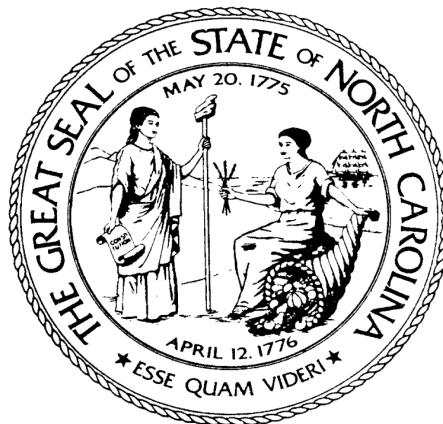


**STATE OF NORTH CAROLINA**  
**TITLE V AIR QUALITY PERMIT PROGRAM**  
**ACCOUNTABILITY REPORT**

**A Report to the  
Environmental Review Commission and the  
Fiscal Research Division**

**Submitted by the  
North Carolina Department of Environment and Natural Resources  
Division of Air Quality  
Sheila Holman, Director**



**NOVEMBER 2011**

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**This report is submitted pursuant to the requirement of NC G.S. 143-215.3A(c) and  
15A NCAC 2Q .0206(f)**

**Signed:**



**Dee A. Freeman, Secretary  
Department of Environment and Natural Resources**

**Date: November 1, 2011**

**NOVEMBER 2011**

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## **EXECUTIVE SUMMARY**

The Federal Clean Air Act Amendments of 1990 established the Title V program (referring to “Title V” of the Act). The Title V program consolidates all federal and state air quality regulations for a particular facility into a single air permit. North Carolina’s largest facilities emitting air pollution are subject to the Title V permits program. The Division of Air Quality (DAQ) in the Department of Environment and Natural Resources administers the Title V program in North Carolina.

The federal Clean Air Act requires the Title V program to be funded entirely by fees collected from permitted facilities. The enclosed annual report discusses the costs and other aspects of North Carolina’s Title V permit program, required under North Carolina General Statute (G.S.) 143-215.3A (Appendix A) and 15A NCAC 2Q .0206(f).

## ACRONYMS

BACT	Best Available Control Technology
BART	Best Available Retrofit Technology
CAIR	Clean Air Interstate Rule
CAM	Compliance Assurance Monitoring
CAMR	Clean Air Mercury Rule
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DENR	Department of Environment and Natural Resources
EMC	Environmental Management Commission
EPA	United States Environmental Protection Agency
ERC	Environmental Review Commission
FTE	Full Time Equivalent
FFY	Federal Fiscal Year
GACT	Generally Available Control Technology
GHG	Greenhouse Gas
G.S.	North Carolina General Statutes
HAP	Hazardous Air Pollutant
IES	Industrial Extension Service
MACT	Maximum Available Control Technology
NAAQS	National Ambient Air Quality Standard
NCAC	North Carolina Administrative Code
NCSU	North Carolina State University
NESHAP	National Emissions Standards for Hazardous Pollutants
NNSR	Nonattainment New Source Review
NO <sub>x</sub>	Nitrogen Oxide
NO <sub>2</sub>	Nitrogen Dioxide
NOV	Notice of Violation
NSPS	New Source Performance Standard

NSR	New Source Review
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SFY	State Fiscal Year
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide

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## INTRODUCTION

North Carolina state law requires that the Department of Environment and Natural Resources (DENR):

“... shall report to the Environmental Review Commission and the Fiscal Research Division on the cost of the Title V Program on or before 1 November of each year. The reports shall include, but is not limited to, fees set and established under this Article, fees collected under this Article, revenues received from other sources for environmental permitting and compliance programs, changes made in the fee schedule since the last report, anticipated revenues from all other sources, interest earned and any other information requested by the General Assembly.” (G.S. 143-215.3A, attached as Appendix A)

This report describes the Title V Permit Program in North Carolina as carried out by the Division of Air Quality (DAQ). The report focuses on funding and staffing issues. It does not cover Title V permit programs under the jurisdiction of local air pollution control programs in Buncombe, Forsyth and Mecklenburg counties.

Congress established the Title V Permit Program under 1990 amendments to the federal Clean Air Act primarily as a way to consolidate all air regulations affecting major emitters of certain air pollutants (as defined in Section 501 of the Clean Air Act) into a single document. Under the Clean Air Act, Title V permits are required for certain industry groups designated by the U.S. Environmental Protection Agency (EPA) and for any facility with the potential to emit at least:

- 100 tons per year of any regulated pollutant, or
- 10 tons per year of any hazardous air pollutant (HAP), or
- 25 tons per year of any combination of HAPs.

This Accountability Report contains:

- A discussion of program accomplishments and goals,
- A discussion of current issues affecting the Title V program,
- A summary of actual and projected Title V fees for calendar year 2010,
- A summary of projected Title V fees for calendar year 2011 and 2012,
- A detailed, line-item Title V expenditures for state fiscal year 2011,
- An account of Title V receipts and expenditures from state fiscal years 1992 to 2011,
- Various appendices, and
- An organizational chart of DAQ staff and Title V-related positions.

## **CURRENT STATUS AND RECENT ACCOMPLISHMENTS**

A historical perspective of North Carolina's Title V Permit Program is included in Appendix B. This section focuses on the program's current status and recent accomplishments.

The Title V permit program encompasses the full range of activities associated with implementing the program, including:

- Reviewing applications for issuance, modification and renewal of Title V permits,
- Advising the regulated community on applicability issues,
- Routinely inspecting permitted facilities,
- Soliciting and responding to citizens' concerns and suggestions,
- Gathering emissions inventory data and submitting the data to the EPA,
- Issuing invoices and collecting fees to operate the Title V permitting program,
- Operating a network of air monitors,
- Performing public outreach, including issuing daily air quality advisories to citizens,
- Long-range planning (including computer modeling) to achieve and maintain healthful air quality for future generations,
- Working with legislators and appointed officials to ensure adequate statutory and regulatory authority to carry out the DAQ's mission, and
- Taking enforcement actions against violators, including assessing penalties, revoking permits and taking legal action when necessary.

### **Staffing Levels**

The DAQ has a total staff of 264 managers, engineers, scientists, technicians and administrators. About 7 percent of the positions are vacant at any time due to turnover. Although almost every position in the division has some Title V responsibility, the full-time equivalent (FTE) staff dedicated to the Title V program is about 117.3 positions. The remaining FTEs are responsible for non-Title V air quality permits (for facilities that do not trigger the Title V permit requirement); area sources of air pollution (such as open burning); motor vehicle emissions control (through programs to ensure proper functioning of vehicle emissions control equipment and reduce emissions from diesel engines); and regulation of toxic air pollutants. These activities are funded with receipts outside of the Title V program and are not the subject of this report.

The DAQ staff size has decreased by approximately 30 positions over the past five years. DAQ is planning for the possibility of additional reduction in workforce due to lower receipts (in part because of the current economic downturn) or other reductions in state and federal funding. As discussed later, fees received from permitted facilities are declining and this trend is expected to continue as major sources switch to cleaner-burning technologies. The DAQ has assembled a workgroup to consider options for maintaining core program functions. The workgroup is performing an analysis of current and future regulatory program requirements and conducting a comprehensive review of all revenue streams. Thus far, the reduction in positions has not significantly affected the services provided under the Title V program. The DAQ has made programmatic changes in other areas to adjust to fewer staff members. These include



discontinuing the emergency air monitoring activities and changing the open burning enforcement requirements. Additionally, the number of permits has declined in recent years due to the economy. The DAQ may experience a greater impact as the economy rebounds.

DENR operates a Small Business Assistance Program, employs a Small Business Ombudsman, and appoints a Compliance Advisory Panel to conduct citizen overview of small business activities. Title V fees also fund these programs, as they are mandated under the Title V requirements of the Clean Air Act Amendments of 1990, although they operate independently of the DAQ. The program is also required by state statute.

## **Permitting and Compliance Actions**

The DAQ reports its activities to the EPA on a federal fiscal year (FFY) basis. In the most recently completed FFY (Oct. 1, 2010, through Sept. 30, 2011), the DAQ performed the following compliance-related activities under the Title V program:

- Reviewed 299 permit applications. Of these, 228 permits were issued, 41 permit applications were consolidated, 20 were withdrawn by the applicant, one was returned to the applicant by DAQ and the remainder are currently under review.
- Approved nine Notice of Intent to Construct requests for Title V facilities and denied two of those requests,
- Inspected 100 percent of permitted Title V facilities (311 inspections),
- Issued 40 Notices of Violations (NOV) to 37 different Title V facilities, and
- Completed 15 enforcement actions against 15 Title V facilities, resulting in penalties of \$203,900 (per General Statute, penalties collected are transferred to local schools).

## **Recent Federal and State Regulatory Actions**

Within the last federal fiscal year, the EPA proposed or adopted several major new air quality rules. For example, a federal rule (commonly known as the Tailoring Rule) has been adopted to reduce the number of sources required to meet limits on carbon dioxide and other greenhouse gases under the New Source Review and Title V programs. The rule created permitting thresholds for major stationary sources of greenhouse gas (GHG) emissions; only the largest sources will trigger New Source Review and Title V permitting requirements under the federal Clean Air Act based solely on the facility's greenhouse gas emissions. (An individual facility could still require a permit based on other air pollution emissions.)

Since EPA has delegated authority for Clean Air Act permitting in North Carolina to DAQ, it was necessary to adopt the provisions of the federal Tailoring Rule as a state rule to make the permit exclusion for small GHG sources available to industries here. The Environmental Management Commission adopted a state version of the Tailoring Rule in November of 2010; since 10 letters of objection to the rule were filed with the Rules Review Commission, the rule could not immediately go into effect. To avoid creating confusion and potential compliance problems for North Carolina industries, Governor Perdue put the rule into effect by executive order on Jan. 28, 2011, as allowed under G.S. 150B-21.3(c). Adoption of the Tailoring Rule in

North Carolina reduced the number of facilities in the state that would potentially have required a GHG permit from 48,000 to 330.

EPA failed to adopt hazardous air pollution standards for two types of industrial sources – boilers/industrial process heaters and brick manufacturers – in time to comply with a deadline set in federal law. As a result, DAQ had to do a case-by-case review of those sources in North Carolina and establish individual permit limits for those hazardous air pollution emissions. The requirement for the case-by-case permit review and criteria for setting hazardous air pollution limits for those sources can be found in Section 112(j) of the federal Clean Air Act. To date, all of the Section 112(j) permits for boilers at major sources have been proposed or issued. Brick permits are in the process of being issued.

### **EPA's Review of North Carolina's Implementation of the Title V Permitting Program**

The EPA typically conducts a review of DAQ's Clean Air Act Title V program every five years. The EPA Region IV conducted a review of the DAQ's Title V program in March 2005, in Raleigh. The results of the review are kept on file at the EPA Region IV office in Atlanta, Ga. The following findings and recommendations are contained in EPA's Sept. 21, 2010, Program Evaluation Report:

#### ***Programmatic Knowledge/Implementation***

The EPA and DAQ held discussions on a variety of Title V topics including adequacy of Title V resources (staffing and capital), public participation, Title V workload, compliance assurance monitoring (CAM) and renewal of Title V permits. It was apparent during the discussions that the DAQ staff had a thorough understanding of the requirements of the federal Clean Air Act regulation.

#### ***Resources***

DAQ's Title V program is organized so that Title V applications are processed in the central office and inspections and enforcement are handled by the regional offices. The DAQ has 15 permit engineers dedicated to working on Title V applications. Three of these permit engineers were focused primarily on reducing the backlog in Title V renewal applications. Title V permit renewals can be very time consuming to process. Since a facility is allowed to continue to operate pending renewal issuance, these applications don't receive a processing priority, in some cases resulting in an application backlog. The DAQ staff is responsible for responding to all permitting related issues for those assigned facilities. These activities include reviewing permit applications, drafting permits, calculating emissions, reviewing all submitted reports, answering questions, responding to citizens' information requests, and providing necessary compliance assistance. The permit writers also assist with non-Title V work such as issuance of construction permits for certain stationary sources under the federal Prevention of Significant Deterioration (PSD) permitting program; a Clean Air Act permitting program for new and modified major sources of air pollution such as power plants, manufacturing facilities, and other large emitting air pollution facilities; state-only permitting; quarterly stakeholders meetings and multiple workgroups.

The EPA and DAQ had minimal conversations about the billing and tracking of Title V expenses. A more extensive review of the DAQ's Title V accounting was covered in the Sept. 28, 2006, program evaluation report submitted to the DAQ, and in the Nov. 2, 2006, response from DAQ. The EPA was pleased to see all of the revisions committed to in the Nov. 2, 2006, response were being implemented effectively.

### ***Conclusion***

At the conclusion of the onsite portion of the Title V program review, EPA personnel met with DAQ officials to conduct an exit interview. Overall, the EPA believes that DAQ is operating the Title V program at a high level of proficiency, and is pleased to note that the protocol by which the DAQ is paying for Title V work has been revised to better reflect federal Clean Air Act Requirements.

## **PROGRAM ISSUES**

The most pressing issue facing the Title V program is long-term funding. Concerns about the adequacy of fee revenue to cover Title V program costs (as required under federal law) forced DAQ to undertake rulemaking in 2007 to increase the Title V fees. Appendix C discusses the fee increase in more detail, and Appendix D contains the rule corresponding to the 2007 fee increase.

As North Carolina's largest coal-fired utilities begin to switch to cleaner-burning technologies, significant reductions in air pollution levels are being realized. Additionally, some older coal-fired utilities are scheduled to be shut down between now and the end of 2017. As these units are converted or taken off-line, the associated fees received (which are based on tons of pollutants emitted) are expected to decrease by more than 20 percent between 2009 and 2017. Although the level of emissions may go down, DAQ will still have a responsibility to permit and inspect these facilities (except for those units that are completely taken offline). That is likely to create a gap between fee revenue and the resources needed for DAQ to meet its permitting and compliance obligations. Additionally, while emission rates have decreased, the regulatory burden on the permitted community and DAQ continue to increase, requiring as much time or more to process permit modification requests. The anticipated shortfall in Title V fees is requiring the DAQ to consider all viable solutions to maintain funding of the Title V permitting program through the permit fees.

Additional issues facing the program include:

- New federal rules including, but not limited to, greenhouse gas permitting, toxic air pollution standards (such as Industrial Boiler MACT/GACT, Utility MACT and Reciprocating Internal Combustion Engine MACT), and short term National Ambient Air Quality Standards (NAAQS);
- Retention issues due to salary disparities between state government positions and comparable private sector and federal government positions;
- Implementation of a new 8-hour ozone standard (adopted by EPA in 2008, but just now being implemented), that will place an additional permitting burden on the agency; and
- The need to adopt a plan for maintaining state compliance with the new national sulfur dioxide (SO<sub>2</sub>) standard adopted by EPA.

### **New Federal Regulatory Programs**

Title V permits are valid for five years after issuance, but it is rare that a Title V permit expires without being modified. Often the permit is modified at the facility's request, due to an expansion or a change in its process. However, revised federal regulations are also responsible for many permit modifications. Each of these modifications requires a careful review by a permit engineer.

A list of the most common federal regulations that require permit modification includes:

- New Source Review,
- Maximum Achievable Control Technology (MACT) standards for emissions of federally regulated toxic air pollutants,
- Generally Available Control Technology (GACT) standards (also addressing federally regulated toxic air pollutants),
- Reasonably Available Control Technology (RACT) analysis for emissions sources in areas of the state that are not meeting a national air pollution standard,
- Compliance Assurance Monitoring (CAM) requirements,
- The federal Clean Air Interstate Rule (CAIR)/Cross-State Air Pollution Rule (addressing interstate movement of nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>),
- New Source Performance Standards and Emission Control Guidelines under 40 CFR Part 60, which are emission standards and guidelines developed for categories of new and existing sources of criteria pollutants,
- Best Available Control Technology (BACT) analysis (required for certain new pollution sources), and
- Best Available Retrofit Technology (BART) analysis.

Although listed on a single line above, a federal regulatory program may actually entail dozens of different rules, each specific to a particular industry or industrial process. These rules are under constant change, due to new technologies, new science, court challenges and other factors.

As noted earlier, the EPA has also proposed, adopted or ordered implementation of new federal standards that will also require DAQ to modify existing permits including:

- Implementation of the 2008 national air quality standard for ozone,
- Adoption of new national primary health standards for SO<sub>2</sub> and nitrogen dioxide (NO<sub>2</sub>),
- Proposed toxic air pollution standards for industrial, commercial and institutional boilers,
- Proposed toxic air pollution standards for electric generating units, and
- Proposed and adopted federal toxic air pollution standards for minor facilities (area sources) and dozens of source categories affecting both Title V and non-Title V permits.

The DAQ must modify its strategy to ensure compliance with each of these evolving standards and rules.

New federal regulatory programs create an issue for the Title V program because new requirements pose continual challenges for air quality engineers, who need to maintain expertise on emerging technologies and regulatory compliance. In addition, communicating the regulatory requirements and drafting the complex permit conditions to implement those requirements can be very challenging and take significant amount of time and resources. Loss of experienced engineers and modelers and the need to train new recruits puts a burden on the division, and can also create delays in permitting new or expanded industrial facilities. Budget restrictions in recent years, including the loss of retention incentives, have created staff shortages while the

pressure to increase production remains high. These conflicting requirements have the potential to impact operational efficiency and product quality.

### **Implementation of the 2008 8-Hour Ozone Standard Requiring Additional NNSR and RACT Permitting**

On Jan. 6, 2010, the EPA proposed setting the 8-hour primary ozone standard between 0.060 and 0.070 ppm (parts per million) as part of a reconsideration of the 8-hour ozone standard of 0.075 ppm adopted in 2008 during the last months of the Bush administration. Instead of implementing the 2008 standard, EPA in effect set it aside in the expectation of adopting a more stringent standard based on recommendations made to EPA by a panel of science advisors. EPA's final decision on the actual standard (within the range of possible standards sent out for public notice) was expected to be announced by mid-2011. On Sept. 1, 2011, President Obama announced that EPA would not be moving forward with reconsideration of the 2008 ozone standard. Instead, EPA will move forward with implementation of the 2008 8-hour ozone standard and will review that standard on the normal 5-year review schedule for national air quality standards (2013). Based on data from 2009-2011, the Charlotte-Gastonia area is the only area in North Carolina violating the 2008 ozone standard. However, depending on when the designations occur for this standard, other areas may be impacted.

Counties or regions that do not meet new air pollution standards or are contributing to a violation of the standards (called "nonattainment areas") will face stricter rules on industry and transportation. Businesses and industries that emit air pollution above certain thresholds in non-attainment areas may require additional source review and air permits. New ambient air quality monitoring also may be required to comply with the regulations.

The DAQ's workload is expected to increase as a result of non-attainment designations as staff develops a State Implementation Plan (SIP) to show how the state will comply with the new standard, issues NNSR/RACT permits, operates ambient monitoring networks and conducts compliance assistance activities.

### **New SO<sub>2</sub> NAAQS Requirements**

In June 2010, the EPA promulgated a new 1-hour SO<sub>2</sub> standard of 0.075 ppm. North Carolina has one monitor --located in New Hanover County-- violating this standard. The EPA is expected to designate non-attainment areas in June 2012. Counties that violate or contribute to a violation of this new standard will face stricter rules on SO<sub>2</sub> emission sources.

In addition to non-attainment requirements, the EPA has stated that any medium or large source that emits SO<sub>2</sub> will be required to model compliance with the new 1-hour standard as part of the Clean Air Act Section 110(a) maintenance plan. This standard may be very difficult to meet and could require sources to take either permit limits or install pollution controls. Therefore, businesses and industries that emit SO<sub>2</sub> above certain thresholds may require additional source review and air permits.

The DAQ's workload is expected to increase as a result of the new SO<sub>2</sub> standard as staff develops State Implementation Plans, issues permits, operates ambient monitoring networks and conducts compliance assistance activities.

### **New NO<sub>2</sub> NAAQS Requirements**

In January 2010, the EPA promulgated a new 1-hour NO<sub>2</sub> standard of 0.100 ppm. Although North Carolina does not have any violations of this standard, new major sources that emit NO<sub>2</sub> or any major modification of an existing source could trigger the need for modeling to demonstrate that the source will not violate the new standard. This standard may also be very difficult to meet and could require sources to take either permit limits or install pollution controls. Therefore, businesses and industries that emit NO<sub>2</sub> above certain thresholds within North Carolina may require additional source review and air permits.

The DAQ's workload is expected to increase as a result of the new NO<sub>2</sub> standard as staff develops State Implementation Plans, issues NSR permits, operates ambient monitoring networks and conducts compliance assistance activities.

### **Anticipated Decline in Title V Revenue**

On June 20, 2002, Gov. Easley signed Senate Bill 1078, the Clean Smokestacks Act. As a result of this act and other federal drivers such as possible GHG emission reduction requirements, two of North Carolina's largest utility companies are projecting a significant reduction in SO<sub>2</sub> and nitrogen oxide (NO<sub>x</sub>) emissions between years 2009 and 2017 by shutting down certain coal fired power plants and building new natural gas units. Consequently, these reductions in emissions are expected to decrease the DAQ annual Title V revenue collected from utilities (based on tons of pollutants emitted) by about 58 percent over this period.

Revenue collected from the utilities subject to the Clean Smokestacks Act represent approximately 30 percent of all Title V fees received. The cumulative effect on the funding available to administer the Title V program will be a reduction of about 20 percent between 2009 and 2017. Unless the DAQ is able to recover this projected loss in Title V revenue, the division will no longer have the revenues to sustain an effective federal Clean Air Act program.

In anticipation of this shortfall, the DAQ has assembled a workgroup to evaluate all available options to sustain the Title V program. The workgroup's activities consists of examining staffing levels needed to support current and future regulatory activities, reviewing all fee-based revenue streams, evaluating the impact of capital and operating cost-cutting measures, and examining relief offered from future changes to the fee structure.

### **Regional Office Justification Review**

During the 2011 session, the N.C. General Assembly proposed legislation to eliminate or reduce the size of DENR's seven regional offices. Although this legislation did not pass, the General Assembly enacted a law (Session Law 2011-145, Appropriations Act of 2011) that eliminated recurring funds for all regional offices starting in Fiscal Year 2011-12. The legislation also

requires the Fiscal Research Division to conduct a justification/operation review of the regional offices and report the findings by May 1, 2012, to the Appropriations Committee of the House of Representatives and the Appropriations/Base Budget Committee of the Senate.

The Regional Office Justification Review covers the program's legislative mandate; the intent of the program; its effectiveness and efficiency; and a determination of the continued need for the program. A report is planned to be issued by May 1, 2012. Among other things, the report is expected to identify major policy issues to be addressed by the General Assembly, explore methods of increasing program efficiency and characterize alternative funding levels and/or opportunities to save taxpayer dollars.

The regional offices do not represent a distinct program for DAQ. Instead, the regional offices allow DAQ to put staff needed for permit reviews and compliance/technical assistance in locations where the staff resources can be most efficiently used and also provide convenient access for permit applicants. Currently, 42.5 FTE positions that support the Title V program are located in DENR regional offices. The following discussion highlights key activities performed by these positions that could potentially be affected by future decisions.

#### Permitting

Regional office permit engineers conduct preliminary review of Title V applications. The results of their assessment are forwarded to the Raleigh Central Office for subsequent applicability determination and issuance of the permits. The regional staff also review and comment on the draft Title V air permit prior to final issuance.

#### Technical Assistance

Regional office inspectors oversee all activities related to compliance with air regulations and permit requirements. Regional office staff completed a total of 355 on-site inspections at about 311 Title V facilities between Jan. 1 and Dec. 31, 2010. Specific compliance-related activities include:

- On-site facility inspections (every Title V facilities inspected at least once per year),
- Response to citizen complaints,
- Report review (review of all federally required reports and supporting records). These may include reports on emissions monitoring systems, malfunctions, excess emissions, and other permit-related reports and records),
- Stack test observation,
- Compliance and parametric monitoring review (review of records operating logs, assessment of process parameters such as feed rates, raw material composition and process rates, etc.),
- Enforcement response (regional office staff recommend actions for any violation documented during the compliance review),
- Emission inventory review (Title V facilities submit inventories once per year),
- Review of all annual and semi-annual compliance certifications, and
- Ongoing permitting and regulatory technical assistance.



In order to perform a full compliance evaluation, an inspector performs a comprehensive file review prior to doing an on-site inspection. The actual inspection is unique to each facility. In general, every permit condition in the Title V permit is addressed during the inspection, whether in pre- or post-inspection conferences with the facility contact, during records review or during the actual inspection. This includes discussions on-site and in the inspection report about required monitoring activities. Every record required by the Title V permit is generally reviewed back to the date of the last inspection or one year back. A detailed inspection report serves as the primary document listing the compliance evaluation findings and the need for enforcement action. All inspection-related activities are part of the DAQ's Compliance Monitoring Strategy approved by the EPA.

### Ambient Monitoring

The DAQ and its local program partners (Forsyth County Environmental Affairs Department, Mecklenburg County Air Quality and Western North Carolina Regional Air Quality Agency located in Buncombe County) operate a network of about 65 monitoring sites to measure various air pollutants. The monitoring program is an essential part of the Title V permitting program. The monitors are located in a variety of locations across the state to determine:

- population exposure,
- maximum concentrations,
- background concentrations, and
- air pollution transported from other regions.

The most well-known air pollutants are ozone and particulate matter, but NO<sub>2</sub>, SO<sub>2</sub>, carbon monoxide and lead are also monitored. The monitoring network is reviewed each year to determine whether adjustments are needed. Whether monitoring sites are added, deleted, moved or modified is driven by a number of factors, including:

- changes to the national ambient air quality standards,
- increases in population or shifts in that population,
- new emission sources,
- changes in technology, and
- the availability of funding and other resources.

To operate the ambient monitoring network requires a variety of skilled staff located at the central office as well as regional offices:

Central office chemists specialize in understanding air quality standards and exposure limits, knowing health effects of various chemicals and pollutants, and analyzing the data. They review all data for quality assurance, develop standard operating procedures, and determine which pollutants are to be monitored at which locations.

Regional office chemists, specialists and technicians support ambient monitoring activities. It is the regional office staff that actually operates the equipment used to measure air pollutants, performs much of the routine maintenance and collects samples and data. This requires frequent on-site visits to the monitors. The monitoring network covers the entire state, from Joanna Bald in the west to Bayview Ferry in the east. This is a span of about 500 miles, or an 8.5 hour drive each way, making it impractical to house

staff at a single location. The seven regional offices are located at strategic locations that allow staff to efficiently operate and maintain required monitoring equipment.

It is important to note that the air in North Carolina has been improving over the last decade, and the trend is expected to continue well into the future. The monitoring network is vital to demonstrate that the state is providing a healthy environment and meeting increasingly stringent national air quality standards. Our ability to document compliance with those standards ensures that North Carolina can continue to permit industrial expansion.

## **PERMIT FEES - 2010 ACTUAL AND PROJECTIONS FOR 2011 & 2012**

The federal Clean Air Act (CAA) requires that the entire cost of the Title V Permit Program, including both direct and other related expenses, be funded by facilities' permit fees and that Title V permit fees be used only for the purpose of operating the permit program.

Given the scope of new permitting activities which are mandated by Title V, the CAA set a presumptive minimum fee in 1990 to \$25 per ton of air pollutant emissions, in order to sufficiently fund a Title V program. States, which nonetheless propose to collect less than that amount, are required to provide a demonstration that their program fees will be adequate to implement the Title V program.

Annually, the EPA publishes an update to the presumptive minimum with Consumer Price Index (CPI) adjustments. In September 2011, the EPA adjusted the presumptive minimum for inflation to \$45.55 per ton for calendar year 2012. North Carolina has consistently been below the EPA presumptive minimum and has provided, at EPA's request, adequate demonstrations that the program fees collected are sufficient to fund our Title V program. North Carolina's average cost per ton for 2012 is projected to be \$40.59, which is about 90 percent of the EPA 2012 presumptive minimum.

In 1992, the Clean Air Act Advisory Council established by the North Carolina General Assembly recommended that half of the total Title V fees should come from a base permit fee (an annual flat fee for each permit). The Council recognized that some fixed amount of work is required to permit and provide compliance oversight for every Title V permitted facility without regard to the individual facility's emissions. The other half of the revenue comes from annual per-ton charges imposed on top of the base permit fee.

The Title V annual base permit fee for calendar year 2012 is \$6,500. The 2012 annual dollars per ton fee is \$30.00. North Carolina's projected average presumptive minimum for 2012 is \$40.59, based on a projected amount of billable tonnage of 202,280 tons of pollutants and a base fee of \$6,500 for a projected 300 billable Title V facilities. Additionally, fees are collected for air permit applications and for permits issued with added non-attainment recordkeeping and reporting requirements, see Table 4 for detail. For example, at \$30.00 per ton and a projected 2012 tonnage of 202,280 tons, the fee collected is \$6,068,400. At the base fee of \$6,500 per permitted Title V facility with a 2012 projected 300 billable Title V facilities, the fee collected is \$1,950,000. Adding the additional fees, the projected total fees collected for 2012 is \$8,211,060. With a 2012 tonnage of 202,280 tons, divided by the total collected fees of \$8,211,060, this equates to the \$40.59 average presumptive minimum for North Carolina.

Table 1 provides actual Title V permit fees collected in calendar year 2010.

Table 2 provides projected Title V permit fees collected for calendar year 2011.

Table 3 provides projected Title V permit fees collected for calendar year 2012.

Table 4 provides actual Title V receipts and expenditures for state fiscal year (SFY) 2010-2011 using the fee structure effective for that period.

Tables 5 and 6 summarize a history of receipts and expenditures for SFY 1992-2011.

**TABLE 1. SUMMARY OF 2010 ACTUAL TITLE V FEES RECEIVED  
(CALENDAR YEAR)**

TITLE V	<u>Annual Fees</u>	<u>Permits</u>	<u>Fee Rate</u>	<u>Fee Subtotal</u>
	Basic	309	\$6,500	\$2,008,500
	Tons/Tonnage Factor	241,978	\$27.50	\$6,654,395
	Non-Attainment	0	\$3,500	\$0
TITLE V	<u>Annual Application Fees</u>	<u>Permits</u>	<u>Fee Rate</u>	<u>Fee Subtotal</u>
	Minor & Significant Modifications	109	\$867	\$94,565
	Ownership Change	4	\$62	\$248
	New	0	\$8,910	\$0
	PSD and/or NSR/NAA	7	\$13,488	\$96,150
	Construction Notice	9	\$200	\$1,800

**2010 Actual Fee Total: \$8,855,658**

**TABLE 2. 2011 PROJECTED TITLE V PERMIT FEES  
(CALENDAR YEAR)**

**Estimates Based on EPA's 2011 Title V Presumptive Minimum (\$/ton):**

Title V Presumptive Minimum	\$44.48/ton	263,032 tons	\$11,699,663
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**Estimates Based on NC's 2011 Fees Rules (\$/ton):**

Average Cost per Ton Based on NC Fees	\$34.08/ton	263,032 tons	\$8,964,220
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% of EPA's Title V Presumptive Minimum			76.62%
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**NC 2011 Estimates (Based on Calculations Below)**

TITLE V	<u>Annual Fees</u>	<u>Permits</u>	<u>Fee Rate</u>	<u>Fee Subtotal</u>
	Basic	305	\$6,500	\$1,982,500
	Tons/Tonnage Factor	263,032	\$30.00	\$6,789,060
	Non-Attainment	2	\$3,500	\$7,000
TITLE V	<u>Annual Fees</u>	<u>Permits</u>	<u>Fee Rate</u>	<u>Fee Subtotal</u>
	Minor & Significant Modifications	112	\$867	\$97,104
	Ownership Change	8	\$62	\$496
	New	2	\$8,910	\$17,820
	PSD and/or NSR/NAA	5	\$13,488	\$67,440
	Construction Notice	14	\$200	\$2,800

**2011 Estimated Fee Total: \$8,964,220**

**TABLE 3. 2012 PROJECTED TITLE V PERMIT FEES  
(CALENDAR YEAR)**

**Estimates Based on EPA's 2012 Title V Presumptive Minimum (\$/ton):**

Title V Presumptive Minimum	\$45.55/ton	202,208 tons	\$9,210,574
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**Estimates Based on NC's 2012 Fees Rules (\$/ton):**

Average Cost per Ton Based on NC Fees	\$40.59/ton	202,280 tons	\$8,211,060
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% of EPA's Title V Presumptive Minimum			89.11%
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**NC 2012 Estimates (Based on Calculations Below)**

TITLE V	<u>Annual Fees</u>	<u>Permits</u>	<u>Fee Rate</u>	<u>Fee Subtotal</u>
	Basic	300	\$6,500	\$1,950,000
	Tons/Tonnage Factor	202,280	\$30.00	\$6,068,400
	Non-Attainment	2	\$3,500	\$7,000
TITLE V	<u>Annual Application Fees</u>	<u>Permits</u>	<u>Fee Rate</u>	<u>Fee Subtotal</u>
	Minor & Significant Modifications	112	\$867	\$97,104
	Ownership Change	8	\$62	\$496
	New	2	\$8,910	\$17,820
	PSD and/or NSR/NAA	5	\$13,488	\$67,440
	Construction Notice	14	\$200	\$2,800

**2012 Estimated Fee Total: \$8,211,060**

**TABLE 4. TITLE V EXPENDITURES**  
**STATE FISCAL YEAR 2011**  
**(\$)**

<b>ACCOUNT DESCRIPTION</b>	<b>ACCOUNT</b>	<b>EXPENDITURE</b>
PERSONNEL SERVICES	531XXX	8,006,114.97
PURCHASED SERVICES	532XXX	265,638.31
SUPPLIES	533XXX	6,374.22
PROPERTY, PLANT & EQUIPMENT	534XXX	12,527.34
OTHER EXPENSES & ADJUSTMENTS	535XXX	0
AID & PUBLIC ASSISTANCE	536XXX	0
INTRAGOVERNMENTAL TRANSFERS	538XXX	340,915.92
<b>TOTAL</b>		<b>8,631,570.76</b>



**TABLE 5. HISTORY (1992-2002)**  
**TITLE V FEES/ASSESSMENTS AND EXPENDITURES**  
**(MILLION \$)**

State Fiscal Year	92	93	94	95	96	97	98	99	00	01	02
<b>Carried Forward</b>	0.0	0.6	1.8	1.7	2.8	4.5	5.5	5.7	5.4	4.8	4.5
<b>Fees</b>	0.9	3.9	3.5	6.3	7.9	7.6	9.3	7.8	7.9	8.7	9.1
<b>Salary</b>	0.1	0.9	2.3	3.6	4.2	4.7	5.1	5.8	6.0	6.4	5.9
<b>Travel</b>		0.1	0.0	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1
<b>Supplies</b>	0.1	0.3	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1
<b>Equipment</b>	0.1	1.1	0.3	0.5	0.3	0.2	0.4	0.3	0.4	0.2	0.1
<b>Contracts</b>		0.3	0.4	0.2	0.1	0.2	0.3	0.1	0.3	0.3	0.3
<b>Other (Rent, Utilities, Reg Office fund,etc)</b>			0.3	0.4	0.7	0.6	0.9	0.8	0.8	1.2	0.7
<b>Small Business Ombudsman's</b>			0.2	0.2	0.3	0.3	0.1	0.3	0.3	0.3	0.3
<b>Transfer to DENR Agencies</b>					0.2	0.3	0.4	0.6	0.4	0.4	0.4
<b>Total Expenses</b>	0.3	2.7	3.6	5.2	6.2	6.6	7.5	8.1	8.5	9.0	7.9
<b>Refund to Sources</b>							1.6				
<b>TO BE CARRIED FORWARD</b>	0.6	1.8	1.7	2.8	4.5	5.5	5.7	5.4	4.8	4.5	5.7

**TABLE 6. HISTORY (2003-2011)**  
**TITLE V FEES/ASSESSMENTS AND EXPENDITURES**  
**(MILLION \$)**

State Fiscal Year	03	04	05	06	07	08	09	10	11
Carried Forward	5.6	4.7	4.1	3.4	1.9	0.8	0.4	0.9	0.6
Fees	7.7	8.2	7.9	7.8	7.6	7.8	8.9	8.8	8.1
Salary	6.0	6.2	6.7	7.2	7.7	7.5	7.6	8.2	8.0
Travel	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Supplies	0.1	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Equipment	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Contracts	0.4	0.4	0.3	0.3	0.3	0.1	0.2	0.2	0.3
Other (Rent, Utilities, Reg Office fund,etc)	0.9	0.6	0.5	0.4	0.1	0.0	0.1	0.1	0.0
Small Business Ombudsman's	0.4	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0
Transfer to DENR Agencies	0.3	0.8	0.7	1.0	0.2	0.5	0.5	0.5	0.0
Total Expenses	8.5	8.8	8.7	9.2	8.7	8.2	8.4	9.1	8.6
Refund to Sources									
TO BE CARRIED FORWARD	4.8	4.1	3.3	2.0	0.8	0.4	0.9	0.6	0.1

**APPENDIX A: NC GENERAL STATUTES ON THE TITLE V PERMIT PROGRAM  
(G.S. 143-215.3 and G.S. 143-215.3A)**

**§ 143-215.3. General powers of Commission and Department; auxiliary powers.**

(a) Additional Powers. – In addition to the specific powers prescribed elsewhere in this Article, and for the purpose of carrying out its duties, the Commission shall have the power:

- (1d) The Commission may adopt and implement a graduated fee schedule sufficient to cover all direct and indirect costs required for the State to develop and administer a permit program which meets the requirements of Title V. The provisions of subdivision (1b) of this subsection do not apply to the adoption of a fee schedule under this subdivision. In adopting and implementing a fee schedule, the Commission shall require that the owner or operator of all air contaminant sources subject to the requirement to obtain a permit under Title V to pay an annual fee, or the equivalent over some other period, sufficient to cover costs as provided in section 502(b)(3)(A) of Title V. The fee schedule shall be adopted according to the procedures set out in Chapter 150B of the General Statutes.
  - a. The total amount of fees collected under the fee schedule adopted pursuant to this subdivision shall conform to the requirements of section 502(b)(3)(B) of Title V. No fee shall be collected for more than 4,000 tons per year of any individual regulated pollutant, as defined in section 502(b)(3)(B)(ii) of Title V, emitted by any source. Fees collected pursuant to this subdivision shall be credited to the Title V Account.
  - b. The Commission may reduce any permit fee required under this section to take into account the financial resources of small business stationary sources as defined under Title V and regulations promulgated by the United States Environmental Protection Agency.
  - c. When funds in the Title V Account exceed the total amount necessary to cover the cost of the Title V program for the next fiscal year, the Secretary shall reduce the amount billed for the next fiscal year so that the excess funds are used to supplement the cost of administering the Title V permit program in that fiscal year.

**§ 143-215.3A. Water and Air Quality Account; use of application and permit fees; Title V Account; I & M Air Pollution Control Account; reports.**

(a) The Water and Air Quality Account is established as a nonreverting account within the Department. Revenue in the Account shall be applied to the costs of administering the programs for which the fees were collected. Revenue credited to the Account pursuant to G.S. 105-449.125, 105-449.134, and 105-449.43 shall be used to administer the air quality program. Except for the following fees, all application fees and permit administration fees collected by the State for permits issued under Articles 21, 21A, 21B, and 38 of this Chapter shall be credited to the Account:

- (1) Fees collected under Part 2 of Article 21A and credited to the Oil or Other Hazardous Substances Pollution Protection Fund.
- (2) Fees credited to the Title V Account.
- (3) Repealed by Session Laws 2005-454, s. 7, effective January 1, 2006.

(4) Fees collected under G.S. 143-215.28A.

(5) Fees collected under G.S. 143-215.94C shall be credited to the Commercial Leaking Petroleum Underground Storage Tank Cleanup Fund.

(a1) The total monies collected per year from fees for permits under G.S. 143-215.3(a)(1a), after deducting those monies collected under G.S. 143-215.3(a)(1d), shall not exceed thirty percent (30%) of the total budgets from all sources of environmental permitting and compliance programs within the Department. This subsection shall not be construed to relieve any person of the obligation to pay a fee established under this Article or Articles 21A, 21B, or 38 of this Chapter.

(b) The Title V Account is established as a nonreverting account within the Department. Revenue in the Account shall be used for developing and implementing a permit program that meets the requirements of Title V. The Title V Account shall consist of fees collected pursuant to G.S. 143-215.3(a)(1d) and G.S. 143-215.106A. Fees collected under G.S. 143-215.3(a)(1d) shall be used only to cover the direct and indirect costs required to develop and administer the Title V permit program, and fees collected under G.S. 143-215.106A shall be used only for the eligible expenses of the Title V program. Expenses of the Small Business Environmental Advisory Panel, the ombudsman for the Small Business Stationary Source Technical and Environmental Compliance Assistance Program, support staff, equipment, legal services provided by the Attorney General, and contracts with consultants and program expenses listed in section 502(b)(3)(A) of Title V shall be included among Title V program expenses.

(b1) The I & M Air Pollution Control Account is established as a nonreverting account within the Department. Fees transferred to the Division of Air Quality of the Department pursuant to G.S. 20-183.7(c) shall be credited to the I & M Air Pollution Control Account and shall be applied to the costs of developing and implementing an air pollution control program for mobile sources.

(c) The Department shall report to the Environmental Review Commission and the Fiscal Research Division on the cost of the State's environmental permitting programs contained within the Department on or before 1 November of each year. In addition, the Department shall report to the Environmental Review Commission and the Fiscal Research Division on the cost of the Title V Program on or before 1 November of each year. The reports shall include, but are not limited to, fees set and established under this Article, fees collected under this Article, revenues received from other sources for environmental permitting and compliance programs, changes made in the fee schedule since the last report, anticipated revenues from all other sources, interest earned and any other information requested by the General Assembly.

## **APPENDIX B: TITLE V HISTORICAL PERSPECTIVE**

The Clean Air Act Amendments of 1970, reviewed and amended by Congress in 1977 and 1990, formed the basis of the federal air pollution control program currently in place. Health-based national ambient air quality standards are the strategic basis of the Clean Air Act. The standards were to be met through the application of control technology that would reduce emissions continuously and result in improved air quality. Costs of technological capability were to be subordinated to public health protection requirements. Also, all requirements were to be national, with no facility having a competitive edge by having to meet less stringent controls in any region in the country. The U.S. Environmental Protection Agency (EPA) is responsible for carrying out the program.

Prior to the 1990 Clean Air Amendments, the EPA set two kinds of National Ambient Air Quality Standards (NAAQS) specifying maximum acceptable levels of pollutants for outdoor air. Primary standards set limits that protect human health; secondary standards provide welfare protection (i.e. plants, animals, aesthetics and materials). The EPA set primary and secondary standards for six criteria pollutants: carbon monoxide, nitrogen dioxide, lead, sulfur dioxide, ozone and particulates. Eight substances were listed as hazardous air pollutants: asbestos, beryllium, mercury, vinyl chloride, radionuclides, inorganic arsenic, benzene and coke oven emissions. National Emissions Standards for Hazardous Pollutants (NESHAPS) were promulgated for sources of seven of these pollutants.

Most air pollution comes from either stationary sources, such as factories, power plants and smelters, or mobile sources such as cars, trucks and airplanes. To limit mobile source pollution, controls were established for automobile emissions. The EPA also set standards that applied to new industrial plants and existing ones that were substantially modified. Additionally, state governments were required to draw up State Implementation Plans (SIPs) that set out other measures to achieve acceptable air quality.

Under the Federal Clean Air Act Amendments of 1990, Congress mandated the Title V Permit Program primarily for regulating major air pollution sources; that is, sources with the potential to emit greater than 100 tons per year of any of the six criteria air pollutants and/or greater than 10 tons per year of any of the 189 Hazardous Air Pollutants (HAPs) or 25 tons per year of combined HAPs.

In North Carolina, the General Assembly enacted laws in 1991 and 1993 authorizing the Title V program. The legislature also established the North Carolina Clean Air Act Advisory Council to develop the programs needed to comply with the Clean Air Act, including the structure of the Title V permit fees. The Clean Air Act Advisory Council issued a final report in August 1992, and the Environmental Management Commission (EMC) followed the council's recommendations in adopting rules for the state Title V Permit Program in 1994. The EPA gave interim approval to North Carolina's Title V Permit Program on Dec. 15, 1995, with final approval pending certain rules changes, which were submitted to the EPA in a timely manner. The EPA gave final approval in October 2001. The Division of Air Quality (DAQ) started receiving Title V permit applications after EPA's interim approval of the program on Dec. 15, 1995. Facilities were given until December 1996 to submit their applications to avoid being considered in violation of the permitting rules. Applications received during the aforementioned timeframe were processed as "Initial Title V Applications" and all other Title V applications received after December 1996 were processed as

“First Time Title V Applications.” By January 1998, the DAQ had 475 Title V applications under review.

The DAQ in implementing the program was required to issue permits to existing major stationary facilities. The DAQ issued all permits to all existing facilities by the end of 2004. The DAQ is also required to issue permits to new major stationary facilities, and to renew permits for each existing facility on a five-year basis.

### **Implementation of the 1990 CAA**

Since program approval, the DAQ has processed (closed-out) a total of 5,662 new, modified and renewal applications, not including other applications that were consolidated into these issued permits. The DAQ has issued 102 first-time Title V permits and is currently reviewing 62 applications required by Section 112(j) of the Clean Air Act. Currently, the DAQ has about 300 operating facilities classified as Title V facilities.

### **Accomplishments**

1. The DAQ has established a Title V Permit Program based on rules adopted by the EMC (15A NCAC 02Q .0500). The program meets the requirements of state law (N.C.G.S. §§143-215.3 and 143-215.108) that authorized the program in North Carolina and set up the North Carolina Clean Air Act Advisory Council. The EPA gave interim approval to the program in 1995, and following the DAQ’s revision to the Title V regulations, the EPA gave final program approval in October 2001.
2. In 2002 the DAQ revised the Title V application forms including the development of special forms for the renewal of Title V permits. These revised forms are intended to facilitate the application process, and they have been placed on the division’s website <http://www.ncair.org/>
3. The federal Clean Air Act requires that Title V permit holders pay fees sufficient to cover the cost to administer the permitting program. The DAQ has developed and maintained a permit and emissions fee schedule that has historically generated an appropriate amount of revenue to carry out the Title V permitting program. The DAQ will continue to evaluate the fee structure to ensure that the necessary fees are collected.

All Title V facilities are required to submit a facility-wide emission inventory annually by June 30. The DAQ has implemented an electronic online inventory reporting system that permittees have been using since 2003 to report annual emissions data. The reported emissions data are used to calculate fees, support regulatory planning and conduct compliance monitoring activities.

Beginning with the submittal of calendar year 2009 emission inventory data, the EPA through the promulgation of the Air Emission Reporting Requirements (AERR) rule has changed two previous requirements. The emission inventory submittal deadline was shortened from 17 months to 12 months. The DAQ staff now must receive, review and approve the emission inventory data

submitted by facilities then convert to the format that EPA requires for submission, run the converted data through EPA's quality assurance procedures, correct the data if necessary and submit it within six months. In previous years, the DAQ staff had eleven months to accomplish this task. AERR also requires that all major sources that have the potential to emit more than 100 tons of any criteria pollutant report annually whereas the previous rule required all major sources to report actual emissions over 100 tons of any criteria pollutant. The DAQ submits all emissions data for all facilities that report in a given calendar year.

The DAQ's computer database is now used for compliance tracking through recording of facility inspections, required reporting and compliance and enforcement actions, permit activities and document storage (inspections, permits, correspondence, etc) as well as emissions data storage, fee calculation and regulatory planning. Title V Annual Compliance Certification reports, any periodic reporting required by a DAQ air permit, stack or source tests and enforcement actions are all now tracked through this computer database.

The DAQ has provided a range of options to qualify facilities as non-Title V facilities. Many facilities have taken advantage of these options, which is one of the reasons why the number of Title V facilities is much less than initial estimates; that is, about 300 operating Title V facilities now versus the 2000 estimated in the Clean Air Act Advisory Council's Final Report. For example, the DAQ established the synthetic minor program so facilities could avoid the Title V permitting program by taking permit emission limits and/or operating restrictions. Also, the EMC adopted and the EPA approved exclusionary rules to allow reasonable potential emission calculations in cases where standard methods would produce unreasonably high potential emissions; thus subjecting such facilities to Title V permitting requirements.

## **APPENDIX C: HISTORY - TITLE V PERMIT FEE INCREASE**

*The following discussion was included in the November 2007 and 2008 reports. It is presented here in its entirety as a historical reference.*

### **Chronological Events Related to the Fee Increase Rule**

- Went to public hearing on Nov. 7, 2007,
- Was approved by the Environmental Management Commission on Jan. 10, 2008,
- Was discussed and received a favorable report by the Joint Legislative Commission on Governmental Operations' Subcommittee on Transportation/Natural and Economic Resources on Feb. 5, 2008, and the full committee on Feb. 6, 2008,
- Approved by the Rules Review Commission on Feb. 21, 2008, and
- Became effective on March 1, 2008 (see Appendix D for final rule).

### **Introduction**

The Clean Air Act requires the Title V permit program to be funded entirely through Title V permit fees. Funding for the Title V permit program expenses is required to be available prior to disbursement and must be sustainable.

The General Assembly approved salary increases for state employees in 2006 and 2007. Salary costs represent a major expense related to the Title V permit program. There have also been annual increases in costs such as office space, utilities and other support costs. The Title V permit program costs increased by 7.3 percent and 6.8 percent for fiscal years 2006 and 2007, respectively.

The Division of Air Quality (DAQ) collects Title V permit fees throughout the year and experiences fluctuating operating fund balances. In 2003, the balance brought forward represented 66 percent of annual cash disbursements, 54 percent in 2004, and 21 percent in 2007. The projected balance to be carried into 2008 is 9 percent of cash disbursements made in 2007. This balance will not be sufficient to fund and operate the Title V permit program. The Title V permit program account could potentially run into deficits in 2008 unless additional fees are collected.

Due to these added expenses and the requirement to fund the permit program entirely with the fees collected from the Title V facilities, the DAQ has begun a rulemaking process to increase the fees to a level sufficient to fund the program at its current level for the foreseeable future. No new positions are established by the proposed fee increase. If Title V permit fees fail to match Title V operating permit program costs, operating costs are legally required to be reduced to match Title V permit fees. Reduced assets (less Title V funded positions) will influence service response time for Title V permits and the level of effort available to conduct thorough compliance facility inspections. An adequate Title V permit program ensures that the state can retain experienced engineers to issue accurate permits in a timely manner and experienced field inspectors to ensure that facilities are operating in accordance with those permits.



## **Description of Amended Rules**

*15A NCAC 02Q .0203*, Permit and Application Fees, updates calendar year 1994-based fees that are applicable to Title V air pollution sources. The tonnage factor fee is being raised in four steps beginning on the rule effective date, until it reaches \$30 per ton on Jan. 1, 2011. A stepped approach was used to increase the Title V tonnage factor fee as recommended by the regulated community. This approach was chosen, opposed to a single large increase, to minimize the sudden impact to the subject fee payers. The related basic permit fee and nonattainment area added fee are being raised to \$6,500 and \$3,500, respectively.

*15A NCAC 02D .0204*, Inflation Adjustment, describes the method used for calendar year inflation adjustment of these Title V Permit and Application Fees. This inflation adjustment will be placed on hold until after the phased increase of the tonnage fee in 02Q .0203 is complete.

## **Authority**

North Carolina General Statutes 143-215.3 provides general powers and authority to the Environmental Management Commission and DENR to adopt fees schedules (see Appendix B).

## **Motivation for the Proposed Rules**

The reason for this action is to modify annual permit fees for Title V facilities and the inflation adjustment to ensure that the Clean Air Act requirements associated with the Title V permit program are met. This action is needed to ensure the current level of service quality in the Title V permit program is maintained into the foreseeable future. A fee adjustment will help ensure that the needs of the public, the environment, and industry are met.

“Title V” is the permitting program for major emitters of air pollution. “Title V” refers to Title V of the Federal Clean Air Act. The Clean Air Act requires the Title V program to be funded entirely through Title V permit fees. The U.S. Environmental Protection Agency (EPA) audited North Carolina’s Title V program in June 2006. They found the technical aspects of the program to be satisfactory, but they did raise questions about whether or not permit fees were paying the entire cost of the program.

The current state rules allow annual permit fees for Title V facilities to be adjusted each year for inflation. However, from 2002 to 2006, no increases were made. Separately, the General Assembly approved salary increases for state employees (almost 10 percent over two years). No appropriations are made to the DAQ for these salary increases, which amounted to annual recurring expenses to the division of \$2 million; these expenses must be paid out of Title V receipts and other non-appropriated funds that the DAQ receives. Salary costs represent a major expense related to the Title V program. However, salary increases represents only a portion of costs associated with the Title V program expenses. Salary increases cause the division's retirement and social security payments to increase. Employee fringe benefits, office space and other support costs are subject to inflation. Title V costs increased by 7.3 percent and 6.8 percent for fiscal years 2006 and 2007. Funding for the Title V program cost increases is required to be available prior to disbursement and must be sustainable.

Additionally, there is a financial and operational need to carry a forward balance each year to operate the Title V program. Fee receipts are paid annually by facilities throughout the calendar year. In 2003, the balance brought forward represented 66 percent of annual cash disbursements, 54 percent in 2004, and 21 percent in 2007. The projected balance to be carried into 2008 is 9 percent of cash disbursements made in 2007. This balance will not be sufficient to fund and operate the Title V program.

The combination of the Title V fee not keeping up with inflation and the salary and benefit and operational cost increases has seriously depleted the Title V account – in fact, the account could potentially run into deficits in 2008 unless additional fees are collected. The proposed rule will increase Title V receipts to allow the account to “catch up” to an adequate funding level. This will also enable the Division to demonstrate to the EPA that the program is entirely funded through permit fees, as required by the Clean Air Act. No new positions are established by the proposed fee increase.

Adequate funding of the Title V program is important to North Carolina’s major industries and the environment. An adequate Title V program ensures that the State can retain experienced engineers to issue accurate permits in a timely manner and experienced field inspectors to ensure that facilities are operating in accordance with those permits. It is especially important to maintain the Title V permit program as the EPA has recently tightened the daily particulate standard, has proposed tightening the ozone standard, and is considering establishing greenhouse gas standards.

A Title V facility’s annual fee consists of two or three parts:

- a flat basic permit fee,
- a variable tonnage fee that depends on the facility’s actual emissions, and
- a flat, nonattainment area added fee which is applicable only to Title V facilities required to comply with 15A NCAC 02D .0531, 15A NCAC 02D .0900 (Volatile Organic Compounds), or 15A NCAC 02D .1400 (Nitrogen Oxides) and either are in an area designated in 40 CFR 81.334 as nonattainment; or are covered by a nonattainment or maintenance State Implementation Plan submitted for approval or approved as part of 40 CFR Part 52, Subpart II.

## **Identification of the Affected Sources**

Amendments of the Annual Permit Fees in 15A NCAC 02Q .0203 and the Inflation Adjustment in 15A NCAC 02Q .0204 will increase the Title V permit fees of all facilities regulated by the State air quality agency. It does not affect facilities regulated by three local air agencies (Mecklenburg County, Forsyth County and Western North Carolina). The local air agencies set their own Title V fee amounts.

## **Establishment of the Baseline**

The current state rules allow annual permit fees for Title V facilities to be adjusted each year for inflation using a Code of Federal Regulation method that is based on the Consumer Price Index (CPI). In 1994, the fee was initially set at \$14.63, and is currently \$18.10. The current basic permit

fee is \$6,311 and the nonattainment area added fee is currently \$3,297. The fees charged in 2007 represent the baseline for the purpose of this rulemaking.

### Changes from the Baseline

Examining the current size of the Title V industry in North Carolina, the size and cost of the regulatory staff needed to service that industry, and then spreading those costs across industry by the amount of pollution they emit established the proposed fee changes, as shown below.

Year	Tonnage Fee	Basic Permit Fee	Nonattainment Area Added Fee (if applicable)
2007	\$18.10	\$6,311	\$3,297
2008	\$22.50	\$6,500	\$3,500
2009	\$25.00	\$6,500	\$3,500
2010	\$27.50	\$6,500	\$3,500
2011	\$30.00	\$6,500	\$3,500
2012 and thereafter	Annual CPI increase	Annual CPI increase	Annual CPI increase

The following table summarizes revenues raised by the proposed tonnage fee increase. In addition, each facility's basic fee would rise by \$189/year, and, if located within a nonattainment area, their added fee would rise by \$203/year.

Year	Proposed Tonnage Fee	Total Revenue <sup>(1)</sup>	Total Impact on All Sources	Impact on Largest Sources <sup>(2)</sup>	Impact on Small Sources <sup>(3)</sup>
2007	\$18.10	\$5,430,000	(Not applicable)		
2008	\$22.50	\$6,750,000	\$1,320,000	\$72,600	\$330
2009	\$25.00	\$7,500,000	\$2,070,000	\$113,850	\$520
2010	\$27.50	\$8,250,000	\$2,820,000	\$155,100	\$710
2011	\$30.00	\$9,000,000	\$3,570,000	\$196,350	\$890
2012+ <sup>(4)</sup>	\$30.60	\$9,180,000	\$3,750,000	\$206,250	\$940

<sup>(1)</sup> "Total Revenue" is calculated by multiplying the tonnage fee by 300,000 tons, a "typical" annual amount based on major source air permits.

<sup>(2)</sup> Tonnage fees for the largest sources are capped at 4,000 tons per pollutant. The state's three largest sources were each billed for about 16,500 total tons of six different pollutants in their most recent annual bill. Annual increase is the fee increase multiplied by 16,500 tons.

<sup>(3)</sup> Small Business Title V facilities having less than 75 tons of all pollutant in their most recent annual bill. Annual impact is the fee difference from baseline multiplied by 75 tons.

<sup>(4)</sup> In 2012 and later years, an annual CPI would be applied. A 2% increase is shown for illustration purposes.

## **Estimating the Cost to the Existing Affected Sources**

### *A. Summary of Costs/Savings Incurred by the Affected Private Sector Sources:*

Industrial facilities holding Title V permits typically emit more than 100 tons per year of a specified air pollutant. These facilities are charged an annual tonnage fee up to 4,000 tons per year per pollutant (i.e., a facility emitting 10,000 tons of a pollutant would pay the same as a facility emitting 4,000 tons of that pollutant). Although most Title V facilities are very large, a facility that emits certain hazardous air pollutants may hold a Title V permit for having the potential to emit as little as 10 tons per year. Thus, the very largest facilities would see their annual tonnage fee per pollutant rise from \$72,400 in 2007 to \$90,000 in 2008. Additionally, all facilities, regardless of size, would see their basic permit fee rise from \$6,311 to \$6,500. Those facilities within a nonattainment area would also see that added fee increased from \$3,297 to \$3,500.

### *B. Costs to Small Business:*

A small business as defined by the Office of State Budget and Management (OSBM) is a business entity, including its affiliates, that is independently owned and operated, employs fewer than 500 employees or has gross annual sales of less than \$6 million. A Title V facility has a potential to emit 100 tons of a single pollutant or 10 tons of a hazardous air pollutant or 25 tons of more than one hazardous air pollutant. There may be facilities that meet the OSBM definition of “small business” that are regulated as Title V facilities. The Clean Air Act does not exempt them from paying Title V fees but the fees can be reduced as noted in G.S. 143-215.3(1d) (see Appendix B).

Typically, the Title V program covers larger businesses, but applicability is dependent on potential emission levels rather than business size. Some smaller businesses, such as manufacturers of bricks, fiberglass, foam rubber, plastics, pharmaceuticals and textiles along with smaller surface coating operations and landfills, are subject to the Title V program because their potential emissions are high enough to trigger Title V thresholds.

The Clean Air Act defines a “Small Business Stationary Source” as a stationary source that employs less than 100 employees and emits less than 75 tons per year of all regulated pollutants. In absence of employment data, and exclusively judging by emissions data, approximately 25 percent of the Title V sources in North Carolina emit less than 75 tons per year of all regulated pollutants. The total billable emissions from these 85 Title V facilities represent less than one percent of the total financial impact from increasing the Title V tonnage and permit fees. The average impact to these smaller Title V sources would be \$330 in 2008, based on an average of 33 tons per year, for both annual permit fees and tonnage fees. The following table summarizes the aggregate and average impacts on small business stationary sources.

<b>Year</b>	<b>Fee Impact on Smaller Sources</b>	<b>Average Fee Impact</b>
2008	\$28,300	\$330
2009	\$35,300	\$420
2010	\$42,300	\$500
2011	\$49,200	\$580

Currently, facilities are not required to provide the data (e.g., number of employees, annual sales) in their permit application that would enable the DAQ to identify which Title V facilities meet the OSBM and/or Clean Air Act definition of “small business.” The DAQ Fees Workgroup is currently evaluating G.S. 143-215.3(1d), and will assess whether or not an adjustment needs to be made to fees charged to small businesses.

### **Conclusion**

Title V facilities subject to fee increases will experience total aggregate impacts of \$3.75 million in 2012, based on this economic analysis. This aggregate impact is considered substantial as defined in North Carolina’s Administrative Procedures Act in NC § 150B-21.4 *Fiscal notes on rules*. The amendment to the Title V Annual Permit Fees in 15A NCAC 02Q .0203(a) will ensure that the North Carolina Title V Permit Program complies effectively with federal Clean Air Act requirements.

## APPENDIX D: 15A NCAC 2Q .0203 PERMIT AND APPLICATION FEES

(a) The owner or operator of any facility holding a permit shall pay the following permit fees:

ANNUAL PERMIT FEES			
Facility Category	Tonnage Factor	Basic Permit Fee	Nonattainment Area Added Fee
Title V	\$22.50 upon Rule effective date; \$25.00 on 01/01/2009; \$27.50 on 01/01/2010; \$30.00 on 01/01/2011 and thereafter.	\$6,500	\$3,500
Synthetic Minor		\$1,500	
Small		\$250	
Transportation		\$0	
General	50% of the otherwise applicable fee		

A facility, other than a Title V facility, which has been in compliance is eligible for a 25 percent discount from the annual permit fees as described in Paragraph (a) of Rule .0205 of this Section. Annual permit fees for Title V facilities shall be adjusted for inflation as described in Rule .0204 of this Section. Annual permit fees for Title V facilities consist of the sum of the applicable fee elements.

## **APPENDIX E: ORGANIZATIONAL CHART EXPLANATION**

The organization chart shown in this document lists all the positions authorized by State Personnel for the Division of Air Quality. Noting the requirement that all Title V work be funded by Title V fees, each employee is required to code his/her time sheet indicating the amount time spent on different functions. Accordingly, approximately 10 percent of the division's employees spend all of their time completing Title V tasks, and the other 90 percent of the staff spend a portion of their time completing Title V tasks.

The DAQ currently has 117.3 full time positions supporting the Title V program.

			Asst Sec for Env		
			Shrubb, Robin		
			60002214 / 194		
			Environ Program Mgr III		
			Deborah Director		
			Edmund, Charles		
			60002302 / 181		
			Admin Sec III		
			Wexler, Vickie		
			60002385 / 142		
			Proceeding Asst III		
			Jordan, Thomas		
			60002400 / 157		
			Environ Program Mgr II		
			Deputy Director		
			Abramson, Michael		
			60002500 / 184		
			Business Officer II		
			Business Officer		
			Vidley, Charles		
			60002601 / 131		
			Info/Comm Specs III		
			Public Information Officer		
			Mather, Thomas		
			60002602 / 173		
			Environ Pro Mgr I		
			Section Chief		
			Van der Weert, Donald		
			60002710 / 182		
			Environ Pro Mgr I		
			Section Chief		
			Dunkel, Lex		
			60002854 / 182		
			Environ Pro Mgr I		
			Section Chief		
			Mauri		
			60002942 / 182		
			Environ Pro Sup IV		
			Section Chief		
			Raymond Jr., Donald		
			60003033 / 184		
			Artist Illustrator II		
			Moore, Jerome		
			60003200 / 185		
Expanded Officers:					



