundant State-specific testing requirement a potential delay of tank repairs may result. This delay could increase the risk of injury or property damage from explosions; however, the Division found it is common for State-specific inspections to be performed either at the same time as the federal inspection or within a month or two of passing the federal inspection. The two leak test methods are similar in that each method requires the cargo tank to be pressurized to check for leaks. However, the USDOT method requires pressure testing of each chamber of the cargo tank, whereas US EPA Method 27 requires the pressure testing of the whole tank. Chamber by chamber pressure testing required by the US DOT takes longer, but identifies leak location more specifically for repair than the US EPA test method. According to FMCSA, the majority of tank leak repairs occur during the initial pressurized pretest “dry run” prior to beginning the actual test. This observation is supported by DAQ compliance records. Regardless of the leak test performed, the identification of leak repairs remains comparable. The owner of a cargo tank will still be responsible for repairs identified by the inspection no matter which test is used. Furthermore, the owners and operators are required by USDOT and FMCSA rules to retest the cargo tanks if any visible sign or cause for concern is detected prior to the regularly scheduled annual test. Therefore, the impact from a delay in detection on safety is expected to be negligible because the leaks are as likely to be detected during the federal inspection and receive repairs.

Fugitive VOCs from cargo tanks can also affect human and environmental health. VOCs combine with oxides of nitrogen (NOx) through a chemical reaction aided by sunlight and heat to form ozone (O₃), commonly known as ground level ozone. Ozone is one of six criteria pollutants with set National Ambient Air Quality Standards (NAAQS).¹¹ Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and airway inflammation. It also can reduce lung function and harm lung tissue. Ozone can worsen bronchitis, emphysema, and asthma, leading to increased medical care. Ozone also impacts sensitive vegetation and ecosystems. The Division does not expect any public health or environmental impacts associated with ground level ozone formation even if VOC emissions varied slightly due to the cargo tank leak tightness test rule changes. While VOC emissions contribute to ozone formation, North Carolina as a state, especially along roadways, remains a NOx limited jurisdiction.¹² In other words, the reaction which causes ozone formation is limited to the amount of NOx available in the ambient air, not the amount of VOC. Therefore, the Division does not expect any additional formation of ground level ozone as a result of the changes to the proposed Rules.

V. Cost and Benefit Summary

As discussed in the previous section, the private sector benefit for 15A NCAC 02D .0536 was estimated to be $132,000 per year associated with the elimination of an obsolete particulate matter stack test and the

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¹¹ The Clean Air Act amended in 1990, requires EPA to set NAAQS (40 CFR part 50) for pollutants considered harmful to public health and the environment. The standard updated in 2015 to 0.070 ppm for O₃ (80 FR 65292).

¹² Odman, M Talat et al., Quantifying the sources of ozone, fine particulate matter, and regional haze in the Southeastern United States, 90 Journal of Environmental Management 3155-3168 (2009).
streamlining of periodic reporting. In addition, the DAQ has a benefit of $1,970 per year because they will no longer be required to review particulate test reports from the facilities.

The DAQ developed a cost and benefit analysis of the modified rules 15A NCAC 02D .0932, .0960 and .2615. The analysis is based on the Division’s recommendation to address response and relief time for fuel distribution to areas impacted from natural disasters. This analysis uses the cost-benefit impacts developed in the previous sections for the private-sector and state government. The DAQ estimated the loss of revenue by the State certification facilities to be $541,050 per year. These facilities would still continue to perform federal cargo tank inspections and any required repairs. The DAQ would receive a benefit of $147,520 per year from not having to certify the State inspection facilities. This cost includes the labor of operating a certification program, travel to the certification facilities, and State certification stickers to show the cargo tanks have been inspected. Owners and operators of the cargo tanks would receive a benefit of $1,895,000 per year from not having to have the cargo tanks inspected for State certification.

The cost to DAQ for modifying the permits for landfills as a result in the proposed change in 15A NCAC 02D .1702 was estimated to be $9,757 for the Year 2021 and $0 thereafter.

The fiscal analysis was performed over a 2-year period for two reasons. First, costs to both the private sector and state government are not expected to change, growing at the same rate as inflation in year 2022 and beyond. Second, estimating costs for compliance beyond 2 years is difficult due to changes in markets which influence the compliance and operations decisions made by affected facilities as a result of natural disasters. The proposed rule would have a net impact of approximately $1.63 million in benefits to the private sector and state government in the first year of implementation, and $1.64 million in net benefits every year thereafter. A summary of the costs and benefits from these Rules are provided in Table 7.

VI. Rule Alternatives

The DAQ is required to analyze alternative approaches under the proposed rulemaking if a substantial economic impact to the state and/or private sector entities is expected to result from the rulemaking. The alternatives to the proposed rulemaking are discussed below.

The Rules with significant economic impact are: 15A NCAC 02D .0932, Gasoline Cargo Tanks and Vapor Collection Systems; 15A NCAC 02D .0960, Cargo Tank Leak Tester Report; and 15A NCAC 02D .2615, Determination of Leak Tightness and Vapor Leaks. The main revision to these Rules is the inclusion of the USDOT test method (49 CFR Part 180.407) as an alternative method for annual State certification requirement of gasoline cargo tanks. Federal regulations require gasoline cargo tanks be tested annually and certified leak tight using the USDOT test method. In addition to this certification, North Carolina also required gasoline cargo tanks to be tested annually for leaks using a state-specific EPA Method 27 at a NC certified facility. Therefore, cargo tanks would need two certifications to operate in North Carolina. By adding the USDOT test method, the State is proposing to allow the USDOT test to satisfy the annual test requirement. We also reviewed other alternatives and they are provided in the paragraphs below.
The first alternative is for North Carolina to take no action on the proposed cargo tank rules 15A NCAC 02D .0932, .0960, .2615. Most importantly, this option will continue the ongoing issue faced during the Hurricane season of 2018 causing delay of fuel deliveries for severe weather impacted communities in need of fuel for evacuation, emergency services, backup generators and other life protective measures following a natural disaster. By taking no action, staffing increases to the Division’s mobile sources technical services workgroup will be necessary to respond to increasing program demands on this branch. This will continue to increase the financial burden on the state agency to provide program oversight.

The second alternative is for North Carolina to eliminate the existing cargo tank rules 15A NCAC 02D .0932, .0960, and .2615 entirely. Because these rules impact VOC as a NAAQS emission included in the SIP, a Clean Air Act Section 110(l) demonstration of noninterference with attainment or maintenance will be necessary. If the program is entirely removed and not simply modified as is proposed, then a more detailed and rigorous demonstration must be developed. It is not guaranteed that the EPA will approve the complete removal of the rules even following a detailed demonstration. Additionally, it benefits the state to continue to require an annual leak tightness test for gasoline cargo tanks in the event the USDOT changes their requirements, the NC program will continue to require an annual inspection and the retention of records to demonstrate compliance using either the approved EPA Method 27 or the USDOT method.
## Table 7. Total Group 6 Impacts Summary

<table>
<thead>
<tr>
<th>Costs/Benefits</th>
<th>Year 2021</th>
<th>Year 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Private Sector Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of Revenue to North Carolina Certified Inspection Facilities</td>
<td>$541,050</td>
<td>$541,050</td>
</tr>
<tr>
<td>Cargo Tank Leak Repairs</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total Private Sector Cost</strong></td>
<td>$541,050</td>
<td>$541,050</td>
</tr>
<tr>
<td><strong>State/Local Government Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of State Personnel Time</td>
<td>$137,229</td>
<td>$137,229</td>
</tr>
<tr>
<td>Value of State Personnel Travel Expenses</td>
<td>$8,276</td>
<td>$8,276</td>
</tr>
<tr>
<td>Value of State Issued Certification Stickers</td>
<td>$2,014</td>
<td>$2,014</td>
</tr>
<tr>
<td><strong>Total Government Benefit</strong></td>
<td>$147,520</td>
<td>$147,520</td>
</tr>
<tr>
<td><strong>Local Community Costs and Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Costs</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>State of Emergency Response &amp; Relief Benefits</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Health Costs</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td><strong>Total Local Community Benefit</strong></td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Private Sector Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Certification for Redundant Annual Leak Testing</td>
<td>$1,500,000</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>Gain of Value From Time no longer Out of Service for Leak Testing</td>
<td>$395,000</td>
<td>$395,000</td>
</tr>
<tr>
<td>Cargo Tank Leak Repairs</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total Private Sector Benefit</strong></td>
<td>$1,895,000</td>
<td>$1,895,000</td>
</tr>
<tr>
<td><strong>State/Local Government Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAQ Permit Review</td>
<td>$9,757</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total Government Cost</strong></td>
<td>$9,757</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Private Sector Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eliminate PM Testing</td>
<td>$119,200</td>
<td>$119,200</td>
</tr>
<tr>
<td>Streamline Periodic Reporting</td>
<td>$12,800</td>
<td>$12,800</td>
</tr>
<tr>
<td><strong>Total Private Sector Benefit</strong></td>
<td>$132,000</td>
<td>$132,000</td>
</tr>
<tr>
<td><strong>State/Local Government Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elimination of the Need to Review Test Report Submittals by Facility</td>
<td>$1,970</td>
<td>$1,970</td>
</tr>
<tr>
<td><strong>Total Government Benefit</strong></td>
<td>$1,970</td>
<td>$1,970</td>
</tr>
<tr>
<td><strong>Total Group 6 Impact</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Impact (+Costs -Savings from Benefits), inflation adjusted</td>
<td>-$1,625,683</td>
<td>-$1,635,439</td>
</tr>
<tr>
<td>Total Impact (+Costs -Savings from Benefits), 2019 dollars</td>
<td>-$1,419,934</td>
<td>-$1,335,006</td>
</tr>
</tbody>
</table>

### Notes:

1. The potential impact of losing inspections will not result in a loss to local jobs. The leak tightness certification inspectors are also specialty welders and mechanics whom service and repair the cargo tanks.

2. The value of the redundant annual leak testing is based off the EPA Method 27 test estimate of $300 provided by the National Tank Truck Carriers (NTTC) of America providing a range of $200 to $400 fee per inspection.

3. The repairs will neither decrease nor increase with comparable test.

**Note:** The Relief & Response following interruptions in fuel supply to the state because of natural disasters may occur due to storms which directly impact North Carolina or Gulf states which serve as the source for our Colonial Pipeline indirectly. The pattern of impact is one or more storms every year.

**Note:** The health benefits or costs are not changing because the fugitive VOC emissions the cargo tank program was created to address, will continue requiring a comparable annual leak tightness test. NC is NOx limited therefore, impacts from ground level ozone formation would not be impacted even if the VOC emissions varied slightly.
The DAQ determined that the amendments to the proposed rules for readoption 15A NCAC 02D .0932, .0960, and .2615 provide for relief to the burden imposed on the state during extreme weather events while continuing to provide protection to the citizens of North Carolina concerning ozone formation.

VII. Conclusion

Of the 108 Rules in this readoption package, five were determined to have economic impacts to industry or to the State. A shown in Table 7, the impact from the readoption and amendment of these Rules is a net benefit of $2,754,940 to North Carolina over the first two years of implementation in 2019 dollars. Net benefits of $1,625,683 are expected in the first year of implementation followed by net benefits of $1,635,439 each year thereafter. The majority of the impacts are benefits for the industry and for the DAQ.

The change to 15A NCAC 02D .0536 provides monetary benefits to both industry and the DAQ, without resulting in any changes to the environment. Coal-fired boilers are already meeting the opacity requirements in 15A NCAC 02D .0536, and the requirement of the particulate test was a burden on industry and the DAQ. Therefore, this Rule is proposed for repeal to reduce this burden.

The Division no longer determines it necessary for air quality protection to maintain a state specific cargo tank leak tightness test inspection program. The Division recognizes the federal USDOT test requirements as comparable in detection of needed cargo tank repairs to prevent fugitive VOC emissions from mobile sources under 15A NCAC 02D .0932, .0960, and .2615. The heavy burden to the state from the cost to the Division and the delay in fuel services from natural disasters outweighs the minimal benefit the current program provides for ground level ozone prevention. Since implementation of the cargo tank inspection program, the understanding of the Division has evolved with the scientific evidence that North Carolina is a NOx limited jurisdiction for ozone. Additionally, the benefits from the program may be appreciated as the prevention of fugitive VOC emissions from cargo tanks while hauling fuel along state roads, highways, and interstates. The program will continue to require a comparable annual inspection to prevent such fugitive emissions, but the burden of certifying the inspection facilities will be removed from the state and rely on the existing Federal Motor Carrier Safety Administration (FMCSA) for ensuring inspection facility compliance.

The proposed change to 15A NCAC 02D .1702 updates the reference to the federal requirements which results in minor administrative changes to each affected facility’s permit. The DAQ will notify landfills, reopen permits for cause pursuant 02D .0517, and make necessary minor administrative changes to the permits. The DAQ does not anticipate any impact on landfills, and resources spent by the DAQ to modify the permit are covered by the DAQ’s operational budget and the fees received by permit program. The DAQ concludes that the proposed revisions to the rules 15A NCAC 02D .0902 described in this analysis will result in little to no increase in any criteria pollutant emissions throughout North Carolina and would not interfere with on-going attainment or maintenance of any of the NAAQS.

The remaining 92 Rules are being readopted without substantive change to incorporate minor administrative amendments. In addition, five of these Rules are proposed for readoption without any changes, and two Rules are proposed to be repealed. A total of 9 Rules are being proposed for readoption with substantive changes without any economic impact.