

US EPA ARCHIVE DOCUMENT



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Over 30 Years of Regional Leadership

December 30, 2005

Ms. Kay Prince
US Environmental Protection Agency
Region 4
61 Forsyth St. S.W.
Atlanta, GA 30303-8960

Dear Ms. Prince:

We are pleased that EPA has approved the revisions to NC's SIP, including the attainment demonstration for the 8 hour ozone standard and the Unifour's EAC Plan. It is also promising that EPA has extended the deferred effective date of the Unifour's nonattainment designation for ozone through December 2006. We are also pleased to note that there were no ozone exceedances in the region during the 2005 season and that the area continues to comply with federal 8 hour ozone standards.

Attached is the December 31, 2005 Milestone and Progress Report for the Unifour Early Action Compact submitted on behalf of the Unifour Air Quality Committee. From June 30, 2005 until present, the UAQC and local members of the Unifour EAC have made continued progress addressing ozone pollution in the Hickory-Morganton-Lenoir metropolitan area. Please see the attached report which details the emission reduction strategies that are being implemented throughout the region to help diminish ozone concentrations in the Unifour.

We look forward to continuing to work with the USEPA and the NC Division of Air Quality in efforts to improve the air quality in the Greater Hickory Metro Area. Thank you for all the support you provide in helping to make this process successful. If we can provide any additional information please contact me at 828-485-4283.

Sincerely,

Ron Hancock, Planner WPCOG

cc: Kitty Barnes, Chair UAQC
Doug Taylor, Executive Director WPCOG
John Tippet, Planning Director WPCOG

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Unifour Early Action Compact Biennial Progress Report December 30, 2005

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PART A

Local EAC Members' Progress Report

**Submitted by the Unifour Air Quality Committee and the
Western Piedmont Council of Governments**

Contributors:

**Alexander County
Town of Taylorsville
Burke County
City of Morganton
Caldwell County
City of Lenoir
Catawba County
City of Hickory
City of Conover
City of Newton**

Overview of Unifour EAC Program

As a requirement of the Unifour Early Action Compact (EAC) reporting schedule, this document represents the Unifour's progress in reaching an important EAC program milestone, implementation of the local emission reduction strategies by December 31, 2005.

This document illustrates efforts being made in the Unifour to reduce the formation of ground level ozone pollution. It serves to "facilitate self-evaluation and communication with EPA, NCDENR, stakeholders, and the public" in regards to the EAC program and to promote the program's goal to achieve cleaner air faster in the Unifour region. It documents the area's progress regarding the implementation of local control measures and provides specific information identifying the government agency or department that has the responsibility for implementation of each measure. In June 2005, the Unifour submitted the previous biannual progress report detailing activities that have taken place in the region up to that point and significant progress being made implementing the control measures. This document builds on previous progress reports and describes stakeholder meetings and other activities by local members that have occurred since June 30, 2005.

The local emission reduction strategies were adopted and implemented based on their suitability for addressing ozone pollution from three primary approaches: education/awareness, transportation, and land use activities. Throughout the Unifour region there have been widespread efforts towards educating the public and raising awareness about air quality while also suggesting practical methods individuals can use to help improve the region's ambient air quality. Presentations to school children and elected officials, as well as a sustained media campaign focusing on ozone, have been the foundation of the education/outreach program. Local and regional newspapers, television and radio, and a growing internet presence, have also been very useful in making Unifour residents aware about ozone and air quality conditions.

This report provides a summary of the local control measures and assesses the Unifour's progress toward completion of the current milestone of implementing each strategy. It also includes a summary of the efforts being made at the state level that will help reduce the formation of ground level ozone.

Local Control Measures Implemented in the Unifour

Please also see attached summary file: UnifourEAC_Prog_Rep_1205.xls

1. Expand the Inspection and Maintenance program for passenger vehicles. Catawba County began July 1, 2003; Burke and Caldwell Counties began July 1, 2005. Authority and responsibility: NCDMV.
2. Expand Public Transportation and Ridesharing Programs. Implemented/Ongoing. A significant fixed route modification has been implemented in the Piedmont Wagon Transit System, effectively increasing the system's service area. Authority and responsibility: Greater Hickory MPO and City of Hickory/PWTS.

3. Promotion of Compressed Work Weeks and Flex-time. All ten members have agreed to this measure which is estimated to reduce NOX 1.3 tons/year. Authority and responsibility: Local EAC members.
4. Develop Regional Bicycle and Pedestrian Plan. Has been estimated to reduce NOx 1.6 tons/year and VOCs 2 tons/year. Greater Hickory MPO/Local EAC members.
5. Outdoor Burning Ban. The NC Environmental Management Commission approved a new rule that bans open burning on "Air Quality Action Days" when the AQI is Code Orange or above. Authority and responsibility: NCDAQ.
6. City and County Energy Plans (An energy conservation plan has been developed that directs city and county departments to reduce energy consumption and conserve natural resources to reduce emissions from EGUs. Authority and responsibility: Local EAC members.
7. Alternative Fuel Vehicles and the Clean Cities Program. The UAQC is a Core Stakeholder in the Carolina Clean Fuels Coalition and all members of the EAC are committed to the pursuit and use of alternative fuel technologies. Authority and responsibility: UAQC, Greater Hickory MPO, and Local EAC members.
8. Support Efforts and Coordination of Metropolitan Planning Organization and Rural Planning Organization. The Greater Hickory MPO and Unifour RPO do long range transportation planning to ensure that highway and transit programs conform to the air quality goals established by the EAC. Authority and responsibility: MPO/RPO and Local EAC members.
9. Improve Traffic Operational Planning, Engineering, and Maintenance. Authority and responsibility: MPO/RPO and Local EAC members.
10. Implement Smart Growth, Mixed Use and Infill Development Policies. Has helped reduce vehicle miles traveled and improve air quality through land use management programs. Authority and responsibility: Local EAC members.
11. Air Awareness Program. All local members participate in the Air Awareness program and have adopted "Ozone Action Plans" that include provisions to help reduce ozone formation. Authority and responsibility: UAQC and Local EAC members.
12. Adopt a Local Clean Air Policy. Local stakeholders promote air quality awareness and work to minimize ozone pollution in their respective local communities. Authority and responsibility: Local EAC members.
13. Air Quality Contacts for Each Local Member of the EAC. Contacts disseminate information to local governments and assure adherence to goals of the EAC program. Authority and responsibility: Local EAC members.
14. Landscaping Standards and Urban Forestry. Implementation throughout Unifour to help mitigate the effect of the "Urban Heat Island" and promote energy conservation and reduce emissions from EGUs. Authority and responsibility: Local EAC members.

Local Member Activities and Implementations

UAQC, UAQOC, and WPCOG

During the past six months, staff at the Western Piedmont Council of Governments (WPCOG) has continued to work on air quality issues in the Unifour Area related to the formation of ground level ozone pollution. Kitty Barnes, Chair of the Catawba County Board of Commissioners, has served as Chair of the Unifour Air Quality Oversight Committee (UAQOC) throughout the past several months and regularly presided over the group’s monthly meetings. The UAQOC is made up of elected officials from the local members of the Unifour Early Action Compact for Ozone and oversees actions taken relevant to air quality. Along with other stakeholders, the group has been instrumental in the implementation of the local control measures and in the promotion of outreach and educational initiatives to improve both air quality and air quality awareness throughout the region. The following is a list of major tasks WPCOG staff has recently been engaged in during the past several months:

- Gather results and distribute information and the most current values from the region’s ozone monitors in Alexander and Caldwell County. After an extended four year drought and heat wave, ozone concentrations climaxed in the region during the 2002 ozone season. The design values for 8 hour ozone concentrations have been trending downward over the past several years. The table and below confirms these conditions.

Design Value Summary (ppm)				
	00-02	01-03	02-04	03-05
Taylorsville	.091	.088	.082	.077
Lenoir	.086	.084	.080	.074

Source: NCDAQ

- Provide technical assistance and information to all EAC members relevant to the draft and preparation of “Energy Conservation Plans.” See Appendix A for typical member’s Energy Plan and Charlotte Observer news coverage.
- Serve as liaison between the UAQC and staff of the U.S. EPA and NCDAQ to help assure that all requirements of the EAC program are followed and that the Unifour area maintains its deferred nonattainment for ozone. Attended meeting November 18, 2005 at NCDAQ offices in Raleigh regarding EAC program.
- Host monthly UAQC meetings to coordinate EAC efforts and provide administrative support to the members of the EAC. During the period June 30, 2005 through December 31, 2005 meetings were held on the following dates: July 26, August 30, September 27, October 25, and November 29.

- Continue the education and outreach component of the EAC to help make area residents aware of health effects of ozone pollution in the Unifour.
- Make presentations to local governments and other stakeholders regarding ozone pollution and alternative fuel technology. John Tippett made presentations to the Alexander County Board of Commissioners, the Catawba Valley Traffic Club, and appeared on the local talk radio program “First Talk” to discuss AFVs.
- Distribute informational materials throughout the region relevant to the NC Air Awareness program and the reduction of ozone pollution. One weekend per month in July, August, and September Ron Hancock volunteered at regional festivals featuring the NC Air Awareness program, alternative fuel vehicles, and environmental conservation. These included the Bele Chere festival, the Southeast Environment and Energy Expo, and the Catawba River Festival.
- Support efforts to maintain media coverage on the ozone issue throughout the region. Area newspapers, radio and cable television stations have been publicizing the NC Air Awareness ozone forecasts and air quality issues throughout the region.

Local EAC Members’ Reports

All ten local members of the Unifour Early Action Compact have been actively participating in the EAC program. During the past six months activities have primarily consisted of the preparation and adoption of “Energy Conservation Plans,” participation in the NC Air Awareness program, maintaining a vigorous education/outreach program, and sustaining a dynamic media campaign concerning ozone pollution throughout the region. The following summary details the local member’s progress towards implementing local measures to reduce ozone pollution.

Alexander County and Taylorsville

Both Alexander County and Taylorsville have adopted “Energy Conservation Plans” and are implementing these plans during the current ozone season. Each has an air quality contact person on staff who regularly attends the meetings of the UAQC. They are establishing a joint stakeholder group to focus on local air quality issues. Taylorsville has been researching alternative fuels and alternative fuel vehicles and are currently examining the feasibility of replacing existing fleet vehicles with hybrid electric vehicles. Alexander County, has achieved the following during the past few months:

ECM #1: Local Governments join and participate with the private sector in the NC Air Awareness Program.

- Monthly attendance at the Unifour Air Quality Committee and Unifour Air Quality Oversight Committee Meetings. (Sylvia Turnmire, Norris Kever)
- Continued the 'Alexander County Clean Air Campaign' with 19 participating organizations or companies from the public education to industrial/ manufacturing sectors. (Sylvia Turnmire)

ECM #2: Enhanced Ozone Awareness (Outreach-Communication).

- Posted ozone awareness notices on the Government Channel of Charter Communications for Alexander County, running daily from July 1, 2005 until October 31, 2005, reaching a potential 3,077 subscribers in the unincorporated portions of Alexander County. (Sylvia Turnmire, Judy Feimster)
- Send daily ozone forecasts to nine organizations until October 31, 2005. (Sylvia Turnmire)
- Send a daily ozone forecast to the local radio station, WACB 860, for announcement ending on October 31, 2005. (Sylvia Turnmire)
- Sent high ozone action alerts on July 26 and 27, 2005 to 17 organizations involving 1,371 people outside of the county organization as well as all county employees. Alerts included 10 action steps to reduce exposure to high ozone concentrations. (Sylvia Turnmire)
- Flew high ozone flags on July 26 and 27, 2005 at Bethlehem Elementary, Shuford Mills and the Alexander County Senior Center, located on major roads or highways for the traveling public. According to NCDOT Transportation Planning Branch – Traffic Survey Unit, the 2003 Annual Average Daily Traffic Count at Bethlehem Elementary School, Shuford Mills and the Alexander County Senior Center are 2,300; 5,500 and 1,200, respectively for a total of 9,000 vehicles or 9,000 persons of the traveling public. (Sylvia Turnmire, Jennifer Hefner, Scott Ross, Mike Carrigan, Rick French)
- Presented air quality and ozone reports to the Alexander County Board of Commissioners on October 4 and November 21, 2005. (Sylvia Turnmire)
- Presented a proposed Energy Conservation Policy to the County Commissioners on November 21, 2005. The policy was adopted on December 12, 2005.

ECM #5: Assign staff to become air quality contact.

- Sylvia Turnmire is the air quality contact for Alexander County, serving on the Unifour Air Quality Committee since 2002.

ECM #10: Discourage Open Burning on Ozone Action Days.

- Notification was sent to the Fire Marshal on July 26 and 27, 2005 to discourage open burning and fire-department training. (Sylvia Turnmire, Russell Greene)

ECM #11: Support Coordination of MPO and RPO efforts.

- Attendance and participation in the Greater Hickory MPO and Unifour RPO. (Sylvia Turnmire)

ECM #12: Encourage the use of compressed work weeks or flexible work hours.

- Alexander County Government employs a total of 214 full-time employees and 112 part-time employees of which 27.9%, or 91 employees, work a compressed work week, flexible work hours or hours in which vehicle travel is outside of the peak driving hours. (data sources: Patricia Howell, Alexander County Department Heads; data compilation and analysis: Sylvia Turnmire)
- Formation of the “Alexander County Clean Air Campaign,” including 19 organizations from both the private and public sectors participating in Air Awareness activities.
- Ozone awareness notices broadcast on the local government cable channel potentially reaching over 3,000 subscribers daily.
- Daily local radio announcements of forecasted ozone conditions.
- “Smart Summer Fun!” ozone workshops for area teachers, childcare providers, and over 500 children.
- Flags representing high ozone action days to be flown in prominent locations along several thoroughfares throughout the area reaching passengers in approximately 9,000 vehicles.
- Revised landscaping ordinance increasing requirements for plantings between varied land uses.
- 91 Alexander County Government employees work a compressed work week, flexible hours, or hours when vehicle travel is outside peak driving times.

Caldwell County and Lenoir

Caldwell County continues its innovative approach towards air quality awareness and reducing ozone pollution. The County has formed a stakeholder group comprised of representatives from local governments, industry, and education to address local air quality issues. Some of the highlights and recent implementations from their program include:

Enhanced Ozone Awareness (Outreach-Communication).

- Posted ozone awareness notices on the Government Channel of Charter Communications for Caldwell County, running daily from April 30, 2005 until September 30, 2005, reaching a potential 17,000 subscribers; representing 56.7% of the households in Caldwell County. In addition, notices were also posted on the UHF channel 49 increasing a potential of 72.4% of the households in Caldwell County. (Debi Nelson, Lucas Bentley)
- Send daily ozone forecasts to 12 businesses/organizations, 500 county employees, 30 schools and community college, 13 townships, NC Forest Service five to local media outlets and 20 fire/emergency management personnel until September 30, 2005. All receiving daily alerts were instructed to post a printed copy of the daily alert on entrance/exit doors so those without email could read the daily forecast. (Debi Nelson)
- Send a daily ozone forecast to the three local radio stations, WJRI 1340, WKGX 1081 and WKVS-KICKS 103.3 FM for announcement ending on September 30, 2005. (Debi Nelson)
- Sent high ozone action alerts on June 24, July 26 and 27, 2005 through emails, announcements on the radio, government cable channel and local newspaper to people outside of the county organization as well as all county employees. Alerts included 10 action steps to reduce exposure to high ozone concentrations. (Debi Nelson)
- Flew color-coded ozone flags-green, yellow and orange/red daily throughout the ozone season to alert county residents of the air quality for the day. The flags were flown at selected businesses, fire departments, NC Forest Service, county offices, local municipalities and schools/community college as visual alerts of the air quality.
- Flew high ozone flags on June 24, July 26 and 27, 2005 at all fire departments, local municipalities, county offices and 12 businesses located on major roads or highways for the traveling public (Debi Nelson)
- Produced and aired a 30 minute ozone program on government cable channel airing the weeks of April 30-May 6 and July 15-22. The program ran three times a day for a week. The program was intended to educate the public about ground level ozone and ways to help reduce the ozone levels in our county.

- Notification was sent to the Fire Marshal, NC Forest Service, local media outlets and all above listed on June, 24, July 26 and 27, 2005 to help prevent open burning and fire-department training on high ozone days. (Debi Nelson)
- Initiating widespread media campaign via local newspaper and radio to notify residents of ozone conditions. (Figure 1)

Figure 1.

Ozone Control Measures

Implemented by the City of Lenoir
July 1, 2005 – December 31, 2005

- Continued the use of a zero emissions electric vehicle for parking enforcement in the Central Business District. This use of this vehicle from July 1, 2005 through December 31, 2005 will have eliminated the emissions from operating a gas-powered vehicle for 325 hours, or 2,200 miles, based on average daily operation.
- Implemented portions the Lenoir Air Quality Awareness Plan and alerted all City departments of high ozone forecasts so that they could make adjustments to various work programs if necessary.
- Continued membership of the Unifour Air Quality Committee and Unifour Air Quality Oversight Committee.
- Constructed a one-half mile extension of the Lenoir Greenway. When completed, the greenway will provide a 5-miles non-motorized transportation alternative connecting four public recreation facilities with the Caldwell County Library.
- Continued the implementation of “Smart Growth” strategies by approving four Special Use Districts that allowed the reuse of vacant residential structures for neighborhood businesses and institutional uses.
- Continued the use of a four-bicycle patrol unit in the Lenoir Police Department. One bicycle will be used to patrol the Lenoir Greenway and the others will be used in densely populated neighborhoods and in the Central Business District where traditional patrol cars may have difficulty maneuvering.

Burke County and Morganton

Burke County has been working to implement its “Air Quality Awareness and Action Plan” and has adopted the “Energy Conservation Plan” to help reduce ozone pollution in the area. The City of Morganton has also adopted its “Energy Plan”. Morganton also remains active promoting air awareness through an ongoing media campaign and the City’s web page (http://www.ci.morganton.nc.us/Morganton_City_Hall/morganton_ozone_.html). In addition to these activities Morganton has begun implementing its strategy to reduce ozone pollution through progressive land use activities. The 400 Union Square Project is a mixed use redevelopment project realized as a result of actions by the Morganton Redevelopment Commission and the City of Morganton which is “designed to reduce vehicle traffic by placing residential properties in the heart of downtown within walking distance of many retail shops and service locations.” The City has also established a stakeholder group to focus on local air quality issues and under the direction of the City manager’s office has implemented the “Ozone

Action Plan.” The City of Morganton took a number of actions to curtail vehicle usage and the use of gasoline powered equipment on this season’s three Ozone Action Days. The City will review its program and make any necessary changes to improve its effectiveness for 2006. The following summarizes activities associated with this implementation:

- Notice of the ozone forecasts were put on COMPAS, the City’s cable TV system, and local news media were notified.
- Fueling from the City’s gasoline pumps was limited to before 9am or after 6pm.
- Public works crews modified work schedules to work earlier shifts and end work earlier in the day. Use of gasoline powered tools and equipment was limited.
- Electric Department workers and meter readers ended outdoor work at noon and did office work in the afternoon.
- Several Departments curtailed outdoor field work and inspections and had employees perform inside work.
- Several Departments organized car pools for lunch. The Human Resources Department held a lunch for its employees in City Hall.
- The Public Safety Department parked some vehicles and performed foot patrols instead. Foot patrols totaled 65 man hours on the 27th and 66 man hours on the 28th.
- Outside Public Safety training sessions were postponed including ones that would have involved vehicle and apparatus training.
- Some Public Safety Officers “doubled up” on patrols riding two to a car and parking the other vehicle.
- Parking enforcement was suspended thereby allowing another vehicle to remain parked.
- Some officers were allowed to take leave on short notice to cut down on further vehicle use.

The City of Morganton has also opened the newest section of its 3.8 mile long greenway system. This section consists of the longest single span pedestrian bridge in North Carolina that connects Freedom High School and Freedom Park with the existing greenway system. It provides pedestrian access to the southern side of Morganton and various parks, schools, and commercial areas found there (Figure 2).

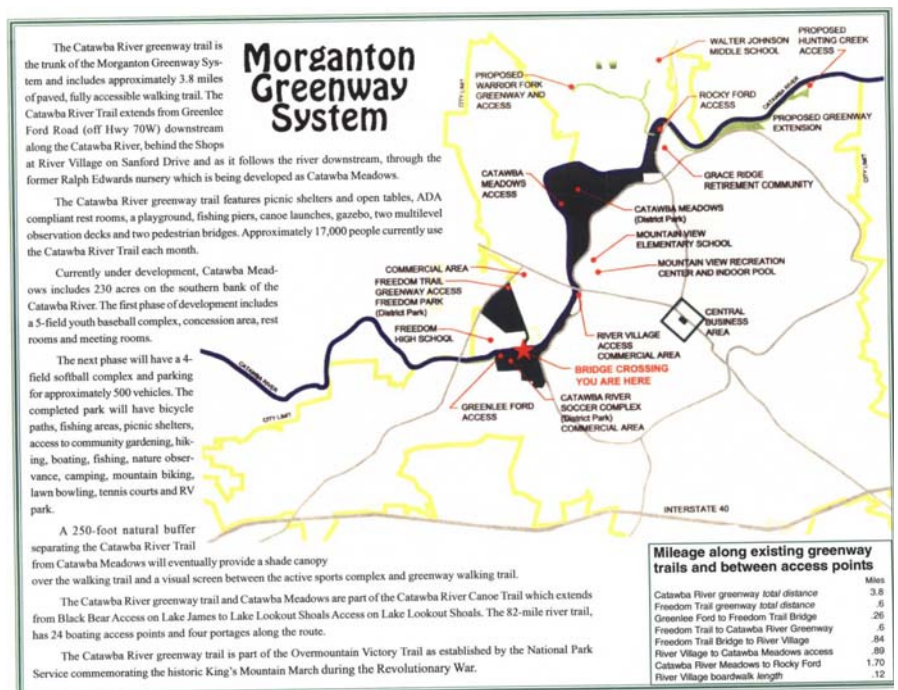


Figure 2.

Catawba County, Hickory, Newton, and Conover

Catawba County and the Cities of Hickory, Newton, and Conover have been very proactive in the development of an air quality program for several years. This has continued to be true throughout the past several months with their many ongoing ozone related activities. The City of Hickory has been instrumental in promoting AFVs in the region through their CNG refueling station, which remains open to the public. Hickory also continues to implement its Hickory by Choice planning initiative focusing on smart growth, as well as other land use activities that help to improve air quality in the region. The City's July edition of the employee newsletter, "The Hickory Post" featured a piece on ozone and the contest with Catawba County to see which organization is the most "ozone friendly" (Figure 3).

PAGE 6 THE HICKORY POST

Ozone Season Is Here

By Claudia Main
Organizational Development Coordinator

Ozone, a colorless gas, is found in the air we breathe. It is also called smog. Ozone is formed when air pollutants "bake" in the hot summer sun. Ozone comes primarily from cars and industries, but there are several steps individuals can take to reduce summer ozone levels.

When ozone levels are high, the following factors are usually in place: Sunshine, clear sky, temperatures above 85 degrees Fahrenheit and little to no wind. Unhealthy levels usually occur between noon and 6 p.m. from May through September.

Air pollution causes shortness of breath and reduces lung function, even in healthy adults. One out of every three people exposed to air pollution is at a higher risk of experiencing health-related effects. Ozone and particulate matter are the two major pollutants in Catawba County.

What are the health effects of ozone?

- ◆ Aggravates existing asthma
- ◆ Reduces lung function
- ◆ Lowers resistance to allergens, infections and respiratory diseases such as pneumonia
- ◆ Causes shortness of breath, pain with deep inhalation, coughing and wheezing, headaches, nausea, and eye and throat irritations

Who is most sensitive to health effects of ozone?

- ◆ Children
- ◆ People with asthma or pre-existing lung problems
- ◆ Healthy adults who engage in physical exercise outdoors
- ◆ Healthy adults who engage in manual labor outdoors

What can you do to help reduce ozone?


- ◆ Conserve energy
- ◆ Avoid spilling fuel and topping off the tank
- ◆ Keep engines tuned
- ◆ Keep tires properly inflated
- ◆ Carpool
- ◆ Refuel after 6:00 p.m.
- ◆ Mow lawns after 6:00 p.m.


Want more Ozone information?

- ◆ Visit <http://daq.state.nc.us/airaware/ozone/>

There is a direct link to this site from our City's web page, top right-hand corner, under "Ozone Forecast"

As City co-workers, let's all do our part to help reduce ozone!





Ozone Contest

Let the Games begin!

Ozone season is here! Local news organizations have begun forecasting air quality reports for Hickory, Charlotte and other areas. As you may recall, ozone is measured each day. Based on the concentration of ozone in the air and other environmental conditions, a "color" is assigned based on the risk it can impact on the population, especially those with respiratory sensitivity or illness. Green and yellow alerts indicate low or moderate ozone while orange, red, or purple alerts indicate unhealthy ozone levels.

Beginning Tuesday, July 5, 2005, City and County employees will enter into a little friendly competition to see who is the most "ozone friendly?" For the first year of the contest, only City of Hickory co-workers who have direct e-mail addresses in their individual name are eligible to enter. Group e-mail addresses are not eligible at this time, but we'll work on it for next year!!!

Figure 3.

Catawba County has maintained its dynamic air quality program through sustained outreach and education, awareness and behavior modification programs, and land use regulations designed to improve air quality. The County actively promotes air quality improvement to all coworkers and sponsors an air quality “contest” rewarding those who help contribute to the reduction of ozone pollution. This initiative takes an innovative approach to air awareness by using the county’s intranet to track and report activities that help improve air quality, including car pooling, ride sharing, transit usage, compressed work weeks and other actions that help reduce vehicle miles traveled and the emissions that contribute to the formation of ozone. Additional activities include several presentations made by Health Department employees throughout the County school system, including to 10th grade high school students and approximately 2000 elementary school students. There have been air quality PSAs broadcast on the local television station, several newspaper articles featuring air quality issues, and a variety of other awareness activities including information being provided in Spanish to the local Hispanic population. Other air quality activities by Catawba County include:

- Conducted and completed the Catawba County Ozone Intranet Contest during ozone season where county employees received points and awards for the individual and building earning the most points for participation in ozone prevention activities.
- Expanded the county ozone intranet contest to a friendly competition with City of Hickory employees for the ozone season with County employees winning by a very narrow margin as the most ozone friendly.
- Provided air quality presentations on ozone and PM 2.5 and information upon request to various county agencies, schools and community organizations, including Rotary Clubs, health fairs, and the Catawba County Chamber of Commerce “Leadership Catawba” class.
- Engaged the business community through the Catawba County Chamber of Commerce in a discussion of air quality issues and their participation in ozone reduction activities. Part of this discussion included the Greater Charlotte Chamber of Commerce’s presentation regarding ozone reduction activities in the business community.

As part of the NC Air Awareness program, the City of Newton has adopted and is actively implementing its “Ozone Action Day Plan.” Newton has also formed a local stakeholder group to address local air quality issues and the City distributes informational material to its residents regarding ozone pollution and has been enthusiastically researching alternative fuel vehicles and the City is promoting the development of a Regional Transit Authority to help expand transit services throughout the Unifour area. As a participant in the Unifour EAC, Newton promotes compressed work weeks and flexible schedules for city employees. As part of its awareness program Newton also features ozone information on its website (Figure 4: http://www.newtonnc.gov/Our_neighborhood/environment.htm).



Figure 4.

Other air quality activities since June 30, 2005 include:

- Adopted Eastside Area Plan which provides for mixed use development at major thoroughfare intersections, provides for sidewalks on both sides of new streets and retrofitting existing street with sidewalks on at least 1 side, calls for higher density development closer in to the city where existing utilities and other infrastructure exists or is planned (http://www.newtonnc.gov/Departments/Planning/Area_plans/eastside.htm)
- Adopted an Energy Policy concerning construction of new facilities and energy conservation
- Implemented a no burn policy for all new construction projects involving land clearance and grading
- Implemented requirement for sidewalks in all new subdivisions and planned developments
- Began the Heritage Trail greenway project...received a \$100,000 enhancement grant from NCDOT
- Attended several expositions on alternative fuel vehicles and use of biodiesel products in city fleet and are currently considering the purchase of an alternative fuel vehicle in the current fiscal year, also met with biodiesel vendors and did considerable research on biodiesel to determine if it will be an acceptable fuel supplement for appropriate vehicles...no decision has been made on this to date.
- Implemented Air Quality Action plan through involvement and participation of all city departments

The City of Conover is an active participant in the Unifour EAC and progress over the past 6 months includes:

- Adoption of the City of Conover Energy Conservation Policy and Energy Plan.
- Hired lighting specialist to evaluate and replace florescent light bulbs with a more energy efficient bulb within the City Hall offices.
- Requested department heads to evaluate their facilities for ways to reduce energy consumption.
- Continued membership in the NC Air Awareness Program.
- The Planning Director has continued to serve as the air quality and EAC contact.
- Actively participated in the local air quality committee as a means to identify and recommend locally feasible air improvement actions.
- Collected reports of measures taken by department heads on high ozone action days, including the encouraged use of carpooling and non-use of 2 cycle engines.
- Continued implementation of minimum landscape standards for new developments that promote strategic tree planting, street trees, and parking lot trees in an effort to reduce the heat island effect, reduce the need for air conditioning and help reduce energy usage.
- Investigated the implementation of a tree preservation ordinance.
- Continued use of Smart Growth based ordinances that encourage compact development and mixed uses in an effort to help reduce vehicle travel and encourage pedestrian activity.
- Implementation of a citywide bicycle and sidewalk plan requiring sidewalks along new streets, future implementation along existing streets, and incorporation of a future municipal greenway project.
- Participation and support of the Greater Hickory Metropolitan Planning Organization and Unifour Rural Planning Organization.
- Contribute to and encourage use of Piedmont Wagon system and require bus stops be implemented in new development where feasible.
- Continued study on implementation of increased citizen notification of high ozone days via web page notification and the use of colored flags at key locations.

PART B

**State of NC Contribution
Submitted by NCDAQ**

North Carolina Division of Air Quality EAC Progress Report

1 Introduction

As a requirement of the Early Action Compact (EAC) reporting schedule, this document represents the State's contribution to the EAC areas semi-annual report due to U. S. Environmental Protection Agency (USEPA) by June 30, 2005. Section 2 contains a progress summary for the implementation of North Carolina's Clean Smokestacks Act. Section 3 covers the existing open burning rule and the pending amendments to the rule as well as the ongoing outreach initiatives. Section 4 discusses the continuation of the on-board diagnostic inspection and maintenance program phase-in and this program's outreach campaign. Section 5 provides details on the ozone season forecasting program and Section 6 provides details on the air awareness outreach efforts for the EAC areas.

2 Clean Smokestacks Act

In June 2002, the N.C. General Assembly enacted the Clean Smokestacks Act, requiring coal-fired power plants to reduce annual nitrogen oxides (NOx) emissions by 78% by 2009. These power plants must also reduce annual sulfur dioxide emissions by 49% by 2009 and by 74% in 2013. The Clean Smokestacks Act will reduce NOx emissions beyond the requirements of the NOx SIP Call Rule.

Duke Energy and Progress Energy Carolina, Inc. have both submitted the 2005 annual compliance progress report to North Carolina Utilities Commission on their status to date, upcoming activities, and expected strategies towards achieving the emissions limitations set out in N.C. G.S.143-215.107D. Both companies are on schedule to meet their compliance deadlines.

3 Open Burning Rule and Outreach

The Environmental Management Commission approved a new rule that would ban open burning during the ozone season on code orange and above ozone action days (i.e., days that exceed the National Ambient Air Quality Standards) for those counties that North Carolina Division of Air Quality (DAQ) or Forsyth County Environmental Affairs Department (FCEAD) forecasts next day ozone levels. This is a mandatory no burn rule and became effective on June 1, 2004.

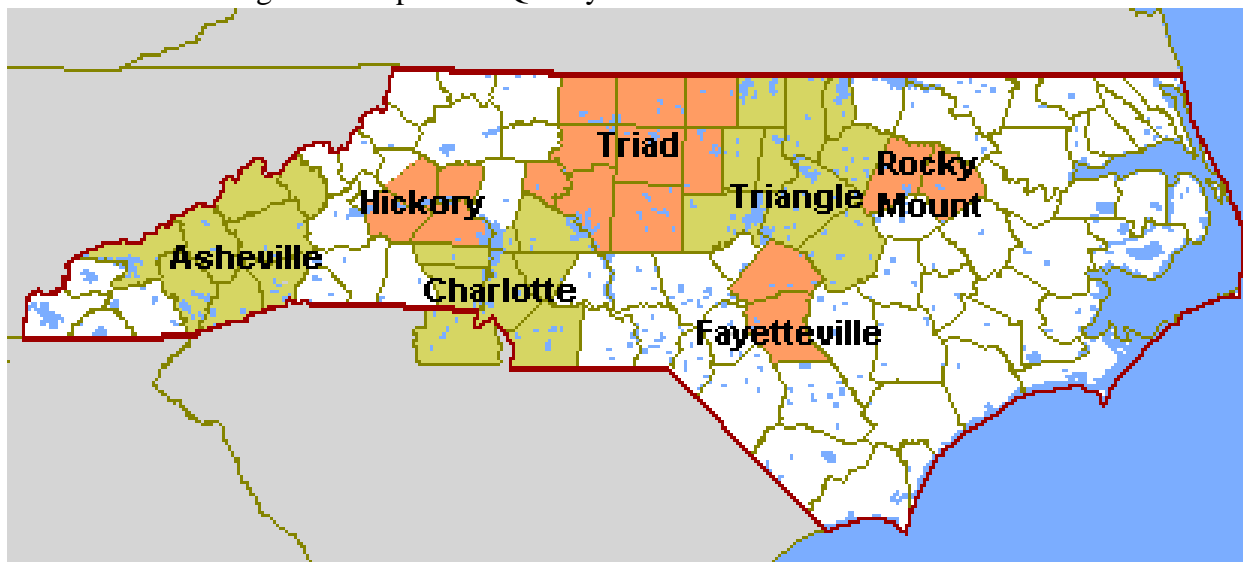
The ban on outdoor burning will help improve air quality and protect public health in areas experiencing Code Orange and or above days. Smoke from outdoor fires is unhealthy to breathe, particularly for people with respiratory problems, and it contributes to ozone and particle pollution. Many of the counties covered by the air quality forecasts are included in

the EAC regions and the burning ban is one of a series of steps that North Carolina is taking to bring these areas back into compliance with national air quality standards.

DAQ is in the process of amending the current open burning rule to include Code Orange or above days for any forecasted pollutant. Currently, DAQ forecasts for both ozone and fine particulate matter in the Charlotte and Hickory area and FCEAD forecasts for both pollutants in the Triad area. Additionally, Rocky Mount, NC, will be added to the list of areas subject to this rule as DAQ currently forecasts for ozone in this area.

The majority of the counties in EAC areas are covered by the open burning rule. Additionally, counties near the EAC areas are covered by the open burning rule and emission reductions from these neighboring areas benefit the EAC areas as well. A map showing all of the forecast counties is below in Figure 1.

Figure 1. Map of Air Quality Forecast Areas in North Carolina



DAQ has undertaken a number of efforts in recent years to better inform the public about open burning and its effect on air quality and public health. The key effort has been the establishment of an Open Burning Outreach Taskforce (OBOT) to develop and implement a plan for increasing public awareness about the rules governing outdoor burning, the risks posed by smoke, and alternatives for disposing waste materials.

OBOT accomplishments, to date, include:

- The development of a new slogan -- "Breathe ... Don't Burn!" -- to use with promotional materials.
- New publications, including one-page fliers that describe open burning regulations in simple, concise language with graphics.
- A one-page handout that summarizes alternatives to open burning.
- Spanish language versions of open burning brochures and fliers.

- A toll-free hotline (1-877-OPEN BURN) that people can call to obtain more information about open burning.
- A billboard advertising campaign along major highways across the state, with the message “Want Clean Air? Don’t Burn” and contact information (web address and toll-free number).
- Web site improvements, including a “burn barrel” logo on DAQ home page that links to an open burning page with more links to information on rules, press releases, publications, photos, forms, and other agencies that deal with burning.
- Training materials (such as PowerPoint presentations) aimed at fire fighters, contractors and other groups.
- Graphics on open burning for the DAQ’s exhibit at conferences and other events.
- Magnets with the open burning slogan and contact information.
- Targeted letters about open regulations to key groups such as contractors and fire fighters.
- An agreement with the state Division of Forest Resources (DFR) to include open burning fliers with burn permits issued by DFR agents.

DAQ has additional open burning outreach efforts that are still under development, including:

- Educational curriculum (7th grade) and materials for K-12 children (pencils, coloring sheets, and teaching guides);
- Videos for educating adults and children; and
- Memoranda of understanding with other state agencies with roles in regulating outdoor burning (Forestry and Agriculture).

4 On-Board Diagnostic Inspection and Maintenance Program

The 1999 Clean Air Bill expanded the vehicle emissions inspection and maintenance (I/M) program from 9 counties to 48, and improved the testing method. Vehicles are being tested using the on-board diagnostic (OBD) system, which indicates NO_x emissions, among other pollutants. The auto emissions inspection program is a key part of the State’s effort to reduce ozone because cars and trucks account for about one-third of the NO_x emissions statewide and up to 70 percent in urban counties.

Since July 1, 2004, motorists in two additional EAC counties, Buncombe and Rockingham Counties, are having their cars and light-duty trucks inspected, as part of the multi-year expansion of the State’s emissions system testing program to help improve air quality. Starting July 1, 2005, five more EAC counties will be required to have their cars and light-duty trucks inspected. The new areas are Burke, Caldwell, Haywood, Stokes and Surry Counties. Additionally, several counties that border EAC areas have recently, or will shortly have, the OBD I/M program implemented. These counties include Harnett County (July 2004) and Robeson County (January 2005), which borders the Fayetteville EAC area; Henderson County (July 2005), which borders the Mountain area EAC; and Wilkes County (July 2005) which borders both the Triad and Hickory EAC areas. The reduction of automobile emissions in bordering counties will also benefit the EAC areas.

North Carolina supports a robust OBD public education and outreach program supported through fees collected with each inspection. In the fall of 2004, new TV and radio ads were developed in both English and Spanish with the talent of John Davis, host of MotorWeek. The goal of the ads was simply to educate the public on the importance of the OBD check engine light and how its proper operation relates to the air we breathe.

North Carolina's 2004 statewide population, according to the US Census Bureau, was 8,541,221. The media advertisement targeted the buy as a statewide campaign in all markets except Wilmington for Phase 5 (January 1, 2005). It was a four-week campaign. All media outlets were utilized including radio, television and newspapers. Our initial statewide goal was to reach a minimum of 50% of all adults 18-64 at least four times on television and 45% of all adults 18-64 at least four times in radio. In many markets, we surpassed this exposure by reaching nearly 75% all adults 18-64 at least four times and in some markets as much as 92% of all adults 18-64 at least four times. Newspapers had two ads per week during the highest circulation days of Sunday and Wednesday. The total circulation of these papers where the ads ran is: 112,208.

Free car care clinics are offered in counties new to the emissions testing program. During these weekend events, the public has the opportunity to meet with trained inspectors and see the equipment used during the OBD tests. Below is the list of DAQ sponsored car clinics scheduled prior to the July 1, 2005 OBD phase-in. Coordination and staffing for these clinics are provided by the Independent Garage Owners of North Carolina.

Clinics were scheduled for the following locations and dates:

- April 30- May 1, Burke County, WalMart, 1227 Burkemont Ave., Morganton
- May 21, Haywood County, WalMart, 157 Paragon Parkway, Clyde
- May 21, Surry County, WalMart Supercenter, 2241 Rockford St., Mount Airy
- May 22, Henderson County, Home Depot, 401 Linda Vista Drive, Hendersonville
- May 22, Stokes County, Food Lion, 1072 N. Main St., Walnut Cove
- June 4-5, Caldwell County, Lenoir Festival Shopping Center, Blowing Rock Blvd., Lenoir
- June 4-5, Wilkes County, WalMart, 1834 Winkler St., Wilkesboro June 11, Rutherford County, Tri-City Mall, U.S. Highway 74A, Forest City

5 North Carolina Ozone Forecasting

DAQ forecasts ozone concentrations for six areas in North Carolina, including the Fayetteville, Mountain area and Hickory EAC areas. The FCEAD forecasts ozone concentrations in the Triad EAC area. The ozone forecasts, issued daily between May 1 and September 30, predict the following day's peak 8-hour ozone concentrations across the forecast area in terms of both color code and Air Quality Index (AQI) number. Individuals are encouraged to modify their outdoor physical activity, according to the level of the forecast, to protect their health. Individuals are also encouraged to take extra steps to reduce ozone-forming emissions on days predicted to exceed the federal ozone standard, which are code orange, red and purple days. The North Carolina Air Awareness program focuses much of its educational outreach on understanding and responding to the forecast.

The Air Quality Forecasts are made available to the public by 3:00 pm daily through several venues. The forecast for areas across the state can be obtained through DAQ's website (<http://www.ncair.org/airaware/forecast/>) and for the Triad area FCEAD's website (<http://www.co.forsyth.nc.us/EnvAffairs/DlyAirQualRpt.htm>). Additionally, the forecasts can be obtained by calling the Air Awareness Hotline (1-888-RU4NCAIR) and the EPA maintained AIRNow website (www.airnow.gov). Forecasts can also be obtained through an email listserv maintained by DAQ. The Forsyth County forecasts can be emailed to interested citizenry via EnviroFlash (<http://cfpub.epa.gov/airnow/index.cfm?action=airnow.enviroflash>), a service of the USEPA. In the future, all air quality forecasts will be made available through the EnviroFlash service to allow for a single listserv for forecasts from across the state.

As of the 2005 ozone season, the Raleigh office of the National Weather Service (NWS) began posting the forecasts for the Triad, the Triangle, Rocky Mount, and Fayetteville areas on their website (<http://www.erh.noaa.gov/rah/airquality/>). In addition, the NWS has made it possible to hear forecasts for central North Carolina via the National Oceanic and Atmospheric Administration (NOAA) weather radio. DAQ hopes to coordinate with other NWS offices to expand this effort to all the NWS offices that cover North Carolina.

All local media providers also receive the Air Quality Forecast for publication in newspapers, television, or radio programs in the region. Currently, all local newspapers and evening and late news broadcasts carry the Air Quality Report as an additional service to the weather segment for their audience.

6 North Carolina Air Awareness Program in the Early Action Compact Areas

Media Advertising

DAQ's North Carolina Air Awareness program (NCAA) is running television and radio public service announcements (PSAs) in the Charlotte, Triangle, and Triad markets during the 2005 ozone season. NCAA is also sponsoring radio drive-time traffic reports and public radio programming. These PSAs and sponsorships are funded by federal Congestion Mitigation and Air Quality Improvement (CMAQ) funds, which may only be spent in nonattainment or maintenance areas. Thus, the PSAs are restricted to these three markets. However, some of the Triangle media reaches the Fayetteville area. In particular, television PSAs are being broadcast on WRAL-TV in Raleigh, which directs a significant amount of news coverage to Fayetteville and which has a large Fayetteville area viewership. Much of the Charlotte media also reaches the Hickory area. Table 1 is a list of radio and television stations carrying NCAA PSAs and sponsorships. PSAs and sponsorships began running during the first week of June 2005 and will continue running until late August 2005.

Table 1. Media outlets running NCAA PSAs and sponsorships June-August 2005

	Triangle	Charlotte	Triad
Broadcast TV stations	WRAL-TV (CBS)	WSOC-TV (ABC)	WXII-TV (NBC) WFMY-TV (CBS)
Cable TV stations	Time-Warner Cable	Time Warner Cable	Time Warner Cable
Radio stations	WRAL-FM WRSN-FM WUNC-Public Radio Total Traffic Network Metro Traffic Network	WKQC-FM WFAE-Public Radio Total Traffic Network Metro Traffic Network	WMAG-FM WTQR-FM WFDD Public Radio Metro Traffic Network

Air Awareness Week

Governor Mike Easley declared April 24-30, 2005 as Air Awareness Week in North Carolina. Several local jurisdictions, including some in the Triad, passed local resolutions in favor of Air Awareness Week, and NCAA distributed a press release soliciting media coverage of the week.

Teacher Training

NCAA hosted an educator training in the Raleigh area on April 9, 2005. Three teachers from the Triad area attended the training.

Fayetteville Air Quality Calendar

In April 2005, the Fayetteville Early Action Compact Group produced an Air Quality Calendar. The DAQ provided a \$500 sponsorship toward the production of this calendar.

NBC-17 Health Fair

In February 2005, NCAA exhibited at the NBC-17 Health and Fitness Expo at the Raleigh Convention Center. This was a huge event, drawing over 30,000 people over two days. While most of the attendees were from the Raleigh area, the event drew attendees other areas of the state, likely including the Triad and Fayetteville areas.

Forecast distribution and Coalition support

NCAA distributes DAQ's daily air quality forecasts via email and fax for several areas of the state, including the Fayetteville and Hickory areas. The FCEAD produces the Triad air quality forecast, and coordinates the Triad Air Quality Coalition. The Fayetteville EAC group is in the process of organizing a Fayetteville Air Quality Coalition, and NCAA is supporting that effort through forecast distribution and outreach materials. There is not currently an active Hickory area coalition.

Outreach materials

NCAA continues to supply printed and promotional items such as brochures, coloring books, pencils, magnets, tote bags, and other items to EAC areas. The policy of DAQ is to make these materials readily available upon request, depending on supply. While exact counts are not available, large quantities of materials have been supplied to the Triad, Fayetteville and Asheville areas.

FCEAD promotes the NCAA outreach in the Triad EAC area. In 2005, the Triad air awareness coordinator gave air quality training and presentations for school-aged children, educators, and to sponsored meetings, luncheons, and press events. Table 2 is a summary of the events since January 2005. Additionally, the Triad coordinator has increased the number of citizens receiving the air quality forecasts, through the Triad air quality coalition, by 11,000.

Table 2. Air Awareness Outreach Events in the Triad Area Since January 2005

Event	County	Attendees
NAACP Community Service and Health Fair	Forsyth	50
Forsyth Audubon Society	Forsyth	20
North Davidson High School	Davidson	70
High Point Regional Hospital	Guilford	13
Guilford Community & Economic Development Department	Guilford	11
Environmental Education Advisory Council	Guilford	40
WFDD Public Radio	Forsyth	2
Winston-Salem Forsyth County Schools	Forsyth	18
Greensboro Parks and Rec. Summer programs	Guilford	8
Guilford Environmental Health	Guilford	6
Clean Air & Government (Sierra Club)	Forsyth	60
Air Awareness Day at SciWorks	Forsyth	1500
Camp Hanes	Stokes	40
Bur Mill Environmental Fest	Guilford	250
Air Quality Leadership Event	Forsyth	53
Wake Forest University Baptist Medical Center Health Fair	Forsyth	1000
Curves for Women	Guilford	37
Moses Cone	Guilford	22
NW Forsyth American Little League	Forsyth	160
W-S Recreation Department.	Forsyth	18
Infant Mortality Coalition	Forsyth	200
Burlington City Health Fair	Alamance	175
Forsyth County Health and Fitness Day	Forsyth	450
Mayodan/Madison Cities Health and Fitness Fair	Rockingham	80
SciWorks Science Saturday Program	Forsyth	38
Wake Forest University - Sports Camps	Forsyth	360
Total		4681

APPENDIX A

Charlotte Observer, The (NC)
December 23, 2005

**GOVERNMENTS WORK TO SAVE ENERGY, AIR
CATAWBA VALLEY COULD BE OFF EPA'S SANCTION LISTS IN 2008
GREG LACOUR, GLACOUR@CHARLOTTEOBSERVER.COM**

The 10 Catawba Valley governments that banded together three years ago to improve air quality have adopted policies that lay out their methods to save energy and reduce emissions. Caldwell County, which adopted its policy Dec. 19, was the last, said Ron Hancock, a Western Piedmont Council of Governments planner advising the governments on conservation and air-quality issues.

Many of the plan's measures - installation of low-energy lighting systems and proper insulation in county buildings, for example - are things the county and its fellow governments have been doing for the past five years, since the state and federal governments began warning them about poor air quality. But the plans are especially important as a gesture to the state Division of Air Quality and U.S. Environmental Protection Agency, Hancock said. The plans show that the 10 governments involved - collectively, on air-quality issues, called the Unifour Air Quality Compact - have concrete plans for conserving energy, therefore reducing emissions, he said.

The EPA has threatened Catawba Valley governments in the past with sanctions and fines because of high levels of atmospheric ozone in the air. Since then, the governments have worked to find ways to reduce ozone emissions through the Air Quality Compact.

For the past two years, the area has met EPA standards for ozone, Hancock said. If those readings remain good, the EPA will reclassify the area in April 2008 and remove the threat of sanctions and fines. "We're just saying to the EPA and anyone else who cares, 'If we build anything, we will design it to be as energy-efficient as we can make it,' " said Caldwell commissioner John Thuss, a member of the Air Quality Compact's board.

Thuss and fellow commissioner Herb Greene are working on another project that might vault Caldwell County into the forefront of conservation in the Catawba Valley.

They're trying to seek money for a processing plant that would produce biodiesel fuel, a cleaner-burning diesel fuel made from natural, renewable sources such as vegetable oils. Their plan would be to place the plant at the old county landfill on Mount Herman Road in Hudson. The plant would harvest methane gas from the landfill and use it as a heat source during the processing of vegetable oil, collected from local restaurants, into biodiesel. It's merely an idea for now. But county officials have discussed methane harvesting from the old landfill for years, and Thuss and Greene believe the biodiesel could fuel school buses, county vehicles and construction equipment to save money and reduce emissions.

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Energy Conservation Policy for Public Facilities

Findings:

- (a) The County of Alexander hereby finds:
 - (1) That it is important to take a leadership role in undertaking energy conservation;
 - (2) That county facilities have a considerable impact on the region's consumption of energy;
 - (3) That energy conservation practices adopted for the design, construction, operation, maintenance, and renovation of these facilities and for the purchase, operation, and maintenance of equipment for these facilities will have a beneficial effect in reducing emissions from electrical generating units (EGUs) that contribute to air pollution;
 - (4) That the cost of energy is significant and facility designs shall take into consideration the total life-cycle cost, including the initial construction cost, and the cost, over the economic life of the facility, of the energy consumed, and of operation and maintenance of the facility as it affects energy consumption; and
 - (5) That local government shall undertake a program to reduce energy use in county facilities and equipment in those facilities in order to provide its citizens with an example of energy-use efficiency.

- (b) It is the policy of Alexander County to ensure that energy conservation practices are employed in the design, construction, operation, maintenance, and renovation of Alexander County facilities and in the purchase, operation, and maintenance of equipment for Alexander County facilities.

Definitions.

For purposes of this Policy:

- (1) "Economic life" means the projected or anticipated useful life of a facility.
- (2) "Energy-consuming system" includes but is not limited to the following equipment or measures:
 - a. Equipment used to heat, cool, or ventilate the facility;
 - b. Equipment used to heat water in the facility;
 - c. Lighting systems;
 - d. On-site equipment used to generate electricity for the facility;
 - e. On-site equipment that uses the sun, wind, oil, natural gas, liquid propane gas, coal, or electricity as a power source; and
 - f. Energy conservation measures in the facility design and construction that decrease the energy requirements of the facility.
- (3) "Facility" means a building or a group of buildings served by a central energy distribution system or components of a central energy distribution system.
- (4) "Life-cycle cost analysis" means an analytical technique that considers certain costs of owning, using, and operating a facility over its economic life, including but not limited to:

- a. Initial costs;
 - b. System repair and replacement costs;
 - c. Maintenance costs;
 - d. Operating costs, including energy costs; and
 - e. Salvage value.
- (5) "Energy conservation measure" means a facility alteration, training, or services related to the operation of the facility, when the alteration, training, or services provide anticipated energy savings. Energy conservation measure includes any of the following:
- a. Insulation of the building structure and systems within the building.
 - b. Air-locking exterior doors and windows, caulking, weatherstripping, multi-glazed windows or doors, heat-absorbing or heat-reflective glazed or coated window or door systems, additional glazing, reductions in glass area, or other window or door system modifications that reduce energy consumption.
 - c. Automatic energy control systems.
 - d. Heating, ventilating, or air-conditioning system modifications or replacements.
 - e. Replacement or modification of lighting fixtures to increase the energy efficiency of a lighting system without increasing the overall illumination of a facility, unless an increase in illumination is necessary to conform to the applicable State or local building code or is required by the light system after the proposed modifications are made.
 - f. Energy recovery systems.
 - g. Cogeneration systems that produce steam or forms of energy such as heat, as well as electricity, for use primarily within a building or complex of buildings.
 - h. Other energy conservation measures.
- (6) "Energy savings" means a measured reduction in fuel costs, energy costs, or operating costs created from the implementation of one or more energy conservation measures when compared with an established baseline of previous fuel costs, energy costs, or operating costs.

Life-cycle cost analysis.

- (a) A life-cycle cost analysis shall include, but not be limited to, the following elements:
- (1) The coordination, orientation, and positioning of the facility on its physical site;
 - (2) The amount and type of openings employed in the facility;
 - (3) Thermal characteristics of materials and the amount of insulation incorporated into the facility design;
 - (4) The variable occupancy and operating conditions of the facility, including illumination levels; and
 - (5) Architectural features which affect energy consumption.

- (b) The life-cycle cost analysis performed for any facility shall include, but not be limited to, the following:
 - (1) An energy-consumption analysis of the facility's energy-consuming systems;
 - (2) The initial estimated cost of each energy-consuming system being evaluated;
 - (3) The estimated annual operating cost of all utility requirements; and
 - (4) The estimated annual cost of maintaining each energy-consuming system.
- (c) Alexander County requires each entity to conduct a life-cycle cost analysis pursuant to this section for the construction or the renovation of any facility of 20,000 or more gross square feet.
- (d) Each agency shall use the life-cycle cost analysis over the economic life of the facility in selecting the optimum system or combination of systems to be incorporated into the design of the facility.

Authority and Duties of County Agencies.

- (a) Alexander County authorizes and directs that county agencies shall carry out the construction and renovation of county facilities, under their jurisdiction in such a manner as to further the policy declared herein, ensuring the use of life-cycle cost analyses and energy-conservation practices.
- (b) The Department of Planning and Development shall identify and recommend energy conservation maintenance and operating procedures that are designed to reduce energy consumption within facilities, in conjunction with appropriate personnel, which require no significant expenditure of funds. Relevant county departments, institutions, or agencies shall implement these recommendations.

Primary Energy Use Categories

HVAC
Lighting
Hot Water
Food Preparation
Processing/Equipment
Misc. Use

Areas for Conservation Potential

Administration and Communications
Utilities Accounting
Office Equipment
New Construction
Lighting

HVAC
Building Envelope
Electric Motors
Steam and Hot Water Systems
Compressed Air
Misc. Equipment
Energy Management Systems

Best Energy Management Practices

1. Commitment by top-level management
2. Clearly defined energy reduction goals.
3. Communication of the goals to all organizational levels.
4. Assignment of responsibility and accountability at the proper level.
5. Tracking of energy use.
6. Continuous identification of all potential savings.
7. Adoption of project investment criteria reflecting project risks and returns.
8. Provision of recognition and reward for achieving the goals.

Action Items for Top Management

- Brief organization on energy efficiency responsibilities and the economic and environmental justifications.
- Establish Conservation Action Teams (CAT) with guidelines to:
 - Develop a Strategic Energy Plan
 - Create an Action Plan
 - Train and Motivate Staff
 - Evaluate Performance
- Set energy saving goals.
- Communicate management goals and report progress.
- Obtain external assistance, if appropriate.

Ten Simple Energy Conservation Measures that can save 50% or more on energy costs:

1. Turn off lights when not needed.
2. Remove unneeded light bulbs.
3. When replacing bulbs, use lower wattage or more efficient ones.
4. Lower heat settings.
5. Raise air conditioning settings.
6. Reduce heating and air conditioning during unoccupied hours.
7. Adjusting heating and air conditioning units before the end of operating hours.
8. Have heating, ventilation, and air conditioning subsystems serviced and adjusted.
9. Turn off machines and equipment when not needed.
10. Make sure all automatic controls are in good working condition and are set properly.

Early Action Compacts December Progress Summary Table

A. Control Measure	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
8 Unifour Area, NC (Effective date of nonattainment designation deferred)							
Open burning ban-ozone action days	The NC Environmental Management Commission approved a new rule that would ban open burning during the ozone season on code orange and code red ozone action days for those counties that NCDQA forecasts next day ozone levels, including the Unifour area.	This is a mandatory no burn rule for metropolitan areas around the state of NC including the Hickory area. The NCDQA has formed an Open Burning Outreach Team (OBOT) responsible for helping to disseminate information to the public regarding open burning.	June 1, 2004	0.7 TPD	0.5 TPD		The emissions are calculated for open burning by multiplying the rural population by an emission factor provided by the U. S. Environmental Protection Agency. To model the open burning rule, a conservative 50% compliance/penetration/effective combined rate was assumed for those counties in our ozone forecast areas.
Local governments join NC Air Awareness Program	Local governments join and participate in the NC Air Awareness Program. This measure calls for the development, adoption, and implementation of an "Ozone Action Day Plan." These plans include provisions that help reduce ozone pollution on "alert days." The Air Awareness program also includes outreach and education programs designed to inform residents on issues relevant to air quality.	Each local member of the EAC has adopted an "Ozone Action Day Plan" with provisions that help reduce ozone pollution.	2004 and 2005				The NC Division of Air Quality issues a ground-level ozone forecast every day from May 1st through September 30th that consists of a color-coded forecast and corresponding Air Quality Index (AQI) number. The AQI values predict the maximum 8 hour ozone concentration for the following day. This information is distributed to participants via email and the NC Ozone Forecast Center website. The ozone forecasts allow organizations to make preparations to take action and implement their Ozone Action Plans.
Enhanced awareness; outreach; educate	This activity has been combined with the measures related to the NC Air Awareness Program and local clean air policies.						
Energy conservation plan	An energy conservation plan will be developed that directs local EAC members to reduce the consumption of electricity in public facilities through practical measures related to: lighting systems, HVAC, weatherproofing, insulation, electrical equipment, etc.	Each local member of the EAC has adopted an "Energy Conservation Plan," or policy with provisions that help conserve natural resources and reduce emissions from EGUs.	2005	0.5 TPY	0.4 TPY		
Staff person-air quality contact	Designation of air quality contacts for each EAC local member will help guarantee each organization's adherence to all other local control measures. These contacts will be responsible for the dissemination of air quality information throughout their respective organizations and for the oversight of air quality programs and EAC reporting requirements as well as local outreach and education programs.	Each local EAC government have appointed staff members as their air quality contact.	2004				
Adopt local clean air policy	Adopt a local clean air policy and appoint stakeholder group to identify and recommend locally feasible air quality improvement strategies.	Each local member of the EAC has adopted clean air policies.	2005				
Landscape/tree ordinances	Planted trees and vegetative landscaping reduce the need for air conditioning, reduce the heat island effect in urban areas, and help reduce consumption of electricity. Landscaping ordinances establish minimum standards for new developments and promote the concepts of "Urban Forestry" in an effort to reduce emissions from EGUs.	Each local member of the EAC has adopted landscaping standards for new developments in their jurisdictions.	2003 / 2005				
Implement Smart Growth	Each local EAC member will actively encourage compact development that provides air quality benefits by promoting land use activities and associated travel behavior which minimizes vehicle miles traveled.		2003 / 2005				
Encourage bicycle and pedestrian usage	Each member will contribute to a regional bicycle and pedestrian plan that includes provisions for the establishment of a network of greenways paths, trails, and bicycle facilities for the continued pursuit of additional non-motorized travel opportunities throughout the Unifour.	The WPCOG has documented such ongoing efforts throughout the Unifour in the Greater Hickory Urban Area Transportation Plan. (http://trans.wpcog.org/planning.asp)	2003 / 2005	2.0 TPY	1.6 TPY		

Early Action Compacts December Progress Summary Table

A. Control Measure	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Support coordination of transportation planning organizations	The Greater Hickory MPO, and the Unifour RPO, do long range transportation planning on a five year cycle to ensure that highway and transit projects conform to the air quality goals established by the EAC's air quality SIP.	All ten members of the EAC participate and make significant contributions to the MPO planning process and all four counties in the region participate and contribute to the MPO.	2003				The Greater Hickory MPO and RPO will coordinate transportation activities in the Unifour Area in such a way that does not cause new air quality violations, worsen existing violations, or delay attainment of the national ambient air quality standards for ozone. The MPO and RPO will use the directionally appropriate concepts of Transportation Conformity as a foundation for transportation planning activities. The WPCOG conducts these activities based largely on results from the modeling of mobile source emission budgets supplied by the NCDQA.
Encourage compressed/flexible work schedules	In an effort to reduce emissions from mobile sources, members encourage the use of compressed work weeks and flexible hours for government employees wherever appropriate.	Currently, several of the stakeholders, including Caldwell County, Catawba County, and the City of Hickory actively use this technique to help reduce traffic congestion and related air quality problems. All members have adopted resolutions supporting this measure.	2004	1.5 TPY	1.3 TPY		
Expand transit and ridesharing	The Piedmont Wagon Transit System (PWTS) and the Piedmont Wagon Manager's Consortium is committed to air quality improvements by continually evaluating expanding transit service and the number of system users. The system has adopted policies that limit bus idling and incorporate the latest transit technology into the system. The Piedmont Wagon Transit System will seek to play a useful role in not only providing an efficient public transit service but also in fostering the implementation of ridesharing programs by area businesses.	The Piedmont Wagon Transit System has increased its service area and is taking delivery of new equipment to replace older less efficient buses. The WPCOG has initiated a feasibility study for the development of a regional transit authority to serve the greater metro area.	2005	0.5 TPY	0.4 TPY		
More efficient trafficking systems	A Transportation Demand Management (TDM) plan will complement the ongoing transportation planning activities in the region and help alleviate air quality problems through efficient traffic management, engineering, and maintenance.	The City of Hickory currently uses coordinated signalization and traffic management in efforts to avoid idling problems and to help decrease traffic congestion. The City of Lenoir has performed major route configurations to several thoroughfares, effectively reducing congestion in the City's CBD.	2005				
Expand vehicle I&M	The vehicle emissions inspection and maintenance program has been expanded in the Unifour to include Caldwell, Burke, and Catawba Counties. Vehicles are tested using the onboard diagnostic system (OBDII), an improved method of testing, which indicates NOx emissions, among other pollutants. The previously used tailpipe test (i.e., idle test) did not measure NOx. The inspection and maintenance program is above and beyond what is federally required for these areas.	The Inspection and Maintenance program has been implemented three Unifour counties.	July 2003 - July 2005	0.8 TPD	0.8 TPD		
Clean Smokestacks Act	In June 2002, the N.C. General Assembly enacted the Clean Smokestacks Act, requiring coal fired power plants to reduce annual NOx emissions by 78% by 2009. These power plants must also reduce annual sulfur dioxide emissions by 49% by 2009 and by 74% in 2013.	This measure was modeled in the attainment demonstration and included in the SIP as a state measure.	June 2005		4.95 TPD		One of the first state laws of its kind in the nation, this legislation provides a model for other states in controlling multiple air pollutants from old coal-fired power plants.
Clean Cities and AFVs	The UAQC will continue its participation as a stakeholder in the Carolina Clean Fuels Coalition and utilize the concepts and methods of the Department of Energy Clean Cities program in order to bring more alternative fuels and alternative fuel vehicles (AFVs) to the Unifour. Members of the EAC will commit to replacing conventional vehicles with AFVs and towards the creation or expansion of alternative fuel delivery systems within the region.	Each local member of the EAC has committed to the research and pursuit of additional Alternative Fuel Vehicles and alternative fuel delivery systems wherever feasible.	2005			Caldwell County has applied for a \$400,000 grant from the State of NC to promote alternative fuels. Catawba County has applied for a \$260,000 grant from the EPA in an effort to expand AFVs in the region.	This measure was not included in the summary table provided by EPA. It is one of the original local control measures and the WPCOG and UAQC have been actively pursuing funding to help increase AFVs and the AFV infrastructure in the region.

Comments:

**North Carolina
Early Action Compact Area
8-Hour Ozone Maintenance Plan
Tracking Report**



December 20, 2005

Preface

This document contains the 8-hour ozone maintenance plan tracking report for Early Action Compact Areas in North Carolina.

Executive Summary

The Early Action Compact (EAC) Agreement

Early Action Compact (EAC) areas were given the opportunity to develop local control strategies to meet the 8-hour ozone national ambient air quality standard (NAAQS) earlier than required by the Clean Air Act. In turn, the United States Environmental Protection Agency (USEPA) agreed to defer the effective date of the nonattainment designation for these areas. If an EAC area attains the 8-hour ozone NAAQS by December 31, 2007 and meets all of their EAC milestones, the USEPA will designate the area as attainment. The EAC areas in North Carolina (NC) include the Cumberland County EAC area; the Mountain EAC area (Buncombe, Haywood and Madison Counties); the Triad EAC area (Alamance, Caswell, Davidson, Davie, Forsyth, Guilford, Randolph, Rockingham, Stokes, Surry and Yadkin Counties); and, the Unifour EAC area (Alexander, Burke, Caldwell, and Catawba Counties).

Annual Review of Growth

The annual review of stationary point source emissions shows NC EAC areas experienced decreases in NO_x emissions for the period evaluated. Two individual counties within EAC areas, Haywood County and Yadkin County, reported NO_x emissions from stationary point sources at levels high enough to meet one of two action triggers. However, there was no corresponding increase in ozone formation in those counties. Therefore, the North Carolina Division of Air Quality (NCDAQ) is not required and does not believe it is appropriate to take further action at this time.

Based on the annual vehicle miles traveled (VMT) growth rate from the EAC SIP and the latest data from the North Carolina Department of Transportation (NCDOT), all of the EAC areas meet the maintenance plan requirements. The only county whose annual VMT growth rate for 2000-2004 is greater than 10% of the annual VMT growth rate for 2000-2007 used in the attainment demonstration is Guilford County (11.77% increase). The 2003-2005 8-hour ozone design value for the ambient monitor (McLeansville) in Guilford County is 0.077 ppm which is below the 0.080 ppm threshold. Furthermore, the design values for the McLeansville monitor have steadily decreased over the past five years. Therefore, Guilford County currently meets the EAC maintenance plan criteria.

Impact on Ozone Formation

For the period evaluated, all of the EAC areas experienced decreases in ozone concentrations. Even though the meteorological conditions during the 2005 ozone season were more conducive to ozone formation, the EAC areas observed few exceedances. Most areas observed far fewer exceedances than in 2002 (which also had a warm and dry ozone season similar to the conditions experienced in 2005) and were generally below the average number of exceedance days for 1994-2005.

Conclusion

Neither the stationary point source nor mobile source action triggers detailed in the maintenance plan section of the EAC State Implementation Plan (SIP) were met. Therefore, the NCDAQ is not required to take further action at this time.

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I. Background

On December 17, 2004, the North Carolina Department of Environment and Natural Resources (NCDENR), Division of Air Quality (NCDAQ), submitted to the United States Environmental Protection Agency (USEPA) North Carolina's 8-hour ozone national ambient air quality standard (NAAQS) attainment demonstration for regions designated as Early Action Compact (EAC) areas. The EAC areas in North Carolina include the Cumberland County EAC area; the Mountain EAC area (Buncombe, Haywood and Madison Counties); the Triad EAC area (Alamance, Caswell, Davidson, Davie, Forsyth, Guilford, Randolph, Rockingham, Stokes, Surry and Yadkin Counties); and, the Unifour EAC area (Alexander, Burke, Caldwell, and Catawba Counties).

Early Action Compact areas were given the opportunity to develop local control strategies to meet the 8-hour ozone NAAQS earlier than required by the Clean Air Act. In turn, the USEPA agreed to defer the effective date of the nonattainment designation for these areas. If an EAC area attains the 8-hour ozone NAAQS by December 31, 2007 and meets all of their EAC milestones, the USEPA will designate the area as attainment. The Mountain EAC area in North Carolina was designated as attainment in April 2004; however, the three counties listed above decided to continue their EAC agreement because of the public health benefits of the program. The December 2004 attainment demonstration showed all of North Carolina's EAC areas meeting the 8-hour ozone NAAQS by December 31, 2007 and maintaining that standard through 2017. In fact, all areas are now attaining the 8-hour ozone NAAQS. The NCDAQ committed to annual tracking of stationary point and highway mobile sources emission inventories data to assess progress in meeting these attainment goals. This is the first annual tracking report submitted to meet that commitment.

II. Annual Tracking for Growth

Stationary Point Source Emission Inventory Data Review

In the December 2004 attainment demonstration submittal, NCDAQ committed to conduct an annual review of growth of stationary point sources by comparing the latest available annual stationary point source nitrogen oxides (NO_x) emissions inventory to the 2000 base year NO_x inventory used in the attainment demonstration air quality modeling analyses. For this report, the latest stationary point source inventory available is for 2003. NCDAQ committed to both a county-by-county comparison and a composite for the entire EAC area.

Tables 1 - 4 below show the total NO_x emissions from all permitted stationary point sources (in tons per year) for 2000 and 2003. Only larger facilities with Title V permits are required to report emissions annually. Therefore, the NCDAQ "assumed" emissions for facilities that were not required to report in a specified year. Since these sources tend to be small and do not generally have significant emissions changes from year to year, the "assumed" emissions for these sources were based on data from the last year they were required to report. Facility-specific NO_x emissions inventory data used to generate the following tables can be found in Appendix A (for calendar year 2000) and Appendix B (for calendar year 2003) of this report.

**Table 1: NOx Emissions from Permitted Stationary Sources
Cumberland County EAC Area (tons/year)**

	2000	2003	Percent Change
<i>Cumberland County</i>	831.7	847.3	1.9%

**Table 2: NOx Emissions from Permitted Stationary Sources
Mountain Area EAC Area (tons/year)**

	2000	2003	Percent Change
<i>Buncombe County</i>	6,931.4	5,389.1	(-) 22.3%
<i>Haywood County</i>	4,742.1	5,368	13.2%
<i>Madison County</i>	0	0	0%
<i>Total for Area</i>	11,673.5	10,757.1	(-) 7.9%

**Table 3: NOx Emissions from Permitted Stationary Sources
Triad EAC Area (tons/year)**

	2000	2003	Percent Change
<i>Alamance County</i>	418.3	395.6	(-) 5.4%
<i>Caswell County</i>	8.3	0	(-) 100.0%
<i>Davidson County</i>	4,454.4	1,901.8	(-) 57.3%
<i>Davie County</i>	68.9	40.8	(-) 40.8%
<i>Forsyth County</i>	2493.7	2161.0	(-) 13.3%
<i>Guilford County</i>	657.5	554.9	(-) 15.6%
<i>Randolph County</i>	362	358.5	(-) 1.0%
<i>Rockingham County</i>	9,214.5	8,345.3	(-) 9.4%
<i>Stokes County</i>	32,513.1	26,874.4	(-) 17.3%
<i>Surry County</i>	475.5	426.1	(-) 10.4%
<i>Yadkin County</i>	0	2.9	Greater than 100%
<i>Total for Area</i>	50,666.2	41,061.3	(-) 19%

**Table 4: NOx Emissions from Permitted Stationary Sources
Unifour EAC Area (tons/year)**

	2000	2003	Percent Change
<i>Alexander County</i>	19	16.5	(-)13.2%
<i>Burke County</i>	344.5	272.5	(-)20.9%
<i>Caldwell County</i>	473.3	478	1.0%
<i>Catawba County</i>	27,075	20,616.9	(-)23.9%
<i>Total for Area</i>	27,911.8	21,383.9	(-) 23.4%

North Carolina agreed to identify and implement additional controls on stationary sources sufficient to offset the growth in the stationary source NO_x emissions if:

- actual stationary source NO_x emissions are greater than 10 percent higher than those emissions used in the EAC State Implementation Plan (SIP) modeling analysis either for an individual county or for the entire EAC area, **and**
- there has also been a corresponding increase in ozone levels in the area such that the latest 3 year design value is greater than 0.080 ppm.

When looking at the EAC areas as a whole, the Cumberland County EAC area was the only area showing an increase in NO_x emissions (1.9 %) for the time period evaluated. Based on the criteria above, this slight increase in emissions does not warrant further action by the NCDAQ.

Yadkin County and Haywood County both reported NO_x emissions in 2003 greater than 10 percent higher than those emissions used in the 2000 EAC SIP modeling analysis. Yadkin County is in the Triad EAC area. The increase in NO_x emissions in Yadkin County can be attributed to the fact that there were no NO_x sources in Yadkin County in the 2000 base year. The 2.9 tons/year of NO_x emissions reported in Yadkin County in 2003 represent only a very small portion of the total NO_x emissions reported in the Triad EAC area. Therefore, NCDAQ does not believe further action is warranted to address this small emissions increase.

Haywood County is in the Mountain Area EAC area. Haywood County's stationary point source emissions growth (13.2% increase) was slightly higher than the action trigger criteria. The increase in NO_x emissions in Haywood County can be attributed to one source, Blue Ridge Paper Products – Canton Mill. NCDAQ is currently evaluating Blue Ridge Paper Products to determine if they must install best available retrofit technology (BART) controls as part of North Carolina's strategy for meeting regional haze requirements to improve visibility. Even with this increase in stationary source NO_x emissions in Haywood County, both the 1-hour and 8-hour ozone design value trends for the Mountain Area EAC area (1994-2005) have steadily decreased. Furthermore, North Carolina has recorded no exceedances of the 1-hour ozone NAAQS and only one exceedance of the 8-hour ozone NAAQS in the mountains in the past 3 years.

The air quality analysis in Section III of this report shows no corresponding increase in ozone levels in either Yadkin or Haywood Counties or in their corresponding EAC areas. Therefore, based on the criteria above, no further action is required by the NCDAQ at this time.

Mobile Source Emission Inventory Data Review

The NCDAQ also committed to conducting an annual review of growth in highway mobile sources. To meet the highway mobile EAC maintenance plan requirements:

- 2000-2004 annual Vehicle Miles Traveled (VMT) growth rate cannot exceed the 2000-2007 annual VMT growth rate by 10% for an individual county or the entire EAC area, **and**

- there cannot be a corresponding increase in ozone levels in the area such that the latest 3 year design value is greater than 0.080 ppm.

Table 5 below shows the comparison between the VMT from the EAC State Implementation Plan (SIP) and the VMT from the latest North Carolina Department of Transportation (NCDOT) data. Data used to generate Table 5, as well as further information on where this data was derived, can be found in Appendix C of this report.

Table 5: Comparison Between the EAC SIP VMT and the latest NCDOT VMT Data

	Annual VMT Growth Rate from EAC SIP	Annual VMT Growth Rate from Latest NCDOT Data	% Change
Cumberland Co. EAC Area			
Cumberland	1.66	0.96	-42.41
Unifour EAC Area			
Alexander	3.88	2.66	-31.42
Burke	2.01	0.58	-71.28
Caldwell	3.10	2.30	-25.77
Catawba	2.73	1.40	-48.74
Total Area	2.67	1.42	-46.95
Mountain EAC Area			
Buncombe	2.16	1.85	-14.15
Haywood	2.42	1.10	-54.67
Madison	2.29	1.78	-22.13
Total Area	2.24	1.65	-26.25
Triad EAC Area			
Alamance	2.29	0.58	-74.71
Caswell	2.40	-0.80	-133.34
Davidson	2.82	0.96	-66.14
Davie	2.51	1.76	-29.97
Forsyth	2.32	1.70	-26.59
Guilford	2.17	2.43	11.77
Randolph	2.87	0.68	-76.25
Rockingham	2.34	-0.26	-110.93
Stokes	2.20	1.65	-24.87
Surry	2.60	-0.14	-105.45
Yadkin	2.29	1.05	-54.42
Total Area	2.38	1.32	-44.51

All of the EAC areas as a whole showed lower VMT growth during the period analyzed compared to the VMT growth assumed in the EAC State Implementation Plan.

Guilford County, which is in the Triad EAC area, is the only individual county where the annual VMT growth rate for 2000-2004 is greater than 10% of the annual VMT growth rate for 2000-2007 (11.77 % increase). The VMT growth rate in Guilford County was dramatically impacted between 2003 and 2004 by two major road construction projects in the county. One impacting project was the widening of I-40/I-85 from 4 to 8 lanes and another was the construction of six additional lanes of the south to southeast section of the Greensboro Beltway Loop. The Triad area previously had two converging Interstates, I-40 and I-85, traveling through the central part of one of North Carolina’s largest urban areas. In the last ten years, significant construction has been initiated to relieve congestion between Burlington and Winston-Salem, North Carolina. The I-85 bypass construction allowed traffic to be redirected (around the heart of Greensboro) and connect with the I-85 business much further south to southwest toward High Point and eventually Charlotte.

Table 6 below shows the 2003-2004 annual VMT growth rate per road type in Guilford County.

Table 6: 2003-2004 Guilford County Annual VMT Growth Rate per Road Type

		2003 DVMT	2004 DVMT	Annual Growth Rate
Rural	Interstate	684.28	736.18	7.58
	Principal Arterial	469.5	469.3	-0.04
	Minor Arterial	228.53	228.53	0.00
	Major Collector	550.86	538.2	-2.30
	Minor Collector	23.41	23.41	0.00
	Local	369.81	369	-0.22
	Total Rural	2326.39	2364.62	1.64
Urban	Interstate	2578.55	2808.75	8.93
	Freeway	1137.74	1871.26	64.47
	Principal Arterial	1602.44	1587.82	-0.91
	Minor Arterial	1978.33	1955.78	-1.14
	Collector	310.15	310.76	0.20
	Local	881.53	885.26	0.42
	Total Urban	8488.74	9419.63	10.97
Total Rural & Urban		10815.13	11784.25	8.96

As shown in Table 6, there was a 64.47% increase in VMT on urban freeways during the 2003-2004 timeframe that resulted in a total increase of 8.96% across all road types.

Traffic congestion has been an issue in Greensboro because of the converging of the I-40 and I-85 interstates. The completion of construction projects to help minimize this congestion are the primary reasons for the significant increase in VMT during 2003-2004. Now, with the equivalent of 10 additional lanes of capacity, this area has reduced congestion and delay. It should be noted that this additional lane capacity was included in the travel demand model VMT used in the attainment demonstration. The DAQ will continue to collaborate with the transportation planners in Guilford County to ensure VMT growth continues to stabilize through the Greensboro area.

III. Air Quality Analysis

The NCDAQ is required to evaluate design value (DV) trends and ozone exceedance trends from 1994 to 2005 to determine if any of the EAC areas show increases in ozone formation. It should be noted, the 2005 ambient ozone data is currently being quality assured by NCDAQ staff and has not been officially submitted to the USEPA. Therefore, the 2005 values in the tables below may change.

Specifically, the NCDAQ evaluated the following data as part of the air quality analyses:

- 1-Hour Ozone Design Value Trends – Most recent 1-hour ozone design values compared to the trend in 1-hour ozone design values from the 1994-1996 timeframe to present.
- 8-hour Ozone Design Value Trends – Most recent design values (3 year average of the 4th highest 8-hour ozone average), compared to the trend in design values from the 1994-1996 timeframe to present.
- 1-Hour Ozone Exceedances – Number of exceedances of the 1-hour ozone standard at each monitor in the EAC areas for the most recent ozone season, compared to the number of exceedances at each monitor from 1994 to present.
- 8-Hour Ozone Exceedances – Number of exceedances of the 8-hour ozone standard at each monitor in the EAC areas for the most recent ozone season, compared to the number of exceedances at each monitor from 1994 to present.
- 4th Highest Value Trends – 4th Highest 1-hour ozone value compared to the 4th highest 1-hour ozone value from 1994 to present.

A summary of this analysis is provided below. A description of weather patterns and climatology for the 2005 ozone season is also included.

1-hour Design Value Trends

Across all EAC areas, 1-hour ozone design values peaked during the 1997-1999 and 1998-2000 periods (see Table 7 below). Since this period, design values have steadily declined and have remained below the 0.124 ppm ozone NAAQS.

Region	Monitoring Sites	AIRS ID	1-hour Design Value Summary (ppm)									
			94-96	95-97	96-98	97-99	98-00	99-01	00-02	01-03	02-04	03-05
Asheville	Bent Creek	37-021-0030	0.085	0.086	0.108	0.111	0.111	0.106	0.106	0.103	0.103	0.092
	Frying Pan	37-087-0035	0.095	0.095	0.106	0.107	0.104	0.098	0.098	0.098	0.098	0.091
	Purchase Knob	37-087-0036	0.094	0.106	0.103	0.105	0.103	0.102	0.104	0.104	0.104	0.091
	Waynesville	37-087-0004				0.090	0.094	0.094	0.095	0.091	0.091	0.084
Unifour (Hickory)	Taylorsville (Waggin Trail)	37-003-0004	0.094	0.094	0.110	0.110	0.111	0.106	0.110	0.106	0.104	0.095
	Lenoir / Caldwell Co.	37-027-0003	0.095	0.097	0.111	0.114	0.114	0.107	0.099	0.105	0.098	0.094
Triad	Coolemees	37-069-0002	0.103	0.105	0.113	0.123	0.123	0.122	0.118	0.119	0.116	0.105
	Hattie Ave.	37-067-0022	0.108	0.115	0.115	0.117	0.113	0.112	0.116	0.116	0.116	0.102
	Union Cross	37-067-1008	0.109	0.115	0.120	0.119	0.118	0.110	0.110	0.109	0.108	0.097
	Shiloh Church	37-067-0028	0.118	0.110	0.112	0.112	0.112	0.113	0.115	0.115	0.113	0.088
	Cherry Grove	37-033-0001	0.109	0.111	0.118	0.118	0.119	0.112	0.119	0.114	0.112	0.099
	McLeansville	37-081-0011	0.111	0.109	0.112	0.112	0.115	0.112	0.121	0.121	0.121	0.103
	Mendenhall	37-081-0013										
	Bethany	37-157-0099	0.111	0.113	0.123	0.112	0.112	0.105	0.109	0.109	0.109	0.092
	Sophia	37-151-0004						0.102	0.104	0.104	0.104	0.095
	Pollirosa	37-067-0027	0.096	0.096	0.107	0.111	0.111	0.107	0.107	0.107	0.103	0.086
Clemmons	37-067-0030											
Fayetteville	Wade	37-051-0008	0.100	0.100	0.108	0.117	0.117	0.115	0.108	0.108	0.105	0.096
	Golfview (Hope Mills)	37-051-1003	0.106	0.105	0.108	0.109	0.109	0.106	0.106	0.105	0.105	0.102

Light Shading = No Data Available Underline = Fewer Than Three Years Or Previous Site Data In DV Calculation

Table 7: 1-hour design values for each monitor in the EAC areas in North Carolina. Design values are presented in parts per million (ppm), with design values exceeding the standard highlighted in orange. Light shading indicates that no data was available while an underlined value indicates fewer than three years or previous site data was used in the DV calculation.

Figure 1 below shows the trend in 1-hour DVs for the different EAC areas. The graph shows the peak in the 1997-1999 and 1998-2000 design values in the Asheville, Unifour, and Fayetteville areas. After this period in the late 1990s, the design values for the areas decrease consistently. The Triad area is the exception in the 1-hour values and follows a different trend. After the 1996-1998 DV period, values roughly plateau until a significant drop is seen in the 2003-2005 DV period.

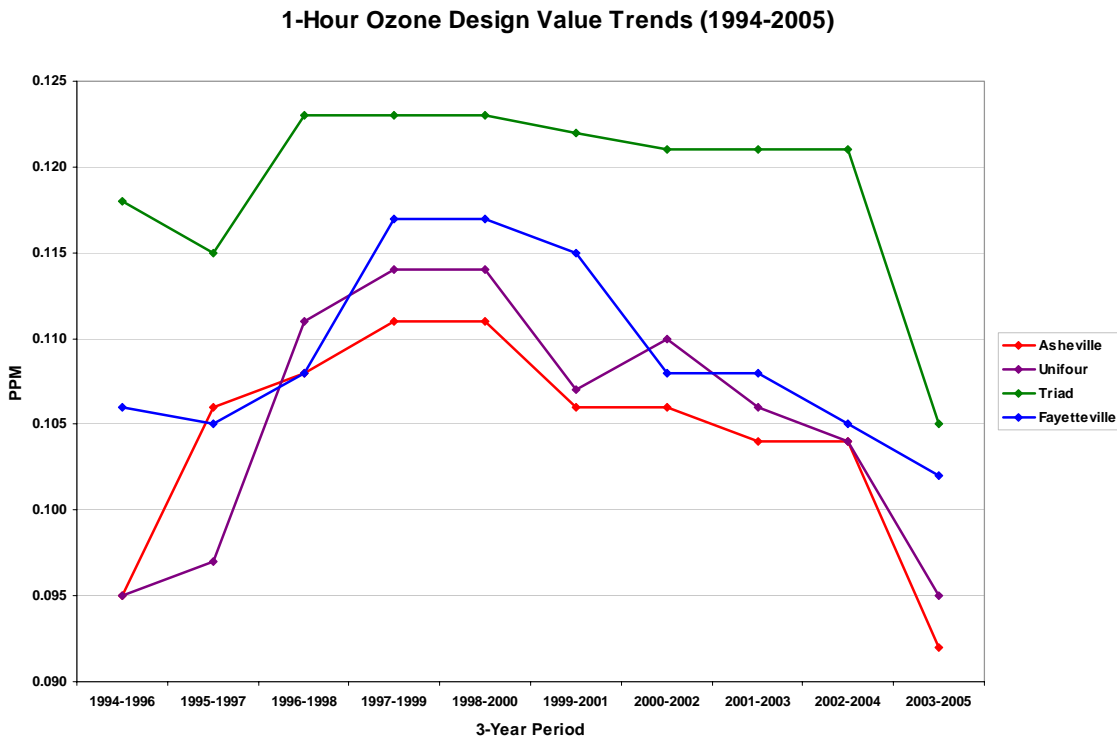


Figure 1: The graph displays the trend in the area-wide 1-hour design values (in parts per million) for each EAC area from 1994 to 2005.

8-hour Design Value Trends

Much like the 1-hour values, 8-hour design values peaked in 1997-1999 and 1998-2000, with a steady decline in DVs in following years (see Figure 2 below). For the 2002-2004 DVs, only the Triad EAC area had a DV in excess of 0.085 ppm. As for the 2003-2005 DVs, all EAC areas had DVs of 0.082 ppm or less.

Figure 2 below shows the trend in 8-hour DVs for the different EAC areas. The graph shows the peak in the 1997-1999 and 1998-2000 design values, as seen in Table 8 below. Design values decrease through the rest of the graph, with the exception of Unifour, which show a slight increase in the 2000-2003 DVs. All areas do drop below the 8-hour standard by the 2003-2005 period.

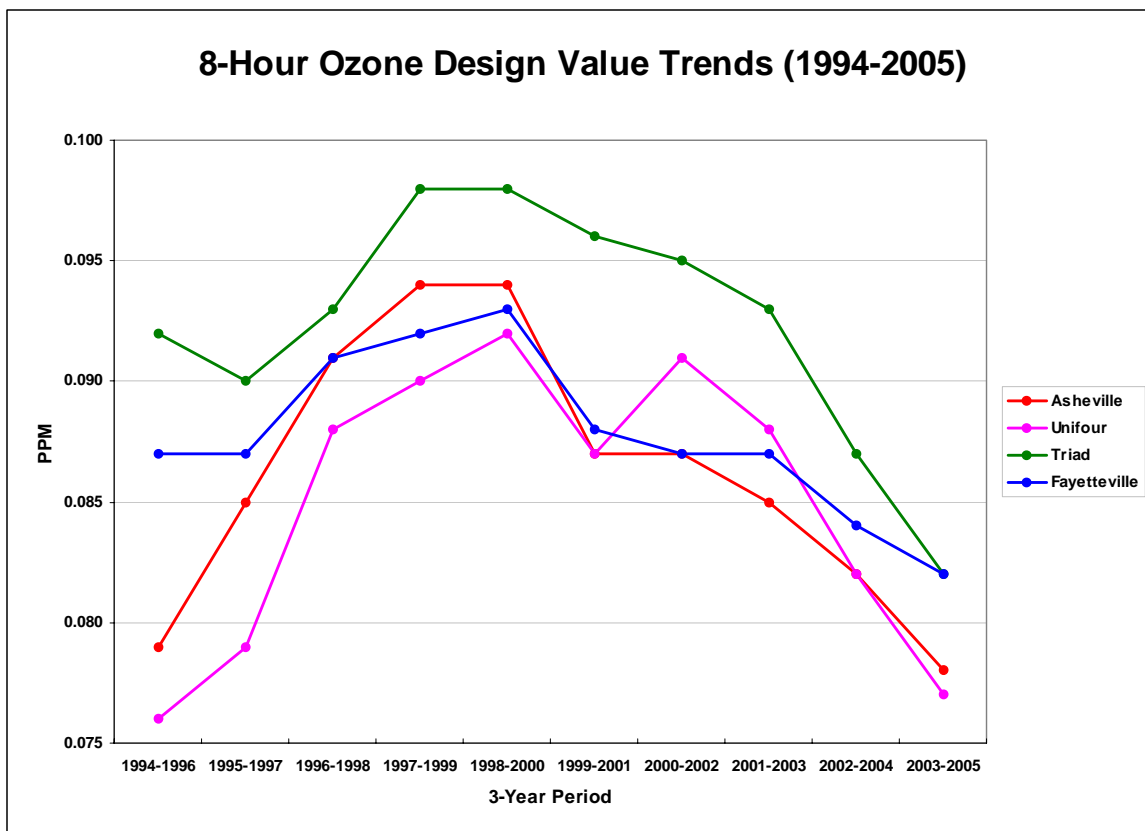


Figure 2: The graph displays the trend in the area-wide 8-hour design values (in parts per million) for each EAC area from 1994 to 2005.

Region	Monitoring Sites	AIRS ID	8-Hour Design Value Summary (ppm)									
			94-96	95-97	96-98	97-99	98-00	99-01	00-02	01-03	02-04	03-05
Asheville	Bent Creek	37-021-0030	0.073	0.075	0.079	0.083	0.088	0.083	0.085	0.078	0.077	0.074
	Frying Pan	37-087-0035	0.079	0.085	0.091	0.094	0.094	0.087	0.085	0.082	0.080	0.075
	Purchase Knob	37-087-0036		0.083	0.085	0.090	0.090	0.087	0.087	0.085	0.082	0.078
	Waynesville	37-087-0004						0.080	0.080	0.079	0.076	0.073
Unifour	Waggin Trail	37-003-0004	0.076	0.079	0.084	0.086	0.089	0.087	0.091	0.088	0.082	0.077
(Hickory)	Lenoir / Caldwell Co.	37-027-0003		0.079	0.088	0.090	0.092	0.087	0.086	0.084	0.080	0.074
Triad	Cooleemee	37-059-0002			0.092	0.098	0.098	0.096	0.095	0.093	0.086	0.082
	Hattie Ave.	37-067-0022	0.083	0.087	0.091	0.097	0.096	0.094	0.094	0.093	0.087	0.079
	Union Cross	37-067-1008	0.088	0.089	0.092	0.094	0.093	0.093	0.092	0.089	0.084	0.079
	Shiloh Church	37-067-0028			0.087	0.086	0.088	0.089	0.092	0.088	0.079	0.074
	Cherry Grove	37-033-0001	0.085	0.089	0.093	0.094	0.093	0.090	0.091	0.088	0.084	0.077
	McLeansville	37-081-0011	0.086	0.085	0.088	0.092	0.094	0.090	0.093	0.089	0.084	0.077
	Mendenhall	37-081-0013										
	Bethany	37-157-0099	0.092	0.090	0.089	0.085	0.083	0.085	0.090	0.091	0.084	0.078
	Sophia	37-151-0004								0.085	0.082	
	Pollirosa	37-067-0027	0.078	0.081	0.084	0.084	0.083	0.082	0.084	0.082	0.079	
Clemmons	37-067-0030											
Fayetteville	Wade	37-051-0008	0.083	0.084	0.088	0.092	0.093	0.088	0.086	0.086	0.084	0.080
	Golfview (Hope Mills)	37-051-1003	0.087	0.087	0.091	0.092	0.091	0.086	0.087	0.087	0.084	0.082

Light Shading = No Data Available Underline = Fewer Than Three Years Or Previous Site Data In DV Calculation

Table 8: 8-hour design values for each monitor in the EAC areas in North Carolina. Design values are presented in parts per million (ppm), with design values exceeding the standard highlighted in orange. Light shading indicates that no data was available while an underlined value indicates fewer than three years or previous site data was used in the DV calculation.

1-hour & 8-Hour Ozone Exceedance Trends

The number of 1-hour ozone exceedance peaked during the 1998 season, in which nine exceedances were observed in the EAC areas. Since 1998, exceedances of the 1-hour standard have decreased dramatically; as there have been no exceedances in the last 3 years in any EAC area (see Table 9 below).

Region	Monitoring Sites	AIRS ID	Number Of 1-Hour Exceedances Per Year												
			1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Asheville	Bent Creek	37-021-0030	0	0	0	0	1	0	0	0	0	0	0	0	
	Frying Pan	37-087-0035	0	0	0	0	0	0	0	0	0	0	0		
	Purchase Knob	37-087-0036		0	0	0	0	0	0	0	0	0	0		
	Waynesville	37-087-0004						0	0	0	0	0	0		
Unifour	Taylorville (Waggin T	37-003-0003	0		0	0	2	0	0	0	0	0	0		
(Hickory)	Lenoir / Caldwell Co.	37-027-0003		0		0	0	0	0	0	0	0	0		
Triad	Cooleemee	37-059-0002			0	0	1	2	0	1	0	0	0		
	Hattie Ave.	37-067-0022	0	1	0	0	1	1	0	0	0	0	0		
	Union Cross	37-067-1008	0	0	0	0	1	0	0	1	0	0	0		
	Shiloh Church	37-067-0028			1	0	1	1	0	0	0	0	0		
	Cherry Grove	37-033-0001	0	0	0	0	0	0	0	0	0	0	0		
	McLeansville	37-081-0011	0	0	1	0	0	0	0	2	0	0	0		
	Bethany	37-157-0099	0	0	0	0	1	0	0	2	0	0	0		
	Sophia	37-151-0004							0	0	0	0			
	Pollirosa	37-067-0027	0	0	0	0	1	0	0	0	0	0	0		
	Fayetteville	Wade	37-051-0008	0	0	0	0	0	0	0	0	0	0	0	
Golfview (Hope Mills)		37-051-1003	0	0	0	0	0	0	0	0	0	0	0		

Light Shading = No Data Available

Table 9: The table shows the number of exceedances of the 1-hour standard at each monitoring site within an EAC area. Light shading indicates that no data was available for the period.

The number of 8-hour ozone exceedances has shown a downward trend since peaking in 1998 and 1999 for all EAC areas. In the mountains, there has been only one exceedance in the past 3 years. In the Unifour region, there have been no exceedances in the past 2 years, and in 2003, the maximum number of exceedances at any monitor was three. In the Triad in 2003, the Hattie

Avenue monitor had five exceedances, and the Cooleemee monitor had four exceedances, with less than four exceedances elsewhere in the Triad. In both 2004 and 2005, no monitor has had more than three exceedances. In the Fayetteville region, the maximum number of exceedances at a monitor in 2003 was four. In 2004, no exceedances were recorded. In 2005, the maximum number of ozone exceedances at any monitor rose to six (see Table 10 below).

Region	Monitoring Sites	AIRS ID	Number Of 8-Hour Exceedances Per Year											
			1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Mountains	Bent Creek	37-021-0030	0	0	0	0	5	2	7	1	7	0	0	1
	Frying Pan	37-087-0035	0	5	5	4	23	24	4	1	13	0	0	0
	Purchase Knob	37-087-0036		4	1	7	12	19	5	0	18	0	0	0
	Waynesville	37-087-0004						1	3	0	2	0	0	0
Unifour (Hickory)	Taylorsville	37-003-0003	1		0	3	15	2	7	5	17	1	0	0
	Lenoir	37-027-0003		1		1	10	18	4	2	10	3	0	0
Triad	Cooleemee	37-059-0002			3	11	18	24	17	11	22	4	0	3
	Hattie Ave.	37-067-0022	2	8	3	9	15	16	6	10	15	5	0	0
	Union Cross	37-067-1008	4	4	5	12	18	11	9	8	15	3	0	0
	Shiloh Church	37-067-0028			4	1	9	6	5	10	8	0	0	0
	Cherry Grove	37-033-0001	3	4	7	17	19	7	9	6	15	3	0	0
	McLeansville	37-081-0011	5	5	3	3	18	18	8	4	20	2	0	3
	Bethany	37-157-0099	8	0	6	11	5	2	3	9	15	3	0	0
	Sophia	37-151-0004								7	10	2	1	
	Pollirosa	37-067-0027	1	1	3	1	6	3	1	2	6	0	0	0
	Fayetteville	Wade	37-051-0008	3	3	4	5	13	17	4	2	17	4	0
Golfview		37-051-1003	4	4	9	4	24	14	3	3	14	3	0	6

Light Shading = No Data Available Orange - 4 Or More Exceedances

Table 10: The table shows the number of exceedances of the 1-hour standard at each monitoring site with in an EAC area. Light shading indicates that no data was available for the period. Orange highlighting indicates a monitor with four or more exceedances for that year.

2005 Ozone Season Weather Patterns

The conditions during the 2005 ozone season were more conducive to ozone formation than the past two seasons. After a cool and wet ozone season in 2004, 2005 had near normal to above normal temperatures and below normal levels of precipitation. Over the past decade, ozone seasons which were warmer and drier than normal generally had more frequent exceedances of the NAAQS.

While the warmer and drier conditions would be conducive to ozone formation, there were periods when the winds became less favorable. Toward the middle of the season, there were a few periods when the wind would take on a more northeasterly component instead of North Carolina’s normal summertime wind flow which is predominately from the southwest.

Even though the meteorological conditions during the 2005 ozone season were more conducive to ozone formation, the EAC areas observed few exceedances. Most areas observed far fewer exceedances than in 2002 (which also had a warm and dry ozone season similar to the conditions experienced in 2005) and were generally below the average number of exceedance days for 1994-2005.

IV. Overall Summary and Conclusions

The annual review of stationary point source emissions shows North Carolina EAC areas generally experienced decreases in NO_x emissions for the period evaluated. The Cumberland County EAC area was the only area experiencing an increase in NO_x emissions (1.9%); however, this increase was well below the action trigger. Two individual counties within EAC areas, Haywood County and Yadkin County, reported NO_x emissions from stationary point sources at levels high enough to meet one of two action triggers. However, there was no corresponding increase in ozone formation in those counties. Therefore, the NCDAQ is not required and does not believe it is appropriate to take further action at this time.

Based on the annual VMT growth rate from the EAC SIP and the latest NCDOT VMT data, all of the EAC areas meet the maintenance plan requirements. The only individual county whose annual VMT growth rate for 2000-2004 is greater than 10% of the annual VMT growth rate for 2000-2007 used in the attainment demonstration is Guilford County (11.77% increase). This increase can be attributed to the completion of the I-85/I-40 widening project in 2003-2004. The NCDAQ will continue to collaborate with the transportation planners in Guilford County to ensure the VMT through the Greensboro area continues to stabilize. The 2003-2005 8-hour ozone design value for the ambient monitor (McLeansville) in Guilford County is 0.077 ppm which is below the 0.080 ppm threshold. Furthermore, the design values for the McLeansville monitor have steadily decreased over the past five years. Therefore, Guilford County currently meets the EAC maintenance plan criteria.

Since no corresponding increases in ozone were recorded in any of the EAC areas for the period evaluated and since neither the stationary point source nor mobile source action triggers detailed in the EAC SIP were met, the NCDAQ is not required to take further action at this time.

Appendix A

Facility-Specific NO_x Emissions Inventory Data Calendar Year 2000

Note 1: The tables that follow are in **alphabetical order by county name**

Note 2: The following data are emissions from permitted point sources only, as reported by the facility to the North Carolina Department of Environment and Natural Resources, Division of Air Quality (NCDAQ) and reviewed by NCDAQ staff during the calendar year following the year emitted. With the exception of 1999, when all permitted facilities were required to report their NO_x emissions, only larger facilities with Title V permits are required to report emissions annually. Therefore, the tables that follow show actual reported emissions for the selected year as well as “assumed” emissions for facilities that were not required to report in that year. The “assumed” emissions were taken from the latest year the source was required to report NO_x emissions (year reported is in parentheses).

Table A1: Facilities in Alamance County Reporting NOx Emissions for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
A.O. Smith Corporation	3.5 Tons	
Braxton Sawmill, Inc.	3.7 Tons	
Cherokee Sanford Group, LLC ** INACTIVE **	11.2 Tons	
Stericycle, Inc.	24.5 Tons	
A.M.P. Division of Central Paving Company, Inc.	25 Tons	
National Spinning Co., Inc. - Alamance Co. Dyeing Operation	27 Tons	
New South Inc	33.6 Tons	
Carolina Finishing of North Carolina LLC - Elmira Street	49.8 Tons	
Burlington Industries LLC -BHF & Pioneer Plant	64.4 Tons	
Nello L. Teer Company	86.8 Tons	
Flynt Fabrics Inc ** INACTIVE **		0 Tons (1999)
City of Burlington - South Burlington WWTP		0.1 Tons (2003)
City of Graham Wastewater Treatment Plant		0.2 Tons (2003)
Cone Mills Corp - Granite Plant ** INACTIVE **		0.3 Tons (1999)
Kayser-Roth Corporation - Ladies Finishing ** INACTIVE **		0.4 Tons (1999)
City of Burlington - East Burlington WWTP		0.6 Tons (2002)
Glen Raven Mills Glen Touch Division ** INACTIVE **		1 Ton (1999)
Carolina Finishing of North Carolina, LLC ** INACTIVE **		1 Ton (1999)
Tower Mills Inc. ** INACTIVE **		1 Ton (1999)
Burlington Chemical Company Inc		1 Ton (1999)
NovaFlex Hose Inc.		1.1 Ton (2003)
Walter Kidde Portable Equipment Inc		1.7 Tons (1999)
Honda Power Equip **Inactive**		2 Tons (1999)
Luxfer Gas Cylinders		2 Tons (1999)
Burlington Industries, LLC - Pioneer Plant ** INACTIVE **		3 Tons (1999)
Glen Raven Technical Fabrics, LLC		3 Tons (1999)
Cortina Fabrics, Inc.		3.2 Tons (2002)
Culp Weaving Inc		3.6 Tons (1999)
APAC-Atlantic, Inc. - Thompson Arthur Division - Plant #8		3.9 Tons (1999)
Craftique LLC		4 Tons (1999)
Texfi Industries Inc Haw River Dyeing ** INACTIVE **		4 Tons (1999)
GKN Driveline - Alamance Facility		4.1 Tons (2002)
Kayser-Roth Corporation - Mens Finishing		4.4 Tons (1999)
Culp, Inc. -Upholstery Prints Division		5 Tons (1999)
Alamance Regional Medical Center, Inc.		5 Tons (1999)
Riley Paving, Inc.		6 Tons (1999)
Culp, Inc. - Culp Finishing		6.9 Tons (2003)
Alexander Fabrics, LLLP		7.2 Tons (2003)
Copland Industries, Inc.		13.1 Tons (2002)
Total Reported Emissions	329.5	
Total Assumed Emissions		88.8
Grand Total		418.3

Table A2: Facilities in Alexander County Reporting NOx Emissions for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Shurtape Technologies Inc	0.4 Tons	
Mitchell Gold	0.5 Tons	
Century Furniture Industries Plant #9	3 Tons	
Daniels Woodcarving Company, Inc.		0 Tons (2002)
Piedmont Wood Products		0 Tons (2004)
Nu-Mode Manufacturing Company		0 Tons (2002)
Vintage Editions, Inc.		0.1 Tons (2002)
Clayton Marcus Plant No. 1		0.3 Tons (1999)
Hancock & Moore Plt 2		4 Tons (1999)
Brushy Mountain Enterprises		4.5 Tons (2002)
Schneider Mills Inc		6.2 Tons (1999)
Total Reported Emissions	3.9	
Total Assumed Emissions		15.1
Grand Total		19.0

Table A3: Facilities in Buncombe County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Anvil Knitwear, Inc.		12.89 Tons (1999)
APAC Enka Plant		4.3 Tons (1999)
APAC Grove Stone		2.5 Tons (1999)
APAC Weatherville		4.3 Tons (1999)
Asheville Metal Finishing		0.4 Tons (1999)
Asheville MICA		0.41 Tons (1999)
Asheville Mortuary		0.1375 Tons (1999)
Asheville Water Authority		1.99 Tons (1999)
BASF	833.00 Tons	
Beacon		9.37 Tons (1999)
Buncombe Co. Landfill		2.7 Tons (1999)
Bussman Corp.		0.33 Tons (1999)
Carolina Power and Light	5909.00 Tons	
Colbond, Inc.		6.33 Tons (1999)
Cremation Services		0.01 Tons (1999)
Day International	8.73 Tons	
Diagnostic Lab		0.1685 Tons (1999)
Dodge Rockwell		0.0451 Tons (1999)
Drexel Heritage		17.10 Tons (1999)
Eaton Cutler-Hammer		0.86 Tons (1999)
Ethan Allen		3.8 Tons (1999)
Girmes		0.84 Tons (1999)
International Aggreg.		0.96 Tons (1999)
Kearfott		0.19 Tons (1999)
Lustar		19.4 Tons (1999)
Mission St. Joe Hospital		11.36 Tons (1999)
Metromont Materials		1.15 Tons (1999)

Table A3: Facilities in Buncombe County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Milkco		1.7 Tons (1999)
Morris Funeral Home		0.086 Tons (1999)
MSD		37.22 Tons (1999)
Norfolk Southern		0.01 Tons (1999)
Owen Manufacturing		9.8 Tons (1999)
PPPi	3.79 Tons	
Square D Company		3.09 Tons (1999)
Thantex Specialty Inc.		0.092 Tons (1999)
Tultex Corporation		17.061 Tons (1999)
VA Medical Center		4.33 Tons (1999)
Volvo Construction		1.99 Tons (1999)
Total Reported Emissions	6754.52	
Total Assumed Emissions		176.9201
Grand Total		6931.4401

Table A4: Facilities in Burke County Reporting NOx Emissions for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
SpartaCraft Inc	0 Tons	
Lexington Furniture Plant 10	0.3 Tons	
Kohler Co., DBA Baker Furniture	2 Tons	
Molded Fiberglass Co/North Carolina	2.6 Tons	
Leviton - Southern Devices Div	5 Tons	
Borden Chemical Inc	7.5 Tons	
Burke Mills Inc	8.2 Tons	
Drexel Heritage Furnishings, Inc. - Plant 43	15.4 Tons	
Drexel Heritage Furn Industries Inc - Furn Pl ** INACTIVE **	18.7 Tons	
Henredon Furniture Industries, Inc.	32.8 Tons	
Drexel Herit Furn Plt 3-5 ** INACTIVE **	34 Tons	
Valdese Manufacturing Company	41.4 Tons	
SGL Carbon LLC	50.8 Tons	
RMC Mid-Atlantic, dba RMC Metromont Materials - Morganton		0 Tons (2002)
Drexel Herit Furn Plt 33		0 Tons (1999)
Robert Bergelin Company		0 Tons (2002)
E J Victor Upholstery Division		0.1 Tons (2003)
Ferguson Copeland, LLC d/b/a Ferguson Copeland Ltd Reep Driv		0.2 Tons (1999)
Synthron Inc		0.3 Tons (2002)
Drexel Heritage Plant No 71 ** INACTIVE **		0.4 Tons (1999)
Basf Corp		0.9 Tons (2003)
Packaging Corporation Of America		1 Ton (2002)
Boggs HMA, LLC - Plant 5		1 Ton (1999)
Valdese Textiles Inc		1 Ton (2002)
NC School for the Deaf		1.1 Tons (1999)
NC DOC Western Youth Institution		1.5 Tons (1999)

Table A4: Facilities in Burke County Reporting NOx Emissions for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Burke Grading & Paving Inc - East Burke Asphalt		2 Tons (1999)
Rexnord Corporation ** INACTIVE **		2 Tons (1999)
Summitville Carolina Inc ** INACTIVE **		3 Tons (1999)
Case Farms of NC, Inc. - Rand St.		3.2 Tons (1999)
WNC Dry Kiln, Inc		4 Tons (1999)
Earthgrains Baking Companies Inc		4.1 Tons (2004)
Drexel Heritage Furniture Industries, Inc. Plt. 60		5.6 Tons (2003)
Valdese Weavers Inc Plant #1		5.8 Tons (1999)
Alba-Waldensian P&W Plt ** INACTIVE **		6.3 Tons (1999)
VNC Fabrics Inc ** INACTIVE **		7.8 Tons (1999)
Drexel Herit Furn Plt 6		8.7 Tons (1999)
Hickory Hill Furniture Corp		10.3 Tons (1999)
W M Cramer Lumber Co		10.7 Tons (2003)
APAC-Atlantic, Inc. - Morganton Plant		11.3 Tons (1999)
Broughton Hospital		15.6 Tons (2003)
Carolina Mills Plt 9		18 Tons (2003)
Total Reported Emissions	218.7	
Total Assumed Emissions		125.89
Grand Total		344.5

Table A5: Facilities in Caldwell County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Shurtape Technologies Inc - Plt No 24	0.6 Tons	
Sealed Air Corp	0.7 Tons	
Pactiv Corporation	2 Tons	
NEPTCO Inc	3.6 Tons	
Meridian Automotive Systems Inc	4 Tons	
Broyhill Miller Hill Complex	4.1 Tons	
Hammary Furniture Company Plant 14 ** INACTIVE **	8.4 Tons	
Fairfield Chair Plt 2	10.5 Tons	
Kincaid Furn Plt 8 ** INACTIVE **	10.6 Tons	
Kincaid Furniture Company Plant No 5 ** INACTIVE **	12.7 Tons	
Broyhill Harper Furniture Co	18.2 Tons	
Bernhardt Furn Plts 2 and 5	22.8 Tons	
Broyhill Virginia Street Complex	25.9 Tons	
Thomasville Furniture Industries Inc - Lenoir Plt	31.7 Tons	
Bernhardt Furn Plts 1 3 & 7	46.2 Tons	
Kincaid Furn Plt 1	50 Tons	
Trigen Biopower Inc - Lenoir	143 Tons	
J & M Woodworking Plt 2		0 Tons (2002)
McCreary Modern Inc - Frame Plant		0 Tons (2002)
ECMD Inc dba Crown Heritage		0.1 Tons (1999)
Schwarz & Schwarz Inc		0.2 Tons (1999)
M & S Warehouse Inc		0.4 Tons (2003)
Lenoir Mirror Plnts 1 & 3		0.7 Tons (1999)

Table A5: Facilities in Caldwell County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Midstate Contractors Inc		2 Tons (1999)
Paxar Corporation - Printed Label Group		4.3 Tons (1999)
Omni Supply Inc		5 Tons (1999)
Martin Marietta Materials Inc		5.7 Tons (2003)
Mat NuWood LLC		5.7 Tons (1999)
Sealed Air Corp - Hudson		6.3 Tons (2002)
Fairfield Chair Plt 1		7.8 Tons (1999)
Granite Hardwoods Inc		9 Tons (1999)
Shuford Mills Inc Hudson Cloth		14.1 Tons (1996)
Associated Hardwood Products, Inc.		17 Tons (1999)
Total Reported Emissions	395.0	
Total Assumed Emissions		78.3
Grand Total		473.3

Table A6: Facilities in Caswell County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
International Aggregate, Inc.	6 Tons	
APAC		2.3 Tons (1999)
Total Reported Emissions	6.0	
Total Assumed Emissions		2.3
Grand Total		8.3

Table A7: Facilities in Catawba County Reporting NOx Emissions for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Null Industries Inc ** INACTIVE **	0 Tons	
Carolina Glove Company, Plant #8	0.2 Tons	
Century Furniture Industries, Plt 40 Technical Center	0.2 Tons	
Laneventure, Plant No. 14	0.2 Tons	
Hickory Springs Manufacturing - Conover Complex	0.3 Tons	
Lackawanna Leather Co **Inactive**	0.6 Tons	
Meridian Automotive Systems, Inc. -Newton Operations	0.6 Tons	
Progressive Furniture Inc	0.9 Tons	
Carpenter Company Conover	1.5 Tons	
Ethan Allen Operations, Inc. Maiden Division	1.6 Tons	
Synthetics Finishing Hickory	1.7 Tons	
Synthetics Finishing Longview	2.6 Tons	
Commscope Inc Catawba Plant	3.3 Tons	
Hickory Springs Manufacturing Company	4.4 Tons	
Spectrum Textured Yarns Inc-Hickory Plant ** INACTIVE **	5 Tons	
Broyhill Furniture Newton Plant ** INACTIVE **	6.5 Tons	
HB Mellott Estate Inc., Maiden Plant	7.9 Tons	
Hooker Furniture Corporation ** INACTIVE **	8.2 Tons	
Broyhill Furniture Conover Plant ** INACTIVE **	10.3 Tons	
Shurtape Technologies - Hickory/Highland Plt	10.4 Tons	

Table A7: Facilities in Catawba County Reporting NOx Emissions for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Blackburn Sanitary Landfill	10.5 Tons	
Southern Furn Co of Conover Catawba Plt	11.2 Tons	
Hickory Chair Company, Plant 7	11.3 Tons	
HWS Company Inc. dba Hickory White	19.1 Tons	
Hickory Chair Company Plant #20 ** INACTIVE **	19.2 Tons	
Century Furniture Industries Plant #1	19.3 Tons	
Claremont NA Cable, LLC	132.5 Tons	
Duke Energy Corporation - Marshall Steam Station	26,670 Tons	
Carolina House Furniture Inc		0 Tons (2002)
Ramsey's Finishing, Inc.		0 Tons (2003)
Thomasville Furniture Industries, Inc., Upholstery Plant 5		0 Tons (2002)
Commscope**inactive**		0 Tons (1999)
Carolina Solvents, Inc.		0.1 Tons (2002)
Cranford Woodcarving Finishing Plant No 3		0.1 Tons (2003)
Alcatel Cable Manuf Plt**inactive**		0.1 Tons (1999)
Vanguard Furniture Company, Inc., Plant No. 2		0.2 Tons (1999)
Synthetics Finishing Conover		0.2 Tons (2002)
Sherrill Furniture Company, Inc., CTH-Sherrill Occasional		0.3 Tons (2003)
Unifour Finishers, Inc., Division I		0.4 Tons (2002)
Appalachian Hardwood Flooring		0.4 Tons (2002)
Unifour Finishers, Inc., Division II		0.4 Tons (2002)
Special Metals Welding Products Company		0.5 Tons (2002)
Karolina Polymers, Inc. ** INACTIVE **		0.6 Tons (2002)
City of Hickory, Henry Fork WWTP ** INACTIVE **		0.6 Tons (2002)
City of Newton - Casa Christina Site		0.8 Tons (2003)
Jackson Lea ** INACTIVE **		1 Ton (1999)
GKN Sinter Metals, Inc.		1 Ton (1999)
Combeau Industries **Exempt**		1 Ton (1999)
Chelsea House-Port Royal Inc		1 Ton (1999)
Newton Sanitary Landfill		1 Ton (2002)
Joan Fabrics Corporation-Newton		1.1 Tons (2003)
Midstate Contractors, Inc.		1.4 Tons (2003)
Commscope Network Cable Division		1.6 Tons (2003)
Weyerhaeuser Company - Newton		2 Tons (1999)
Carolina Paving of Hickory Inc		2 Tons (1999)
Thomasville Furniture Industries, Inc., Upholstery Plant 9		2 Tons (1999)
Conover Lumber Co Inc		2 Tons (1999)
Midstate Mills Inc		2 Tons (1999)
Carolina Container Corporation		2.1 Tons (1999)
Frye Regional Medical Center		2.5 Tons (2003)
Tradewinds International, Inc.		2.7 Tons (2002)
Classic Leather Inc		2.9 Tons (1999)
Technibilt Ltd **Inactive**		3 Tons (1999)
City of Newton - Sarstedt Site		3.1 Tons (2003)

Table A7: Facilities in Catawba County Reporting NOx Emissions for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Bassett Upholstery Division		3.3 Tons (1999)
Southern Furniture Company of Conover, Inc., Plant No. 2		3.3 Tons (1999)
City of Newton Inno - Therm Products Site		3.4 Tons (2003)
City of Newton - Polymask Corp Site		3.5 Tons (2003)
City of Newton - Moretz Inc. Site		3.6 Tons (2003)
Inno-Therm Products LLC		3.6 Tons (2003)
Terra-Mulch Products, LLC		4.8 Tons (1999)
City of Newton, Clark Creek Wastewater Treatment Plant		6 Tons (1999)
C Nelson Sigmon Paving Inc		6 Tons (1999)
Southern Furn Co of Conover #1		10.1 Tons (1999)
APAC-Atlantic, Inc. - Hickory Plant		10.8 Tons (2002)
Delta Apparel, Inc.		17 Tons (1999)
Total Reported Emissions	26,959.5	
Total Assumed Emissions		115.49
Grand Total		27,075.0

Table A8: Facilities in Cumberland County Reporting NOx Emissions for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Black & Decker (US) Inc.	0.9 Tons	
Purolator Products Inc	7.2 Tons	
Dupont Teijin Films	10.1 Tons	
DAK Resins Cedar Creek Site	10.6 Tons	
Carolina By-Products Fayetteville Division	71.8 Tons	
The Goodyear Tire & Rubber Company	81 Tons	
HQ XVIII ABN Corps & Fort Bragg	89 Tons	
DAK Resins, LLC	101 Tons	
Public Works Commission Butler-Warner Generation Plant	148.5 Tons	
Cargill Inc - Fayetteville	208 Tons	
Cumberland Co - Ann Street Landfill		1 Ton (2003)
Rankin Brothers Company		2 Tons (1999)
National Linen Service		2 Tons (1999)
Fayetteville Gas Producers Inc ** INACTIVE **		2 Tons (1999)
Veterans Affairs Medical Center - Fayetteville		3 Tons (1999)
Highland Paving Company, LLC		3.6 Tons (2004)
M J Soffe Co		6 Tons (1999)
Pope Air Force Base		7.5 Tons (2003)
Cape Fear Valley Med Center		8.4 Tons (2003)
Barnhill Contracting - Fayetteville Plant		8.9 Tons (2002)
Texfi Blends Inc**Inactive**		15.6 Tons (1999)
APAC Atlantic, Inc - Shaw Plant		17.8 Tons (2003)
Hexion Specialty Chemicals, Inc.		25.8 Tons (2003)
Total Reported Emissions	728.1	
Total Assumed Emissions		103.6
Grand Total		831.7

Table A9: Facilities in Davidson County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Vitafoam Incorporated	0.1 Tons	
Exopack - Thomasville, LLC	0.1 Tons	
Councill Company, LLC - Plant #1	3.1 Tons	
T I Industries	3.3 Tons	
Kurz Transfer Products, LLC	3.4 Tons	
StrideMark, LLC	8.7 Tons	
Thomasville Furniture Plant D	9.4 Tons	
Lexington Furniture Plant 12 ** INACTIVE **	11.3 Tons	
Thomasville Furniture Plant B ** INACTIVE **	11.3 Tons	
NC Municipal Power Agency No. 1 Lexington, Plant No. 1	11.4 Tons	
Lexington Furniture Industries Plant 2	12.3 Tons	
NC Municipal Power Agency No. 1- Lexington Plant No. 2	13.5 Tons	
Lexington Furniture Inc., Plant 5	17.8 Tons	
Cunningham Brick Company Inc	19.6 Tons	
Thomasville Furniture Plant C/M/W/SB	21.4 Tons	
Stanley Furniture Company - Lexington Mfg	24 Tons	
Thomasville Furniture Plant A/X/V Face	26.3 Tons	
Lexington Furniture Plants 7 8 9 ** INACTIVE **	31.3 Tons	
Thomasville Furniture Industries, Inc. - Plant SFD/SFLP	37.2 Tons	
Thomasville Furniture Plant E/CDF/CDK/NV	42.5 Tons	
Lexington Furniture Plant 1	47 Tons	
PPG Industries Fiber Glass Products, Inc.	227 Tons	
Owens-Brockway Glass Container Plt 6	578.8 Tons	
Transcontinental Gas Pipeline Corp	3,222.2 Tons	
Superior Wood Products, Inc.		0 Tons (2002)
Dell Inc		0.1 Tons (2003)
Tomlinson/Erwin-Lambeth, Inc.		0.1 Tons (2003)
Leggett & Platt, Incorporated - Metal Bed Rail		0.1 Tons (2002)
LKF Inc		0.1 Tons (2002)
Georgia - Pacific Resins Inc		0.2 Tons (1999)
Diebold Southeast Manufacturing, Inc.		0.2 Tons (1999)
Acme Face Veneer Company		0.2 Tons (2002)
Cardinal Container Services Inc **INACTIVE**		0.3 Tons (1996)
Thomasville Veneer Company		0.5 Tons (2002)
Burlington Ind - Denton Plant ** INACTIVE **		0.6 Tons (1999)
Central Lumber Company, Inc.		0.6 Tons (2002)
Thomas Manufacturing Co Of Thomasville		0.6 Tons (2002)
Carolina Veneer of Thomasville Inc ** INACTIVE **		1 Ton (1999)
Commercial Carving Company		1 Ton (1999)
Hekman Furniture Company		1 Ton (1999)
Leonard Block Company		1 Ton (1999)
Leggett & Platt - Metal Bed Rail		1 Ton (1999)
Councill Company, LLC - Plant #3		1 Ton (1999)
RMC Mid-Atlantic, LLC - Thomasville Plant		1 Ton (1999)

Table A9: Facilities in Davidson County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Councill Company, LLC - Plant #2		1 Ton (1999)
Santaro Construction Co **inactive**		1 Ton (1999)
Conner Carving and Turning Co Inc ** INACTIVE **		1 Ton (1999)
Southern Veneer Company, Inc.		1.2 Tons (2002)
Lexington Furniture Plt 3 **INACTIVE**		1.7 Tons (1999)
Finch Industries Inc		1.8 Tons (1999)
Celand Yarn Dyers Inc		1.8 Tons (2003)
The North Carolina Moulding Company		2 Tons (1999)
Green Printing and Packaging Company		2 Tons (1999)
Davidson Water Inc		2 Tons (1999)
Stone Container Corporation d/b/a Smurfit-Stone Container		2.5 Tons (2003)
Duracell Global Business Management Group		3 Tons (1999)
Moll Industries, Inc. - Lexington Division		3 Tons (1999)
Hanes Construction Company		4.4 Tons (2003)
Kimberly Clark Corporation		6.4 Tons (2003)
Dimension Milling Company, Inc.		7.3 Tons (2002)
Pallet Resource of NC, Inc.		18.7 Tons (2003)
Total Reported Emissions	4,383.0	
Total Assumed Emissions		71.39
Grand Total		4,454.4

Table A10: Facilities in Davie County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Panels, Services & Components, Inc.	8.6 Tons	
Thomson Crown Wood Products Company ** INACTIVE **	27.8 Tons	
Kohler Co. - Baker Furniture		0.8 Tons (2002)
Funder America, Inc		12.7 Tons (2002)
Ingersoll - Rand Company		19 Tons (1999)
Total Reported Emissions	36.4	
Total Assumed Emissions		32.5
Grand Total		68.9

Table A11: Facilities in Forsyth County Reporting NOx Emissions for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Microfibres, Inc.	19 Tons	
Hanes Dye & Finishing	135 Tons	
R.J. Reynolds Tobacco Company (00339)	365.6 Tons	
Thomasville Furniture	26.9 Tons	
R.J. Reynolds Tobacco Company (00405)	9 Tons	
Brady Furniture	1.3 Tons	
Seimens Westinghouse Power Corporation	25.9 Tons	
Highland Industries, Inc.	12 Tons	
Hooker Furniture Corporation	0.3 Tons	

Table A11: Facilities in Forsyth County Reporting NOx Emissions for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
R.J. Reynolds Packaging Division (00465)	20.2 Tons	
R.J. Reynolds Packaging Division (00466)	9.5 Tons	
Rexam Beverage Can	8.7 Tons	
Corn Products International, Inc.	402.1 Tons	
R.J. Reynolds Tobacco Company (00745)	1258.7 Tons	
Sun Chemical Corp. – Specialty Inks	0.8 Tons	
Classic Packaging	0.1 Tons	
Archie Elledge Plant	3.8 Tons	
Bids, Inc.	3.3 Tons	
Americraft Carton Group, Inc.	0.1 Tons	
Muddy Creek POTW	17.1 Tons	
Salem Energy Systems, LLC	27.7 Tons	
The Encore Group Inc. DBA Xpres	2.3 Tons	
Cloverleaf Mixing, Inc.	2.4 Tons	
Piedmont Landfill & Recycling Center	1.6 Tons	
Wake Forest University		23 Tons (1999)
Winston Weaver Company, Inc.		1.1 Tons (1999)
Royster-Clark, Inc.		8.4 Tons (1999)
Southern Tool Manufacturing Co.		0.2 Tons (1999)
NC Baptist Hospital		13.8 Tons (1999)
Forsyth Technical Community College		0.1 Tons (1999)
Sara Lee Underwear		15.7 Tons (1999)
Sara Lee Hosiery		7.1 Tons (1999)
Associated Posters, Inc.		3.3 Tons (1999)
Douglas Battery Manufacturing Co.		3.7 Tons (1999)
RMC Carolina Materials, Inc.		0.2 Tons (1999)
Brown & Williamson Tobacco		1.6 Tons (1999)
Ilco Unican Corporation		2.7 Tons (1999)
Jefferson Smurfit Container Corp. of America		3.5 Tons (1999)
Larco Construction (00464)		2.5 Tons (1999)
Winston-Salem State University		4.5 Tons (1999)
Vogler Funeral Home		0.1 Tons (1999)
Colliers Pinkard		0.4 Tons (1999)
Taylor Brothers, Inc.		2.2 Tons (1999)
Johnson Controls, Inc.		5 Tons (1999)
Santaro Industries, Inc. (00753)		2.1 Tons (1999)
Forsyth Memorial Hospital		5.3 Tons (1999)
Corrflex Display and Packaging		3.4 Tons (1999)
Thompson Arthur Paving		3.9 Tons (1999)
Santaro Industries, Inc. (00770)		1.4 Tons (1999)
Corilam Fabricating Company		0.2 Tons (1999)
Deere-Hitachi Construction Machinery		1.1 Tons (1999)
Larco Construction (00791)		4 Tons (1999)
Modern Machine & Metal Fabricators, Inc.		0.5 Tons (1999)
Textilease Corporation		2.8 Tons (1999)

Table A11: Facilities in Forsyth County Reporting NOx Emissions for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
The Lee Apparel Company, Inc.		8.7 Tons (1999)
Bepeco, Inc.		0.3 Tons (1999)
Wilson-Cook Medical, Inc.		0.1 Tons (1999)
Cres Tobacco Company, Inc.		3.4 Tons (1999)
Powerlab, Inc.		0.1 Tons (1999)
APAC-Carolina, Inc.		3.9 Tons (1999)
Total Reported Emissions	2353.4	
Total Assumed Emissions		140.3
Grand Total		2493.7

Table A12: Facilities in Guilford County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Madison Hill Funeral Service & Cremation Center	0 Tons	
Shamrock Corporation Tipping Division	0.1 Tons	
The Valspar Corporation	0.1 Tons	
Custom Finishers Inc	0.2 Tons	
Miller Desk Inc	0.2 Tons	
Lane Furniture Industries Inc. Royal Development Co Division	0.2 Tons	
Mickey Truck Bodies Inc	0.3 Tons	
Greensboro Flexible Packaging LLC dba North State Flexibles	0.3 Tons	
Shamrock Corp - Bruce St	0.4 Tons	
Shamrock Corporation - Chimney Rock Printing	0.5 Tons	
Engineered Polymer Solutions, Inc. dba Valspar Coatings	0.7 Tons	
The Sherwin - Williams Co, Consumer Group	0.9 Tons	
Akzo Nobel Coatings Inc	0.9 Tons	
Engineered Polymer Solutions Inc d.b.a. Valspar Coatings	1 Ton	
Vitafoam Inc - Pleasant Garden	1.1 Tons	
Thomas Built Buses - Fairfield Road	1.4 Tons	
Flowers Baking Company of Jamestown, Inc.	2.7 Tons	
Unitex Chemical Corporation	3.6 Tons	
Resco Products Inc	4.2 Tons	
Thomas Built Buses - Courtesy Road	5.3 Tons	
Hooker Furniture Corporation	8.1 Tons	
Konica Minolta Manufacturing USA Inc	8.7 Tons	
NC Municipal Power Agency No. 1 - High Point Plant 1	11.4 Tons	
NC Municipal Power Agency No. 1 - High Point Plant 2	11.4 Tons	
City of Greensboro - White Street Landfill	12.4 Tons	
City of Greensboro - Thomas Z. Osborne POTW	12.6 Tons	
The University of North Carolina at Greensboro - Physical pl	12.8 Tons	
Marsh Furniture Company	15.2 Tons	
Carolina By-Products (Greensboro) ** INACTIVE **	16 Tons	
Hanson Brick - Pleasant Garden Plant #1	16.8 Tons	
Lorillard Tobacco Company	20.2 Tons	

Table A12: Facilities in Guilford County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Guilford Mills - George Greenberg Plant ** INACTIVE **	40.7 Tons	
Cone Denim LLC - White Oak Plant	127.4 Tons	
Brayton International Inc		1.5 Tons (2002)
Jefferson-Pilot Life Insurance Company **Inactive**		0 Tons (1999)
Wysong & Miles Machinery ** INACTIVE **		0 Tons (1999)
Bolection Door, A Division of Marshfield DoorSystems, Inc.		0 Tons (1999)
Snyder Paper Corporation - Synder Cushion of High Point		0 Tons (2002)
Smurfit-Stone Container Enterprises, Inc.		0 Tons (1999)
Patrician Furniture, Inc. d/b/a Patrician Furniture Company		0 Tons (2002)
Oldcastle Precast, Inc.		0.1 Tons (2003)
Chemcentral Atlantic Corporation		0.1 Tons (2003)
Guilford Mills, Inc. - Hornaday Plant ** INACTIVE **		0.1 Tons (2003)
First Line Activewear Inc **Inactive**		0.1 Tons (1996)
Davis Furniture Industries, Inc. - Plant 2		0.1 Tons (2003)
Leggett & Platt, Inc.		0.1 Tons (2003)
Associated Asphalt Greensboro, Inc.		0.2 Tons (1999)
DaimlerChrysler Commercial Buses North Carolina, LLC		0.2 Tons (2003)
High Point Fibers, Inc.		0.2 Tons (2002)
Swaim Metals, Inc.		0.3 Tons (2003)
RMC Mid Atlantic, LLC d/b/a RMC Metromont Materials		0.3 Tons (2002)
Drexel Heritage Furnishings Inc		0.3 Tons (2002)
United Metal Finishing Inc		0.3 Tons (2002)
Carpenter Co.		0.4 Tons (2002)
Dow Corning Corporation		0.4 Tons (1999)
Future Foam, Inc.		0.4 Tons (2002)
Jefferson-Pilot Life Insurance Company		0.4 Tons (2003)
Metal Creations Inc		0.4 Tons (2002)
Greensboro News & Record, Inc.		0.5 Tons (2002)
Degussa Corporation		0.5 Tons (1999)
High Point Furniture Industries, Inc.		0.5 Tons (2003)
Mannington Mills, Inc. dba Mannington Laminate Floors		0.5 Tons (2003)
Prochem Chemicals Inc		0.6 Tons (1999)
Banner Pharmacaps, Inc. a subsidiary of Sobel USA		0.7 Tons (1999)
Haworth Myrtle & Muller **INACTIVE**		0.7 Tons (1996)
HM Real Estate Co. No. 1 dba Woodmark Originals, Inc.		0.8 Tons (2003)
Bush Industries, Inc. d/b/a The Color Works, Inc.		0.8 Tons (2003)
RF Micro Devices, Inc. - Fab. 2		0.9 Tons (2002)
Goria Enterprises, Inc.		1 Ton (1999)
Thomasville - Dexel Incorporated		1 Ton (1999)
Oakdale Cotton Mills, Inc.		1 Ton (1999)
Thomasville - Dexel Incorporated ** INACTIVE **		1 Ton (1999)
Leggett & Platt Inc - Guilford Fibers ** INACTIVE **		1 Ton (1999)
City of Greensboro - N Buffalo WWTP		1 Ton (1999)

Table A12: Facilities in Guilford County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Brenntag Southeast, Inc.		1 Ton (1999)
Royal Carolina Corporation		1 Ton (1999)
Ritch Face Veneer Company & Faces South, Inc.		1 Ton (1999)
Magellan Terminals Holdings, L.P.		1 Ton (1999)
Haworth, Inc. - Haworth Wood Seating		1.1 Tons (1999)
Henredon Furniture Industries, Inc. - Ward Plant		1.2 Tons (2003)
City of Greensboro - Kenneth Lift Station		1.3 Tons (2003)
North Carolina Agricultural and Technical State University		1.5 Tons (1999)
Henredon Furniture Industries, Inc. - Brevard Plant		1.6 Tons (2003)
APAC-Atlantic, Inc. - Thompson Arthur Division - Plant #15		1.7 Tons (2003)
Piedmont Chemical Industries I, LLC		1.7 Tons (1999)
Harvin Reaction Technology, Inc.		1.7 Tons (2002)
Tyco Electronics Corporation		1.9 Tons (1999)
RF Micro Devices, Inc. - FAB 1, FAB 3 and Packaging		1.9 Tons (2002)
Piedmont Hardwood Dry Kiln Company		2 Tons (1999)
Claude Gable Company Inc		2 Tons (1999)
Lin Pac Corrugated Inc		2 Tons (1999)
Highland Containers, Inc.		2 Tons (1999)
Guilford Mills - Friendship Facility		2 Tons (1999)
Guilford College - Main Campus		2.1 Tons (2002)
Shionogi Qualicaps Inc		2.5 Tons (2002)
Santaro Manufacturing Company Inc**INACTIVE**		2.6 Tons (1999)
Carolina Container Company		2.8 Tons (2003)
Mannington Mills, Inc. - Mannington Wood Floors Company		2.8 Tons (2003)
OMNOVA Solutions Inc ** INACTIVE **		2.8 Tons (1999)
Chemol Inc		2.9 Tons (1999)
Culp Inc - Ticking		3 Tons (1999)
Syngenta Crop Protection Inc		3.4 Tons (1999)
Motiva Enterprises LLC - Greensboro		3.4 Tons (2003)
TransMontaigne Product Services, Inc.		3.7 Tons (2002)
Cascade Die Casting Group, Inc. - Atlantic Division		3.8 Tons (2003)
Gilbarco, Inc.		4 Tons (1999)
Fiber Dynamics, Inc.		4 Tons (2002)
City of High Point - Eastside Wastewater Treatment Plant		4.1 Tons (2003)
Pine Needle LNG Company LLC		4.9 Tons (1999)
Slane Hosiery Mills Inc		5.1 Tons (1999)
International Aggregate, Inc. ** INACTIVE **		6 Tons (1999)
APAC-Atlantic, Inc. - Thompson Arthur Division - Plant #10		6.1 Tons (1999)
Nello L. Teer Company		6.3 Tons (1999)
APAC-Atlantic, Inc. - Thompson Arthur Division - Plant #11		6.5 Tons (2003)
Procter & Gamble Manufacturing Company		6.5 Tons (1999)
Blythe Construction, Inc - Plant #1		8.1 Tons (2003)
The Moses H Cone Memorial Hospital		8.8 Tons (2002)

Table A12: Facilities in Guilford County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
CDR Holdings, L.L.C. dba Charles D. Roberts Company		9.9 Tons (2003)
Kao Specialties Americas, LLC		10.4 Tons (1999)
Elastic Fabrics of America		12.4 Tons (1999)
Guilford Mills - Maurice Fishman Plt **INACTIVE**		13.8 Tons (1999)
Precision Fabrics Group Inc		16 Tons (1999)
The Procter & Gamble Manufacturing Company - Brown Summit		25.1 Tons (1999)
Hayworth Roll & Panel Company Inc		30.3 Tons (1999)
Morflex Chemical Company Inc		47.6 Tons (2003)
Total Reported Emissions	337.79	
Total Assumed Emissions		319.7
Grand Total		657.5

Table A13: Facilities in Haywood County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Lea Industries Incorporated ** INACTIVE **	37.6 Tons	
Blue Ridge Paper Products - Canton Mill	4,694.9 Tons	
Waynesville Waste Water Treatment Plant		0.2 Tons (1999)
Airboss Rubber Compounding Inc.		0.2 Tons (1999)
Oaks Unlimited - Division of Fiber Fuels Inc		1 Tons (1999)
APAC-Tennessee Harrison Construction - Waynesville Asphalt		1.5 Tons (1999)
Giles Chemical		1.6 Tons (1999)
Blue Ridge Paper Products - Waynesville		5.1 Tons (1999)
Total Reported Emissions	4732.5	
Total Assumed Emissions		9.6
Grand Total		4742.1

Table A14: Facilities in Stokes County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
KobeWieland Copper Products, LLC	3 Tons	
Charah Environmental, Inc. ** INACTIVE **	9 Tons	
Duke Energy Corp - Belews Creek Steam Station	32,500 Tons	
Bill Hanks Lumber Company		0.2 Tons (2002)
JPS Elastomerics Corporation		0.9 Tons (2003)
Total Reported Emissions	32,512.0	
Total Assumed Emissions		1.1
Grand Total		32,513.1

Table A15: Facilities in Surry County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Barnhardt Manufacturing Company	3.7 Tons	
Bassett Furniture, Inc.	29 Tons	
Vaughan-Bassett Furn Co - Elkin Furniture	34.4 Tons	
Interface Fabrics Group South, Inc.	78 Tons	
Weyerhaeuser Company - Elkin Plant	98 Tons	
RMC Mid-Atlantic, LLC - DBA- RMC Metromont Materials		0 Tons (2003)
Wayne Farms- Elkin		0.1 Tons (1999)
The North Carolina Granite Corporation		0.1 Tons (2002)
Henredon Furniture Industries, Inc.		0.1 Tons (2003)
Rack Works Inc **INACTIVE**		0.4 Tons (1996)
Kentucky Derby Hosiery Co., Inc.		0.6 Tons (2002)
Surry Community College		1 Ton (1999)
Perdue Farms Incorporated		1 Ton (1999)
LS Starrett Company		1 Ton (1999)
Hamlin Casting Corp.		1 Ton (2002)
Wayne Farms, LLC		1.6 Tons (2003)
Brown Wooten Mills Inc-1546 Carter St **INACTIVE**		3 Tons (1999)
Candle Corporation of America		3.1 Tons (2002)
Spencers Inc Plant No 4		5.2 Tons (1999)
APAC-Atlantic, Inc. - Thompson Arthur Divisio ** INACTIVE **		5.5 Tons (2003)
Intex Corporation ** INACTIVE **		6 Tons (1999)
Sara Lee Sock Company		6.7 Tons (2002)
Carl Rose & Sons, Inc. - Elkin Asphalt Plant		7.6 Tons (2002)
Hamilton Beach/Proctor-Silex Inc **INACTIVE**		8.8 Tons (1999)
Pine State Knitwear Company Inc ** INACTIVE **		11.3 Tons (1999)
Wayne Farms LLC		11.5 Tons (2002)
Spencers Inc Plant No 1		11.8 Tons (1999)
Renfro Corporation		15 Tons (1999)
Cross Creek Apparel, LLC		31 Tons (1999)
City of Mount Airy WWTP		99 Tons (1999)
Total Reported Emissions	243.1	
Total Assumed Emissions		232.39
Grand Total		475.5

Table A16: Facilities in Randolph County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Vitafoam Inc	0.3 Tons	
DAR/RAN Furniture Industries	0.5 Tons	
Prestige Fabricators Inc - Foam Plant	0.8 Tons	
Confluence Holding Corp.	1.9 Tons	
Oliver Rubber Company	2.8 Tons	
Component Fabricators, Inc.	10.8 Tons	
City of Asheboro Lake Lucas PS	99 Tons	
Jowat Corporation		0 Tons (2002)
The P. & P. Chair Company		0.1 Tons (2002)

Table A16: Facilities in Randolph County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Swaim, Inc. - Wagner Division		0.1 Tons (2003)
Carolina Business Furniture LLC		0.1 Tons (2003)
Carolina Custom Finishing, LLC		0.1 Tons (2002)
Miller Desk, Inc. - South Road Plant		0.2 Tons (2003)
Matlab, Inc. - Ramseur Plant		0.2 Tons (2003)
Liberty Veneer Company Inc **INACTIVE**		0.2 Tons (1996)
Ultracraft Company, Division of Norcraft Holdings, LP		0.2 Tons (1999)
Sapona Manufacturing Company Inc		0.3 Tons (2002)
Collier-Keyworth, Inc.		0.5 Tons (2002)
Riley Paving, Inc. - Liberty Plant		0.6 Tons (1999)
Household Products Inc **INACTIVE**		0.6 Tons (1998)
Matlab, Inc. - Plants 1-4, 5, 7, 8 and 11		0.9 Tons (2002)
Moll Industries, Inc., Mid-State Plastics Division		0.9 Tons (2003)
Miller Office Seating		1 Tons (1999)
Miller Desk Finishing **INACTIVE**		1 Tons (1999)
Elkhart Industries, LLC **INACTIVE**		1 Tons (1999)
Georgia - Pacific Corp Asheboro Plant		1 Tons (1999)
Commonwealth Hosiery Mills Inc		1.6 Tons (2002)
Gold Kist Inc		2 Tons (1999)
APAC-Atlantic, Inc., Thompson Arthur Division - Plant #6		2.2 Tons (2002)
Acme McCrary Corp Pritchard St Plant		2.3 Tons (1999)
Acme McCrary Corp North St Finishing Plt		2.5 Tons (1999)
Kayser-Roth Balfour Division		2.8 Tons (1999)
Liberty Lumber Company		3 Tons (1999)
Quality Veneer Company		3.1 Tons (2002)
Bossong Hosiery Mills Inc		3.2 Tons (1999)
Hardin's Wholesale Florist, Inc.		3.3 Tons (1999)
Energizer Battery Manufacturing, Inc.		3.5 Tons (1999)
Galey & Lord Industries Inc ** INACTIVE **		3.6 Tons (1999)
Arrow International Inc		4.2 Tons (1999)
North Carolina Zoological Park ** INACTIVE **		4.4 Tons (2002)
Nylon Dye Works, LLC.		5.1 Tons (1999)
Gilbert Hardwood Centers Inc		7 Tons (1999)
The Goodyear Tire & Rubber Company		7.7 Tons (1999)
APAC-Atlantic, Inc. - Thompson-Arthur Div. - Plant # 9		8.5 Tons (1999)
Ramtex Inc		8.7 Tons (1999)
Starpet, Inc.		9.5 Tons (2003)
Sara Lee Corporation, Underwear Division ** INACTIVE **		11.5 Tons (2003)
Seagroves Foods, Inc. ** INACTIVE **		16.4 Tons (1999)
Deep River Dyeing Company Inc		20.9 Tons (1999)
City of Asheboro Brown WTP		99.9 Tons (1999)
Total Reported Emissions	116.1	
Total Assumed Emissions		245.9
Grand Total		362.0

Table A17: Facilities in Rockingham County Reporting NOx for Calendar Year 2000

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
The Southern Finishing Company, Inc.- Plant 10	1 Ton	
NPC, Inc. - 770 East #1	2.7 Tons	
Morehead Memorial Hospital ** INACTIVE **	4.3 Tons	
Ball Metal Beverage Container Corp	6.4 Tons	
Mohawk Carpet Corp Karastan Rug Mill	6.5 Tons	
Loparex, Inc.	7.3 Tons	
Metzeler Automotive Profile Systems North Carolina Inc	7.4 Tons	
Rockingham Power LLC	35 Tons	
Trigen Biopower Inc - Eden	70.7 Tons	
Pine Hall Brick Company Incorporated	82.9 Tons	
Miller Brewing Company - Eden Plant	540.6 Tons	
Duke Energy Corp - Dan River Steam Station	2,500 Tons	
Transcontinental Gas Pipeline Corp	5,900.3 Tons	
Southern Finishing Company Inc - Plant 7 **INACTIVE**		0.2 Tons (1999)
Fieldcrest Cannon Blanket Manufacturing ** INACTIVE **		0.2 Tons (2003)
Ensley Corporation **INACTIVE**		0.4 Tons (1996)
AMI Doduco (NC), Inc.		0.8 Tons (1999)
New Filcas of America Inc		1 Ton (1999)
Beacon Manuf **Inactive**		1.3 Tons (1996)
Glen Raven Inc Springwood Fabrics Plant ** INACTIVE **		2 Tons (1999)
APAC-Atlantic, Inc. - Thompson-Arthur Division - Plant #7		2.9 Tons (1999)
Pillowtex / Hollingsworth GP		3.1 Tons (2002)
Stoneville Furniture Company Inc ** INACTIVE **		4.6 Tons (1999)
Commonwealth Brands, Inc		5.8 Tons (2002)
Unifi, Inc. - Plant 15		8 Tons (2003)
Unifi Manufacturing, Inc. Dyeing Business Unit - Plant 2		8.6 Tons (2003)
The Equity Group, Inc. - NC Division		10.5 Tons (2002)
Total Reported Emissions	9,165.1	
Total Assumed Emissions		49.4
Grand Total		9,214.5

Appendix B

Facility-Specific NO_x Emissions Inventory Data Calendar Year 2003

Note 1: The tables that follow are in **alphabetical order by county name**

Note 2: The following data are emissions from permitted point sources only, as reported by the facility to the North Carolina Department of Environment and Natural Resources, Division of Air Quality (NCDAQ) and reviewed by NCDAQ staff during the calendar year following the year emitted. With the exception of 1999, when all permitted facilities were required to report their NO_x emissions, only larger facilities with Title V permits are required to report emissions annually. Therefore, the tables that follow show actual reported emissions for the selected year as well as “assumed” emissions for facilities that were not required to report in that year. The “assumed” emissions were taken from the latest year the source was required to report NO_x emissions (year reported is in parentheses).

Table B1: Facilities in Alamance County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
City of Burlington - South Burlington WWTP	0.1 Tons	
City of Graham Wastewater Treatment Plant	0.2 Tons	
NovaFlex Hose Inc.	1.1 Tons	
Riley Paving, Inc.	2.4 Tons	
Liggett Group - Alamance	2.9 Tons	
A.O. Smith Corporation	3 Tons	
Culp, Inc. - Culp Finishing	6.9 Tons	
Alexander Fabrics, LLLP	7.2 Tons	
Stericycle, Inc.	23.1 Tons	
New South Inc	47.9 Tons	
Burlington Industries LLC -BHF & Pioneer Plant	48.9 Tons	
Flynt Fabrics Inc ** INACTIVE **		0 Tons (1999)
City of Burlington - East Burlington WWTP		0.6 Tons (2002)
Glen Raven Mills Glen Touch Division ** INACTIVE **		1 Ton (1999)
Burlington Chemical Company Inc		1 Ton (1999)
Tower Mills Inc. ** INACTIVE **		1 Ton (1999)
Walter Kidde Portable Equipment Inc		1.7 Tons (1999)
Luxfer Gas Cylinders		2 Tons (1999)
Burlington Industries, LLC - Pioneer Plant ** INACTIVE **		3 Tons (1999)
Glen Raven Technical Fabrics, LLC		3 Tons (1999)
Cortina Fabrics, Inc.		3.2 Tons (2002)
Culp Weaving Inc		3.6 Tons (1999)
Braxton Sawmill, Inc.		3.7 Tons (2000)
APAC-Atlantic, Inc. - Thompson Arthur Division - Plant #8		3.9 Tons (1999)
Craftique LLC		4 Tons (1999)
GKN Driveline - Alamance Facility		4.1 Tons (2002)
Kayser-Roth Corporation - Mens Finishing		4.4 Tons (1999)
Culp, Inc. -Upholstery Prints Division		5 Tons (1999)
Alamance Regional Medical Center, Inc.		5 Tons (1999)
Copland Industries, Inc.		13.1 Tons (2002)
A.M.P. Division of Central Paving Company, Inc.		25 Tons (2000)
National Spinning Co., Inc. - Alamance Co. Dyeing Operation		27 Tons (2000)
Carolina Finishing of North Carolina LLC - Elmira Street		49.8 Tons (2000)
Nello L. Teer Company		86.8 Tons (2000)
Total Reported Emissions	143.7	
Total Assumed Emissions		251.89
Grand Total		395.6

Table B2: Facilities in Alexander County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Chase Coating & Laminating	0 Tons	
Shurtape Technologies Inc	0.4 Tons	
Century Furniture Industries Plant #9	0.4 Tons	
Mitchell Gold	0.6 Tons	
Daniels Woodcarving Company, Inc.		0 Tons (2002)
Piedmont Wood Products		0 Tons (2004)
Nu-Mode Manufacturing Company		0 Tons (2002)
Vintage Editions, Inc.		0.1 Tons (2002)
Clayton Marcus Plant No. 1		0.3 Tons (1999)
Hancock & Moore Plt 2		4 Tons (1999)
Brushy Mountain Enterprises		4.5 Tons (2002)
Schneider Mills Inc		6.2 Tons (1999)
Total Reported Emissions	1.4	
Total Assumed Emissions		15.1
Grand Total		16.5

Table B3: Facilities in Buncombe County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Anvil Knitwear, Inc.	39.1 Tons	
APAC Enka	9.15 Tons	
APAC Grove Stone	4.25 Tons	
APAC Weaverville	13.9 Tons	
Asheville Area Alternative Funeral and Crematory	0.07 Tons	
Asheville Mortuary Services	0.3 Tons	
Asheville Velour, Inc. (formerly Girmes)	0.337 Tons	
BASF Enka	239 Tons	
Basofil Fibers, LLC	0.304 Tons	
BorgWarner Turbo Systems	11.0 Tons	
Buncombe Co. Landfill	3.2 Tons	
Colbond, Inc.	5.75 Tons	
Cremation Services of WNC	0.32 Tons	
Day International, Inc.	10.2 Tons	
Eaton Cutler – Hammer	0.566 Tons	
Forever Faithful Pet Memorial	0.22 Tons	
Interstate Custom Crushing	1.88 Tons	
Lustar	16.5 Tons	
Metropolitan Sewerage District	4.53 Tons	
Milkco, Inc.	2.53 Tons	
Mission St. Joseph's	17.5 Tons	
Morris Funeral Home	0.12 Tons	
Owen Manufacturing	9.5 Tons	
Pechiney Plastic Packaging, Inc.	9.55 Tons	
Progress Energy Carolinas (formerly CP&L)	4980 Tons	

Table B3: Facilities in Buncombe County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Regional Water Authority (formerly Asheville Water Authority)	0.09 Tons	
Riverside Stump Dump	3.94 Tons	
Sensible Alternatives	0.03 Tons	
US Dept. of Veterans Affairs	5.07 Tons	
Western Animal Disease Diag (formerly Diagnostic Lab)	0.22 Tons	
Total Reported Emissions	5,389.127	
Total Assumed Emissions		0
Grand Total		5,389.127

Table B4: Facilities in Burke County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
E J Victor Upholstery Division	0.1 Tons	
Lexington Furniture Plant 10	0.4 Tons	
E J Victor Inc	0.6 Tons	
Saft America Inc	0.7 Tons	
Basf Corp	0.9 Tons	
Molded Fiberglass Co/North Carolina	1.9 Tons	
Kohler Co., DBA Baker Furniture	2.8 Tons	
Leviton - Southern Devices Div	3.3 Tons	
Drexel Heritage Furniture Industries, Inc. Plt. 60	5.6 Tons	
Earthgrains Baking Companies Inc	7.3 Tons	
W M Cramer Lumber Co	10.7 Tons	
Broughton Hospital	15.6 Tons	
Drexel Heritage Furnishings, Inc. - Plant 43	15.7 Tons	
Carolina Mills Plt 9	18 Tons	
Burke Mills Inc	23.5 Tons	
SGL Carbon LLC	29.9 Tons	
Henredon Furniture Industries, Inc.	30.1 Tons	
Valdese Manufacturing Company	40.2 Tons	
RMC Mid-Atlantic, dba RMC Metromont Materials - Morganton		0 Tons (2002)
Robert Bergelin Company		0 Tons (2002)
SpartaCraft Inc		0 Tons (2000)
Ferguson Copeland, LLC d/b/a Ferguson Copeland Ltd Reep Driv		0.2 Tons (1999)
Synthron Inc		0.3 Tons (2002)
Packaging Corporation Of America		1 Ton (2002)
Boggs HMA, LLC - Plant 5		1 Ton (1999)
Valdese Textiles Inc		1 Ton (2002)
NC School for the Deaf		1.1 Tons (1999)
NC DOC Western Youth Institution		1.5 Tons (1999)
Burke Grading & Paving Inc - East Burke Asphalt		2 Tons (1999)
Case Farms of NC, Inc. - Rand St.		3.2 Tons (1999)

Table B4: Facilities in Burke County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
WNC Dry Kiln, Inc		4 Tons (1999)
Valdese Weavers Inc Plant #1		5.8 Tons (1999)
Alba-Waldensian P&W Plt ** INACTIVE **		6.3 Tons (1999)
Borden Chemical Inc		7.5 Tons (2000)
Drexel Heritage Furn Industries Inc - Furn Plt ** INACTIVE **		8.7 Tons (2002)
Hickory Hill Furniture Corp		10.3 Tons (1999)
APAC-Atlantic, Inc. - Morganton Plant		11.3 Tons (1999)
Total Reported Emissions	207.3	
Total Assumed Emissions		65.2
Grand Total		272.5

Table B5: Facilities in Caldwell County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
M & S Warehouse Inc	0.4 Tons	
Sealed Air Corp	0.6 Tons	
Shurtape Technologies Inc - Plt No 24	0.6 Tons	
Pactiv Corporation	1.4 Tons	
Kincaid Furn Plt 8 ** INACTIVE **	3.2 Tons	
Broyhill Miller Hill Complex	4 Tons	
Meridian Automotive Systems Inc	4.1 Tons	
Kincaid Furniture Company Plant No 5 ** INACTIVE **	4.1 Tons	
NEPTCO Inc	5 Tons	
Martin Marietta Materials Inc	5.7 Tons	
Fairfield Chair Plt 2	7.3 Tons	
Bernhardt Furn Plts 2 and 5	17.8 Tons	
Broyhill Harper Furniture Co	23.9 Tons	
Thomasville Furniture Industries Inc - Lenoir Plt	27.3 Tons	
Broyhill Virginia Street Complex	37.9 Tons	
Bernhardt Furn Plts 1 3 & 7	39.8 Tons	
Kincaid Furn Plt 1	54.3 Tons	
Trigen Biopower Inc - Lenoir	182.5 Tons	
J & M Woodworking Plt 2		0 Tons (2002)
McCreary Modern Inc - Frame Plant		0 Tons (2002)
ECMD Inc dba Crown Heritage		0.1 Tons (1999)
Schwarz & Schwarz Inc		0.2 Tons (1999)
Lenoir Mirror Plnts 1 & 3		0.7 Tons (1999)
Midstate Contractors Inc		2 Tons (1999)
Paxar Corporation - Printed Label Group		4.3 Tons (1999)
Omni Supply Inc		5 Tons (1999)
Mat NuWood LLC		5.7 Tons (1999)
Sealed Air Corp - Hudson		6.3 Tons (2002)
Fairfield Chair Plt 1		7.8 Tons (1999)

Table B5: Facilities in Caldwell County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Granite Hardwoods Inc		9 Tons (1999)
Associated Hardwood Products, Inc.		17 Tons (1999)
Total Reported Emissions	419.9	
Total Assumed Emissions		58.1
Grand Total		478.0

Table B6: Facilities in Catawba county reporting NOx(CAS: NOx) for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Null Industries Inc ** INACTIVE **	0 Tons	
Ramsey's Finishing, Inc.	0 Tons	
Cranford Woodcarving Finishing Plant No 3	0.1 Tons	
Sherrill Furniture Company, Inc., CTH-Sherrill Occasional	0.3 Tons	
Plastic Packaging Inc	0.3 Tons	
Claremont NA Cable, LLC	0.3 Tons	
Laneventure, Plant No. 14	0.4 Tons	
Hickory Springs Manufacturing - Conover Complex	0.4 Tons	
City of Newton - Casa Christina Site	0.8 Tons	
Synthetics Finishing Hickory	0.9 Tons	
Progressive Furniture Inc	1 Ton	
Joan Fabrics Corporation-Newton	1.1 Tons	
Midstate Contractors, Inc.	1.4 Tons	
Commscope Network Cable Division	1.6 Tons	
Carpenter Company Conover	1.6 Tons	
Synthetics Finishing Longview	2.1 Tons	
Frye Regional Medical Center	2.5 Tons	
City of Newton - Sarstedt Site	3.1 Tons	
Hooker Furniture Corporation ** INACTIVE **	3.1 Tons	
Ethan Allen Operations, Inc. Maiden Division	3.3 Tons	
City of Newton Inno - Therm Products Site	3.4 Tons	
City of Newton - Polymask Corp Site	3.5 Tons	
City of Newton - Moretz Inc. Site	3.6 Tons	
Inno-Therm Products LLC	3.6 Tons	
Hickory Chair Company, Plant 7	4.2 Tons	
Hickory Springs Manufacturing Company	5.5 Tons	
Blackburn Sanitary Landfill	6.9 Tons	
Century Furniture Industries, Inc., Plants #3 and #7	8.4 Tons	
Hickory Chair Company Plant #20 ** INACTIVE **	8.6 Tons	
Shurtape Technologies - Hickory/Highland Plt	10.2 Tons	
HWS Company Inc. dba Hickory White	12.1 Tons	
Broyhill Furniture Conover Plant ** INACTIVE **	12.2 Tons	
Century Furniture Industries Plant #1	16.4 Tons	
Duke Energy Corporation - Marshall Steam Station	20,397.7 Tons	
Carolina House Furniture Inc		0 Tons (2002)
Thomasville Furniture Industries, Inc., Upholstery Plant 5		0 Tons (2002)

Table B6: Facilities in Catawba county reporting NOx(CAS: NOx) for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Carolina Glove Company, Plant #8		0 Tons (2002)
Carolina Solvents, Inc.		0.1 Tons (2002)
Century Furniture Industries, Plt 40 Technical Center		0.1 Tons (2002)
Vanguard Furniture Company, Inc., Plant No. 2		0.2 Tons (1999)
Synthetics Finishing Conover		0.2 Tons (2002)
Unifour Finishers, Inc., Division I		0.4 Tons (2002)
Appalachian Hardwood Flooring		0.4 Tons (2002)
Unifour Finishers, Inc., Division II		0.4 Tons (2002)
Special Metals Welding Products Company		0.5 Tons (2002)
Karolina Polymers, Inc. ** INACTIVE **		0.6 Tons (2002)
City of Hickory, Henry Fork WWTP ** INACTIVE **		0.6 Tons (2002)
Jackson Lea ** INACTIVE **		1 Tons (1999)
GKN Sinter Metals, Inc.		1 Tons (1999)
Chelsea House-Port Royal Inc		1 Tons (1999)
Newton Sanitary Landfill		1 Tons (2002)
Southern Furn Co of Conover Catawba Plt		1.5 Tons (2002)
Weyerhaeuser Company - Newton		2 Tons (1999)
Carolina Paving of Hickory Inc		2 Tons (1999)
Conover Lumber Co Inc		2 Tons (1999)
Thomasville Furniture Industries, Inc., Upholstery Plant 9		2 Tons (1999)
Midstate Mills Inc		2 Tons (1999)
Carolina Container Corporation		2.1 Tons (1999)
Tradewinds International, Inc.		2.7 Tons (2002)
Classic Leather Inc		2.9 Tons (1999)
Commscope Inc Catawba Plant		3.3 Tons (2000)
Bassett Upholstery Division		3.3 Tons (1999)
Southern Furniture Company of Conover, Inc., Plant No. 2		3.3 Tons (1999)
Terra-Mulch Products, LLC		4.8 Tons (1999)
Spectrum Textured Yarns Inc-Hickory Plant ** INACTIVE **		5 Tons (2000)
City of Newton, Clark Creek Wastewater Treatment Plant		6 Tons (1999)
C Nelson Sigmon Paving Inc		6 Tons (1999)
Southern Furn Co of Conover #1		10.1 Tons (1999)
APAC-Atlantic, Inc. - Hickory Plant		10.8 Tons (2002)
Delta Apparel, Inc.		17 Tons (1999)
Total Reported Emissions	20520.6	
Total Assumed Emissions		96.29
Grand Total		20616.9

Table B7: Facilities in Cumberland County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Black & Decker (US) Inc.	0.8 Tons	
Cumberland Co - Ann Street Landfill	1 Tons	
Purolator Products Inc	5.9 Tons	
Pope Air Force Base	7.5 Tons	
Cape Fear Valley Med Center	8.4 Tons	

Table B7: Facilities in Cumberland County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
APAC Atlantic, Inc - Shaw Plant	17.8 Tons	
Hexion Specialty Chemicals, Inc.	25.8 Tons	
DAK Resins, LLC	74.7 Tons	
Carolina By-Products Fayetteville Division	76.7 Tons	
HQ XVIII ABN Corps & Fort Bragg	91 Tons	
Public Works Commission Butler-Warner Generation Plant	113.3 Tons	
The Goodyear Tire & Rubber Company	157.6 Tons	
Cargill Inc - Fayetteville	219 Tons	
Rankin Brothers Company		2 Tons (1999)
National Linen Service		2 Tons (1999)
Veterans Affairs Medical Center - Fayetteville		3 Tons (1999)
Highland Paving Company, LLC		3.6 Tons (2004)
M J Soffe Co		6 Tons (1999)
Barnhill Contracting - Fayetteville Plant		8.9 Tons (2002)
DAK Resins Cedar Creek Site		10.6 Tons (2002)
Dupont Teijin Films		11.7 Tons (2001)
Total Reported Emissions	799.5	
Total Assumed Emissions		47.8
Grand Total		847.3

Table B8: Facilities in Davidson County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Dell, Inc	0.1 Tons	
Tomlinson/Erwin-Lambeth, Inc.	0.1 Tons	
Exopack - Thomasville, LLC	0.1 Tons	
Green Printing and Packaging Company	0.1 Tons	
Kurz Transfer Products, LLC	0.5 Tons	
Thomasville Furniture Plant B ** INACTIVE **	0.6 Tons	
Celand Yarn Dyers Inc	1.8 Tons	
Stone Container Corporation d/b/a Smurfit-Stone Container	2.5 Tons	
T I Industries	3 Tons	
Hanes Construction Company	4.4 Tons	
Shaw Industries Group, Inc. - Plant LP	4.5 Tons	
Thomasville Furniture Plant D	4.6 Tons	
Kimberly Clark Corporation	6.4 Tons	
StrideMark, LLC	6.6 Tons	
Lexington Furniture Plant 12 ** INACTIVE **	6.8 Tons	
Lexington Furniture Inc., Plant 5	12.6 Tons	
Lexington Furniture Plant 1	14.4 Tons	
Stanley Furniture Company - Lexington Mfg	15.9 Tons	
Cunningham Brick Company Inc	16.7 Tons	
Thomasville Furniture Plant C/M/W/SB	17.8 Tons	
Pallet Resource of NC, Inc.	18.7 Tons	
Lexington Furniture Industries Plant 2	21.1 Tons	
Thomasville Furniture Plant A/X/V Face	22.3 Tons	

Table B8: Facilities in Davidson County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
PPG Industries Fiber Glass Products, Inc.	88.4 Tons	
Owens-Brockway Glass Container Plt 6	576.6 Tons	
Transcontinental Gas Pipeline Corp	915.4 Tons	
Vitafoam Incorporated		0 Tons (2002)
Superior Wood Products, Inc.		0 Tons (2002)
Leggett & Platt, Incorporated - Metal Bed Rail		0.1 Ton (2002)
LKF Inc		0.1 Ton (2002)
Georgia - Pacific Resins Inc		0.2 Tons (1999)
Diebold Southeast Manufacturing, Inc.		0.2 Tons (1999)
Acme Face Veneer Company		0.2 Tons (2002)
Thomasville Veneer Company		0.5 Tons (2002)
Burlington Ind - Denton Plant ** INACTIVE **		0.6 Tons (1999)
Central Lumber Company, Inc.		0.6 Tons (2002)
Thomas Manufacturing Co Of Thomasville		0.6 Tons (2002)
Commercial Carving Company		1 Ton (1999)
Conner Carving and Turning Co Inc ** INACTIVE **		1 Ton (1999)
Hekman Furniture Company		1 Ton (1999)
Leonard Block Company		1 Ton (1999)
Santaro Construction Co **inactive**		1 Ton (1999)
Councill Company, LLC - Plant #3		1 Ton (1999)
RMC Mid-Atlantic, LLC - Thomasville Plant		1 Ton (1999)
Councill Company, LLC - Plant #2		1 Ton (1999)
Leggett & Platt - Metal Bed Rail		1 Ton (1999)
Southern Veneer Company, Inc.		1.2 Tons (2002)
Finch Industries Inc		1.8 Tons (1999)
The North Carolina Moulding Company		2 Tons (1999)
Davidson Water Inc		2 Tons (1999)
Councill Company, LLC - Plant #1		2.8 Tons (2002)
Duracell Global Business Management Group		3 Tons (1999)
Moll Industries, Inc. - Lexington Division		3 Tons (1999)
Dimension Milling Company, Inc.		7.3 Tons (2002)
NC Municipal Power Agency No. 1 Lexington, Plant No. 1		11.4 Tons (2000)
NC Municipal Power Agency No. 1- Lexington Plant No. 2		13.5 Tons (2000)
Thomasville Furniture Industries, Inc. - Plant SFD/SFLP		37.2 Tons (2000)
Thomasville Furniture Plant E/CDF/CDK/NV		42.5 Tons (2000)
Total Reported Emissions	1,762.0	
Total Assumed Emissions		139.8
Grand Total		1,901.8

Table B9: Facilities in Davie County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Thomson Crown Wood Products Company ** INACTIVE **	8.3 Tons	
Kohler Co. - Baker Furniture		0.8 Tons (2002)
Funder America, Inc		12.7 Tons (2002)
Ingersoll - Rand Company		19 Tons (1999)
Total Reported Emissions	8.3	
Total Assumed Emissions		32.5
Grand Total		40.8

Table B10: Facilities in Forsyth County Reporting NOx Emissions for Calendar Year 2003

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
Microfibres, Inc.	12.9 Tons	
Hanes Dye & Finishing	86.6 Tons	
R.J. Reynolds Tobacco Company (00339)	316 Tons	
Javic Properties, LLC	22.5 Tons	
Sara Lee Underwear	15.7 Tons	
R.J. Reynolds Tobacco Company (00405)	6.4 Tons	
Highland Industries, Inc.	10.3 Tons	
Hooker Furniture Corporation	0.3 Tons	
R.J. Reynolds Packaging Division (00465)	17.5 Tons	
R.J. Reynolds Packaging Division (00466)	7.9 Tons	
Rexam Beverage Can	10.4Tons	
Corn Products International, Inc.	501.4 Tons	
R.J. Reynolds Tobacco Company (00745)	972 Tons	
Sun Chemical Corp. – Specialty Inks	0.8 Tons	
Powerlab, Inc.	0.2 Tons	
Carolina Art and Frame	3.4 Tons	
Wake Forest University		0.9 Tons (2002)
NC Baptist Hospital		18.7 Tons (2002)
Sara Lee Hosiery		7.1 Tons (2002)
Kaba Ilco Corporation		2.7 Tons (2002)
Vogler & Son's Funeral Home		0.2 Tons (2002)
Taylor Brothers, Inc.		3.7 Tons (2002)
Johnson Controls, Inc.		4.8 Tons (2002)
APAC-Carolina, Inc. Thompson-Arthur Division		2.1 Tons (2002)
VF Jeanswear, Inc.		8 Tons (2002)
City of Winston-Salem – Archie Elledge WWTP		15.1 Tons (2002)
Salem Energy Systems, LLC		32.5 Tons (2002)
Piedmont Landfill & Recycling Cneter		1.7 Tons (2002)
Royster-Clark, Inc.		0.6 Tons (2001)
Advanced Turbine Components		17 Tons (2001)
Winston-Salem State University		4.5 Tons (2001)
Americraft Carton Group, Inc.		0.2 Tons (2001)
Cremation Services, Inc.		0.2 Tons (2001)
City of Winston-Salem Muddy Creek		17.1 Tons (2001)

Table B10: Facilities in Forsyth County Reporting NOx Emissions for Calendar Year 2003

Facility Name	Reported Amount (2000)	Additional Assumed Amount (year)
WWTP		
Central Carolina Pet Services, Inc.		0.1 Tons (2001)
Southern Tool Manufacturing Co.		0.2 Tons (2000)
Brady Furniture		1.3 Tons (2000)
Transflo Terminal Services, Inc.		3.3 Tons (2000)
The Encore Group Inc. DBA Xpres		2.3 Tons (2000)
Cloverleaf Mixing, Inc.		2.4 Tons (2000)
Winston Weaver Company, Inc.		1.1 Tons (1999)
Forsyth Technical Community College		0.1 Tons (1999)
Douglas Battery Manufacturing Co.		3.7 Tons (1999)
RMC Carolina Materials, Inc.		0.2 Tons (1999)
Jefferson Smurfit Container Corp. of America		3.5 Tons (1999)
Larco Construction		2.5 Tons (1999)
Winston Tower Main, LLC		0.4 Tons (1999)
Forsyth Memorial Hospital		5.3 Tons (1999)
Sonoco Corfflex		3.4 Tons (1999)
APAC – Carolina, Inc. Thompson-Arthur Division (00770)		1.4 Tons (1999)
Corilam Fabricating Company		0.2 Tons (1999)
Deere-Hitachi Construction Machinery		1.1 Tons (1999)
Unifirst		2.8 Tons (1999)
Bepco, Inc.		0.3 Tons (1999)
Wilson-Cook Medical, Inc.		0.1 Tons (1999)
APAC Atlantic, Inc. Thompson Arthur Division (00909)		3.9 Tons (1999)
Total Reported Emissions	1984.3	
Total Assumed Emissions		176.7
Grand Total		2161.0

Table B11: Facilities in Guilford County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Banknote Corporation of America, Inc.	0 Tons	
Oldcastle Precast, Inc.	0.1 Tons	
Chemcentral Atlantic Corporation	0.1 Tons	
Guilford Mills, Inc. - Hornaday Plant ** INACTIVE **	0.1 Tons	
Davis Furniture Industries, Inc. - Plant 2	0.1 Tons	
Leggett & Platt, Inc.	0.1 Tons	
Shamrock Corporation Tipping Division	0.1 Tons	
Custom Finishers Inc	0.1 Tons	
DaimlerChrysler Commercial Buses North Carolina, LLC	0.2 Tons	
Shamrock Corp - Bruce St	0.2 Tons	
Miller Desk Inc	0.2 Tons	
Swaim Metals, Inc.	0.3 Tons	
The Sherwin - Williams Company - Stagecoach Trail	0.3 Tons	

Table B11: Facilities in Guilford County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Greensboro Flexible Packaging LLC dba North State Flexibles	0.3 Tons	
Mickey Truck Bodies Inc	0.4 Tons	
Jefferson-Pilot Life Insurance Company	0.4 Tons	
High Point Furniture Industries, Inc.	0.5 Tons	
Mannington Mills, Inc. dba Mannington Laminate Floors	0.5 Tons	
Engineered Polymer Solutions Inc d.b.a. Valspar Coatings	0.7 Tons	
Engineered Polymer Solutions, Inc. dba Valspar Coatings	0.8 Tons	
HM Real Estate Co. No. 1 dba Woodmark Originals, Inc.	0.8 Tons	
City of Greensboro - White Street Landfill	0.8 Tons	
Bush Industries, Inc. d/b/a The Color Works, Inc.	0.8 Tons	
The Sherwin - Williams Co, Consumer Group	0.9 Tons	
Thomas Built Buses - Fairfield Road	1 Ton	
Henredon Furniture Industries, Inc. - Ward Plant	1.2 Tons	
City of Greensboro - Kenneth Lift Station	1.3 Tons	
Henredon Furniture Industries, Inc. - Brevard Plant	1.6 Tons	
APAC-Atlantic, Inc. - Thompson Arthur Division - Plant #15	1.7 Tons	
Carolina Container Company	2.8 Tons	
Mannington Mills, Inc. - Mannington Wood Floors Company	2.8 Tons	
Flowers Baking Company of Jamestown, Inc.	2.9 Tons	
Colonial Pipeline Company	2.9 Tons	
Motiva Enterprises LLC - Greensboro	3.4 Tons	
Cascade Die Casting Group, Inc. - Atlantic Division	3.8 Tons	
Thomas Built Buses - Courtesy Road	4.1 Tons	
City of High Point - Eastside Wastewater Treatment Plant	4.1 Tons	
High Point Regional Health System	5 Tons	
Hooker Furniture Corporation	5.2 Tons	
APAC-Atlantic, Inc. - Thompson Arthur Division - Plant #11	6.5 Tons	
Blythe Construction, Inc - Plant #1	8.1 Tons	
Resco Products Inc	8.3 Tons	
CDR Holdings, L.L.C. dba Charles D. Roberts Company	9.9 Tons	
Konica Minolta Manufacturing USA Inc	12.7 Tons	
Hanson Brick - Pleasant Garden Plant #1	13.5 Tons	
Marsh Furniture Company	19.8 Tons	
Lorillard Tobacco Company	41.7 Tons	
Morflex Chemical Company Inc	47.6 Tons	
Cone Denim LLC - White Oak Plant	73.8 Tons	
Brayton International Inc		1.5 Tons (2002)
Lane Furniture Industries Inc. Royal Development Co Division		0 Tons (2002)
Wysong & Miles Machinery ** INACTIVE **		0 Tons (1999)
Madison Hill Funeral Service & Cremation Center		0 Tons (2000)
Bolection Door, A Division of Marshfield DoorSystems, Inc.		0 Tons (1999)
Snyder Paper Corporation - Synder Cushion of High Point		0 Tons (2002)
Smurfit-Stone Container Enterprises, Inc.		0 Tons (1999)
Patrician Furniture, Inc. d/b/a Patrician Furniture Company		0 Tons (2002)
Associated Asphalt Greensboro, Inc.		0.2 Tons (1999)

Table B11: Facilities in Guilford County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
High Point Fibers, Inc.		0.2 Tons (2002)
RMC Mid Atlantic, LLC d/b/a RMC Metromont Materials		0.3 Tons (2002)
Drexel Heritage Furnishings Inc		0.3 Tons (2002)
United Metal Finishing Inc		0.3 Tons (2002)
Carpenter Co.		0.4 Tons (2002)
Future Foam, Inc.		0.4 Tons (2002)
Metal Creations Inc		0.4 Tons (2002)
Shamrock Corporation - Chimney Rock Printing		0.5 Tons (2000)
Greensboro News & Record, Inc.		0.5 Tons (2002)
Degussa Corporation		0.5 Tons (1999)
Prochem Chemicals Inc		0.6 Tons (1999)
Banner Pharmacaps, Inc. a subsidiary of Sobel USA		0.7 Tons (1999)
Akzo Nobel Coatings Inc		0.9 Tons (2000)
RF Micro Devices, Inc. - Fab. 2		0.9 Tons (2002)
Goria Enterprises, Inc.		1 Ton (1999)
Magellan Terminals Holdings, L.P.		1 Ton (1999)
Ritch Face Veneer Company & Faces South, Inc.		1 Ton (1999)
Thomasville - Dixel Incorporated		1 Ton (1999)
City of Greensboro - N Buffalo WWTP		1 Ton (1999)
Brenntag Southeast, Inc.		1 Ton (1999)
Royal Carolina Corporation		1 Ton (1999)
Haworth, Inc. - Haworth Wood Seating		1.1 Tons (1999)
Vitafoam Inc - Pleasant Garden		1.2 Tons (2001)
North Carolina Agricultural and Technical State University		1.5 Tons (1999)
Piedmont Chemical Industries I, LLC		1.7 Tons (1999)
Harvin Reaction Technology, Inc.		1.7 Tons (2002)
Tyco Electronics Corporation		1.9 Tons (1999)
RF Micro Devices, Inc. - FAB 1, FAB 3 and Packaging		1.9 Tons (2002)
Piedmont Hardwood Dry Kiln Company		2 Tons (1999)
Lin Pac Corrugated Inc		2 Tons (1999)
Claude Gable Company Inc		2 Tons (1999)
Highland Containers, Inc.		2 Tons (1999)
Guilford Mills - Friendship Facility		2 Tons (1999)
Guilford College - Main Campus		2.1 Tons (2002)
Shionogi Qualicaps Inc		2.5 Tons (2002)
Unitex Chemical Corporation		2.6 Tons (2002)
Santaro Manufacturing Company Inc**INACTIVE**		2.6 Tons (1999)
Chemol Inc		2.9 Tons (1999)
Culp Inc - Ticking		3 Tons (1999)
Syngenta Crop Protection Inc		3.4 Tons (1999)
TransMontaigne Product Services, Inc.		3.7 Tons (2002)
Gilbarco, Inc.		4 Tons (1999)
Fiber Dynamics, Inc.		4 Tons (2002)

Table B11: Facilities in Guilford County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Pine Needle LNG Company LLC		4.9 Tons (1999)
Slane Hosiery Mills Inc		5.1 Tons (1999)
International Aggregate, Inc. ** INACTIVE **		6 Tons (1999)
APAC-Atlantic, Inc. - Thompson Arthur Division - Plant #10		6.1 Tons (1999)
Nello L. Teer Company		6.3 Tons (1999)
Procter & Gamble Manufacturing Company		6.5 Tons (1999)
The Moses H Cone Memorial Hospital		8.8 Tons (2002)
Kao Specialties Americas, LLC		10.4 Tons (1999)
NC Municipal Power Agency No. 1 - High Point Plant 1		11.4 Tons (2000)
NC Municipal Power Agency No. 1 - High Point Plant 2		11.4 Tons (2000)
Elastic Fabrics of America		12.4 Tons (1999)
The University of North Carolina at Greensboro - Physical pl		12.8 Tons (2000)
Precision Fabrics Group Inc		16 Tons (1999)
City of Greensboro - Thomas Z. Osborne POTW		19.5 Tons (2002)
The Procter & Gamble Manufacturing Company - Brown Summit		25.1 Tons (1999)
Hayworth Roll & Panel Company Inc		30.3 Tons (1999)
Total Reported Emissions	294.5	
Total Assumed Emissions		260.4
Grand Total		554.9

Table B12: Facilities in Haywood County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Blue Ridge Paper Products - Canton Mill	5,358.4 Tons	
Waynesville Waste Water Treatment Plant		0.2 Tons (1999)
Airboss Rubber Compounding Inc.		0.2 Tons (1999)
Oaks Unlimited - Division of Fiber Fuels Inc		1 Tons (1999)
APAC-Tennessee Harrison Construction - Waynesville Asphalt		1.5 Tons (1999)
Giles Chemical		1.6 Tons (1999)
Blue Ridge Paper Products - Waynesville		5.1 Tons (1999)
Total Reported Emissions	5358.4	
Total Assumed Emissions		9.6
Grand Total		5368.0

Table B13: Facilities in Stokes County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
JPS Elastomerics Corporation	0.9 Tons	
KobeWieland Copper Products, LLC	3.1 Tons	
Duke Energy Corp - Belews Creek Steam Station	26,861.2 Tons	
Bill Hanks Lumber Company		0.2 Tons (2002)
Charah Environmental, Inc. ** INACTIVE **		9 Tons (2000)
Total Reported Emissions	26,865.2	
Total Assumed Emissions		9.2
Grand Total		26,874.4

Table B14: Facilities in Surry County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
RMC Mid-Atlantic, LLC - DBA- RMC Metromont Materials	0 Tons	
Henredon Furniture Industries, Inc.	0.1 Tons	
Wayne Farms, LLC	1.6 Tons	
APAC-Atlantic, Inc. - Thompson Arthur Divisio ** INACTIVE **	5.5 Tons	
Bassett Furniture, Inc.	30.3 Tons	
Vaughan-Bassett Furn Co - Elkin Furniture	32.7 Tons	
Weyerhaeuser Company - Elkin Plant	41 Tons	
Interface Fabrics Group South, Inc.	98.2 Tons	
Wayne Farms- Elkin		0.1 Tons (1999)
The North Carolina Granite Corporation		0.1 Tons (2002)
Kentucky Derby Hosiery Co., Inc.		0.6 Tons (2002)
Surry Community College		1 Ton (1999)
Perdue Farms Incorporated		1 Ton (1999)
LS Starrett Company		1 Ton (1999)
Hamlin Casting Corp.		1 Ton (2002)
Candle Corporation of America		3.1 Tons (2002)
Barnhardt Manufacturing Company		3.7 Tons (2000)
Spencers Inc Plant No 4		5.2 Tons (1999)
Intex Corporation ** INACTIVE **		6 Tons (1999)
Sara Lee Sock Company		6.7 Tons (2002)
Carl Rose & Sons, Inc. - Elkin Asphalt Plant		7.6 Tons (2002)
Pine State Knitwear Company Inc ** INACTIVE **		11.3 Tons (1999)
Wayne Farms LLC		11.5 Tons (2002)
Spencers Inc Plant No 1		11.8 Tons (1999)
Renfro Corporation		15 Tons (1999)
Cross Creek Apparel, LLC		31 Tons (1999)
City of Mount Airy WWTP		99 Tons (1999)
Total Reported Emissions	209.4	
Total Assumed Emissions		216.7
Grand Total		426.1

Table B15: Facilities in Randolph County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Swaim, Inc. - Wagner Division	0.1 Tons	
Carolina Business Furniture LLC	0.1 Tons	
Miller Desk, Inc. - South Road Plant	0.2 Tons	
Matlab, Inc. - Ramseur Plant	0.2 Tons	
DAR/RAN Furniture Industries	0.5 Tons	
Moll Industries, Inc., Mid-State Plastics Division	0.9 Tons	
B & H Panel Company	2.2 Tons	
Oliver Rubber Company	2.7 Tons	
Starpet, Inc.	9.5 Tons	
Sara Lee Corporation, Underwear Division ** INACTIVE **	11.5 Tons	
Jowat Corporation		0 Tons (2002)
The P. & P. Chair Company		0.1 Tons (2002)

Table B15: Facilities in Randolph County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Carolina Custom Finishing, LLC		0.1 Tons (2002)
Ultracraft Company, Division of Norcraft Holdings, LP		0.2 Tons (1999)
Vitafoam Inc		0.3 Tons (2000)
Sapona Manufacturing Company Inc		0.3 Tons (2002)
Collier-Keyworth, Inc.		0.5 Tons (2002)
Riley Paving, Inc. - Liberty Plant		0.6 Tons (1999)
Prestige Fabricators Inc - Foam Plant		0.6 Tons (2001)
Matlab, Inc. - Plants 1-4, 5, 7, 8 and 11		0.9 Tons (2002)
Miller Office Seating		1 Ton (1999)
Elkhart Industries, LLC **INACTIVE**		1 Ton (1999)
Georgia - Pacific Corp Asheboro Plant		1 Ton (1999)
Commonwealth Hosiery Mills Inc		1.6 Tons (2002)
Confluence Holding Corp.		1.9 Tons (2000)
Gold Kist Inc		2 Tons (1999)
APAC-Atlantic, Inc., Thompson Arthur Division - Plant #6		2.2 Tons (2002)
Acme McCrary Corp Pritchard St Plant		2.3 Tons (1999)
Acme McCrary Corp North St Finishing Plt		2.5 Tons (1999)
Kayser-Roth Balfour Division		2.8 Tons (1999)
Liberty Lumber Company		3 Tons (1999)
Quality Veneer Company		3.1 Tons (2002)
Bossong Hosiery Mills Inc		3.2 Tons (1999)
Hardin's Wholesale Florist, Inc.		3.3 Tons (1999)
Energizer Battery Manufacturing, Inc.		3.5 Tons (1999)
Arrow International Inc		4.2 Tons (1999)
North Carolina Zoological Park ** INACTIVE **		4.4 Tons (2002)
Nylon Dye Works, LLC.		5.1 Tons (1999)
Gilbert Hardwood Centers Inc		7 Tons (1999)
The Goodyear Tire & Rubber Company		7.7 Tons (1999)
APAC-Atlantic, Inc. - Thompson-Arthur Div. - Plant # 9		8.5 Tons (1999)
Ramtex Inc		8.7 Tons (1999)
Component Fabricators, Inc.		10.8 Tons (2000)
Seagroves Foods, Inc. ** INACTIVE **		16.4 Tons (1999)
Deep River Dyeing Company Inc		20.9 Tons (1999)
City of Asheboro Lake Lucas PS		99 Tons (2000)
City of Asheboro Brown WTP		99.9 Tons (1999)
Total Reported Emissions	27.9	
Total Assumed Emissions		330.6
Grand Total		358.5

Table B16: Facilities in Rockingham County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Fieldcrest Cannon Blanket Manufacturing ** INACTIVE **	0.2 Tons	
The Southern Finishing Company, Inc.- Plant 10	0.6 Tons	
Loparex, Inc.	5.6 Tons	
Ball Metal Beverage Container Corp	6.8 Tons	

Table B16: Facilities in Rockingham County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Metzeler Automotive Profile Systems North Carolina Inc	7.2 Tons	
Unifi, Inc. - Plant 15	8 Tons	
Unifi Manufacturing, Inc. Dyeing Business Unit - Plant 2	8.6 Tons	
Rockingham Power LLC	22 Tons	
Trigen Biopower Inc - Eden	81.1 Tons	
Pine Hall Brick Company Incorporated	81.4 Tons	
Miller Brewing Company - Eden Plant	529.3 Tons	
Duke Energy Corp - Dan River Steam Station	2,963.9 Tons	
Transcontinental Gas Pipeline Corp	4,590.7 Tons	
AMI Doduco (NC), Inc.		0.8 Tons (1999)
New Filcas of America Inc		1 Ton (1999)
Glen Raven Inc Springwood Fabrics Plant ** INACTIVE **		2 Tons (1999)
NPC, Inc. - 770 East #1		2.7 Tons (2000)
APAC-Atlantic, Inc. - Thompson-Arthur Division - Plant #7		2.9 Tons (1999)
Pillowtex / Hollingsworth GP		3.1 Tons (2002)
Stoneville Furniture Company Inc ** INACTIVE **		4.6 Tons (1999)
Commonwealth Brands, Inc		5.8 Tons (2002)
Mohawk Carpet Corp Karastan Rug Mill		6.5 Tons (2000)
The Equity Group, Inc. - NC Division		10.5 Tons (2002)
Total Reported Emissions	8305.4	
Total Assumed Emissions		39.9
Grand Total		8345.3

Table B17: Facilities in Yadkin County Reporting NOx for Calendar Year 2003

Facility Name	Reported Amount (2003)	Additional Assumed Amount (year)
Ferrellgas, LP d.b.a. Blue Rhino of N.C.- Hamptonville Plant	1.8 Tons	
67 Acquisition Company, Inc. - 21C Retail Arts		0 Tons (2002)
Lydall Thermal/Acoustical, Inc. - Westex Divi ** INACTIVE **		1.1 Tons (2002)
Total Reported Emissions	1.8	
Total Assumed Emissions		1.1
Grand Total		2.9

Appendix C

Vehicle Miles Traveled (VMT) Grow Data

Note: The following VMT data was generated by the NCDOT based on vehicles registered with the North Carolina Division of Motor Vehicles. Travel demand models are used by metropolitan planning organizations to calculate speeds and VMT for their local coverage area. The VMT used in the EAC SIP modeling demonstration was derived from the travel demand model for Davidson, Forsyth and Guilford Counties. The VMT for the remaining counties is from NCDOT data that is reported to the Federal Highway Administration to estimate lane miles and VMT for national highway systems. On average, VMT derived from the EAC SIP travel demand models are 25%-40% higher than NCDOT VMT data.

Table C1: Annual VMT Growth Rate Based on 2000 - 2007 EAC SIP

	2000 VMT	2007 VMT	Annual VMT Growth Rate
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Fayetteville Area

Cumberland	7,578,450	8,460,602	1.66
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Hickory Area

Alexander	594,210	755,500	3.88
Burke	2,518,540	2,873,401	2.01
Caldwell	1,651,220	2,010,100	3.10
Catawba	4,314,040	5,138,099	2.73
Total Area	9,078,010	10,777,100	2.67

Mountain Area

Buncombe	5,736,440	6,603,801	2.16
Haywood	2,244,520	2,625,298	2.42
Madison	492,930	571,879	2.29
Total Area	8,473,890	9,800,978	2.24

Triad Area

Alamance	3,598,930	4,176,499	2.29
Caswell	619,580	723,600	2.40
Davidson	4,112,280	4,924,498	2.82
Davie	1,245,080	1,464,200	2.51
Forsyth	9,595,433	11,153,970	2.32
Guilford	14,349,184	16,533,141	2.17
Randolph	3,675,570	4,414,300	2.87
Rockingham	2,469,390	2,874,500	2.34
Stokes	924,340	1,066,800	2.20
Surry	2,485,200	2,937,501	2.60
Yadkin	1,330,380	1,544,000	2.29
Total Area	44,405,367	51,813,009	2.38

Table C2: Annual VMT Growth Rate Based on 2000-2004 Universe Data

	2000 VMT	2004 VMT	Annual VMT Growth Rate
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Fayetteville Area

Cumberland	7,578,450	7,868,760	0.96
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Hickory Area

Alexander	594,210	657,420	2.66
Burke	2,518,540	2,576,770	0.58
Caldwell	1,651,220	1,803,450	2.30
Catawba	4,314,040	4,555,400	1.40
Total Area	9,078,010	9,593,040	1.42

Mountain Area

Buncombe	5,736,440	6,161,940	1.85
Haywood	2,244,520	2,343,160	1.10
Madison	492,930	528,060	1.78
Total Area	8,473,890	9,033,160	1.65

Triad Area

Alamance	3,598,930	3,682,400	0.58
Caswell	619,580	599,760	-0.80
Davidson	4,112,280	4,269,430	0.96
Davie	1,245,080	1,332,770	1.76
Forsyth	7,882,840	8,419,940	1.70
Guilford	10,740,240	11,784,250	2.43
Randolph	3,675,570	3,775,820	0.68
Rockingham	2,469,390	2,444,080	-0.26
Stokes	924,340	985,500	1.65
Surry	2,485,200	2,471,110	-0.14
Yadkin	1,330,380	1,386,020	1.05
Total Area	39,083,830	41,151,080	1.32