State of North Carolina

State implementation Plan

Inspection and Maintenance (I/M) Program

Department of Environment and Natural Resources

Division of Air Quality

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Implementation Plan for Inspection/Maintenance Program

INTRODUCTION

The State of North Carolina implemented a Motor Vehicle Inspection/Maintenance (I/M) program under Environmental Protection Agency (EPA) regulations in Code of Federal Regulations (CFR) 40 CFR Part 51. The implementation of this program continues to be an integral part of North Carolina's plan to attain and maintain compliance with the National Ambient Air Quality Standards (NAAQS) for ozone (O_3) and carbon monoxide (CO).

The Division of Motor Vehicles (DMV), License and Theft Bureau, has operational responsibility for the I/M program, and has created rules for implementing and monitoring the program under the North Carolina Administrative Code (NCAC) Title 19A 03D.05. The Division of Air Quality (DAQ) is responsible for monitoring the DMV's adherence to EPA's guidelines and reporting to EPA each year (per *40 CFR 51.366*) detailing the activity of North Carolina's I/M program. In addition, the DAQ develops specifications for the program and certifies the emissions testing equipment used in the program.

The North Carolina I/M program began in 1982 in Mecklenburg County. From 1986 through1991, the program expanded to include eight additional counties, based on a "tail-pipe" emissions test. In 1999, the North Carolina General Assembly passed legislation to require an On-Board Diagnostic II (OBD) I/M program in not only the counties required to have an I/M program under 40 CFR 51.350(a), but also in other counties in the State that may need the additional emission reductions to achieve the 1997 8-hour ozone standard. Starting in October 2002, the original nine counties converted from tail-pipe testing to the new OBD emissions testing for all model year (MY) 1996 and newer light duty gasoline vehicles. The program began to expand from nine counties starting July 1, 2002 to a total of 48 counties on January 1, 2006. At the time of full implementation of the OBD program, inspection stations were performing the OBD emissions test on MY 1996 and newer vehicles, and tailpipe testing for MY 1995 and older vehicles were discontinued.

In 2002, North Carolina inspection stations performed over 2.5 million vehicle emission inspections. As the new I/M counties were added, the number of inspections was expected to rise to a high of about 3.5 million inspections but then dip to a lower figure when all tail pipe testing ended on Dec 31, 2005. The actual number of OBD inspections has varied from 4.2 to 4.6 million since 2006, due to higher than expected fleet turnover and population growth.

On November 1, 2008, the State ended the use of paper stickers and began the process of aligning vehicle inspection expiration and registration renewal dates by using electronic inspection authorizations. By aligning the two dates the State hopes to improve the vehicle compliance because vehicles will be required to have a passing OBD inspection no more than 90 days prior to the vehicle registration expiration date in order to renew their registration.

A. APPLICABILITY (40 CFR §51.350)

1. In North Carolina, Table 1 below lists the counties required to have an I/M program as described in *40 CFR 51.350(a),* due to being designated nonattainment for CO or Moderate O_3. Although only part of Granville County was designated Moderate nonattainment for the 1-hour O_3 standard, the whole County was subject to the I/M program. Similarly with Iredell County, where only a portion of the County was designated as Moderate for the 8-hour O_3 standard, the whole County is subject to the I/M program.

Table 1. Counties Required to Have I/M Program

County	Nonattainment Pollutant	Status	Program	1990 Census Population
Cabarrus	8-hour O_3	Moderate-Nonattainment	Basic OBD	98,935
Davidson	1-hour O_3	Maintenance	Basic OBD	126,677
Durham	CO	Maintenance	Basic OBD	181,835
	1-hour O_3			
	8-hour O_3			
Forsyth	CO	Maintenance	Basic OBD	265,878
	1-hour O_3			
Gaston	1-hour O_3	Maintenance	Basic OBD	175,093
	8-hour O_3	Moderate-Nonattainment		
Granville	1-hour O_3	Maintenance	Basic OBD	38,345
	8-hour O_3	Maintenance		
Guilford	1-hour O_3	Maintenance	Basic OBD	347,420
Iredell	8-hour O_3	Moderate-Nonattainment	Basic OBD	92,931
Lincoln	8-hour O_3	Moderate-Nonattainment	Basic OBD	50,319
Mecklenburg	CO	Maintenance	Basic OBD	511,433
	1-hour O_3			
	8-hour O_3	Moderate-Nonattainment		
Rowan	8-hour O_3	Moderate-Nonattainment	Basic OBD	110,605
Union	8-hour O_3	Moderate-Nonattainment	Basic OBD	84,211
Wake	CO	Maintenance	Basic OBD	423,380
	1-hour O_3			
	8-hour O_3			

2. In 1999, the North Carolina General Assembly passed legislation to require an OBD I/M program in not only the counties required to have an I/M program under *40 CFR 51.350(a),* but also in other counties in the State that may need the additional emission reductions to achieve the 1997 8-hour ozone standard. The *North Carolina General Statue (NCGS) §143-215.107A(c)* specifies the counties that are required to have OBD I/M. The State regulations *NCAC Title 15A, Subchapter 2D, Section .1000, "Motor Vehicle Emission Control Standard"*

references the General Statue. Table 2 below lists the additional counties that are required to have an I/M program per *NCGS §143-215.107A.*

Table 2. Additional Counties Required by 1999 Clean Air Bill to Have OBD I/M Program

County	Nonattainment Pollutant	Status	Program	1990 Census Population
Alamance	-	-	Basic OBD	108,213
Brunswick	-	-	Basic OBD	50,985
Buncombe	-	-	Basic OBD	174,821
Burke	-	-	Basic OBD	75,744
Caldwell	-	-	Basic OBD	70,709
Carteret	-	-	Basic OBD	52,556
Catawba	$PM_{2.5}$	Subpart 1	Basic OBD	118,412
Chatham	8-hour O_3	Maintenance	Basic OBD	38,759
Cleveland	-	-	Basic OBD	84,714
Craven	-	-	Basic OBD	81,613
Cumberland	-	-	Basic OBD	274,566
Edgecombe	8-hour O_3	Maintenance	Basic OBD	56,558
Franklin	8-hour O_3	Maintenance	Basic OBD	36,414
Harnett	-	-	Basic OBD	67,822
Haywood	8-hour O_3	Maintenance	Basic OBD	46,942
Johnston	8-hour O_3	Maintenance	Basic OBD	81,306
Lee	-	-	Basic OBD	41,734
Lenoir	-	-	Basic OBD	52,274
Moore	-	-	Basic OBD	59,013
Nash	8-hour O_3	Maintenance	Basic OBD	76,677
New Hanover	-	-	Basic OBD	120,284
Onslow	-	-	Basic OBD	149,838
Orange	8-hour O_3	Maintenance	Basic OBD	93,851
Person	8-hour O_3	Maintenance	Basic OBD	30,180
Pitt	-	-	Basic OBD	107,924
Randolph	-	-	Basic OBD	106,546
Robeson	-	-	Basic OBD	105,179
Rockingham	-	-	Basic OBD	86,064
Rutherford	-	-	Basic OBD	56,918
Stanly	-	-	Basic OBD	51,765
Stokes	-	-	Basic OBD	37,223
Surry	-	-	Basic OBD	61,704
Wayne	-	-	Basic OBD	104,666
Wilkes	-	-	Basic OBD	59,393
Wilson	-	-	Basic OBD	66,061

3. The Environmental Management Commission (EMC) has the authority to adopt "a program for testing emissions from motor vehicles and to adopt motor vehicle emission standards", *NCGS §143-215.107. (a)(6), "Air Quality Standards and Classifications."*

   The EMC has adopted a basic I/M program, *NCAC, Title 15A, Subchapter 2D, Section .1000, "Motor Vehicle Emissions Control Standard."*

   The I/M program is implemented by the Commissioner of the DMV through the use of licensed safety/emission inspection stations, *NCGS Article 3 – Motor Vehicle Act of 1937 §20-128.2 (a), "Motor vehicle emission standards."*

4. *40 CFR 51.372(a) (3)* requires ZIP codes be included in the State Implementation Plan (SIP) if program is not county-wide. The North Carolina program is county wide, so no list of program area ZIP codes is required.

B. ENHANCED I/M PERFORMANCE STANDARD (40 CFR §51.351)

Not applicable to North Carolina.

C. BASIC I/M PERFORMANCE STANDARD (40 CFR §51.352)

1. Basic I/M Performance Standards for 1-hour O_3 and CO standards
   In 1993, North Carolina submitted an I/M SIP to address the I/M requirements for the 1-hour O_3 and CO standards. The original performance standards for Volatile Organic Compounds (VOC) and CO are summarized below. These performance standards were calculated using the latest EPA mobile model at that time, MOBILE5a. *Appendix 1* contains the MOBILE5a input and output files from the runs used to evaluate the emission reduction benefits.

VOC Emission Factors (grams/mile)

	1997	2000	2003
Performance Standard	2.32	2.09	1.94
Program Target	2.30	2.08	1.92

CO Emission Factors (grams/mile)

	1996	2000
Performance Standard	26.74	24.46
Program Target	26.53	24.34

2. Basic I/M Performance Standards for the 1997 8-hour O_3 standard
   In June 2004, the EPA designated areas as nonattainment for the 1997 8-hour O_3 standard. One area in North Carolina was designated as Moderate nonattainment, the Charlotte-Gastonia-Rock Hill, NC-SC area (referred to as the Metrolina area). The North Carolina portion of the Metrolina area includes Cabarrus, Gaston, Lincoln, Mecklenburg, Rowan, Union Counties and Coddle Creek and Davidson Townships in Iredell County. With this

designation, additional counties were required under *40 CFR 51.350(a)* to implement an I/M program.

Since Mecklenburg and Gaston Counties had been designated Moderate nonattainment for the 1-hour O3 standard, the performance standards for these two counties are established in *40 CFR 51.352(c)*. The results of the performance standards are summarized below. *Appendix 1* contains the input and output files for MOBILE6.2 runs performed to evaluate the emission benefits of the basic I/M areas in these two counties.

Emission Factors for Mecklenburg and Gaston Counties (grams/mile)

	VOC	NOx
Performance Standard	0.784	0.750
Program Target	0.726	0.688

The remaining counties in the Metrolina nonattainment area are required to meet the performance standards established in *40 CFR 51.352(e)*. The results of the performance standards are summarized below. *Appendix 1* contains the input and output files for MOBILE6.2 runs performed to evaluate the emission benefits of the basic I/M areas in these counties.

Emission Factors for Remaining Counties (grams/mile)

	VOC	NOx
Performance Standard	1.363	1.027
Program Target	1.280	0.936

3. The I/M program meets the emission reduction targets in the attainment year and each milestone year prior to the attainment year, as applicable. The State of North Carolina commits to meeting the performance standard.

4. The MOBILE input and output files for runs used in determining compliance with the performance standards are included in *Appendix 1*. *Appendix 2* contains the modeling assumptions, which includes a description of the local inputs used in the modeling, a description of the source from which those inputs were derived, and a description of how they were derived.

D. NETWORK TYPE AND PROGRAM EVALUATION (40 CFR §51.353)

1. North Carolina's basic I/M program is comprised of a decentralized network of test-and-repair facilities. No counties are currently required to be part of an Enhanced I/M program. The program consists of approximately 4,464 stations.

   The DAQ has regional staff that conduct a random vehicle survey in each I/M county annually, to determine the compliance of the sampled vehicles and the DMV's execution of registration denial on those out of compliance. The State continues to determine program effectiveness although basic I/M programs are not required to include an ongoing evaluation

to quantify the emission reduction benefits of the program or to determine if the program is meeting the requirements of the Clean Air Act.

E. ADEQUATE TOOLS AND RESOURCES (40 CFR §51.354)

1. The I/M program is funded by receipts collected from the sale of electronic I/M inspection authorizations. A portion of these monies are accredited to the DAQ and DMV, as directed in *NCGS Article 3A – Safety and Emissions Inspection Program §20-183.7(c),* "Fees for performing an inspection and issuing an electronic inspection authorization to a vehicle; use of civil penalties."

Inspection fee	
Station Fee	$23.75
Authorization Fee	$6.25
	$30.00

The authorization fee is distributed as follows:

Highway Fund	$0.55
Inspection Program Account	3.00
Telecommunications Account	1.75
Volunteer Rescue/EMS Fund	0.18
Rescue Squad Workers' Relief Fund	0.12
Division of Air Quality	0.65
	$6.25

The DAQ portion of the fee is credited to the DAQ I/M Air Pollution Control Account. This is a nonreverting fund established for developing and implementing air pollution control programs for mobile sources, *NCGS §143-215.3A (b1),* "*Water and Air Quality Account; use of application and permit fees; Title V Account; I & M Air Pollution Control Account; reports."*

The DMV I/M budget is a nonreverting account within the North Carolina Department of Transportation's (NCDOT) Inspection Program Account. Revenue in the Inspection Program Account may be used only to fund the vehicle I/M program.

2. *Appendix 3* includes DAQ and DMV budgets for Fiscal Years 2010-2011 (Note: State fiscal year runs from July 1 through June 30).

The DAQ I/M Air Pollution Control Account funds 10 I/M positions within DAQ. The DAQ employs two full time engineers, one specialist, and one supervisor that perform the day to day program duties which include but are not limited to data analysis, EPA annual reporting, consumer outreach, and software/analyzer certification and specification development. DAQ also has six regional auditors that perform annual audits of DMV staff's enforcement activities on an annual basis. Additionally, the DAQ I/M staff supports the periodic analyzer recertification testing and other such activities.

The License & Theft Bureau of the DMV is tasked with oversight and enforcement of the I/M program for North Carolina. The DMV has 147 "sworn" law enforcement agents that issue vehicle waivers and perform some covert audits. They are also the enforcement arm of the

agency and are responsible for investigating all clean scan cases and handling all criminal charges. The DMV's 61 civilian auditors are tasked with performing overt and covert audits on approximately 4,464 emission stations in North Carolina. The civilian auditors and law enforcement agents also perform remote audits on the inspection stations. Waivers and exemptions are issued by the auditors and law enforcement agents within the eight districts throughout North Carolina. Additionally, the DMV employs a six member civilian staff Call Center for consumers to report complaints and inquiries on emission inspection requirements and information. The DMV employs personnel to handle the registration denial system.

F. TEST FREQUENCY AND CONVENIENCE (40 CFR §51.355)

1. The current test frequency of North Carolina's basic I/M inspection is annual. In addition, North Carolina has a 1-year new vehicle exemption, as described in *NCAC Title 15A, Section 2D.1005, "On-Board Diagnostic Standards"* and *NCGS § 20-183.2. "Description of vehicles subject to safety or emissions inspection; definitions."* In addition, an emissions component tamper and safety inspection is performed statewide on all vehicles no more than 35 years old, measured from the date of manufacture, *NCGS Article 3A – Safety and Emissions Inspection Programs §20-183.3 (a), "Scope of safety inspection and emissions inspection."*

2. Subject vehicles are required to have an annual OBD inspection no more than 90 days prior to the vehicle registration expiration date, *NCGS Article 3 – § 20-183.4C, "When a vehicle must be inspected; three-day trip permit."*
   All North Carolina law-enforcement officers have the power to enforce the provisions of *NCGS Article 3 – Motor Vehicle Act of 1937 §20-183, "Duties and powers of law-enforcement officers; warning by local officers before stopping another vehicle on highway; warning tickets."*

3. The DMV *"Safety and Emissions Regulation Manual"* requires stations to operate at least eight hours per day five days per week, except holidays. Stations are required to have at least one inspector mechanic on duty a minimum of eight hours during normal working hours. Stations may operate other than 8:00 AM to 5:00 PM Monday through Friday schedule. At least one inspector mechanic at a station must be licensed. The DMV is responsible for licensing of the inspector mechanics as outlined in Section R.

G. VEHICLE COVERAGE (40 CFR §51.356)

1. An I/M inspection is required for all 1996 and newer model year gasoline-powered vehicles (light-duty) registered in I/M subject areas, *NCAC Title 15A, Subchapter 2D, Section .1005, "On-Board Diagnostic Standards"* and *NCGS §143-215.107A, "Motor vehicle emissions testing and maintenance program."* A table showing the number of vehicles by county and model year for 2009 is contained in *Appendix 4.* These figures reflect the number of registered vehicles believed to be operated in the I/M area.

2. The following highway vehicles are exempt from the I/M requirement: the current model year, all 1995 and older model vehicles, diesel vehicles, heavy-duty vehicles, alternative fueled vehicles, and motorcycles. These vehicles are subject to the annual safety inspection, which includes an emissions control device tampering inspection. Vehicles registered as "Kit cars" are exempt from the OBD portion of the inspection.

3. The DMV may collect fleet information directly from the owners or from the vehicle registration records concerning the number of vehicles operated in an I/M county but registered in a non-I/M county and vice versa. Enforcement will continue to be registration denial.

4. Fleet vehicles are subject to the program if registered in or primarily operated in a designated I/M county. Fleet owners are allowed to self-inspect their vehicles, *NCGS Article 3A Safety and Emissions Inspection Program §20.183-4A, "License required to perform safety inspection; qualifications for license."*

   Federal fleet vehicles are required to meet the same requirements as other fleets. EPA's I/M rules require that federal employees working at a federal facility within an I/M county must comply with the I/M program even if they live outside the I/M county. There are federal facilities located in I/M subject areas in North Carolina.

H. TEST PROCEDURES AND STANDARDS (40 CFR §51.357)

1. The EMC has the authority to establish test procedures and standards under *NCGS §143-215.107 (6), "Air quality standards and classifications."*

   The EMC has adopted test standards under *NCAC, Title 15A, Subchapter 2D, Section .1000, "Motor Vehicle Emission Control Standard."*

   The EMC has also adopted test procedures developed by the DAQ and outlined in, *"North Carolina Analyzer System Specification"*, using EPA's OBD Test procedures on an OBD type analyzer. The OBD test procedures and standards were implemented July 1, 2002.

2. Vehicles must pass the safety inspection, tampering inspection, and OBD test to receive a safety/emissions authorization. All vehicles failing any part of an initial test must pass a retest. If the initial failure was an emissions related item (check engine light commanded on, emissions control device tampering or exhaust system), the OBD test must be repeated and passed. If the vehicle owner takes the vehicle to a station other than the original location of the initial test failure, the vehicle must be tested for and pass all the test components.

3. Inspection rejection standards are clearly established in both the DAQ *"North Carolina Analyzer System Specification,"* and the DMV *"Safety and Emissions Regulation Manual."*

I. TEST EQUIPMENT (40 CFR §51.358)

1. Test equipment specifications are contained in the DAQ *"North Carolina Analyzer System Specification."* The DMV regulations manual contain equipment required to carry out inspections, *"DMV License and Theft Policy and Procedures Manual."*

2. All test equipment is fully computerized and all processes are automated to the highest degree possible. The DMV law enforcement agents have the authority to clear lock-outs. Manufacturer's service representatives are able to clear specific lockouts. The date and cause

of any occurrence of a lockout as well as the date and the authority personnel who cleared the lockout are recorded in a data record.

Data entry functions associated with the test are streamlined through the use of look-up tables. To reduce data entry errors, vehicle identification information requires redundant entry if manually entered. However, under normal circumstances, vehicle information entry is by bar code scanners. Emissions test results are recorded automatically by the analyzer.

3. The test process is completely controlled by the analyzer. The process begins with data entry of the vehicle registration, license plate and vehicle identification number (VIN) information. Verification of vehicle identification data is confirmed through re-entry of this information during the inspection. The test procedure sequence and pass/fail determinations are made automatically by the analyzer. Data is recorded to both a removable device (floppy/USB storage key) and a hard drive. Test data is sent via modem to the State during each inspection, and stored on the analyzer hard drive for a minimum of 60 days. Once transmitted to the State, it is maintained by the Vehicle Information Database (VID) contractor as a permanent data set. Prior to being loaded to the program database all information is edit checked for errors.

J. QUALITY CONTROL (40 CFR §51.359)

1. Quality control procedures and record keeping requirements have been established in the *"DMV License and Theft Policy and Procedures Manual."* These measures will ensure the State of North Carolina meets its commitment to provide motorists with consistent and accurate test results. The inspection site personnel must continue to ensure that all equipment is properly maintained and has updated vendor software.

2. The DAQ *"North Carolina Analyzer System Specification"* includes the minimum durability and functional requirements to ensure accurate processing and recording of test results. All enhancements and/or changes to this document are reviewed and approved prior to its release.

K. WAIVERS AND COMPLIANCE VIA DIAGNOSTIC INSPECTION (40 CFR §51.360)

1. A waiver rate of 5% (percentage of initially failed vehicles receiving waivers) is assumed in the demonstration that the I/M program meets the basic performance standard. The State of North Carolina commits to a waiver rate in practice that is equal to or lower than 5%. If the waiver rate reported in the annual report to EPA is higher, the State will take corrective action to lower the waiver rate. Corrective strategies may include: not issuing waivers on vehicles under 6 years of age, raising minimum expenditure limits, and limiting waivers on vehicles to only once every four years. If the waiver rate cannot be lowered to levels committed to in the SIP, or if the State chooses not to implement measures to do so, the State will revise the I/M emission reduction projections in the SIP and will implement other program changes needed to ensure the performance standard is met.

2. The State of North Carolina commits to issuing waivers only when the requirements of the *40 CFR §51.360* are met. *§51.360* requires a minimum of $200 for 1981 and newer vehicles be spent in order to qualify for a waiver. Repairs must be performed by a recognized repair

technician to apply toward the waiver limit. Waivers are issued by DMV as outlined in the *"DMV License and Theft Policy and Procedures Manual"* and authorized by *NCGS § 20-183.5A. "When a vehicle that fails a safety inspection because of missing emissions control devices may obtain a waiver."*

3. EPA regulations allow a time extension to obtain needed repairs on a vehicle in the case of economic hardship when waiver requirements have not been met. The DMV, at this time, has not chosen to offer time extensions.

   EPA regulations also allow exemptions for tampering-related repairs if it can be verified that the part in question or one similar to it is no longer available for sale. The DMV has chosen to offer tamper-related exemptions; DMV will verify that the part in question or one similar to it is no longer available for sale prior to issuing the exception.

4. The emissions receipt (certificate) for a failed vehicle inspection alerts the motorist of emission failure information, warranty coverage, and waiver availability in the DAQ's *"North Carolina Analyzer System Specification."*

L. MOTORIST COMPLIANCE ENFORCEMENT (40 CFR §51.361)

1. The legal authority for the implementation of the I/M program is included in *§ 143-215.107. "Air quality standards and classifications."* The regulations governing specific operation of this aspect of the program are contained in the regulations in *15A NCAC 02D .1005, "On-Board Diagnostic Standards."*

2. The legal authority for enforcement of the I/M program is included in, *NCGS § 20-183.8. "Infractions and criminal offenses for violations of inspection requirements."* A penalty schedule for violations of these regulations is included in *NCGS Article 3A – Safety and Emissions Inspection Program § 20-183.8A, "Civil penalties against motorists for emissions violations; waiver."*

3. A registration-denial based program is used for enforcement. As of April 12, 2010, vehicles will be denied registration renewal if a required emissions inspection is not found in the VID for that vehicle. Vehicle owners are allowed 90 days prior to the registration expiration date to get an inspection for their vehicle.

   The DMV developed the *"DMV License and Theft Policy and Procedures Manual"* to be followed by personnel involved in enforcing and overseeing the program. This manual details the procedures followed by the DMV and other State personnel involved in I/M program document handling and processing and by the supervisory personnel who oversee staff involved in program enforcement, document handling and processing. The procedures manual also provides a schedule of disciplinary actions used against personnel who deviate from prescribed procedures.

4. All non-gasoline powered vehicles, motorcycles, heavy-duty, and current model year vehicles are exempt from the I/M program.

5. There are no provisions for off-hours testing for fleet vehicles since fleets may be self-inspected. Fleets may be officially inspected outside of the normal I/M program test

facilities, but are subject to the same test requirements using the same quality control standards as non-fleet vehicles.

6. The State of North Carolina commits to the level of motorist enforcement necessary to ensure a compliance rate of no less than 92% among subject vehicles by 2011. This compliance rate reflects the compliance rate used in the demonstration of the performance standard as described in Section A of this document. If it is determined that the I/M program is not meeting the compliance rate committed to here, the DAQ will review the compliance methodology and revise when necessary. The DAQ believes that the compliance rate of 92% is a conservative estimate. However, when the new electronic authorization program is fully implemented, the DAQ and DMV anticipate compliance rates to considerably improve.

M. MOTORIST COMPLIANCE ENFORCEMENT PROGRAM OVERSIGHT (40 CFR §51.362)

1. The *"DMV License and Theft Policy and Procedures Manual"* details the procedures followed by the DMV in enforcing the motorist compliance portion of the I/M program, handling and processing program documents, and by the supervisory personnel who oversee staff involved in program enforcement, document handling, and processing. The State Personnel Manual describes disciplinary actions to be used against personnel who deviate from prescribed procedures.

N. QUALITY ASSURANCE (40 CFR §51.363)

1. The DMV uses a process to automate their reporting system that gathers information of the DMV's activities that takes place across the state. In mid-2006, the DMV began the installation of their new enforcement application package that tracks all enforcement activities and field auditing activities in an electronic format for better efficiency. Verizon Business, the VID contractor developed a new real time data collection system called the North Carolina Electronic Transmission System (NCETS). NCETS helps to improve the DMV's remote auditing of stations, by allowing the DMV field staff to remotely observe an inspection taking place from their computer. NCETS also allows authorized station personnel to purchase electronic authorizations for their analyzers.

2. The DMV schedules a minimum of four overt audits per station per year, and one covert audit per station per year and as many remote observations as required to validate complaints or concerns of wrong doing. The DMV and DAQ requested approval from EPA to reduce the number of covert audits from two to one per year, while the DMV implements a new targeted enforcement program. Details of this new effort is outlined in the DAQ's "Inspection and Maintenance (I/M) Program Audit Procedure Manual" and the "DMV License and Theft Policy and Procedures Manual."

3. All DMV program auditors shall themselves be audited once per year by the DAQ. The DAQ "Inspection and Maintenance (I/M) Program Audit Procedure Manual" documents the

procedures the DAQ follows while auditing the I/M program and the DMV quality assurance auditors.

O. ENFORCMENT AGAINST CONTRACTORS, STATIONS AND INSPECTORS (40 CFR §51.364)

1. The DMV is responsible for enforcement against inspection stations and inspector mechanics. The enforcement actions that the DMV must follow for violations found at inspection stations or by inspectors are outlined in the following statutes:
    - *NCGS § 20-183.8, "Infractions and criminal offenses for violations of inspection requirements"*
    - *NCGS § 20-183.8A, "Civil penalties against motorists for emissions violations; waiver"*
    - *NCGS §20-183.8B, "Civil penalties against license holders and suspension or revocation of license for emissions violations"*
    - *NCGS § 20-183.8C "Acts that are Type I, II, or III emissions violations"*
    - *NCGS § 20-183.8D, "Suspension or revocation of license."*
    - *NCGS § 20-183.8F, "Requirements for giving license holders notice of violations and for taking summary action."*

   The NCGS allow for the immediate suspension or revocation of a license when a violation is found at an inspection station or by an inspector.

2. The administrative and judicial procedures and responsibilities relevant to the enforcement process are outlined in, *NCGS § 20-183.8G, "Administrative and judicial review."*

P. DATA COLLECTION (40 CFR §51.365)

1. The DAQ's *"North Carolina Analyzer System Specification"* contains the equipment specifications that must be met by all I/M testing equipment approved for use in the State of North Carolina. This manual also provides data collection requirements and record storage formatting for the analyzers. The information contained within each vehicle test record is such that it is possible to tie specific test results to a specific vehicle, test site, analyzer, and inspector.
2. The State of North Carolina hereby commits to gather, summarize and report the results of quality control checks performed on testing equipment, sorted according to station number, analyzer number, date, and the start time of the quality control check.

Q. DATA ANALYSIS AND REPORTING (40 CFR §51.366)

1. Annually, the State of North Carolina will generate a report summary based upon program data collected from January through December of the previous year. This report will provide statistics for the testing program, the quality control program, the quality assurance program, and the enforcement program. At a minimum, the State commits to address all of the data elements listed in *40 CFR §51.366.*

2. The State of North Carolina shall report biennially on all changes made in the program design, funding, personnel levels, procedures, regulations, and legal authority, and shall supply a detailed discussion of the impact of such changes upon the program. This report will also detail and discuss any weaknesses or problems discovered in the program over the previous two-year period, as well as the steps that were taken to address those problems, the result of those corrective actions, and any future efforts planned.

R. INSPECTOR TRAINING AND LICENSING OR CERTIFICATION (40 CFR §51.367)

1. Inspectors are required to successfully complete an eight-hour course approved by the DMV that teaches students about the causes and effects of the air pollution problem, the purpose of the emissions inspection program, the vehicle emission standards established by the EPA, the emission control devices on vehicles, how to conduct an emissions inspection using equipment to analyze data provided by the OBD equipment approved by the EMC, and any other topic required by *40 C.F.R. § 51.367* to be included in the course. This course is offered at local community colleges across the state. Successful course completion requires a passing score on a written test and on a hands-on test in which the student is required to conduct an emissions inspection of a motor vehicle.

2. By law, *NCGS § 20-183.4, "License required to perform emissions inspection; qualifications for license"*, both stations and inspectors are required to apply for a license with the DMV. Stations are also required to have equipment to analyze data provided by the OBD equipment approved by the EMC.

S. PUBLIC INFORMATION AND COSUMER PROTECTION (40 CFR §51.368)

1. The DAQ and DMV have a Memorandum of Understanding to jointly address public outreach for the OBD I/M program throughout the life of the program. Both agencies have developed public service announcements that inform the public about the I/M program. When the OBD program first started in North Carolina, many of the public service announcements focused on informing the public about the new program and when it would become effective in the various areas across the State. Additionally, Car Care Clinics were held across the State, which provided face-to-face time with the public and the inspection facilities to discuss the importance of the I/M program. Open-Net Forums were broadcasted on public television four or five times a year, in both English and Spanish, which provided the public the opportunity to call into the show and have their questions answered about the I/M program. Finally, the DAQ has established a separate web page (http://daq.state.nc.us/motor/inspect/htdocs/en/) providing information on the I/M program.

   Now that the program has been fully implemented, the public service announcements have focused on the importance of vehicle maintenance.

   In addition to the OBD specific outreach, the DAQ has an Air Awareness program that provides general public education and outreach across the State about air quality issues. This program has two state-wide coordinators and helps fund local coordinators in several areas

across the State to educate the public about how their actions impact the air quality and types of things the public may do to minimize their emissions. Since highway mobile sources are the largest source of emissions contributed to the general public, part of the Air Awareness program focuses on educating the public about the OBD I/M program, what the check engine light means, and why it is important to keep their vehicles maintained.

Additionally, the DAQ voluntarily provides Air Quality Forecasts across the State. Currently, the DAQ forecasts for ozone and fine particulate matter in the following areas: Asheville (both valley and ridge tops), Hickory, Charlotte/Gastonia, Greensboro/Winston-Salem/High Point, Raleigh/Durham/Chapel Hill, Fayetteville and Rocky Mount (no PM forecast due to no continuous monitor in the area). The forecasts are available through the DAQ website, a toll-free hotline, the EPA Air Now website, the newspapers and the broadcast media. In addition to the Air Quality Forecasts, real-time ambient air quality data can be viewed on the DAQ website or the public may call a hotline that provides the current Air Quality Index for nine areas in the State.

2. The DMV has made provisions for individuals wishing to challenge their results from an I/M station. When a vehicle fails an emissions test, the test report automatically includes information concerning causes for emissions failure, vehicle warranty, and waiver availability as outlined in the DAQ's *"North Carolina Analyzer System Specification."*

T. IMPROVING REPAIR EFFECTIV ENESS (40 CFR §51.369)

1. North Carolina's basic I/M program is not required to track repair effectiveness of individual repair facilities, however the DAQ has developed a course curriculum (basic and advanced) for the diagnosis and repair of motor vehicles that have OBD systems and has provided training sessions for community college instructors to offer this specialized training.

U. COMPLIANCE WITH RECALL NOTICES (40 CFR §51.370)

1. Although not required for basic I/M program, the North Carolina emissions analyzers will display emissions related Technical Service Bulletins (TSB) or recall information, if available from the VID, during the emission inspection process.

V. ON ROAD TESTING (40 CFR §51.371)

1. On-road testing is not required of North Carolina's basic I/M program.

APPENDIX 1
MOBILE Input and Output Files

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MOBILE5a Input and Output Files

```
1           PROMPT
 EPA's Standard - CO
1           TAMFLG - Tampering rates.
1           SPDFLG - One average speed.
1           VMFLAG - VMT mix.
1           MYMRFG - Registration distributions.
1           NEWFLG - Basic exhaust emission rates.
2           IMFLAG - Inspection/maintenance program.
1           ALHFLG - Corrections for A/C useage, load, trailers, humidity.
1           ATPFLG - Specifies ATP, pressure, and purge checks.
1           RLFLAG - Data about Stage II and onboard VRS systems.
2           LOCFLG - LAP record will appear once, in one-time data section.
2           TEMFLG - Temperature corrections.
4           OUTFMT - Output format.
4           PRTFLG - Pollutant emissions factors.
1           IDLFLG - Idle emission factors calculated disabled in moble 5.
3           NMHFLG - Calculate emissions for volatile organic hydrocarbons.
1           HCFLAG - Print sum and component emissions.
83 20 68 20 00 00 100 1 1 2111 1111 220. 1.20 999.
EPA Standard    C 50.6 50.6 12.5 12.5 92 1 1 1        Local Area Parameter record
1 96 24.0 50.6 20.6 27.3 20.6
1 00 24.0 50.6 20.6 27.3 20.6
```

```
1 EPA's Standard - CO
 MOBILE5a (26-Mar-93)
0
-M146 Warning:
+             Diurnal emissions are zero when Tmax-Tmin<1. The
              minimum and maximum temperatures of the day must
              be used to get the proper diurnal output.
0I/M program selected:

0     Start year (January 1):                1983
      Pre-1981 MYR stringency rate:           20%
      First model year covered:              1968
      Last model year covered:               2020
      Waiver rate (pre-1981):                 0.%
      Waiver rate (1981 and newer):           0.%
      Compliance Rate:                      100.%
      Inspection type:                       Test Only
      Inspection frequency                   Annual
      Vehicle types covered:                 LDGV - Yes
                                            LDGT1 - No
                                            LDGT2 - No
                                             HDGV - No
      1981 & later MYR test type:            Idle
      Cutpoints, HC:  220.000   CO:    1.200   NOx:  999.000
0EPA Standard
                      Minimum Temp: 51. (F)   Maximum Temp: 51. (F)
                      Period 1 RVP: 12.5      Period 2 RVP: 12.5 Period 2 Yr: 2002
0VOC HC emission factors include evaporative HC emission factors.
0_____________________________________________________________________________
0Emission factors are as of Jan. 1st of the indicated calendar year.
0Cal. Year: 1996          Region: Low          Altitude:  500. Ft.
                      I/M Program: Yes       Ambient Temp:   50.6 / 50.6 / 50.6 F
                 Anti-tam. Program: No      Operating Mode:   20.6 / 27.3 / 20.6
                   Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV   MC   All Veh
+            ____  _____  _____  _____  _____  _____  _____  _____  ____  _______
 Veh. Spd.: 24.0   24.0   24.0          24.0   24.0   24.0   24.0   24.0
   VMT Mix:  0.629  0.182  0.084          0.031  0.003  0.002  0.062  0.007
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  2.22   3.14   4.21   3.48   5.53   0.66   0.94   2.12   2.36   2.65
 Exhst  CO: 22.66  32.48  41.98  35.48  73.04   1.41   1.62   9.83  21.06  26.74
 Exhst NOX:  1.91   2.18   2.76   2.36   5.94   1.50   1.74  12.60   1.04   2.81
_____________________________________________________________________________
-M146 Warning:
+             Diurnal emissions are zero when Tmax-Tmin<1. The
              minimum and maximum temperatures of the day must
              be used to get the proper diurnal output.
0Emission factors are as of Jan. 1st of the indicated calendar year.
0Cal. Year: 2000          Region: Low          Altitude:  500. Ft.
                      I/M Program: Yes       Ambient Temp:   50.6 / 50.6 / 50.6 F
                 Anti-tam. Program: No      Operating Mode:   20.6 / 27.3 / 20.6
                   Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV   MC   All Veh
+            ____  _____  _____  _____  _____  _____  _____  _____  ____  _______
 Veh. Spd.: 24.0   24.0   24.0          24.0   24.0   24.0   24.0   24.0
   VMT Mix:  0.616  0.191  0.086          0.031  0.002  0.001  0.068  0.006
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  2.04   2.84   3.82   3.14   4.12   0.55   0.74   1.91   2.34   2.40
 Exhst  CO: 20.91  30.52  40.74  33.69  48.27   1.29   1.42   9.36  21.06  24.46
 Exhst NOX:  1.68   1.99   2.73   2.22   5.27   1.27   1.40   9.91   1.04   2.50
_____________________________________________________________________________
```

```
1           PROMPT
 EPA's Standard - HC
1           TAMFLG - Tampering rates.
1           SPDFLG - One average speed.
1           VMFLAG - VMT mix.
1           MYMRFG - Registration distributions.
1           NEWFLG - Basic exhaust emission rates.
2           IMFLAG - Inspection/maintenance program.
1           ALHFLG - Corrections for A/C useage, load, trailers, humidity.
1           ATPFLG - Specifies ATP, pressure, and purge checks.
1           RLFLAG - Data about Stage II and onboard VRS systems.
2           LOCFLG - LAP record will appear once, in one-time data section.
2           TEMFLG - Temperature corrections.
4           OUTFMT - Output format.
4           PRTFLG - Pollutant emissions factors.
1           IDLFLG - Idle emission factors calculated disabled in moble 5.
3           NMHFLG - Calculate emissions for volatile organic hydrocarbons.
1           HCFLAG - Print sum and component emissions.
83 20 68 20 00 00 100 1 1 2111 1111 220. 1.20 999.
EPA Standard     A 69.1 96.6 09.0 07.8 92 1 1 1        Local Area Parameter record
1 97 24.0 87.4 20.6 27.3 20.6  7
1 00 24.0 87.4 20.6 27.3 20.6  7
1 03 24.0 87.4 20.6 27.3 20.6  7
```

```
1 EPA's Standard - HC
 MOBILE5a (26-Mar-93)
0I/M program selected:

0     Start year (January 1):                1983
      Pre-1981 MYR stringency rate:           20%
      First model year covered:              1968
      Last model year covered:               2020
      Waiver rate (pre-1981):                 0.%
      Waiver rate (1981 and newer):           0.%
      Compliance Rate:                      100.%
      Inspection type:                      Test Only
      Inspection frequency                  Annual
      Vehicle types covered:                LDGV - Yes
                                           LDGT1 - No
                                           LDGT2 - No
                                            HDGV - No
      1981 & later MYR test type:           Idle
      Cutpoints, HC:  220.000   CO:    1.200   NOx:  999.000
0EPA Standard
                      Minimum Temp: 69. (F)    Maximum Temp: 97. (F)
                      Period 1 RVP:  9.0       Period 2 RVP:  7.8 Period 2 Yr: 1992
0VOC HC emission factors include evaporative HC emission factors.
0
0Emission factors are as of July 1st of the indicated calendar year.
0Cal. Year: 1997              Region: Low            Altitude:  500. Ft.
                         I/M Program: Yes        Ambient Temp:   87.4 / 87.4 / 87.4 F
                    Anti-tam. Program: No       Operating Mode:   20.6 / 27.3 / 20.6
                     Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV   MC   All Veh
+
 Veh. Spd.: 24.0   24.0   24.0           24.0   24.0   24.0   24.0   24.0
   VMT Mix:  0.624  0.186  0.085          0.031  0.002  0.001  0.064  0.007
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  1.88   2.61   3.46   2.88   6.41   0.63   0.89   2.02   5.36   2.32
 Exhst  CO: 13.34  21.43  29.37  23.92  70.25   1.38   1.58   9.64  20.18  17.74
 Exhst NOX:  1.52   1.77   2.36   1.96   5.42   1.43   1.65  11.63   0.84   2.40

0Emission factors are as of July 1st of the indicated calendar year.
0Cal. Year: 2000              Region: Low            Altitude:  500. Ft.
                         I/M Program: Yes        Ambient Temp:   87.4 / 87.4 / 87.4 F
                    Anti-tam. Program: No       Operating Mode:   20.6 / 27.3 / 20.6
                     Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV   MC   All Veh
+
 Veh. Spd.: 24.0   24.0   24.0           24.0   24.0   24.0   24.0   24.0
   VMT Mix:  0.614  0.191  0.086          0.031  0.001  0.001  0.068  0.006
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  1.72   2.34   3.09   2.57   5.05   0.54   0.71   1.89   5.34   2.09
 Exhst  CO: 12.77  19.37  26.76  21.66  48.27   1.27   1.40   9.32  20.18  16.12
 Exhst NOX:  1.41   1.66   2.26   1.85   5.06   1.24   1.35   9.57   0.84   2.20

0Emission factors are as of July 1st of the indicated calendar year.
0Cal. Year: 2003              Region: Low            Altitude:  500. Ft.
                         I/M Program: Yes        Ambient Temp:   87.4 / 87.4 / 87.4 F
                    Anti-tam. Program: No       Operating Mode:   20.6 / 27.3 / 20.6
                     Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV   MC   All Veh
+
 Veh. Spd.: 24.0   24.0   24.0           24.0   24.0   24.0   24.0   24.0
   VMT Mix:  0.605  0.195  0.087          0.031  0.002  0.002  0.073  0.006
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  1.60   2.17   2.89   2.39   4.15   0.46   0.63   1.82   5.34   1.94
 Exhst  CO: 12.50  18.24  25.24  20.39  31.69   1.18   1.32   9.17  20.18  15.09
 Exhst NOX:  1.34   1.59   2.17   1.77   4.79   1.09   1.21   7.83   0.84   2.04
```

```
1           PROMPT
 NC CO - Current I/M, Tamp
1           TAMFLG - Tampering rates.
1           SPDFLG - One average speed.
1           VMFLAG - VMT mix.
1           MYMRFG - Registration distributions.
1           NEWFLG - Basic exhaust emission rates.
2           IMFLAG - Inspection/maintenance program.
1           ALHFLG - Corrections for A/C useage, load, trailers, humidity.
2           ATPFLG - Specifies ATP, pressure, and purge checks.
1           RLFLAG - Data about Stage II and onboard VRS systems.
2           LOCFLG - LAP record will appear once, in one-time data section.
2           TEMFLG
4           OUTFMT - Output format.
4           PRTFLG - Pollutant emissions factors.
1           IDLFLG - Idle emission factors calculated disabled in moble 5.
3           NMHFLG - Calculate emissions for volatile organic hydrocarbons.
1           HCFLAG - Print sum and component emissions.
87 20 75 20 05 05 095 2 1 2222 1111 220. 1.20 999.
75 68 20 2222 21 095. 22212222
NC IM  CO         C 50.6 50.6 12.5 12.5 92 1 1 1        Local Area Parameter record
1 96 24.0 50.6 20.6 27.3 20.6
1 00 24.0 50.6 20.6 27.3 20.6
1 20 24.0 50.6 20.6 27.3 20.6
```

```
1 NC CO - Current I/M, Tamp
 MOBILE5a (26-Mar-93)
0
-M146 Warning:
+             Diurnal emissions are zero when Tmax-Tmin<1. The
              minimum and maximum temperatures of the day must
              be used to get the proper diurnal output.
0I/M program selected:

0     Start year (January 1):                  1987
      Pre-1981 MYR stringency rate:             20%
      First model year covered:                1975
      Last model year covered:                 2020
      Waiver rate (pre-1981):                   5.%
      Waiver rate (1981 and newer):             5.%
      Compliance Rate:                         95.%
      Inspection type:                         Computerized Test and Repair
      Inspection frequency                     Annual
      Vehicle types covered:                    LDGV - Yes
                                               LDGT1 - Yes
                                               LDGT2 - Yes
                                                HDGV - Yes
      1981 & later MYR test type:               Idle
      Cutpoints, HC:  220.000   CO:    1.200   NOx:  999.000
0Functional Check Program Description:
0Check Start   Model Yrs  Vehicle Classes Covered        Inspection        Comp
       (Jan1)  Covered    LDGV   LDGT1  LDGT2  HDGV    Type      Freq      Rate

 ATP   1975    1968-2020  Yes    Yes    Yes    Yes Test & Repair Annual    95.0%
0Air pump system disablements:       Yes  Catalyst removals:                  Yes
 Fuel inlet restrictor disablements: Yes  Tailpipe lead deposit test:         No
 EGR disablement:                    Yes  Evaporative system disablements:   Yes
 PCV system disablements:            Yes  Missing gas caps:                  Yes
0NC IM  CO
                     Minimum Temp: 51. (F)    Maximum Temp: 51. (F)
                     Period 1 RVP: 12.5       Period 2 RVP: 12.5 Period 2 Yr: 1992
0VOC HC emission factors include evaporative HC emission factors.
0_____________________________________________________________________________
0Emission factors are as of Jan. 1st of the indicated calendar year.
0Cal. Year: 1996           Region: Low           Altitude:  500. Ft.
                       I/M Program: Yes       Ambient Temp:   50.6 / 50.6 / 50.6 F
                  Anti-tam. Program: Yes     Operating Mode:   20.6 / 27.3 / 20.6
                   Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV   MC    All Veh
+            ____  _____  _____  _____  _____  _____  _____  _____  _____  _______
 Veh. Spd.: 24.0   24.0   24.0          24.0   24.0   24.0   24.0   24.0
   VMT Mix:  0.629  0.182  0.084         0.031  0.003  0.002  0.062  0.007
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  2.37   2.62   3.57   2.92   5.31   0.66   0.94   2.12   2.36   2.59
 Exhst  CO: 24.96  27.32  34.97  29.74  68.95   1.41   1.62   9.83  21.06  26.53
 Exhst NOX:  1.90   2.06   2.62   2.24   5.90   1.50   1.74  12.60   1.04   2.77
_____________________________________________________________________________
-M146 Warning:
+             Diurnal emissions are zero when Tmax-Tmin<1. The
              minimum and maximum temperatures of the day must
              be used to get the proper diurnal output.
0Emission factors are as of Jan. 1st of the indicated calendar year.
0Cal. Year: 2000           Region: Low           Altitude:  500. Ft.
                       I/M Program: Yes       Ambient Temp:   50.6 / 50.6 / 50.6 F
                  Anti-tam. Program: Yes     Operating Mode:   20.6 / 27.3 / 20.6
                    Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV   MC    All Veh
+            ____  _____  _____  _____  _____  _____  _____  _____  _____  _______
 Veh. Spd.: 24.0   24.0   24.0          24.0   24.0   24.0   24.0   24.0
   VMT Mix:  0.616  0.191  0.086         0.031  0.002  0.001  0.068  0.006
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  2.19   2.42   3.25   2.68   3.86   0.55   0.74   1.91   2.34   2.36
 Exhst  CO: 23.04  26.42  34.63  28.97  44.15   1.29   1.42   9.36  21.06  24.34
 Exhst NOX:  1.67   1.86   2.58   2.08   5.21   1.27   1.40   9.91   1.04   2.45
_____________________________________________________________________________
```

```
-M146 Warning:
+             Diurnal emissions are zero when Tmax-Tmin<1. The
              minimum and maximum temperatures of the day must
              be used to get the proper diurnal output.
0Emission factors are as of Jan. 1st of the indicated calendar year.
0Cal. Year: 2020           Region: Low            Altitude:  500. Ft.
                      I/M Program: Yes       Ambient Temp:   50.6 / 50.6 / 50.6 F
                Anti-tam. Program: Yes     Operating Mode:   20.6 / 27.3 / 20.6
                 Reformulated Gas: No
```

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	24.0	24.0	24.0		24.0	24.0	24.0	24.0	24.0	
VMT Mix:	0.575	0.207	0.089		0.034	0.002	0.005	0.084	0.004	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.95	2.23	3.02	2.47	2.67	0.45	0.62	1.79	2.34	2.11
Exhst CO:	21.52	25.65	34.54	28.32	18.35	1.17	1.30	9.03	21.06	22.23
Exhst NOX:	1.48	1.62	2.30	1.82	3.77	1.01	1.15	6.08	1.04	2.04

```
1           PROMPT
 North Carolina HC - Current I/M, Tamp
1           TAMFLG - Tampering rates.
1           SPDFLG - One average speed.
1           VMFLAG - VMT mix.
1           MYMRFG - Registration distributions.
1           NEWFLG - Basic exhaust emission rates.
2           IMFLAG - Inspection/maintenance program.
1           ALHFLG - Corrections for A/C useage, load, trailers, humidity.
2           ATPFLG - Specifies ATP, pressure, and purge checks.
1           RLFLAG - Data about Stage II and onboard VRS systems.
2           LOCFLG - LAP record will appear once, in one-time data section.
2           TEMFLG - Temperature corrections.
4           OUTFMT - Output format.
4           PRTFLG - Pollutant emissions factors.
1           IDLFLG - Idle emission factors calculated disabled in moble 5.
3           NMHFLG - Calculate emissions for volatile organic hydrocarbons.
1           HCFLAG - Print sum and component emissions.
87 20 75 20 05 05 095 2 1 2222 1111 220. 1.20 999.
75 68 20 2222 21 095. 22212222
NC IM HC          A 69.1 96.6 09.0 07.8 92 1 1 1        Local Area Parameter record
1 97 24.0 87.4 20.6 27.3 20.6  7
1 00 24.0 87.4 20.6 27.3 20.6  7
1 03 24.0 87.4 20.6 27.3 20.6  7
1 20 24.0 87.4 20.6 27.3 20.6  7
```

```
1 North Carolina HC - Current I/M, Tamp
 MOBILE5a (26-Mar-93)
0I/M program selected:

0     Start year (January 1):             1987
      Pre-1981 MYR stringency rate:        20%
      First model year covered:           1975
      Last model year covered:            2020
      Waiver rate (pre-1981):              5.%
      Waiver rate (1981 and newer):        5.%
      Compliance Rate:                    95.%
      Inspection type:                    Computerized Test and Repair
      Inspection frequency                Annual
      Vehicle types covered:               LDGV - Yes
                                          LDGT1 - Yes
                                          LDGT2 - Yes
                                           HDGV - Yes
      1981 & later MYR test type:          Idle
      Cutpoints, HC:  220.000   CO:    1.200   NOx:  999.000
0Functional Check Program Description:
0Check Start   Model Yrs  Vehicle Classes Covered       Inspection        Comp
       (Jan1)  Covered    LDGV   LDGT1  LDGT2  HDGV    Type       Freq     Rate

 ATP   1975    1968-2020  Yes     Yes     Yes    Yes Test & Repair Annual   95.0%
0Air pump system disablements:       Yes  Catalyst removals:                  Yes
 Fuel inlet restrictor disablements: Yes  Tailpipe lead deposit test:         No
 EGR disablement:                    Yes  Evaporative system disablements:    Yes
 PCV system disablements:            Yes  Missing gas caps:                   Yes
0NC IM HC
                      Minimum Temp: 69. (F)   Maximum Temp: 97. (F)
                      Period 1 RVP:  9.0      Period 2 RVP:  7.8 Period 2 Yr: 1992
0VOC HC emission factors include evaporative HC emission factors.
0______________________________________________________________________________
0Emission factors are as of July 1st of the indicated calendar year.
0Cal. Year: 1997           Region: Low          Altitude:  500. Ft.
                       I/M Program: Yes      Ambient Temp:    87.4 / 87.4 / 87.4 F
                   Anti-tam. Program: Yes    Operating Mode:   20.6 / 27.3 / 20.6
                    Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT    HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____  _____  _____  _____   _____  _____  _____  _____  _____  _____
 Veh. Spd.: 24.0   24.0   24.0           24.0   24.0   24.0   24.0   24.0
   VMT Mix:  0.624  0.186  0.085          0.031  0.002  0.001  0.064  0.007
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  1.97   2.24   2.98   2.47    6.19   0.63   0.89   2.02   5.36   2.26
 Exhst  CO: 15.04  17.76  24.22  19.79   66.23   1.38   1.58   9.64  20.18  17.55
 Exhst NOX:  1.51   1.67   2.24   1.85    5.37   1.43   1.65  11.63   0.84   2.37
 ______________________________________________________________________________
0Emission factors are as of July 1st of the indicated calendar year.
0Cal. Year: 2000           Region: Low          Altitude:  500. Ft.
                       I/M Program: Yes      Ambient Temp:    87.4 / 87.4 / 87.4 F
                   Anti-tam. Program: Yes    Operating Mode:   20.6 / 27.3 / 20.6
                    Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT    HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____  _____  _____  _____   _____  _____  _____  _____  _____  _____
 Veh. Spd.: 24.0   24.0   24.0           24.0   24.0   24.0   24.0   24.0
   VMT Mix:  0.614  0.191  0.086          0.031  0.001  0.001  0.068  0.006
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  1.81   2.03   2.67   2.23    4.79   0.54   0.71   1.89   5.34   2.05
 Exhst  CO: 14.26  16.43  22.33  18.26   44.25   1.27   1.40   9.32  20.18  15.97
 Exhst NOX:  1.40   1.55   2.14   1.73    4.99   1.24   1.35   9.57   0.84   2.16
 ______________________________________________________________________________
0Emission factors are as of July 1st of the indicated calendar year.
0Cal. Year: 2003           Region: Low          Altitude:  500. Ft.
                       I/M Program: Yes      Ambient Temp:    87.4 / 87.4 / 87.4 F
                   Anti-tam. Program: Yes    Operating Mode:   20.6 / 27.3 / 20.6
                    Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT    HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____  _____  _____  _____   _____  _____  _____  _____  _____  _____
 Veh. Spd.: 24.0   24.0   24.0           24.0   24.0   24.0   24.0   24.0
   VMT Mix:  0.605  0.195  0.087          0.031  0.002  0.002  0.073  0.006
```

Start Site Emission Factors (Gm/Mile)

VOC	HC:	1.59	1.90	2.51	2.09	3.83	0.45	1.62	1.82	5.34	1.90
Exhst	CO:	13.21	15.81	21.61	17.60	13.17	1.18	1.31	9.17	20.18	15.05
Exhst	NOX:	1.34	1.48	2.05	1.65	4.69	1.09	1.31	7.33	0.84	2.00

0Emission factors are as of July 1st of the indicated calendar year.

0Cal. Year: 2020 Region: Low Altitude: 500. Ft.

I/M Program: Yes Ambient Temp: 87.4 / 87.4 / 87.4 F

Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6

Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	24.0	24.0	24.0		24.0	24.0	24.0	24.0	24.0	
VMT Mix:	0.575	0.207	0.089		0.034	0.002	0.005	0.084	0.004	

0Composite Emission Factors (Gm/Mile)

VOC	HC:	1.51	1.70	2.24	1.86	2.75	0.45	0.62	1.79	5.34	1.69
Exhst	CO:	13.72	15.34	21.10	17.07	14.59	1.17	1.30	9.03	20.18	14.29
Exhst	NOX:	1.26	1.37	1.94	1.54	3.89	1.01	1.15	6.08	0.84	1.84

```
MOBILE6 INPUT FILE :

> Mecklenburg & Gaston Co. I/M Baseline Analysis for 2010
> with DAQ generated vehicle mix

POLLUTANTS         : NOX HC
SPREADSHEET        : Mecklenburg & Gaston CO., NOX VOC
RUN DATA           :

***************** RUN SECTION  **********
FUEL RVP           : 7.8
REG DIST           : mekage08.prn

HOURLY TEMPERATURES: 71.0 73.8 77.0 80.3 82.5 85.4 87.3 88.5 89.1 88.5 89.6 89.2
                     86.3 82.6 77.8 77.5 76.2 75.9 75.0 74.0 73.2 82.3 71.6 71.0

> IDLE

I/M PROGRAM        : 1 2002 2050 1 T/O IDLE
I/M MODEL YEARS    : 1 1968 1995
I/M VEHICLES       : 1 21111 11111111 1
I/M STRINGENCY     : 1 20.0
I/M COMPLIANCE     : 1 100.0
I/M WAIVER RATES   : 1 0.0 0.0

> OBDII

I/M PROGRAM        : 2 2002 2050 1 T/O OBD I/M
I/M MODEL YEARS    : 2 1996 2050
I/M VEHICLES       : 2 21111 11111111 1
I/M STRINGENCY     : 2 20.0
I/M COMPLIANCE     : 2 100.0
I/M WAIVER RATES   : 2 0.0 0.0

I/M PROGRAM        : 3 2002 2050 1 T/O EVAP OBD
I/M MODEL YEARS    : 3 1996 2050
I/M VEHICLES       : 3 21111 11111111 1
I/M STRINGENCY     : 3 20.0
I/M COMPLIANCE     : 3 100.0
I/M WAIVER RATES   : 3 0.0 0.0

ANTI-TAMP PROG     :
91 76 50 22222 22222222 2 11 095. 22212222

************  SCENARIO SECTION ********
SCENARIO RECORD    : Urban local
CALENDAR YEAR      : 2010
EVALUATION MONTH   : 7

> Urban local mix and speeds

VMT FRACTIONS      :
0.3751   0.0939   0.3127   0.0963   0.0443   0.0388   0.0037   0.0031
0.0024   0.0086   0.0021   0.0023   0.0082   0.0019   0.0010   0.0056

AVERAGE SPEED      : 24 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY  : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES    : 30

END OF RUN         :
```

```
*************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                            *
* Input file: PGNV10B.IN (file 1, run 1).                               *
*************************************************************************

* Reading Registration Distributions from the following external
* data file: MEKAGE08.PRN
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                0.996     MYR sum not = 1. (will normalize)
  M 49 Warning:
                0.998     MYR sum not = 1. (will normalize)
* IDLE
* OBDII

* # # # # # # # # # # # # # # # # # # # # # # # # # 
* Urban local
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # # 
* Urban local mix and speeds
  M615 Comment:
              User supplied VMT mix.
  M583 Warning:
            The user supplied arterial average speed of 24.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2010
                            Month:  July
                         Altitude:  Low
              Minimum Temperature:  71.0 (F)
              Maximum Temperature:  89.6 (F)
                Minimum Rel. Hum.:  47.0 (%)
                Maximum Rel. Hum.:  91.0 (%)
              Barometric Pressure: 30.00 (inches Hg)
                 Nominal Fuel RVP:   7.8 psi
                    Weathered RVP:   7.5 psi
              Fuel Sulfur Content:   30. ppm
```

```
              Exhaust I/M Program:  Yes
                 Evap I/M Program:  Yes
                      ATP Program:  Yes
                 Reformulated Gas:  No

    Vehicle Type:   LDGV   LDGT12   LDGT34    LDGT   HDGV   LDDV   LDDT   HDDV    MC      All Veh
            GVWR:           <6000    >6000     (All)
                   ----- ------   ------    ------  -----  -----  -----  -----   -----    ------
VMT Distribution:  0.3748  0.4066  0.1385           0.0344  0.0003 0.0021 0.0377  0.0056   1.0000
  ---------------------------------------------------------------------------------------------
Composite Emission Factors (g/mi):
Composite VOC :     0.547   1.081   0.618     0.963  0.692   0.185  0.304  0.326    3.02    0.784
Composite NOX :     0.380   0.796   0.634     0.755  1.527   0.315  0.407  3.645    0.96    0.750
  ---------------------------------------------------------------------------------------------
```

```
MOBILE6 INPUT FILE :


> Mecklenburg & Gaston Co. I/M SIP analysis NC run for 2010
> with default starts and 92% compliance instead of 95%

POLLUTANTS         : NOX HC
SPREADSHEET        : Mecklenburg & Gaston CO., NOX VOC
RUN DATA           :

***************** RUN SECTION  **********
FUEL RVP           : 7.8
REG DIST           : mekage08.prn

HOURLY TEMPERATURES: 71.0 73.8 77.0 80.3 82.5 85.4 87.3 88.5 89.1 88.5 89.6 89.2
                     86.3 82.6 77.8 77.5 76.2 75.9 75.0 74.0 73.2 82.3 71.6 71.0

> OBDII

I/M PROGRAM        : 1 2003 2050 1 TRC OBD I/M
I/M MODEL YEARS    : 1 1996 2050
I/M VEHICLES       : 1 22222 11111111 1
I/M STRINGENCY     : 1 10.0
I/M COMPLIANCE     : 1 92.0
I/M WAIVER RATES   : 1 5.0 5.0

I/M PROGRAM        : 2 2003 2050 1 TRC EVAP OBD
I/M MODEL YEARS    : 2 1996 2050
I/M VEHICLES       : 2 22222 11111111 1
I/M STRINGENCY     : 2 10.0
I/M COMPLIANCE     : 2 92.0
I/M WAIVER RATES   : 2 5.0 5.0

ANTI-TAMP PROG     :
91 76 50 22222 22222222 2 11 095. 22212222


************  SCENARIO SECTION ********
SCENARIO RECORD    : Urban local-Gaston County
CALENDAR YEAR      : 2010
EVALUATION MONTH   : 7

> Urban local mix and speeds

VMT FRACTIONS      :
0.3751   0.0939   0.3127   0.0963   0.0443   0.0388   0.0037   0.0031
0.0024   0.0086   0.0021   0.0023   0.0082   0.0019   0.0010   0.0056

AVERAGE SPEED      : 24 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY  : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES    : 30

END OF RUN         :
```

```
****************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                               *
* Input file: PGNV10C.IN (file 1, run 1).                                  *
****************************************************************************

* Reading Registration Distributions from the following external
* data file: MEKAGE08.PRN
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                0.996     MYR sum not = 1. (will normalize)
  M 49 Warning:
                0.998     MYR sum not = 1. (will normalize)
* OBDII

* # # # # # # # # # # # # # # # # # # # # # # # # #
* Urban local
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Urban local mix and speeds
  M615 Comment:
               User supplied VMT mix.
  M583 Warning:
            The user supplied arterial average speed of 24.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2010
                            Month:  July
                         Altitude:  Low
              Minimum Temperature:  71.0 (F)
              Maximum Temperature:  89.6 (F)
                Minimum Rel. Hum.:  47.0 (%)
                Maximum Rel. Hum.:  91.0 (%)
              Barometric Pressure: 30.00 (inches Hg)
                 Nominal Fuel RVP:   7.8 psi
                    Weathered RVP:   7.5 psi
              Fuel Sulfur Content:   30. ppm

              Exhaust I/M Program:  Yes
```

```
                Evap I/M Program:  Yes
                     ATP Program:  Yes
                Reformulated Gas:  No

    Vehicle Type:   LDGV   LDGT12   LDGT34    LDGT   HDGV   LDDV   LDDT   HDDV    MC      All Veh
            GVWR:           <6000    >6000     (All)
                   ----- ------   ------    ------  -----  -----  -----  -----   -----    ------
VMT Distribution:  0.3748  0.4066  0.1385           0.0344  0.0003 0.0021 0.0377  0.0056   1.0000
  ---------------------------------------------------------------------------------------------
Composite Emission Factors (g/mi):
Composite VOC :    0.571    0.949   0.525    0.841   0.692   0.185  0.304  0.326    3.02    0.726
Composite NOX :    0.391    0.665   0.543    0.634   1.527   0.315  0.407  3.645    0.96    0.688
  ---------------------------------------------------------------------------------------------
```

```
MOBILE6 INPUT FILE :

> Other Counties I/M Baseline Analysis for 2010
> with DAQ generated vehicle mix

POLLUTANTS         : NOX HC
SPREADSHEET        : Other Counties, NOX VOC
RUN DATA           :

***************** RUN SECTION  **********
FUEL RVP           : 9.0
REG DIST           : ncage08.prn

HOURLY TEMPERATURES: 71.0 73.8 77.0 80.3 82.5 85.4 87.3 88.5 89.1 88.5 89.6 89.2
                     86.3 82.6 77.8 77.5 76.2 75.9 75.0 74.0 73.2 82.3 71.6 71.0
> IDLE

I/M PROGRAM        : 1 2008 2050 1 T/O IDLE
I/M MODEL YEARS    : 1 1968 2000
I/M VEHICLES       : 1 21111 11111111 1
I/M STRINGENCY     : 1 20.0
I/M COMPLIANCE     : 1 100.0
I/M WAIVER RATES   : 1 0.0 0.0

> OBDII

I/M PROGRAM        : 2 2008 2050 1 T/O OBD I/M
I/M MODEL YEARS    : 2 2001 2050
I/M VEHICLES       : 2 21111 11111111 1
I/M STRINGENCY     : 2 20.0
I/M COMPLIANCE     : 2 100.0
I/M WAIVER RATES   : 2 0.0 0.0

I/M PROGRAM        : 3 2008 2050 1 T/O EVAP OBD
I/M MODEL YEARS    : 3 2001 2050
I/M VEHICLES       : 3 21111 11111111 1
I/M STRINGENCY     : 3 20.0
I/M COMPLIANCE     : 3 100.0
I/M WAIVER RATES   : 3 0.0 0.0

ANTI-TAMP PROG     :
91 76 50 22222 22222222 2 11 095. 22212222


************  SCENARIO SECTION ********
SCENARIO RECORD    : Urban local
CALENDAR YEAR      : 2010
EVALUATION MONTH   : 7

> Urban local mix and speeds

VMT FRACTIONS      :
0.3751   0.0939   0.3127   0.0963   0.0443   0.0388   0.0037   0.0031
0.0024   0.0086   0.0021   0.0023   0.0082   0.0019   0.0010   0.0056

AVERAGE SPEED      : 24 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY  : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES    : 30



END OF RUN         :
```

```
*********************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                        *
* Input file: PCNV10B.IN (file 1, run 1).                           *
*********************************************************************

* Reading Registration Distributions from the following external
* data file: NCAGE08.PRN
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.997     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.997     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.999     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.999     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.999     MYR sum not = 1. (will normalize)
* IDLE
* OBDII

* # # # # # # # # # # # # # # # # # # # # # # # # #
* Urban local
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Urban local mix and speeds
  M615 Comment:
                User supplied VMT mix.
  M583 Warning:
            The user supplied arterial average speed of 24.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                   Calendar Year:  2010
                           Month:  July
                        Altitude:  Low
              Minimum Temperature:  71.0 (F)
              Maximum Temperature:  89.6 (F)
                Minimum Rel. Hum.:  47.0 (%)
                Maximum Rel. Hum.:  91.0 (%)
              Barometric Pressure: 30.00 (inches Hg)
                 Nominal Fuel RVP:   9.0 psi
                    Weathered RVP:   8.6 psi
              Fuel Sulfur Content:   30. ppm

              Exhaust I/M Program:  Yes
                 Evap I/M Program:  Yes
```

ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3748	0.4066	0.1386		0.0349	0.0003	0.0021	0.0372	0.0056	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.954	1.778	1.405	1.684	1.473	0.257	0.512	0.397	3.55	1.363
Composite NOX :	0.574	1.009	1.008	1.009	2.240	0.437	0.654	4.752	0.97	1.027

```
MOBILE6 INPUT FILE :

> Cabarrus & Union Counties I/M SIP analysis NC run for 2010
> with default starts and 92% compliance instead of 95%

POLLUTANTS         : NOX HC
SPREADSHEET        : Cabarrus & Union Counties, NOX VOC
RUN DATA           :

***************** RUN SECTION  **********
FUEL RVP           : 9.0
REG DIST           : ncage08.prn

HOURLY TEMPERATURES: 71.0 73.8 77.0 80.3 82.5 85.4 87.3 88.5 89.1 88.5 89.6 89.2
                     86.3 82.6 77.8 77.5 76.2 75.9 75.0 74.0 73.2 82.3 71.6 71.0
> OBDII

I/M PROGRAM        : 1 2003 2050 1 TRC OBD I/M
I/M MODEL YEARS    : 1 1996 2050
I/M VEHICLES       : 1 22222 11111111 1
I/M STRINGENCY     : 1 10.0
I/M COMPLIANCE     : 1 92.0
I/M WAIVER RATES   : 1 5.0 5.0

I/M PROGRAM        : 2 2003 2050 1 TRC EVAP OBD
I/M MODEL YEARS    : 2 1996 2050
I/M VEHICLES       : 2 22222 11111111 1
I/M STRINGENCY     : 2 10.0
I/M COMPLIANCE     : 2 92.0
I/M WAIVER RATES   : 2 5.0 5.0

ANTI-TAMP PROG     :
91 76 50 22222 22222222 2 11 095. 22212222


************  SCENARIO SECTION ********
SCENARIO RECORD    : Urban local-Cabarrus and Union Counties
CALENDAR YEAR      : 2010
EVALUATION MONTH   : 7

> Urban local mix and speeds

VMT FRACTIONS      :
0.3751   0.0939   0.3127   0.0963   0.0443   0.0388   0.0037   0.0031
0.0024   0.0086   0.0021   0.0023   0.0082   0.0019   0.0010   0.0056

AVERAGE SPEED      : 24 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY  : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES    : 30

END OF RUN         :
```

```
*************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                            *
* Input file: CUNV10C.IN (file 1, run 1).                               *
*************************************************************************

* Reading Registration Distributions from the following external
* data file: NCAGE08.PRN
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.997     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.997     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.999     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.999     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.999     MYR sum not = 1. (will normalize)
* OBDII

* # # # # # # # # # # # # # # # # # # # # # # # # #
* Urban local-Cabarrus and Union Counties
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Urban local mix and speeds
  M615 Comment:
                User supplied VMT mix.
  M583 Warning:
             The user supplied arterial average speed of 24.0
             will be used for all hours of the day.  100% of VMT
             has been assigned to the arterial/collector roadway
             type for all hours of the day and all vehicle types.
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
               there are no sales for vehicle class HDGV8b

                     Calendar Year:  2010
                             Month:  July
                          Altitude:  Low
               Minimum Temperature:  71.0 (F)
               Maximum Temperature:  89.6 (F)
                 Minimum Rel. Hum.:  47.0 (%)
                 Maximum Rel. Hum.:  91.0 (%)
               Barometric Pressure: 30.00 (inches Hg)
                  Nominal Fuel RVP:   9.0 psi
                     Weathered RVP:   8.6 psi
               Fuel Sulfur Content:   30. ppm
```

```
              Exhaust I/M Program:  Yes
                 Evap I/M Program:  Yes
                      ATP Program:  Yes
                 Reformulated Gas:  No

    Vehicle Type:   LDGV   LDGT12   LDGT34    LDGT   HDGV   LDDV   LDDT   HDDV    MC      All Veh
            GVWR:          <6000    >6000     (All)
                  ----- ------   ------    ------  -----  -----  -----  -----   -----    ------
VMT Distribution:  0.3748  0.4066   0.1386           0.0349 0.0003 0.0021 0.0372  0.0056  1.0000
  ---------------------------------------------------------------------------------------------
Composite Emission Factors (g/mi):
Composite VOC :    0.960  1.619   1.263   1.528   1.473  0.257  0.512 0.397    3.55  1.280
Composite NOX :    0.534  0.865   0.882   0.869   2.240  0.437  0.654 4.752    0.97  0.936
  ---------------------------------------------------------------------------------------------
```

```
MOBILE6 INPUT FILE :

> Lincoln, Iredell, Rowan Counties I/M SIP analysis NC run for 2010
> with default starts and 92% compliance instead of 95%

POLLUTANTS         : NOX HC
SPREADSHEET        : Lincoln, Iredell, Rowan, NOX VOC
RUN DATA           :

***************** RUN SECTION  **********
FUEL RVP           : 9.0
REG DIST           : ncage08.prn

HOURLY TEMPERATURES: 71.0 73.8 77.0 80.3 82.5 85.4 87.3 88.5 89.1 88.5 89.6 89.2
                     86.3 82.6 77.8 77.5 76.2 75.9 75.0 74.0 73.2 82.3 71.6 71.0
> OBDII

I/M PROGRAM        : 1 2004 2050 1 TRC OBD I/M
I/M MODEL YEARS    : 1 1996 2050
I/M VEHICLES       : 1 22222 11111111 1
I/M STRINGENCY     : 1 10.0
I/M COMPLIANCE     : 1 92.0
I/M WAIVER RATES   : 1 5.0 5.0

I/M PROGRAM        : 2 2004 2050 1 TRC EVAP OBD
I/M MODEL YEARS    : 2 1996 2050
I/M VEHICLES       : 2 22222 11111111 1
I/M STRINGENCY     : 2 10.0
I/M COMPLIANCE     : 2 92.0
I/M WAIVER RATES   : 2 5.0 5.0

ANTI-TAMP PROG     :
91 76 50 22222 22222222 2 11 095. 22212222

************  SCENARIO SECTION ********
SCENARIO RECORD    : Urban local-Lincoln, Iredell and Rowan Counites
CALENDAR YEAR      : 2010
EVALUATION MONTH   : 7

> Urban local mix and speeds

VMT FRACTIONS      :
0.3751   0.0939   0.3127   0.0963   0.0443   0.0388   0.0037   0.0031
0.0024   0.0086   0.0021   0.0023   0.0082   0.0019   0.0010   0.0056

AVERAGE SPEED      : 24 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY  : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES    : 30

END OF RUN         :
```

```
*************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                            *
* Input file: RLINV10C.IN (file 1, run 1).                              *
*************************************************************************

* Reading Registration Distributions from the following external
* data file: NCAGE08.PRN
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.997     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.997     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.999     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.999     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
               0.999     MYR sum not = 1. (will normalize)
* OBDII

* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Urban local-Lincoln, Iredell and Rowan Counites
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Urban local mix and speeds
  M615 Comment:
                User supplied VMT mix.
  M583 Warning:
            The user supplied arterial average speed of 24.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2010
                            Month:  July
                         Altitude:  Low
              Minimum Temperature:  71.0 (F)
              Maximum Temperature:  89.6 (F)
                Minimum Rel. Hum.:  47.0 (%)
                Maximum Rel. Hum.:  91.0 (%)
              Barometric Pressure: 30.00 (inches Hg)
                 Nominal Fuel RVP:   9.0 psi
                    Weathered RVP:   8.6 psi
              Fuel Sulfur Content:   30. ppm
```

```
              Exhaust I/M Program:  Yes
                 Evap I/M Program:  Yes
                      ATP Program:  Yes
                 Reformulated Gas:  No

    Vehicle Type:   LDGV   LDGT12   LDGT34    LDGT   HDGV   LDDV   LDDT   HDDV    MC      All Veh
            GVWR:          <6000    >6000     (All)
                  ----- ------   ------    ------  -----  -----  -----  -----   -----    ------
VMT Distribution:  0.3748  0.4066   0.1386           0.0349 0.0003 0.0021 0.0372  0.0056  1.0000
  ---------------------------------------------------------------------------------------------
Composite Emission Factors (g/mi):
Composite VOC :    0.960  1.619    1.263   1.528  1.473  0.257  0.512 0.397  3.55    1.280
Composite NOX :    0.534  0.865    0.882   0.869  2.240  0.437  0.654 4.752  0.97    0.936
  ---------------------------------------------------------------------------------------------
```

APPENDIX 2
MOBILE Modeling Assumptions

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MOBILE5a Modeling Results

MOBILE5a Model Runs

To Demonstrate Attainment of VOC/CO Standards

		EPA Performance Standard			NC Inspection/Maintenance	
Winter		VOC	CO		VOC	CO
(CO)	1996	2.65	26.74	1996	2.59	26.53
	2000	2.40	24.46	2000	2.36	24.34
Summer						
(VOC)	1997	2.32	17.74	1997	2.26	17.55
	2000	2.09	16.12	2000	2.05	15.97
	2003	1.94	15.09	2003	1.90	15.05

MOBILE5a Model Runs

To Demonstrate No Increase in NOx

	Without I/M		With I/M	
Winter		NOx		NOx
	1996	2.83	1996	2.77
	2000	2.51	2000	2.45
Summer				
	1997	2.42	1997	2.37
	2000	2.21	2000	2.16
	2003	2.05	2003	2.00

MOBILE5a Modeling Assumptions

Inspection and Maintenance (I/M) Program Start Year: North Carolina has implemented I/M programs in various counties as early as 1983 and as recently as 1993. As an average, Wake County with an I/M program start year of 1987, was used for model runs for the SIP.

Anti-Tampering Program: North Carolina began a statewide safety inspection program in 1975. This program includes checking the vehicle for tampering of emissions control equipment. Vehicles at the 1968 model year and later are inspected.

Vehicle Registration and VMT mix: North Carolina does not maintain accurate data to determine a vehicle registration or a VMT mix specific to North Carolina. EPA defaults for these variables were used in the model runs.

Vehicle Speed: To minimize the number of runs as recommend by EPA, one vehicle speed of 24.0 mph was used for all runs.

Reid Vapor Pressure (RVP): RVP for the summer is based on 40 CFR § 80.27 that requires a 7.8 RVP standard in North Carolina after 1992. For the winter, an RVP of 12.5 was used based on a weighted average of monthly RVP's and gasoline sales during that month. This value for RVP is very conservative and thus should satisfy any requirements.

ASTM Class: The ASTM classes that most closely match the RVP was used in the model runs. For summer, 7.8 RVP is actually an ASTM standard of "AA" which the mobile model will not handle, so "A" was used. In the winter, 12.5 RVP falls between ASTM classes "C" and "D", so "C" was used. The ASTM standard is not recognized in the model unless you have a reformulated fuels program. Since North Carolina does not, these values are not looked at in calculating emission factors.

Temperatures: The temperatures used for the mobile runs were generated according to the guidance in the EPA publication Procedures for Emission Inventory Preparation., Volume IV: Mobile Sources. Because the calculated temperatures vary by region in the state, Wake County was again used as the average.

> Running the model separately for the winter and summer months (CO and ozone seasons) is the most accurate method for getting true emission factors based on temperatures in the model. The following variables were used for each run.
>
> Summer: The calculated minimum, maximum and ambient temperatures for the ozone season were used in the model run. TEMFLG in the model was set to 2 to prevent the ambient temperature from being recalculated in the model.
>
> Winter: In the CO season, one temperature is used for the minimum, maximum and ambient temperatures. Running the model with one temperature for the winter has been recommended by EPA. Consequently, running MOBILE 5.0a with the same temperature causes a warning in the output that diurnal emissions cannot be

calculated when Tmax-Tmin<1. Looking at diurnal emissions in the winter is not critical and this method provides for the most accurate calculation of emissions in the winter months. TEMFLG in the model was set to 2 to prevent the ambient temperature from being recalculated.

Altitude: North Carolina is considered a low altitude region for modeling purposes.

MOBILE6.2 Modeling Results

MOBILE6.2 model runs to demonstrate compliance for the 1997 8-hour ozone standards. Since Mecklenburg and Gaston Counties were 1-hour ozone maintenance areas, the performance standards for these two counties were slightly different from the remaining counties in the 1997 8-hour ozone nonattainment area (Cabarrus, Lincoln, Rowan, Union Counties and Coddle Creek and Davidson Townships in Iredell County). Below are the emission factors for the two performance standards that are required to be met and the program target based upon how North Carolina's Inspection and Maintenance (I/M) program is actual run. The North Carolina I/M program meets the emission reduction targets in the attainment year. The State of North Carolina commits to meeting the performance standard.

Emission Factors for Mecklenburg and Gaston Counties (grams/mile)

	VOC	NOx
Performance Standard	0.784	0.750
Program Target	0.726	0.688

Emission Factors for Remaining Counties (grams/mile)

	VOC	NOx
Performance Standard	1.363	1.027
Program Target	1.280	0.936

MOBILE6.2 Modeling Assumptions

Modeled Calendar Year:

- As required by the Code of Federal Regulations (CFR) 40 CFR 51.352(e) the evaluation date is to be set at six years after the effective date of designation. The Charlotte-Gastonia-Rock Hill, North Carolina-South Carolina Moderate Nonattainment area (referred to as the Metrolina area) has an effective designated date of June 15, 2004, therefore, the evaluation date is 2010.

I/M Program Start Year:

- Performance Standards for Mecklenburg and Gaston Counties: According to 51.352(c), the required start date was 2002, with the idle test for 1968 to 1995 vehicles and On Board Diagnostic II (OBD) for 1996 and newer vehicles.
- Program Target for Mecklenburg and Gaston Counties: Although these two counties had the idle test implemented in prior to 2002, the OBD I/M program was implemented in these two counties starting July 2002 for all 1996 and newer vehicles. By the evaluation year (2010), the idle test had been phased-out and only the OBD test was required. Therefore, the I/M program start year for Mecklenburg and Gaston Counties was set at 2003.

- Performance Standards for Remaining Counties: According to 51.352(e), the required start date was 2008, with the idle test for 1968 to 2000 vehicles and On Board Diagnostic II (OBD) for 2001 and newer vehicles.
- Program Target for Cabarrus and Union Counties: Although these two counties had the idle test implemented in prior to 2002, the OBD I/M program was implemented in these two counties starting July 2002 for all 1996 and newer vehicles. By the evaluation year (2010), the idle test had been phased-out and only the OBD test was required. Therefore, the I/M program start year for Cabarrus and Union Counties was set at 2003.
- Program Target for Iredell, Lincoln and Rowan Counties: The OBD I/M program, for all 1996 and newer vehicles, was implemented in Iredell and Rowan Counties starting July 2003 and in Lincoln County starting January 2004. Therefore, the I/M program start year for Cabarrus and Union Counties was set at 2003.

Anti-Tampering Program:

- North Carolina began a statewide safety inspection program in 1975. This program includes checking the vehicle for tampering of emission control equipment. Vehicles 35 years old and newer are inspected.

Vehicle Registration and VMT mix:

- North Carolina Division of Air Quality (NCDAQ) receives vehicle registration data for Mecklenburg and Gaston Counties combined and for the remaining counties in that nonattainment area uses the statewide vehicle registration data. The 2008 vehicle registration data, the most recent data available, was used for these runs. The vehicle registration data is attached at the end of this summary.

- The VMT mix was based on the latest data available from the transportation partners and is presented below.

0.3751	0.0939	0.3127	0.0963	0.0443	0.0388	0.0037	0.0031
0.0024	0.0086	0.0021	0.0023	0.0082	0.0019	0.0010	0.0056

Vehicle Speeds:

- To minimize the number of runs as recommended by the United States Environmental Protection Agency (USEPA), one vehicle speed of 24 miles per hour was used for all runs.

Reid Vapor Pressure:

- For Mecklenburg and Gaston Counties, the Reid Vapor Pressure (RVP) is 7.8 pounds per square inch (psi) during the summer months as required by 40 CFR 80.27.
- For the remaining nonattainment counties, the RVP is 9.0 psi during the summer months.

Temperature, Relative Humidity and Barometric Pressure:

- The temperature, relative humidity and barometric pressure used in these modeling runs were the same data used in the latest attainment demonstration plan. This data was based on average July 2002 data for the Metrolina region.
- The hourly temperature data as formatted in the input files:

71.0	73.8	77.0	80.3	82.5	85.4	87.3	88.5	89.1	88.5	89.6	89.2
86.3	82.6	77.8	77.5	76.2	75.9	75.0	74.0	73.2	82.3	71.6	71.0

- The hourly relative humidity data as formatted in the input files:

91.	86.	78.	71.	65.	59.	53.	50.	48.	51.	47.	47.
53.	61.	70.	71.	76.	77.	79.	83.	85.	87.	88.	91.

- The barometric pressure is set to 30 inches of mercury, which is consistent with the average summertime barometric pressure in North Carolina.

Altitude:

- North Carolina is considered a low altitude region for modeling purposes.

Mecklenburg and Gaston Counties 2008 Vehicle Registration data

*Convert MOBILE5 Registration Fractions to MOBILE6-Based Registration Fractions
*
*Calendar Year: 2008.000User-Input
*
*MOBILE5b Reg Fractions
* 0.081 0.081 0.076 0.077 0.076 0.073 0.070 0.065 0.067 0.059
* 0.049 0.043 0.034 0.034 0.025 0.020 0.015 0.011 0.009 0.007
* 0.005 0.004 0.003 0.002 0.015
* 0.042 0.058 0.063 0.055 0.063 0.059 0.060 0.064 0.065 0.061
* 0.054 0.050 0.039 0.040 0.038 0.026 0.019 0.016 0.015 0.017
* 0.015 0.013 0.012 0.008 0.049
* 0.122 0.153 0.111 0.094 0.079 0.059 0.042 0.050 0.053 0.051
* 0.035 0.035 0.018 0.024 0.012 0.011 0.005 0.005 0.005 0.006
* 0.005 0.004 0.002 0.003 0.018
* 0.101 0.109 0.136 0.094 0.077 0.074 0.044 0.053 0.062 0.052
* 0.025 0.036 0.017 0.020 0.012 0.007 0.007 0.005 0.006 0.007
* 0.006 0.006 0.005 0.004 0.034
* 0.061 0.051 0.097 0.068 0.045 0.057 0.053 0.050 0.050 0.045
* 0.031 0.026 0.034 0.034 0.019 0.024 0.023 0.013 0.012 0.010
* 0.013 0.022 0.026 0.034 0.101
* 0.040 0.046 0.100 0.078 0.078 0.076 0.065 0.070 0.061 0.085
* 0.023 0.052 0.039 0.035 0.028 0.021 0.013 0.011 0.014 0.006
* 0.007 0.007 0.008 0.006 0.031
* 0.062 0.114 0.108 0.105 0.076 0.058 0.051 0.066 0.073 0.068
* 0.035 0.042 0.024 0.030 0.015 0.011 0.007 0.010 0.011 0.008
* 0.006 0.005 0.003 0.003 0.005
* 0.088 0.123 0.107 0.094 0.069 0.077 0.059 0.053 0.047 0.040
* 0.032 0.024 0.021 0.020 0.014 0.014 0.010 0.007 0.005 0.006
* 0.005 0.006 0.009 0.008 0.060
*
*
* MOBILE6 Vehicle Classes:
* 1 LDV Light-Duty Vehicles (Passenger Cars)
* 2 LDT1 Light-Duty Trucks 1 (0-6,000 lbs. GVWR, 0-3750 lbs. LVW)
* 3 LDT2 Light Duty Trucks 2 (0-6,000 lbs. GVWR, 3751-5750 lbs. LVW)
* 4 LDT3 Light Duty Trucks 3 (6,001-8500 lbs. GVWR, 0-3750 lbs. LVW)
* 5 LDT4 Light Duty Trucks 4 (6,001-8500 lbs. GVWR, 3751-5750 lbs. LVW)
* 6 HDV2B Class 2b Heavy Duty Vehicles (8501-10,000 lbs. GVWR)
* 7 HDV3 Class 3 Heavy Duty Vehicles (10,001-14,000 lbs. GVWR)
* 8 HDV4 Class 4 Heavy Duty Vehicles (14,001-16,000 lbs. GVWR)
* 9 HDV5 Class 5 Heavy Duty Vehicles (16,001-19,500 lbs. GVWR)
* 10 HDV6 Class 6 Heavy Duty Vehicles (19,501-26,000 lbs. GVWR)

```
* 11  HDV7   Class 7 Heavy Duty Vehicles (26,001-33,000 lbs. GVWR)
* 12  HDV8A  Class 8a Heavy Duty Vehicles (33,001-60,000 lbs. GVWR)
* 13  HDV8B  Class 8b Heavy Duty Vehicles (>60,000 lbs. GVWR)
* 14  HDBS   School Busses
* 15  HDBT   Transit and Urban Busses
* 16  MC     Motorcycles (All)
*
REG DIST
*                  RESULTING MOBILE6-BASED REGISTRATION FRACTIONS
*
*MOBILE6 REGISTRATION FRACTIONS BY VEHICLE CLASS AND AGE
* LDV          M5 LDGV
     1  0.081  0.081  0.076  0.077  0.076  0.073  0.070  0.065  0.067  0.059
        0.049  0.043  0.034  0.034  0.025  0.020  0.015  0.011  0.009  0.007
        0.005  0.004  0.003  0.002  0.015
* LDT1         M5 LDGT1
     2  0.042  0.058  0.063  0.055  0.063  0.059  0.060  0.064  0.065  0.061
        0.054  0.050  0.039  0.040  0.038  0.026  0.019  0.016  0.015  0.017
        0.015  0.013  0.012  0.008  0.049
* LDT2         M5 LDGT1
     3  0.042  0.058  0.063  0.055  0.063  0.059  0.060  0.064  0.065  0.061
        0.054  0.050  0.039  0.040  0.038  0.026  0.019  0.016  0.015  0.017
        0.015  0.013  0.012  0.008  0.049
* LDT3         M5 LDGT2
     4  0.122  0.153  0.111  0.094  0.079  0.059  0.042  0.050  0.053  0.051
        0.035  0.035  0.018  0.024  0.012  0.011  0.005  0.005  0.005  0.006
        0.005  0.004  0.002  0.003  0.018
* LDT4         M5 LDGT2
     5  0.122  0.153  0.111  0.094  0.079  0.059  0.042  0.050  0.053  0.051
        0.035  0.035  0.018  0.024  0.012  0.011  0.005  0.005  0.005  0.006
        0.005  0.004  0.002  0.003  0.018
* HDV2B        M5 HDVs (Combined HDGV and HDDV)
     6  0.082  0.112  0.122  0.099  0.077  0.066  0.048  0.060  0.067  0.060
        0.030  0.039  0.021  0.025  0.013  0.009  0.007  0.008  0.009  0.008
        0.006  0.006  0.004  0.004  0.019
* HDV3         M5 HDVs (Combined HDGV and HDDV)
     7  0.082  0.112  0.122  0.099  0.077  0.066  0.048  0.060  0.067  0.060
        0.030  0.039  0.021  0.025  0.013  0.009  0.007  0.008  0.009  0.008
        0.006  0.006  0.004  0.004  0.019
* HDV4         M5 HDVs (Combined HDGV and HDDV)
     8  0.082  0.112  0.122  0.099  0.077  0.066  0.048  0.060  0.067  0.060
        0.030  0.039  0.021  0.025  0.013  0.009  0.007  0.008  0.009  0.008
```

0.006 0.006 0.004 0.004 0.019
* HDV5 M5 HDVs (Combined HDGV and HDDV)
9 0.082 0.112 0.122 0.099 0.077 0.066 0.048 0.060 0.067 0.060
0.030 0.039 0.021 0.025 0.013 0.009 0.007 0.008 0.009 0.008
0.006 0.006 0.004 0.004 0.019
* HDV6 M5 HDVs (Combined HDGV and HDDV)
10 0.082 0.112 0.122 0.099 0.077 0.066 0.048 0.060 0.067 0.060
0.030 0.039 0.021 0.025 0.013 0.009 0.007 0.008 0.009 0.008
0.006 0.006 0.004 0.004 0.019
* HDV7 M5 HDVs (Combined HDGV and HDDV)
11 0.082 0.112 0.122 0.099 0.077 0.066 0.048 0.060 0.067 0.060
0.030 0.039 0.021 0.025 0.013 0.009 0.007 0.008 0.009 0.008
0.006 0.006 0.004 0.004 0.019
* HDV8a M5 HDVs (Combined HDGV and HDDV)
12 0.082 0.112 0.122 0.099 0.077 0.066 0.048 0.060 0.067 0.060
0.030 0.039 0.021 0.025 0.013 0.009 0.007 0.008 0.009 0.008
0.006 0.006 0.004 0.004 0.019
* HDV8b M5 HDVs (Combined HDGV and HDDV)
13 0.082 0.112 0.122 0.099 0.077 0.066 0.048 0.060 0.067 0.060
0.030 0.039 0.021 0.025 0.013 0.009 0.007 0.008 0.009 0.008
0.006 0.006 0.004 0.004 0.019
* HDBS M5 HDVs (Combined HDGV and HDDV)
14 0.082 0.112 0.122 0.099 0.077 0.066 0.048 0.060 0.067 0.060
0.030 0.039 0.021 0.025 0.013 0.009 0.007 0.008 0.009 0.008
0.006 0.006 0.004 0.004 0.019
* HDBT M5 HDDVs
15 0.062 0.114 0.108 0.105 0.076 0.058 0.051 0.066 0.073 0.068
0.035 0.042 0.024 0.030 0.015 0.011 0.007 0.010 0.011 0.008
0.006 0.005 0.003 0.003 0.005
* Motorcycles M5 MC
16 0.088 0.123 0.107 0.094 0.069 0.077 0.059 0.053 0.047 0.040
0.032 0.024 0.021 0.020 0.014 0.014 0.010 0.007 0.005 0.006
0.005 0.006 0.009 0.008 0.060

North Carolina Statewide 2008 Vehicle Registration data

*Convert MOBILE5 Registration Fractions to MOBILE6-Based Registration Fractions
*
*Calendar Year: 2008.000User-Input
*
*MOBILE5b Reg Fractions
* 0.046 0.062 0.061 0.067 0.065 0.063 0.063 0.061 0.067 0.062
* 0.054 0.050 0.042 0.045 0.035 0.029 0.023 0.018 0.015 0.013
* 0.010 0.008 0.006 0.005 0.031
* 0.025 0.037 0.040 0.042 0.052 0.048 0.048 0.052 0.057 0.054
* 0.052 0.052 0.041 0.046 0.048 0.034 0.027 0.024 0.023 0.028
* 0.026 0.022 0.021 0.015 0.083
* 0.051 0.075 0.074 0.067 0.071 0.056 0.045 0.050 0.056 0.051
* 0.040 0.044 0.032 0.041 0.030 0.022 0.016 0.014 0.017 0.021
* 0.018 0.012 0.014 0.010 0.072
* 0.042 0.049 0.057 0.050 0.052 0.047 0.039 0.048 0.052 0.046
* 0.032 0.038 0.031 0.039 0.028 0.020 0.018 0.016 0.019 0.024
* 0.023 0.018 0.020 0.016 0.177
* 0.031 0.038 0.101 0.079 0.058 0.060 0.063 0.056 0.058 0.043
* 0.030 0.024 0.028 0.025 0.016 0.016 0.013 0.019 0.014 0.012
* 0.010 0.023 0.033 0.037 0.111
* 0.032 0.046 0.083 0.069 0.080 0.078 0.066 0.075 0.060 0.078
* 0.020 0.058 0.040 0.031 0.025 0.020 0.014 0.012 0.014 0.013
* 0.009 0.009 0.013 0.011 0.044
* 0.046 0.080 0.087 0.077 0.064 0.056 0.046 0.063 0.071 0.072
* 0.039 0.049 0.034 0.036 0.026 0.019 0.013 0.015 0.020 0.018
* 0.018 0.014 0.009 0.008 0.019
* 0.077 0.107 0.097 0.085 0.067 0.077 0.064 0.055 0.048 0.041
* 0.031 0.027 0.026 0.020 0.017 0.014 0.009 0.007 0.007 0.007
* 0.007 0.008 0.013 0.011 0.078
*
*
* MOBILE6 Vehicle Classes:
* 1 LDV Light-Duty Vehicles (Passenger Cars)
* 2 LDT1 Light-Duty Trucks 1 (0-6,000 lbs. GVWR, 0-3750 lbs. LVW)
* 3 LDT2 Light Duty Trucks 2 (0-6,000 lbs. GVWR, 3751-5750 lbs. LVW)
* 4 LDT3 Light Duty Trucks 3 (6,001-8500 lbs. GVWR, 0-3750 lbs. LVW)
* 5 LDT4 Light Duty Trucks 4 (6,001-8500 lbs. GVWR, 3751-5750 lbs. LVW)
* 6 HDV2B Class 2b Heavy Duty Vehicles (8501-10,000 lbs. GVWR)
* 7 HDV3 Class 3 Heavy Duty Vehicles (10,001-14,000 lbs. GVWR)
* 8 HDV4 Class 4 Heavy Duty Vehicles (14,001-16,000 lbs. GVWR)
* 9 HDV5 Class 5 Heavy Duty Vehicles (16,001-19,500 lbs. GVWR)
* 10 HDV6 Class 6 Heavy Duty Vehicles (19,501-26,000 lbs. GVWR)

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* 11  HDV7   Class 7 Heavy Duty Vehicles (26,001-33,000 lbs. GVWR)
* 12  HDV8A  Class 8a Heavy Duty Vehicles (33,001-60,000 lbs. GVWR)
* 13  HDV8B  Class 8b Heavy Duty Vehicles (>60,000 lbs. GVWR)
* 14  HDBS   School Busses
* 15  HDBT   Transit and Urban Busses
* 16  MC     Motorcycles (All)
*
REG DIST
*                  RESULTING MOBILE6-BASED REGISTRATION FRACTIONS
*
*MOBILE6 REGISTRATION FRACTIONS BY VEHICLE CLASS AND AGE
* LDV          M5 LDGV
     1  0.046  0.062  0.061  0.067  0.065  0.063  0.063  0.061  0.067  0.062
        0.054  0.050  0.042  0.045  0.035  0.029  0.023  0.018  0.015  0.013
        0.010  0.008  0.006  0.005  0.031
* LDT1         M5 LDGT1
     2  0.025  0.037  0.040  0.042  0.052  0.048  0.048  0.052  0.057  0.054
        0.052  0.052  0.041  0.046  0.048  0.034  0.027  0.024  0.023  0.028
        0.026  0.022  0.021  0.015  0.083
* LDT2         M5 LDGT1
     3  0.025  0.037  0.040  0.042  0.052  0.048  0.048  0.052  0.057  0.054
        0.052  0.052  0.041  0.046  0.048  0.034  0.027  0.024  0.023  0.028
        0.026  0.022  0.021  0.015  0.083
* LDT3         M5 LDGT2
     4  0.051  0.075  0.074  0.067  0.071  0.056  0.045  0.050  0.056  0.051
        0.040  0.044  0.032  0.041  0.030  0.022  0.016  0.014  0.017  0.021
        0.018  0.012  0.014  0.010  0.072
* LDT4         M5 LDGT2
     5  0.051  0.075  0.074  0.067  0.071  0.056  0.045  0.050  0.056  0.051
        0.040  0.044  0.032  0.041  0.030  0.022  0.016  0.014  0.017  0.021
        0.018  0.012  0.014  0.010  0.072
* HDV2B        M5 HDVs (Combined HDGV and HDDV)
     6  0.044  0.065  0.072  0.064  0.058  0.052  0.043  0.056  0.062  0.059
        0.036  0.044  0.033  0.037  0.027  0.020  0.015  0.015  0.019  0.021
        0.020  0.016  0.015  0.012  0.097
* HDV3         M5 HDVs (Combined HDGV and HDDV)
     7  0.044  0.065  0.072  0.064  0.058  0.052  0.043  0.056  0.062  0.059
        0.036  0.044  0.033  0.037  0.027  0.020  0.015  0.015  0.019  0.021
        0.020  0.016  0.015  0.012  0.097
* HDV4         M5 HDVs (Combined HDGV and HDDV)
     8  0.044  0.065  0.072  0.064  0.058  0.052  0.043  0.056  0.062  0.059
        0.036  0.044  0.033  0.037  0.027  0.020  0.015  0.015  0.019  0.021
```

0.020 0.016 0.015 0.012 0.097
* HDV5 M5 HDVs (Combined HDGV and HDDV)
9 0.044 0.065 0.072 0.064 0.058 0.052 0.043 0.056 0.062 0.059
0.036 0.044 0.033 0.037 0.027 0.020 0.015 0.015 0.019 0.021
0.020 0.016 0.015 0.012 0.097
* HDV6 M5 HDVs (Combined HDGV and HDDV)
10 0.044 0.065 0.072 0.064 0.058 0.052 0.043 0.056 0.062 0.059
0.036 0.044 0.033 0.037 0.027 0.020 0.015 0.015 0.019 0.021
0.020 0.016 0.015 0.012 0.097
* HDV7 M5 HDVs (Combined HDGV and HDDV)
11 0.044 0.065 0.072 0.064 0.058 0.052 0.043 0.056 0.062 0.059
0.036 0.044 0.033 0.037 0.027 0.020 0.015 0.015 0.019 0.021
0.020 0.016 0.015 0.012 0.097
* HDV8a M5 HDVs (Combined HDGV and HDDV)
12 0.044 0.065 0.072 0.064 0.058 0.052 0.043 0.056 0.062 0.059
0.036 0.044 0.033 0.037 0.027 0.020 0.015 0.015 0.019 0.021
0.020 0.016 0.015 0.012 0.097
* HDV8b M5 HDVs (Combined HDGV and HDDV)
13 0.044 0.065 0.072 0.064 0.058 0.052 0.043 0.056 0.062 0.059
0.036 0.044 0.033 0.037 0.027 0.020 0.015 0.015 0.019 0.021
0.020 0.016 0.015 0.012 0.097
* HDBS M5 HDVs (Combined HDGV and HDDV)
14 0.044 0.065 0.072 0.064 0.058 0.052 0.043 0.056 0.062 0.059
0.036 0.044 0.033 0.037 0.027 0.020 0.015 0.015 0.019 0.021
0.020 0.016 0.015 0.012 0.097
* HDBT M5 HDDVs
15 0.046 0.080 0.087 0.077 0.064 0.056 0.046 0.063 0.071 0.072
0.039 0.049 0.034 0.036 0.026 0.019 0.013 0.015 0.020 0.018
0.018 0.014 0.009 0.008 0.019
* Motorcycles M5 MC
16 0.077 0.107 0.097 0.085 0.067 0.077 0.064 0.055 0.048 0.041
0.031 0.027 0.026 0.020 0.017 0.014 0.009 0.007 0.007 0.007
0.007 0.008 0.013 0.011 0.078

APPENDIX 3
I/M Budget: Fiscal Years 2010-2011

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DAQ Tools and Resources

The Division of Air Quality dedicates ten positions to the I/M Program:

- An Environmental Program Manager, primary duties are to supervise the Mobile Sources Compliance Branch.

- A lead Environmental Engineer, primary purpose of this position is to oversee the Inspection/Maintenance (I/M) Program and act as a liaison with DMV.

- A staff level Environmental Engineer, primary purpose of this position is to perform staff-level engineering technical services in support of the state's inspection/maintenance (I/M) program.

- An audit coordinating specialist, primary duties are to develop and execute procedures for the evaluation of the inspection and maintenance program (I/M) and to coordinate regional audit staff tasks to measure the effectiveness of the inspection and maintenance program and identify areas for improvement.

- Six regional Senior Technicians (auditors), primary duties are performs an ongoing survey to determine the field vehicle compliance rate and visits inspection stations to audit DMV's implementation of the program.

These are all existing funded positions, funded through a dedicated, non-reverting account.

4300 -
24300 DENR - Special
2338 Inspection and Maintenance - Air Pollution

CODE (1)	DESCRIPTION (2)	2007-2008 ACTUAL (3)	2008-2009 CERTIFIED (4)	2008-2009 AUTHORIZED (5)	2009-2010 INCR/DECR (6)	2009-2010 TOTAL (7)	2010-2011 INCR/DECR (8)	2010-2011 TOTAL (9)
REQUIREMENTS								
53 1212	SPA-REG SALARIES-RECPT	847,778	993,018	1,002,062	0	1,002,062	0	1,002,062
53 1422	HOLIDAY PAY - RECEIPTS	93	0	0	0	0	0	0
53 1462	EPA&APA LONGVTY PAY - RE	17,751	9,985	9,985	0	9,985	0	9,985
53 1512	SOCIAL SEC CONTRIB-REC	63,276	77,385	77,385	0	77,385	0	77,385
53 1522	REG RETIRE CONTRIB-RECPT	67,315	76,118	76,118	0	76,118	0	76,118
53 1562	MED INS CONTRIB-RECPTS	69,123	60,400	60,400	0	60,400	0	60,400
53 1576	FLEXIBLE SPENDING SA	1,236	0	0	0	0	0	0
53 1631	WORKERS COMPENSATION	59	0	0	0	0	0	0
TOTAL PERSONAL SERVICES		1,066,631	1,216,906	1,225,950	0	1,225,950	0	1,225,950
53 2133	EMPLOYEE PHYSICALS	0	20,000	20,000	0	20,000	0	20,000
53 2170	ADMN SERVICES	132	0	0	0	0	0	0
53 2186	SECURITY SERVICE AGR	5,607	0	0	0	0	0	0
53 2199	MISC CONTRACTUAL SERVICE	571,392	1,321,439	1,321,439	0	1,321,439	0	1,321,439
53 2200	UTILITY/ENERGY SERVICES	0	56,000	56,000	0	56,000	0	56,000
53 2300	REPAIR SERVICES	1,621	500	500	0	500	0	500
53 2400	MAINTENANCE AGREEMENTS	914	0	0	0	0	0	0
53 2500	RENTALS/LEASES	237,266	500,000	500,000	0	500,000	0	500,000
53 2700	TRAVEL&OTHER EMPLOYEE EX	9,183	11,312	11,312	0	11,312	0	11,312
53 2800	COMMUNICATION&DATA PROC	3,686	96,417	96,417	0	96,417	0	96,417
53 2900	OTHER SERVICES	41,944	56,020	56,020	0	56,020	0	56,020
TOTAL PURCHASED SERVICES		871,745	2,061,688	2,061,688	0	2,061,688	0	2,061,688
53 3100	GENERAL ADMIN SUPPLIES	2,853	34,099	34,099	0	34,099	0	34,099
53 3200	FACILITY & HARDWARE SUPP	18	1,250	1,250	0	1,250	0	1,250
53 3300	VEHICLE/EQUIP OPER SUPPL	0	100	100	0	100	0	100
53 3700	RESEARCH/DEVELOP& ED SUP	156	2,500	2,500	0	2,500	0	2,500
53 3900	OTHER MATERIALS & SUPP	3,590	10,250	10,250	0	10,250	0	10,250
TOTAL SUPPLIES		6,617	48,199	48,199	0	48,199	0	48,199
53 4500	EQUIPMENT	51,289	258,000	258,000	0	258,000	0	258,000
53 4700	INTANGIBLE ASSETS	10,495	0	0	0	0	0	0
TOTAL PROPERTY,PLANT & EQUIPMT		61,784	258,000	258,000	0	258,000	0	258,000
53 5800	OTHER ADMINISTRATIVE EXP	2,555	625	625	0	625	0	625
53 5900	OTHER EXPENSES	4,969	11,617	11,617	0	11,617	0	11,617
TOTAL OTHER EXPENSES & ADJUSTMEN		7,524	12,242	12,242	0	12,242	0	12,242

4300 -
24300 DENR - Special
2338 Inspection and Maintenance - Air Pollution

CODE (1)	DESCRIPTION (2)	2007-2008 ACTUAL (3)	2008-2009 CERTIFIED (4)	2008-2009 AUTHORIZED (5)	2009-2010 INCR/DECR (6)	2009-2010 TOTAL (7)	2010-2011 INCR/DECR (8)	2010-2011 TOTAL (9)
REQUIREMENTS								
53 8102	TRF.TO DPPEA-1615	55,175	50,000	50,000	0	50,000	0	50,000
53 8129	TRANSFER TO REGIONAL OFF	199,854	14,000	14,000	0	14,000	0	14,000
TOTAL INTRAGOVERNMENTAL TRANSACT		255,029	64,000	64,000	0	64,000	0	64,000
TOTAL REQUIREMENTS		2,269,330	3,661,035	3,670,079	0	3,670,079	0	3,670,079
ESTIMATED RECEIPTS								
43 5400	INSPECT/EXAMINATION FEES	2,823,020	2,911,035	2,920,079	0	2,920,079	0	2,920,079
43 7127	CONSERVATION FUND	48	0	0	0	0	0	0
TOTAL RECEIPTS		2,823,068	2,911,035	2,920,079	0	2,920,079	0	2,920,079
CHANGE IN FUND BALANCE		553,738	-750,000	-750,000	0	-750,000	0	-750,000

DMV Tools and Resources

The Division of Motor Vehicles License and Theft Bureau dedicates 214 positions to the I/M program.

- 147 sworn law enforcement agents, primary duties are program management, issuing waivers, exemptions, covert audits, remote audits, and enforcement of violations.
- 61 civilian auditors, primary duties are performing overt and covert audits, and remote audits.
- Six civilian Call Center operators, primary duties are to assist citizens with complaints, and inquiries on the emission inspection requirements and information.

These are all existing funded positions, funded through a dedicated, non-reverting account.

Fund 1500/HF01 Highway Fund
Funds Center 1500/150054 DMV Exh Emiss Insp

Commitment Item		Budget 09/10	Commits.	Actuals	Avl.Budget 09/10	Budget 10/11	Budget 11/12
*** 1500/01	Revenue	(37,329,087.00)	0.00	0.00	(37,329,087.00)	(37,329,087.00)	(37,329,087.00)
** 1500/45400024	Auto Ems Insp Fee	(15,095,754.00)	0.00	0.00	(15,095,754.00)	(15,095,754.00)	(15,095,754.00)
** 1500/47900030	Tele Serv - DMV	(22,233,333.00)	0.00	0.00	(22,233,333.00)	(22,233,333.00)	(22,233,333.00)
*** 1500/02	Total Requirements	37,329,087.00	7,481,548.60	9,234,958.44	20,612,579.96	36,571,877.00	36,571,877.00
1500/02-01	**PERSONNEL**	**11,424,786.00**	**1,226,929.02**	**5,509,504.45**	**4,688,352.53**	**11,424,786.00**	**11,424,786.00**
*1500/02-01-01**	**SALARIES**	**7,591,007.00**	**0.00**	**4,073,607.38**	**3,517,399.62**	**7,591,007.00**	**7,591,007.00**
1500/51211000	Salaries & Wages	3,153,765.00	0.00	1,506,796.13	1,646,968.87	3,153,765.00	3,153,765.00
1500/51211016	Pay Add Per Ann Rate	139,625.00	0.00	84,926.60	54,698.40	139,625.00	139,625.00
1500/51411000	Sal & Wages Overtime	7,000.00	0.00	4,473.50	2,526.50	7,000.00	7,000.00
1500/51411002	Pay Add Overtime	200.00	0.00	98.61	101.39	200.00	200.00
1500/51431000	Sal & Wages Prem Pay	2,000.00	0.00	1,316.05	683.95	2,000.00	2,000.00
1500/51431001	Pay Add Prem Pay	200.00	0.00	29.91	170.09	200.00	200.00
1500/51461000	S/W Long Pay StateFd	130,348.00	0.00	70,268.95	60,079.05	130,348.00	130,348.00
1500/51461001	Pay Add Long Pay	2,485.00	0.00	1,500.45	984.55	2,485.00	2,485.00
1500/51625001	Short Term Disab	100.00	0.00	(1,131.24)	1,231.24	100.00	100.00
1500/51231000	LEO Salaries & Wages	4,155,284.00	0.00	2,405,328.42	1,749,955.58	4,155,284.00	4,155,284.00
*1500/02-01-02**	**EXP RELATED TO PAYRO**	**2,191,579.00**	**0.00**	**1,201,315.75**	**990,263.25**	**2,191,579.00**	**2,191,579.00**
1500/51511000	Soc Sec Contribution	567,223.00	0.00	309,285.63	257,937.37	567,223.00	567,223.00
1500/51521000	Retire Contribution	287,073.00	0.00	133,973.53	153,099.47	287,073.00	287,073.00
1500/51531000	Law Enf Of Ret Cont	570,731.00	0.00	338,249.42	232,481.58	570,731.00	570,731.00
1500/51561000	Med Ins Contribution	763,552.00	0.00	417,863.40	345,688.60	763,552.00	763,552.00
1500/51576000	Dependent Care	3,000.00	0.00	1,943.77	1,056.23	3,000.00	3,000.00
*1500/02-01-03**	**CONTRACTUAL SERVICES**	**1,642,200.00**	**1,226,929.02**	**234,581.32**	**180,689.66**	**1,642,200.00**	**1,642,200.00**
1500/52140000	Oth Inf Tech Serv	120,000.00	0.00	0.00	120,000.00	120,000.00	120,000.00
1500/52160000	Contr Per Ser Pd Ots	0.00	0.00	0.00	0.00	0.00	0.00
1500/52173000	Janitorial Services	19,490.00	7,226.32	11,584.77	678.91	19,490.00	19,490.00
1500/52173000RE	Janitorial Serv RE	110.00	0.00	114.05	(4.05)	110.00	110.00
1500/52174000	Waste Disposal	2,600.00	2,000.00	169.20	430.80	2,600.00	2,600.00
1500/52199012	Professional Fees	1,500,000.00	1,217,702.70	222,713.30	59,584.00	1,500,000.00	1,500,000.00
1500/02-02	**OPERATING**	**25,904,301.00**	**6,254,619.58**	**3,725,453.99**	**15,924,227.43**	**25,147,091.00**	**25,147,091.00**
*1500/02-02-01**	**OP SERV & OTHER EXP**	**22,578,477.00**	**5,482,194.88**	**2,753,162.47**	**14,343,119.65**	**22,578,477.00**	**22,578,477.00**
1500/52210000	Energy Services-Elec	5,780.00	0.00	4,353.19	1,426.81	5,780.00	5,780.00
1500/52230000	Energy Ser Wat Sew	710.00	0.00	528.33	181.67	710.00	710.00
1500/52310000	Repairs to Buildings	50,000.00	0.00	17,676.48	32,323.52	50,000.00	50,000.00
1500/52331002	Int Vehicle Rep Pts	350.00	0.00	226.34	123.66	350.00	350.00
1500/52331003	Ext Vehicle Rep Pts	1,560.00	0.00	1,157.41	402.59	1,560.00	1,560.00
1500/52333002	Rep/Ser to Eq -Other	76,700.00	832.20	9,249.18	66,618.62	76,700.00	76,700.00
1500/52333010	Rep Pers Comp/Prin	770.00	0.00	202.58	567.42	770.00	770.00
1500/52511001	Rent Land	20,500.00	0.00	1,528.00	18,972.00	20,500.00	20,500.00
1500/52590004	Rent Eq fr Eq Unit	7,770.00	0.00	0.00	7,770.00	7,770.00	7,770.00
1500/52590005	Rent of Equipment	3,000.00	0.00	0.00	3,000.00	3,000.00	3,000.00
1500/52811000	Telephone Service	32,000.00	0.00	15,427.39	16,572.61	32,000.00	32,000.00
1500/52812000	Telecom Data Charge	21,509,033.00	5,435,759.10	2,577,152.30	13,496,121.60	21,509,033.00	21,509,033.00

	Commitment Item		Budget 09/10	Commits.	Actuals	Avl.Budget 09/10	Budget 10/11	Budget 11/12
	1500/52814000	State Own/Rent Pager	500.00	0.00	0.00	500.00	500.00	500.00
	1500/52814001	St Own Wireless Phon	59,400.00	0.00	26,791.06	32,608.94	59,400.00	59,400.00
	1500/52817000	Internet Serv Prov	2,300.00	1,140.00	1,140.00	20.00	2,300.00	2,300.00
	1500/52821000	Comp Data Proc Serv	14,000.00	0.00	1,252.30	12,747.70	14,000.00	14,000.00
	1500/52840001	Post,Fr&D-MailSer	270.00	0.00	0.00	270.00	270.00	270.00
	1500/52840002	Post,Fr&Del-Fr&Del	225.00	0.00	0.00	225.00	225.00	225.00
	1500/52840003	Post,Fr&Del-Meter	2,870.00	0.00	0.00	2,870.00	2,870.00	2,870.00
	1500/52850000	Print, Bind, Dupl	13,080.00	540.00	0.00	12,540.00	13,080.00	13,080.00
	1500/52860001	Advertising	650,000.00	20,303.00	4,331.17	625,365.83	650,000.00	650,000.00
	1500/52919001	Ins/Bond Prems	2,994.00	0.00	1,945.20	1,048.80	2,994.00	2,994.00
	1500/52942000	Educational Exp	9,800.00	0.00	115.23	9,684.77	9,800.00	9,800.00
	1500/52950000	Emp Moving Exp	800.00	0.00	0.00	800.00	800.00	800.00
	1500/52512001	Rent-Building/Office	112,865.00	23,620.58	89,055.81	188.61	112,865.00	112,865.00
	1500/52430000	Maint Ag Equipment	500.00	0.00	417.00	83.00	500.00	500.00
	1500/52930000	Conference Reg Fees	700.00	0.00	613.50	86.50	700.00	700.00
*	**1500/02-02-02**	**TRAVEL**	**1,096,822.00**	**10,242.20**	**595,301.74**	**491,278.06**	**1,096,822.00**	**1,096,822.00**
	1500/52712000	Trans Air-Out State	2,000.00	0.00	0.00	2,000.00	2,000.00	2,000.00
	1500/52714000	Tran Gr Emp In State	10,186.00	1,125.44	64.46	8,996.10	10,186.00	10,186.00
	1500/52715000	Tran Gr Emp Out St	3,200.00	0.00	0.00	3,200.00	3,200.00	3,200.00
	1500/52717002	Trans Other-In State	2,280.00	144.00	233.66	1,902.34	2,280.00	2,280.00
	1500/52718000	Trans Oth-Out State	750.00	0.00	0.00	750.00	750.00	750.00
	1500/52721000	Lodging - In State	21,548.00	6,487.66	765.34	14,295.00	21,548.00	21,548.00
	1500/52722000	Lodg OutState In US	5,460.00	0.00	0.00	5,460.00	5,460.00	5,460.00
	1500/52724000	Meals - In State	18,000.00	2,485.10	1,083.60	14,431.30	18,000.00	18,000.00
	1500/52725000	Meals - Out State	2,048.00	0.00	1,786.30	261.70	2,048.00	2,048.00
	1500/52714001	Perm Motor Fleet Trn	900,000.00	0.00	559,580.35	340,419.65	900,000.00	900,000.00
	1500/52714002	Temp Motor Fleet Trn	40,000.00	0.00	0.00	40,000.00	40,000.00	40,000.00
	1500/52714003	Rental Car Charges	1,350.00	0.00	0.00	1,350.00	1,350.00	1,350.00
	1500/52714004	Motor Fleet Pen Mil	90,000.00	0.00	31,788.03	58,211.97	90,000.00	90,000.00
*	**1500/02-02-03**	**SUPPLIES & MATERIALS**	**172,488.00**	**1,663.05**	**99,392.56**	**71,432.39**	**172,488.00**	**172,488.00**
	1500/53110000	Office Supplies	64,000.00	1,663.05	26,216.87	36,120.08	64,000.00	64,000.00
	1500/53130000	Photo Supplies	2,000.00	0.00	110.63	1,889.37	2,000.00	2,000.00
	1500/53150004	Med & Safety Sup	4,000.00	0.00	651.72	3,348.28	4,000.00	4,000.00
	1500/53210000	Janitorial Supplies	850.00	0.00	0.00	850.00	850.00	850.00
	1500/53280000	Rd Signs & Signals	1,876.00	0.00	0.00	1,876.00	1,876.00	1,876.00
	1500/53310000	Oil, Lub, Fluids	20.00	0.00	0.00	20.00	20.00	20.00
	1500/53310002	Motor Fuel (Other)	21,347.00	0.00	8,276.05	13,070.95	21,347.00	21,347.00
	1500/53340000	Tires & Tubes	120.00	0.00	0.00	120.00	120.00	120.00
	1500/53510000	Clothing & Uniforms	63,875.00	0.00	63,725.40	149.60	63,875.00	63,875.00
	1500/53800200	Lic Plates & Sticker	1,000.00	0.00	0.00	1,000.00	1,000.00	1,000.00
	1500/53900005	Bld Gr Mtrls/Sup	1,375.00	0.00	3.56	1,371.44	1,375.00	1,375.00
	1500/53900006	Shop Sup & Sm Tools	12,000.00	0.00	408.33	11,591.67	12,000.00	12,000.00
	1500/53310004	Rental Car Gas	25.00	0.00	0.00	25.00	25.00	25.00
*	**1500/02-02-05**	**FURNITURE AND EQUIP**	**1,554,117.00**	**753,206.00**	**(38,124.34)**	**839,035.34**	**796,907.00**	**796,907.00**
	1500/54511000	Office Furniture	62,012.00	0.00	207.78	61,804.22	62,012.00	62,012.00
	1500/54521000	Office Equipment	17,000.00	0.00	2,405.84	14,594.16	17,000.00	17,000.00
	1500/54528000	Voice Comm Eq	283,470.00	0.00	1,571.35	281,898.65	283,470.00	283,470.00

Commitment Item		Budget 09/10	Commits.	Actuals	Avl.Budget 09/10	Budget 10/11	Budget 11/12
1500/54528001	Voice Com Eq-No FM	191,000.00	0.00	0.00	191,000.00	191,000.00	191,000.00
1500/54529001	Weapons - Eq	3,270.00	0.00	0.00	3,270.00	3,270.00	3,270.00
1500/54534000	Pers Com Print Pur	224,799.00	0.00	28,285.32	196,513.68	224,799.00	224,799.00
1500/54539003	Misc Equipment	2,000.00	0.00	(71,635.20)	73,635.20	2,000.00	2,000.00
1500/54539005	LEO Auto Accessories	757,210.00	753,206.00	199.50	3,804.50	0.00	0.00
1500/54549001	Motor Veh Oper	5,500.00	0.00	0.00	5,500.00	5,500.00	5,500.00
1500/54710000	Oth Comp Software	3,430.00	0.00	416.50	3,013.50	3,430.00	3,430.00
1500/54710002	Per Comp Software	2,377.00	0.00	0.00	2,377.00	2,377.00	2,377.00
1500/54220000	RECON ASSET ADDITION	2,049.00	0.00	424.57	1,624.43	2,049.00	2,049.00
* **1500/02-02-06**	**OTHER EXP & ADJUST**	**502,397.00**	**7,313.45**	**315,721.56**	**179,361.99**	**502,397.00**	**502,397.00**
1500/55111001	Cash Settlements	69,000.00	0.00	0.00	69,000.00	69,000.00	69,000.00
1500/55112001	Public Liab Claims	1,618.00	0.00	0.00	1,618.00	1,618.00	1,618.00
1500/55120005	Envir Permits Fees	0.00	0.00	0.00	0.00	0.00	0.00
1500/55232000	LEO Separation Allow	207,194.00	0.00	165,270.51	41,923.49	207,194.00	207,194.00
1500/55830000	Member Dues&Subsc	1,450.00	0.00	0.00	1,450.00	1,450.00	1,450.00
1500/55900001	Branch Agent Com	0.00	0.00	0.00	0.00	0.00	0.00
1500/55900004	Spec Investigation	220,110.00	7,313.45	148,187.60	64,608.95	220,110.00	220,110.00
1500/55900005	Saf Insp Invest	0.00	0.00	0.00	0.00	0.00	0.00
1500/55960000	Elect Pymnt Proc Fee	3,005.00	0.00	2,263.45	741.55	3,005.00	3,005.00
1500/55660001	Serv Chg-Sale of Sur	20.00	0.00	0.00	20.00	20.00	20.00
Total		**0.00**	**7,481,548.60**	**9,234,958.44**	**(16,716,507.04)**	**0.00**	**0.00**

APPENDIX 4
Number of Vehicles Included in the I/M Program

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County	Total Vehicles
CABARRUS	112,993
GASTON	122,870
IREDELL	106,226
LINCOLN	51,982
MECKLENBURG	559,178
ROWAN	86,024
UNION	128,681
Total Vehicles	1,167,954

County	Model Year	Number of Vehicles
ALAMANCE	1996	5359
ALAMANCE	1997	6181
ALAMANCE	1998	6650
ALAMANCE	1999	7491
ALAMANCE	2000	7990
ALAMANCE	2001	7314
ALAMANCE	2002	7462
ALAMANCE	2003	7030
ALAMANCE	2004	7329
ALAMANCE	2005	7300
ALAMANCE	2006	6426
ALAMANCE	2007	6253
ALAMANCE	2008	4999
ALAMANCE	2009	1893
ALAMANCE	2010	37
BRUNSWICK	1996	3072
BRUNSWICK	1997	3965
BRUNSWICK	1998	4414
BRUNSWICK	1999	5274
BRUNSWICK	2000	5851
BRUNSWICK	2001	5794
BRUNSWICK	2002	6151
BRUNSWICK	2003	6363
BRUNSWICK	2004	6939
BRUNSWICK	2005	7156
BRUNSWICK	2006	6719
BRUNSWICK	2007	6838
BRUNSWICK	2008	5208
BRUNSWICK	2009	1934
BRUNSWICK	2010	40
BUNCOMBE	1996	7842
BUNCOMBE	1997	9560
BUNCOMBE	1998	10435
BUNCOMBE	1999	11857
BUNCOMBE	2000	12520
BUNCOMBE	2001	11623
BUNCOMBE	2002	11996
BUNCOMBE	2003	12139
BUNCOMBE	2004	12155
BUNCOMBE	2005	12204
BUNCOMBE	2006	11655
BUNCOMBE	2007	11041
BUNCOMBE	2008	8961

County	Model Year	Number of Vehicles
BUNCOMBE	2009	3598
BUNCOMBE	2010	100
BURKE	1996	3533
BURKE	1997	4048
BURKE	1998	4280
BURKE	1999	4657
BURKE	2000	4816
BURKE	2001	4345
BURKE	2002	4179
BURKE	2003	4047
BURKE	2004	4068
BURKE	2005	4006
BURKE	2006	3598
BURKE	2007	3432
BURKE	2008	2603
BURKE	2009	856
BURKE	2010	17
CABARRUS	1996	5225
CABARRUS	1997	6556
CABARRUS	1998	6952
CABARRUS	1999	8238
CABARRUS	2000	9401
CABARRUS	2001	8677
CABARRUS	2002	9076
CABARRUS	2003	9277
CABARRUS	2004	9635
CABARRUS	2005	9758
CABARRUS	2006	9596
CABARRUS	2007	9749
CABARRUS	2008	8008
CABARRUS	2009	2804
CABARRUS	2010	41
CALDWELL	1996	3305
CALDWELL	1997	3821
CALDWELL	1998	4109
CALDWELL	1999	4636
CALDWELL	2000	4805
CALDWELL	2001	4045
CALDWELL	2002	3879
CALDWELL	2003	3742
CALDWELL	2004	3579
CALDWELL	2005	3543
CALDWELL	2006	3281

County	Model Year	Number of Vehicles
CALDWELL	2007	3056
CALDWELL	2008	2252
CALDWELL	2009	715
CALDWELL	2010	15
CARTERET	1996	2233
CARTERET	1997	2890
CARTERET	1998	3070
CARTERET	1999	3552
CARTERET	2000	3925
CARTERET	2001	3791
CARTERET	2002	3876
CARTERET	2003	4304
CARTERET	2004	4291
CARTERET	2005	4395
CARTERET	2006	3788
CARTERET	2007	3829
CARTERET	2008	2849
CARTERET	2009	990
CARTERET	2010	23
CATAWBA	1996	5537
CATAWBA	1997	6779
CATAWBA	1998	7392
CATAWBA	1999	8681
CATAWBA	2000	9396
CATAWBA	2001	8280
CATAWBA	2002	8255
CATAWBA	2003	8023
CATAWBA	2004	8076
CATAWBA	2005	8041
CATAWBA	2006	7603
CATAWBA	2007	7613
CATAWBA	2008	6308
CATAWBA	2009	2230
CATAWBA	2010	76
CHATHAM	1996	2306
CHATHAM	1997	2693
CHATHAM	1998	2955
CHATHAM	1999	3202
CHATHAM	2000	3562
CHATHAM	2001	3226
CHATHAM	2002	3496
CHATHAM	2003	3489
CHATHAM	2004	3627

County	Model Year	Number of Vehicles
CHATHAM	2005	3535
CHATHAM	2006	3332
CHATHAM	2007	3090
CHATHAM	2008	2491
CHATHAM	2009	952
CHATHAM	2010	22
CLEVELAND	1996	3832
CLEVELAND	1997	4457
CLEVELAND	1998	4768
CLEVELAND	1999	5355
CLEVELAND	2000	5686
CLEVELAND	2001	4923
CLEVELAND	2002	4594
CLEVELAND	2003	4606
CLEVELAND	2004	4588
CLEVELAND	2005	4464
CLEVELAND	2006	4082
CLEVELAND	2007	4024
CLEVELAND	2008	3070
CLEVELAND	2009	968
CLEVELAND	2010	17
CRAVEN	1996	2799
CRAVEN	1997	3615
CRAVEN	1998	3605
CRAVEN	1999	4268
CRAVEN	2000	5189
CRAVEN	2001	4968
CRAVEN	2002	5263
CRAVEN	2003	5544
CRAVEN	2004	5926
CRAVEN	2005	6333
CRAVEN	2006	5758
CRAVEN	2007	6013
CRAVEN	2008	4685
CRAVEN	2009	1822
CRAVEN	2010	24
CUMBERLAND	1996	7951
CUMBERLAND	1997	9348
CUMBERLAND	1998	10328
CUMBERLAND	1999	12141
CUMBERLAND	2000	14119
CUMBERLAND	2001	13368
CUMBERLAND	2002	14361

County	Model Year	Number of Vehicles
CUMBERLAND	2003	15632
CUMBERLAND	2004	17304
CUMBERLAND	2005	17646
CUMBERLAND	2006	18131
CUMBERLAND	2007	18519
CUMBERLAND	2008	16516
CUMBERLAND	2009	6894
CUMBERLAND	2010	159
DAVIDSON	1996	6168
DAVIDSON	1997	7266
DAVIDSON	1998	7931
DAVIDSON	1999	8740
DAVIDSON	2000	9467
DAVIDSON	2001	8476
DAVIDSON	2002	8489
DAVIDSON	2003	8141
DAVIDSON	2004	8199
DAVIDSON	2005	8177
DAVIDSON	2006	7454
DAVIDSON	2007	7162
DAVIDSON	2008	5620
DAVIDSON	2009	1713
DAVIDSON	2010	62
DURHAM	1996	7608
DURHAM	1997	9525
DURHAM	1998	10374
DURHAM	1999	11779
DURHAM	2000	13053
DURHAM	2001	11890
DURHAM	2002	12551
DURHAM	2003	12335
DURHAM	2004	12305
DURHAM	2005	12100
DURHAM	2006	11341
DURHAM	2007	11343
DURHAM	2008	8915
DURHAM	2009	4061
DURHAM	2010	89
EDGECOMBE	1996	1996
EDGECOMBE	1997	2223
EDGECOMBE	1998	2221
EDGECOMBE	1999	2463
EDGECOMBE	2000	2784

County	Model Year	Number of Vehicles
EDGECOMBE	2001	2232
EDGECOMBE	2002	2274
EDGECOMBE	2003	2263
EDGECOMBE	2004	2456
EDGECOMBE	2005	2492
EDGECOMBE	2006	2175
EDGECOMBE	2007	2063
EDGECOMBE	2008	1347
EDGECOMBE	2009	413
EDGECOMBE	2010	5
FORSYTH	1996	10933
FORSYTH	1997	13215
FORSYTH	1998	14566
FORSYTH	1999	16961
FORSYTH	2000	18090
FORSYTH	2001	17091
FORSYTH	2002	17701
FORSYTH	2003	17628
FORSYTH	2004	17637
FORSYTH	2005	17213
FORSYTH	2006	16085
FORSYTH	2007	15702
FORSYTH	2008	13041
FORSYTH	2009	4703
FORSYTH	2010	129
FRANKLIN	1996	2088
FRANKLIN	1997	2489
FRANKLIN	1998	2641
FRANKLIN	1999	2894
FRANKLIN	2000	3089
FRANKLIN	2001	2835
FRANKLIN	2002	2941
FRANKLIN	2003	2814
FRANKLIN	2004	3000
FRANKLIN	2005	2981
FRANKLIN	2006	2688
FRANKLIN	2007	2710
FRANKLIN	2008	1857
FRANKLIN	2009	615
FRANKLIN	2010	11
GASTON	1996	6712
GASTON	1997	8084
GASTON	1998	8663

County	Model Year	Number of Vehicles
GASTON	1999	9759
GASTON	2000	10265
GASTON	2001	9802
GASTON	2002	9407
GASTON	2003	10192
GASTON	2004	10009
GASTON	2005	10217
GASTON	2006	9572
GASTON	2007	9799
GASTON	2008	7774
GASTON	2009	2563
GASTON	2010	52
GRANVILLE	1996	2001
GRANVILLE	1997	2360
GRANVILLE	1998	2404
GRANVILLE	1999	2662
GRANVILLE	2000	2801
GRANVILLE	2001	2655
GRANVILLE	2002	2754
GRANVILLE	2003	2657
GRANVILLE	2004	2806
GRANVILLE	2005	2848
GRANVILLE	2006	2671
GRANVILLE	2007	2520
GRANVILLE	2008	1843
GRANVILLE	2009	642
GRANVILLE	2010	11
GUILFORD	1996	14535
GUILFORD	1997	17185
GUILFORD	1998	19333
GUILFORD	1999	22510
GUILFORD	2000	24416
GUILFORD	2001	22472
GUILFORD	2002	23262
GUILFORD	2003	23791
GUILFORD	2004	23975
GUILFORD	2005	24320
GUILFORD	2006	21929
GUILFORD	2007	21998
GUILFORD	2008	19496
GUILFORD	2009	9193
GUILFORD	2010	333
HARNETT	1996	3486

County	Model Year	Number of Vehicles
HARNETT	1997	4035
HARNETT	1998	4263
HARNETT	1999	5072
HARNETT	2000	5289
HARNETT	2001	4907
HARNETT	2002	5175
HARNETT	2003	5275
HARNETT	2004	5654
HARNETT	2005	5648
HARNETT	2006	5398
HARNETT	2007	5395
HARNETT	2008	4199
HARNETT	2009	1415
HARNETT	2010	27
HAYWOOD	1996	1983
HAYWOOD	1997	2346
HAYWOOD	1998	2604
HAYWOOD	1999	3014
HAYWOOD	2000	3038
HAYWOOD	2001	3032
HAYWOOD	2002	2923
HAYWOOD	2003	3056
HAYWOOD	2004	3331
HAYWOOD	2005	3389
HAYWOOD	2006	3238
HAYWOOD	2007	3089
HAYWOOD	2008	2483
HAYWOOD	2009	847
HAYWOOD	2010	14
HENDERSON	1996	3450
HENDERSON	1997	4355
HENDERSON	1998	4631
HENDERSON	1999	5440
HENDERSON	2000	5838
HENDERSON	2001	5586
HENDERSON	2002	5814
HENDERSON	2003	5781
HENDERSON	2004	6030
HENDERSON	2005	6012
HENDERSON	2006	5651
HENDERSON	2007	5552
HENDERSON	2008	4182
HENDERSON	2009	1908

County	Model Year	Number of Vehicles
HENDERSON	2010	33
IREDELL	1996	5138
IREDELL	1997	6127
IREDELL	1998	6707
IREDELL	1999	8041
IREDELL	2000	8805
IREDELL	2001	8240
IREDELL	2002	8390
IREDELL	2003	8494
IREDELL	2004	8978
IREDELL	2005	9066
IREDELL	2006	8906
IREDELL	2007	9264
IREDELL	2008	7456
IREDELL	2009	2559
IREDELL	2010	55
JOHNSTON	1996	5291
JOHNSTON	1997	6558
JOHNSTON	1998	6987
JOHNSTON	1999	8127
JOHNSTON	2000	8749
JOHNSTON	2001	8398
JOHNSTON	2002	8768
JOHNSTON	2003	9088
JOHNSTON	2004	9459
JOHNSTON	2005	9638
JOHNSTON	2006	8985
JOHNSTON	2007	8957
JOHNSTON	2008	6273
JOHNSTON	2009	2126
JOHNSTON	2010	39
LEE	1996	2098
LEE	1997	2496
LEE	1998	2601
LEE	1999	2915
LEE	2000	3225
LEE	2001	2785
LEE	2002	2858
LEE	2003	2769
LEE	2004	2978
LEE	2005	3022
LEE	2006	2815
LEE	2007	2677

County	Model Year	Number of Vehicles
LEE	2008	1969
LEE	2009	711
LEE	2010	10
LENOIR	1996	2123
LENOIR	1997	2661
LENOIR	1998	2478
LENOIR	1999	2809
LENOIR	2000	3239
LENOIR	2001	2909
LENOIR	2002	2893
LENOIR	2003	2828
LENOIR	2004	2905
LENOIR	2005	2889
LENOIR	2006	2627
LENOIR	2007	2481
LENOIR	2008	1630
LENOIR	2009	628
LENOIR	2010	9
LINCOLN	1996	2752
LINCOLN	1997	3363
LINCOLN	1998	3552
LINCOLN	1999	4040
LINCOLN	2000	4404
LINCOLN	2001	4226
LINCOLN	2002	4118
LINCOLN	2003	4143
LINCOLN	2004	4262
LINCOLN	2005	4394
LINCOLN	2006	4127
LINCOLN	2007	4062
LINCOLN	2008	3442
LINCOLN	2009	1084
LINCOLN	2010	13
MECKLENBURG	1996	21376
MECKLENBURG	1997	27294
MECKLENBURG	1998	31041
MECKLENBURG	1999	37229
MECKLENBURG	2000	42184
MECKLENBURG	2001	41130
MECKLENBURG	2002	43601
MECKLENBURG	2003	45473
MECKLENBURG	2004	48044
MECKLENBURG	2005	48622

County	Model Year	Number of Vehicles
MECKLENBURG	2006	49999
MECKLENBURG	2007	51197
MECKLENBURG	2008	48112
MECKLENBURG	2009	23146
MECKLENBURG	2010	730
MOORE	1996	2895
MOORE	1997	3430
MOORE	1998	3831
MOORE	1999	4228
MOORE	2000	4623
MOORE	2001	4631
MOORE	2002	4836
MOORE	2003	5165
MOORE	2004	5413
MOORE	2005	5589
MOORE	2006	5158
MOORE	2007	5379
MOORE	2008	4304
MOORE	2009	1760
MOORE	2010	43
NASH	1996	3361
NASH	1997	3948
NASH	1998	4178
NASH	1999	4758
NASH	2000	5091
NASH	2001	4588
NASH	2002	4730
NASH	2003	4876
NASH	2004	5234
NASH	2005	5034
NASH	2006	5013
NASH	2007	4863
NASH	2008	3763
NASH	2009	1215
NASH	2010	17
NEW HANOVER	1996	5053
NEW HANOVER	1997	6560
NEW HANOVER	1998	7426
NEW HANOVER	1999	9045
NEW HANOVER	2000	10024
NEW HANOVER	2001	9787
NEW HANOVER	2002	10404
NEW HANOVER	2003	10851

County	Model Year	Number of Vehicles
NEW HANOVER	2004	11719
NEW HANOVER	2005	11502
NEW HANOVER	2006	11195
NEW HANOVER	2007	11028
NEW HANOVER	2008	9511
NEW HANOVER	2009	4042
NEW HANOVER	2010	179
ONSLOW	1996	3735
ONSLOW	1997	4831
ONSLOW	1998	5288
ONSLOW	1999	5942
ONSLOW	2000	7223
ONSLOW	2001	7073
ONSLOW	2002	7969
ONSLOW	2003	8736
ONSLOW	2004	9786
ONSLOW	2005	10121
ONSLOW	2006	10316
ONSLOW	2007	9995
ONSLOW	2008	8933
ONSLOW	2009	3573
ONSLOW	2010	60
ORANGE	1996	3697
ORANGE	1997	4457
ORANGE	1998	4892
ORANGE	1999	5657
ORANGE	2000	6321
ORANGE	2001	6160
ORANGE	2002	6182
ORANGE	2003	6333
ORANGE	2004	6206
ORANGE	2005	5863
ORANGE	2006	5663
ORANGE	2007	5692
ORANGE	2008	4571
ORANGE	2009	2056
ORANGE	2010	33
PITT	1996	4187
PITT	1997	5292
PITT	1998	5599
PITT	1999	6524
PITT	2000	7427
PITT	2001	6748

County	Model Year	Number of Vehicles
PITT	2002	7051
PITT	2003	7241
PITT	2004	7787
PITT	2005	7788
PITT	2006	7454
PITT	2007	7590
PITT	2008	6010
PITT	2009	2484
PITT	2010	63
RANDOLPH	1996	5529
RANDOLPH	1997	6761
RANDOLPH	1998	7047
RANDOLPH	1999	7723
RANDOLPH	2000	8038
RANDOLPH	2001	7236
RANDOLPH	2002	7073
RANDOLPH	2003	7010
RANDOLPH	2004	7035
RANDOLPH	2005	7185
RANDOLPH	2006	6338
RANDOLPH	2007	6064
RANDOLPH	2008	4359
RANDOLPH	2009	1454
RANDOLPH	2010	35
ROBESON	1996	4353
ROBESON	1997	4942
ROBESON	1998	5376
ROBESON	1999	6170
ROBESON	2000	6851
ROBESON	2001	5576
ROBESON	2002	5499
ROBESON	2003	5396
ROBESON	2004	5519
ROBESON	2005	5330
ROBESON	2006	5199
ROBESON	2007	5009
ROBESON	2008	3735
ROBESON	2009	1273
ROBESON	2010	14
ROCKINGHAM	1996	3810
ROCKINGHAM	1997	4442
ROCKINGHAM	1998	4510
ROCKINGHAM	1999	5174

County	Model Year	Number of Vehicles
ROCKINGHAM	2000	5455
ROCKINGHAM	2001	4656
ROCKINGHAM	2002	4582
ROCKINGHAM	2003	4426
ROCKINGHAM	2004	4432
ROCKINGHAM	2005	4557
ROCKINGHAM	2006	3733
ROCKINGHAM	2007	3596
ROCKINGHAM	2008	2954
ROCKINGHAM	2009	893
ROCKINGHAM	2010	23
ROWAN	1996	5126
ROWAN	1997	6072
ROWAN	1998	6236
ROWAN	1999	7061
ROWAN	2000	7471
ROWAN	2001	6982
ROWAN	2002	6833
ROWAN	2003	6586
ROWAN	2004	7073
ROWAN	2005	7084
ROWAN	2006	6352
ROWAN	2007	6214
ROWAN	2008	5158
ROWAN	2009	1744
ROWAN	2010	32
RUTHERFORD	1996	2684
RUTHERFORD	1997	3030
RUTHERFORD	1998	3060
RUTHERFORD	1999	3486
RUTHERFORD	2000	3738
RUTHERFORD	2001	3296
RUTHERFORD	2002	3122
RUTHERFORD	2003	2973
RUTHERFORD	2004	2925
RUTHERFORD	2005	2814
RUTHERFORD	2006	2619
RUTHERFORD	2007	2445
RUTHERFORD	2008	1957
RUTHERFORD	2009	587
RUTHERFORD	2010	9
STANLY	1996	2645
STANLY	1997	2876

County	Model Year	Number of Vehicles
STANLY	1998	2951
STANLY	1999	3341
STANLY	2000	3461
STANLY	2001	2999
STANLY	2002	2973
STANLY	2003	2921
STANLY	2004	2975
STANLY	2005	2954
STANLY	2006	2724
STANLY	2007	2598
STANLY	2008	1981
STANLY	2009	633
STANLY	2010	11
STOKES	1996	2006
STOKES	1997	2374
STOKES	1998	2345
STOKES	1999	2614
STOKES	2000	2879
STOKES	2001	2576
STOKES	2002	2414
STOKES	2003	2486
STOKES	2004	2399
STOKES	2005	2347
STOKES	2006	2128
STOKES	2007	1966
STOKES	2008	1458
STOKES	2009	457
STOKES	2010	8
SURRY	1996	2970
SURRY	1997	3572
SURRY	1998	3605
SURRY	1999	4037
SURRY	2000	4519
SURRY	2001	3886
SURRY	2002	3704
SURRY	2003	3726
SURRY	2004	3774
SURRY	2005	3974
SURRY	2006	3399
SURRY	2007	3227
SURRY	2008	2360
SURRY	2009	763
SURRY	2010	31

County	Model Year	Number of Vehicles
UNION	1996	5204
UNION	1997	6579
UNION	1998	7318
UNION	1999	8883
UNION	2000	9870
UNION	2001	9708
UNION	2002	10088
UNION	2003	11007
UNION	2004	11499
UNION	2005	11142
UNION	2006	11923
UNION	2007	12106
UNION	2008	9952
UNION	2009	3344
UNION	2010	58
WAKE	1996	22441
WAKE	1997	28811
WAKE	1998	34060
WAKE	1999	39651
WAKE	2000	45856
WAKE	2001	44554
WAKE	2002	48012
WAKE	2003	51336
WAKE	2004	54363
WAKE	2005	53152
WAKE	2006	52840
WAKE	2007	53884
WAKE	2008	50304
WAKE	2009	24402
WAKE	2010	819
WAYNE	1996	3912
WAYNE	1997	4485
WAYNE	1998	4977
WAYNE	1999	5415
WAYNE	2000	6219
WAYNE	2001	5665
WAYNE	2002	5829
WAYNE	2003	5617
WAYNE	2004	5912
WAYNE	2005	6150
WAYNE	2006	5804
WAYNE	2007	6166
WAYNE	2008	4742

County	Model Year	Number of Vehicles
WAYNE	2009	1728
WAYNE	2010	33
WILKES	1996	2914
WILKES	1997	3341
WILKES	1998	3464
WILKES	1999	3695
WILKES	2000	3980
WILKES	2001	3470
WILKES	2002	3256
WILKES	2003	3317
WILKES	2004	3154
WILKES	2005	3267
WILKES	2006	2855
WILKES	2007	2934
WILKES	2008	2319
WILKES	2009	815
WILKES	2010	13
WILSON	1996	2758
WILSON	1997	3324
WILSON	1998	3364
WILSON	1999	3888
WILSON	2000	4088
WILSON	2001	3679
WILSON	2002	3696
WILSON	2003	3904
WILSON	2004	4017
WILSON	2005	4037
WILSON	2006	3837
WILSON	2007	4064
WILSON	2008	3058
WILSON	2009	1030
WILSON	2010	28

APPENDIX 5
References

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Links to North Carolina General Statutes can be found on the following web page:

- http://www.ncleg.net/gascripts/statutes/Statutes.asp

Links to the North Carolina Administrative Code can be found on the following web page:

- http://daq.state.nc.us/rules/rules/

The North Carolina Analyzer Specifications can be found on the following web page:

- http://daq.state.nc.us/motor/inspect/analyzer_vendor.shtml

The newly revised and approved the DAQ Audit Procedures were submitted to EPA on March 5, 2010. Additional copies can be provided upon request.

The DMV manuals can be provided upon request.

Appendix 6
List of Abbreviations

(This page intentionally left blank)

CFR	Code of Federal Regulations
CO	carbon monoxide
DENR	Department of Environment and Natural Resources
DAQ	Division of Air Quality
DMV	Division of Motor Vehicles
EGR	exhaust gas recirculation
EPA	Environmental Protection Agency
EMC	Environmental Management Commission
EMF	Emissions Maintenance Fund
HDV	heavy duty vehicle
I/M	inspection and maintenance
LDV	light duty vehicle
MSA	metropolitan statistical area
NAAQS	National Ambient Air Quality Standards
NC	North Carolina
NCAC	North Carolina Administrative Code
NCDOT	North Carolina Department of Transportation
NCGS	North Carolina General Statute
NO_x	oxides of nitrogen
O_3	ozone
OBD	On-Board Diagnostic II System
PCV	positive crankcase ventilation
SIP	state implementation plan
TSB	technical service bulletin
VID	vehicle information database
VIN	vehicle identification number
VOC	volatile organic compounds

Appendix 7
Public Notice Report,
Comments Received and Responses

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Public Notice Report
For
The North Carolina State Implementation Plan
Inspection and Maintenance (I/M) Program

On April 6, 2010, a draft version of Inspection and Maintenance (I/M) Program State Implementation Plan (SIP) was submitted to the U. S. Environmental Protection Agency (USEPA). A request for public hearing, in accordance with 40 CFR 51.102, and the public comment period were noticed in the local newspapers on Monday, April 5, 2010. The public comment period was open from April 5, 2010, through May 14, 2010, with no hearing scheduled unless one was requested in writing by Wednesday May 5, 2010. No request for public hearing was received. There were no comments received on the I/M program SIP.

Background

The purpose of the I/M Program SIP is to satisfy the USEPA's requirements for the State to meet and/or maintain the National Ambient Air Quality Standards (NAAQS) for carbon monoxide and ozone. This document revises the State of North Carolina basic I/M program SIP due to changes to the I/M program since the last approved I/M SIP in 1993 and to demonstrate compliance with the basic performance standards for the 1997 8-hour ozone standard. The program changes include testing vehicles by using the On-board Diagnostic (OBD) system instead of tailpipe emissions and the expansion of the program coverage area from nine counties to 48 counties. The SIP also demonstrates that North Carolina's I/M program meets the USEPA basic I/M performance standard for the 1997 8-hour ozone NAAQS.

Summary of Public Notice and Comment Period

The public comment period was from April 5, 2010 through May 14, 2010. The only written response received was from Richard A. Schutt, Chief, Air Planning Branch, USEPA, stating that they had no comments on the I/M Program SIP.

Conclusions

Since no comments were received, the North Carolina Division of Air Quality will move forward with the final submittal to the USEPA of the State Implementation Plan for the Inspection and Maintenance Program.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

APR 30 2010

Mr. B. Keith Overcash, P.E., Director
North Carolina Department of Environment
And Natural Resources
Division of Air Quality
1641 Mail Service Center
Raleigh, North Carolina 27699-1641

Dear Mr. Overcash:

Thank you for your letter dated April 6, 2010, transmitting a prehearing package regarding the Inspection and Maintenance State Implementation Plan for North Carolina. These rules will be the subject of a public hearing if one is requested by the end of the comment period, May 14, 2010, with written comments requested by the close of business on the same date. We have completed our review of the submittal and offer no comments at this time.

We look forward to continuing to work with you and your staff. If you have any questions, please contact Ms. Lynorae Benjamin, Chief, Regulatory Development Section at (404) 562-9040, or have your staff contact Ms. Nacosta C. Ward at (404) 562-9140.

Sincerely,

Lynorae Benjamin for

Richard A. Schutt
Chief
Air Planning Branch

AFFIDAVIT OF PUBLICATION

NORTH CAROLINA.)
Wake County.) Ss.

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES

PUBLIC NOTICE

PURPOSE:
The State of North Carolina implemented a Motor Vehicle Inspection/Maintenance (I/M) program under Environmental Protection Agency (EPA) regulations in Code of Federal Regulations (CFR) 40 CFR Part 51. The North Carolina Department of Environment and Natural Resources, Division of Air Quality (NCDAQ) hereby gives notice regarding its Pre-Hearing Draft of The North Carolina State Implementation Plan for the Inspection and Maintenance Program. Persons wishing to submit written requests for a public hearing or comments regarding the 'State Implementation Plan for the Inspection and Maintenance Program' are invited to do so.

REQUESTS FOR A PUBLIC HEARING:
Requests for a public hearing must be in writing and include a statement supporting the need for such a hearing, an indication of your interest in the subject, and a brief summary of the information intended to be offered at such hearing. Written requests for a public hearing must be received by NCDAQ no later than Wednesday, May 5, 2010.

If a public hearing is requested, a second public notice will be published announcing the time and place for the hearing!

COMMENT PROCEDURES:
Any person wishing to comment may submit a written statement for inclusion in the record of proceedings regarding the State Implementation Plan for the Inspection and Maintenance Program. Written comments must be received by no later than Friday, May 14, 2010.

INFORMATION:
Written requests for a public hearing or comments can be electronically submitted or sent to the following:
daq.publiccomments@ncdenr.gov
(Please type 'I/M SIP' in the subject line)

Brian Phillips
NC Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641
Phone: (919) 733-1480
Fax: (919) 733-1812

Copies of the State Implementation Plan for the Inspection and Maintenance Program may be downloaded from the NCDAQ web site at
http://www.ncair.org/planning/nc_sip.shtml

The State Implementation Plan for the Inspection and Maintenance Program may be reviewed in person during normal business hours at the following offices:

NCDAQ, Asheville Regional Office 828-296-4500
NCDAQ, Fayetteville Regional Office 910-433-3300
NCDAQ, Raleigh Central Office, Technical Services Section 919-715-0531
NCDAQ, Mooresville Regional Office 704-663-1699
NCDAQ, Washington Regional Office 252-946-6481
NCDAQ, Wilmington Regional Office 910-796-7215
NCDAQ, Winston-Salem Regional Office 336-771-5000

B. Keith Overcash, P.E., Director
N&O: April 5, 2010

Public Chatham County, NC

APR 3 2010

Before the undersigned, a Notary Public of Chatham County North Carolina, duly commissioned and authorized to administer oaths, affirmations, etc., personally appeared Debra Peebles, who, being duly sworn or affirmed, according to law, doth depose and say that she is Accounts Receivable Specialist of The News and Observer a corporation organized and doing business under the Laws of the State of North Carolina, and publishing a newspaper known as The News and Observer, in the City of Raleigh , Wake County and State aforesaid, the said newspaper in which such notice, paper, document, or legal advertisement was published was, at the time of each and every such publication, a newspaper meeting all of the requirements and qualifications of Section 1-597 of the General Statutes of North Carolina and was a qualified newspaper within the meaning of Section 1-597 of the General Statutes of North Carolina, and that as such she makes this affidavit; that she is familiar with the books, files and business of said corporation and by reference to the files of said publication the attached advertisement for NCDENR/ AIR QUALITY DIVISION was inserted in the aforesaid newspaper on dates as follows: 04/05/10

Account Number: 73314870

T m the books and files of the aforesaid Corporation and publication.

Debra Peebles, Accounts Receivable Specialist
Wake County, North Carolina

Sworn or affirmed to, and subscribed before me, this 06 day of APRIL , 2010 AD by, Debra Peebles

In Testimony Whereof, I have hereunto set my hand and affixed my official seal, the day and year aforesaid.

Janet Scroggs, Notary Public

My commission expires 14th day of March 2014.

The Charlotte Observer Publishing Co.
Charlotte, NC
Affidavit of Publication

North Carolina } ss
Mecklenburg County}

THE CHARLOTTE OBSERVER

APR 12 2010

ACCOUNTS PAYABLE
N.C DIVISION OF AIR QUALITY
1641 MAIL SERVICES CENTER
RALEIGH NC 27699-1641

REFERENCE: 30056358
6453201 ph-motor veh insp

Before the undersigned, a Notary Public of said County and State, duly authorized to administer oaths affirmations, etc., personally appeared, being duly sworn or affirmed according to law, doth depose and say that he/she is a representative of The Charlotte Observer Publishing Company, a corporation organized and doing business under the laws of the State of Delaware, and publishing a newspaper known as The Charlotte Observer in the city of Charlotte, County of Mecklenburg, and State of North Carolina and that as such he/she is familiar with the books, records, files, and business of said Corporation and by reference to the files of said publication, the attached advertisement was inserted. The following is correctly copied from the books and files of the aforesaid Corporation and Publication.

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES

PUBLIC NOTICE

PURPOSE: The State of North Carolina implemented a Motor Vehicle Inspection/Maintenance (I/M) program under Environmental Protection Agency (EPA) regulations in Code of Federal Regulations (CFR) 40 CFR Part 51. The North Carolina Department of Environment and Natural Resources, Division of Air Quality (NCDAQ) hereby gives notice regarding its Pre-Hearing Draft of The North Carolina State Implementation Plan for the Inspection and Maintenance Program. Persons wishing to submit written requests for a public hearing or comments regarding the "State Implementation Plan for the Inspection and Maintenance Program" are invited to do so.

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INFORMATION: Written requests for a public hearing or comments can be electronically submitted or sent to the following:

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(Please type "I/M SIP" in the subject line)

Brian Phillips
NC Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641
Phone: (919) 733-1480
Fax: (919) 733-1812

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NCDAQ, Washington Regional Office
252-946-6481
NCDAQ, Wilmington Regional Office
910-796-7215
NCDAQ, Winston-Salem Regional Office
336-771-5000

Date 4/1/2010

B. Keith Overcash, P.E., Director

LP6453201

PUBLISHED ON: 04/05

AD SPACE: 172 LINE
FILED ON: 04/08/10

NAME: Anita Dist TITLE: Acct Clerk
DATE: APR 09 2010

In Testimony Whereof I have hereunto set my hand and affixed my seal, the day and year aforesaid.

Notary: [signature] My Commission Expires: __/__/__

My Commission Expires May 27, 2011

AFFIDAVIT OF PUBLICATION

STATE OF NORTH CAROLINA
COUNTY OF NEW HANOVER

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES PUBLIC NOTICE
PURPOSE: The State of North Carolina implemented a Motor Vehicle Inspection/Maintenance (I/M) program under Environmental Protection Agency (EPA) regulations in Code of Federal Regulations (CFR) 40 CFR Part 51. The North Carolina Department of Environment and Natural Resources, Division of Air Quality (NCDAQ) hereby gives notice regarding its Pre-Hearing Draft of The North Carolina State Implementation Plan for the Inspection and Maintenance Program. Persons wishing to submit written requests for a public hearing or comments regarding the "State Implementation Plan for the Inspection and Maintenance Program" are invited to do so.
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Raleigh, NC 27699-1641
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Fax: (919) 733-1812
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NCDAQ, Washington Regional Office 252-946-6481
NCDAQ, Wilmington Regional Office 910-796-7215
NCDAQ, Winston-Salem Regional Office 336-771-5000
Date: 4/1/2010
B. Keith Overcash, P.E., Director

Before the undersigned, a Notary Public of Said County and State,

Keith Raffone

Who, being duly sworn or affirmed, according to the law, says that he/she is

Controller

of THE STAR-NEWS, a corporation organized and doing business under the Laws of the State of North Carolina, and publishing a newspaper known as STAR-NEWS in the City of Wilmington

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES PUBLIC NOTICE PURPOSE: The State of North Carolina implemented a Motor Vehicle Inspection/Maintenance I/M program under Environmental Protection Agency EPA regulations in Code of Federal Regula

was inserted in the aforesaid newspaper in space, and on dates as follows:

4/7 1x

And at the time of such publication Star-News was a newspaper meeting all the requirements and qualifications prescribed by Sec. No. 1-597 G.S. of N.C.

Title: **Controller**

Sworn or affirmed to, and subscribed before me this 13th day of April, A.D., 2010

In Testimony Whereof, I have hereunto set my hand and affixed my official seal, the day and year aforesaid.

JERRIE L. O'CONNER NOTARY PUBLIC NEW HANOVER COUNTY, N.C.

Jerrie L. O'Conner
Notary Public

My commission expires 12th day of Sep, 20 12

oregoing affidavit with the advertisement thereto annexed it is adjudged by the Court that the said perly made and that the summons has been duly and legally served on the defendant(s).

_____, ____

Clerk of Superior Court

ASHEVILLE
CITIZEN-TIMES
VOICE OF THE MOUNTAINS • CITIZEN-TIMES.com

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES

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NCDAQ, Washington Regional Office
252-946-6481
NCDAQ, Wilmington Regional Office
910-796-7215
NCDAQ, Winston-Salem Regional Office
336-771-5000

B. Keith Overcash, P.E., Director

April 7, 2010 (7099)

AFFIDAVIT OF PUBLICATION

BUNCOMBE COUNTY

SS.

NORTH CAROLINA

Before the undersigned, a Notary Public of said County and State, duly commissioned, qualified and authorized by law to administer oaths, personally appeared **Elyse Giannetti,** who, being first duly sworn, deposes and says: that she is the **Legal Billing Clerk** of **The Asheville Citizen-Times,** engaged in publication of a newspaper known as **The Asheville Citizen-Times**, published, issued, and entered as first class mail in the City of Asheville, in said County and State; that she is authorized to make this affidavit and sworn statement; that the notice or other legal advertisement, a true copy of which is attached hereto, was published in **The Asheville Citizen-Times** on the following date: April 7th , 2010. And that the said newspaper in which said notice, paper, document or legal advertisement was published was, at the time of each and every publication, a newspaper meeting all of the requirements and qualifications of Section 1-597 of the General Statues of North Carolina and was a qualified newspaper within the meaning of Section 1-597 of the General Statues of North Carolina.

Signed this 7th day of April, 2010

Elyse Giannetti
(Signature of person making affidavit)

Sworn to and subscribed before me the 7th day of April, 2010.

APR - 9 2010

Katrina Joye Petrey
(Notary Public)

My Commission expires the 5th day of October, 2013.

KATRINA JOYE PETREY
NOTARY
PUBLIC
BUNCOMBE CO. N.C.

(828) 232-5830 | (828) 253-5092 FAX
14 O. HENRY AVE. | P.O. BOX 2090 | ASHEVILLE, NC 28802 | (800) 800-4204

GANNETT

News & Record

Published by
News & Record, Inc.
Greensboro, North Carolina

AFFIDAVIT OF PUBLICATION

North Carolina, Guilford County

Before the undersigned, a Notary Public of said County and State, duly commissioned, qualified and authorized by law to administer oaths, personally appeared the Publisher's Representative who being first duly sworn, deposed and says:

1. That he/she is the Publisher's Representative of the Greensboro News & Record, Inc. a corporation, engaged in the publication of newspapers known as "News & Record", published, issued and entered as second class mail in the City of Greensboro in said County and State.

2. That he/she is authorized to make this affidavit and sworn statement; that the notice or other legal advertisement, a copy of which is attached hereto, was published in the News & Record on the dates listed below.

3. That the said newspaper (or newspapers) in which such notice, paper, document, or legal advertisement was published was, at the time of each and every such publication, a newspaper meeting all of the requirements and qualifications of Section 1-597 of the General Statutes of North Carolina and was a qualified newspaper within the meaning of Section 1-597 of the General Statutes of North Carolina.

Publisher's Representative Shannon Weston

Sworn to and subscribed before me, this 6 day of April, 2010

Notary Public

LEA ANNE LAMB NOTARY PUBLIC My Comm. Exp. 6/15/2014 GUILFORD COUNTY, NC

Name	Ad #	Date	Edition	Class	PO	Ad Copy
NC DENR DIV OF AIR QUALITY	33577919	04/05/10	News & Record	400	IM public no	NORTH CAROLINA DEPARTMENT OF ENVIR

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Ad ID 33577919 Date 04/01/2010 Time 4:26 PM

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES

PUBLIC NOTICE

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NCDAQ, Wilmington Regional Office
910-796-7215
NCDAQ, Winston-Salem Regional Office
336-771-5000

Date: April 1, 2010
B. Keith Overcash, P.E., Director

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