

US EPA ARCHIVE DOCUMENT

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Promoting and protecting the health of the public and the environment

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December 14, 2007

Mr. J. I. Palmer, Jr., Regional Administrator
U.S. EPA, Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303

RE: December 2007 Early Action Progress Report

Dear Mr. Palmer:

In the Fall of 2002, the Environmental Protection Agency (EPA) allowed areas the opportunity to enter into an 8-hour Ozone Early Action Compact (EAC). South Carolina led the nation with forty-five counties electing to participate in the EAC process. By signing the EAC, the counties agreed to implement emission reduction strategies in an effort to attain the 1997 8-hour Ozone standard by December 2007, three years earlier than federally required. In April 2004, when EPA issued boundary designations for the 8-hour Ozone standard, only three areas in South Carolina were designated nonattainment. The Rock Hill-Fort Mill Area Transportation Study (RFATS) Metropolitan Planning Organization (MPO) in York County was designated nonattainment due to their inclusion in the Charlotte Metropolitan Statistical Area. The Columbia Area (portions of Richland and Lexington counties) and the Greenville-Spartanburg-Anderson Area (all of the three counties) were designated nonattainment; however, as a result of their participation in the 8-hour Ozone EAC process, the effective date of their designation was deferred.

As a requirement of the EAC, South Carolina is pleased to submit this EAC Progress Report including documentation showing attainment of the 1997 8-hour Ozone standard. Strong commitments by local stakeholders, including local governments, as well as local industry and environmental groups working together, in conjunction with regional and state-wide efforts, have been successful in South Carolina, and we have the data to support the success of these efforts. Most recent data is evidence that at times when the meteorological patterns are conducive to the formation of ozone, the ozone monitors did not reveal elevated readings. While weather is definitely a factor in the formation of ozone, it is one component that we do not have the ability to control. However, local stakeholders given the flexibility to implement programs geared toward reducing oxides of nitrogen emissions do have an impact on the formation of ozone.

On December 6, 2007, Mr. Scott Reynolds, Director of the Division of Air Quality Analysis submitted documentation certifying that all South Carolina SLAMS ozone ambient monitoring and the associated quality assurance data for the 2007 Ozone Season (through October 2007) were completely submitted to AQS and are accurate to the best of his knowledge. The correspondence included a summary report generated through AQS to provide accurate 2007 ozone summary statistics for the State of South Carolina. A copy of this correspondence and report is included as Enclosure 1. Also included in Enclosure 1 is a table which gives the 4th highest 8-hour average for each of the monitoring sites for the years 2003, 2004, 2005, 2006 and 2007 as well as the three year design values for 2003-2005, 2004-2006 and 2005-2007.

In 2005, South Carolina committed to an annual review of growth (highway mobile and stationary NO_x sources) to ensure emission reduction strategies and growth are adequate as well as identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates. Review of this information indicates that for both areas designated nonattainment with the effective date deferred, the actual emissions were lower than the forecasted modeled data and the 2006 VMT was well below the action trigger. Detailed information with supporting graphs is included in Enclosure 2.

As per EPA guidance, the EAC identified eight key milestones that must be met for continued participation. All participating areas in South Carolina, including those areas designated attainment but electing to continue participation have met all milestones. In addition, each of these counties has submitted semi-annual progress reports every year, beginning with the June 2003 report. This document contains the tenth and final EAC progress report. Enclosure 3 includes the table provided by EPA's guidance document of October 17, 2005, for each participating county identifying each of the local measures included in their respective local early action plan. Additionally, a narrative description of activity from the five counties in the deferred nonattainment areas is included. Information regarding activities that have occurred since June 2007 is included for each county and is grouped by the following areas:

Appalachian: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg
Catawba: Chester, Lancaster, Union, York
Pee Dee: Chesterfield, Darlington, Dillon, Florence, Marion, Marlboro
Waccamaw: Georgetown, Horry, Williamsburg
Santee Lynches: Clarendon, Kershaw, Lee, Sumter
Berkeley-Charleston-Dorchester: Berkeley, Charleston, Dorchester
Low Country: Beaufort, Colleton, Hampton, Jasper
Lower Savannah: Aiken, Allendale, Bamberg, Barnwell, Calhoun, Orangeburg
Central Midlands: Fairfield, Lexington, Newberry, Richland
Upper Savannah: Abbeville, Edgefield, Greenwood, Laurens, Saluda

As pointed out in previous EAC progress reports, the emission reduction strategies submitted by the local areas contain both quantifiable and directionally sound measures. However, it should be noted that none of them were used to demonstrate attainment in 2007. A table and narrative description identifying statewide activities and progress made toward each is included as Enclosure 4 Statewide EAC Activities.

EPA should be commended for allowing areas the opportunity and flexibility to improve air quality by implementing local programs earlier than would be required under federal mandates and for rewarding these areas by deferring the prescriptive requirements of nonattainment. The partnership opportunities developed over the last several years and the awareness of the participants, including local officials, state agencies, universities, organizations, businesses, industries, environmental groups and other stakeholders about air quality issues have resulted in proactive, voluntary and regulatory actions that would not have occurred without the EAC process. The continuing effort of these groups is a marvelous example of partnerships in many directions. Each of these diverse parties has come together for a worthy common goal of providing cleaner air sooner to the citizens of South Carolina. We continue to see activities that remain a part of the EAC process, above and beyond that required of an area with a "traditional" nonattainment designation. These areas could be used as a model to show that implementation of emission reduction strategies earlier than required does bring cleaner air sooner.

South Carolina respectfully requests that EPA review the documentation submitted and expeditiously take final action on the 8-hour Ozone EAC process by re-designating the Columbia Area and the Greenville-Spartanburg-Anderson Area to attainment for the 1997 8-hour Ozone standard.

Thank you not only for the opportunity to participate in the 8-hour Ozone EAC process but for your assistance and support over the last several years. We look forward to continuing to work with EPA and other stakeholders as we continue to encourage implementing measures to achieve cleaner air sooner for our citizens. Should you have questions or desire additional information, please do not hesitate to contact me at (803) 896-8940 or Myra Reece, Chief of the Bureau of Air Quality at (803) 898-4123.

Sincerely,



Robert W. King, Jr., P.E.
Deputy Commissioner
Environmental Quality Control

Enclosures

cc: Kay Prince, EPA Region 4
County Officials (no attachments*)
Ron Methier, GA Dept. of Natural Resources (no attachments*)
Keith Overcash, NC Dept. of Environmental and Natural Resources (no attachments*)
Myra Reece (no attachments*)
EQC Regional Directors (no attachments*)
Scott Reynolds (no attachments*)

*All those not receiving attachments will be notified when materials are placed on our website.

**South Carolina's Ozone Early Action Compact
December 2007 Progress Report
Enclosures
December 14, 2007**

1. 3-Year Ozone Average Summary to Date, AQS Data
South Carolina Certification Correspondence (December 6, 2007)
2. South Carolina's Comprehensive Maintenance Plan
3. Local EAC Activities for Participating Areas
4. Statewide EAC Activities

Enclosure 1

December 2007

FINAL EAC Progress Report Document 3-Year Ozone Average Summary to Date, AQS Data



County	Monitoring Site	2003 4th 8-hr Average	2004 4th 8-hr Average	2005 4th 8-hr Average	2006 4th 8-hr Average	2007 4th 8-hr Average	2003-2005 Design Values	2004-2006 Design Values	2005-2007 Design Values
Abbeville	Due West	0.077	0.075	0.082	0.079	0.083	0.078	0.078	0.081
Aiken	Jackson	0.069	0.080	0.077	0.073	0.082	0.075	0.076	0.077
Anderson	Powdersville	0.078	0.076	0.082	0.069		0.078	0.075	
Barnwell	Barnwell	0.073	0.072	0.074	0.074	0.073	0.073	0.073	0.073
Berkeley	Bushy Park	0.070	0.073	0.068	0.064	0.06	0.070	0.068	0.064
Berkeley	Army Reserve	0.070	0.067						
Charleston	Cape Romain	0.074	0.070	0.077	0.078	0.069	0.073	0.075	0.074
Cherokee	Cowpens	0.079	0.068	0.078	0.076	0.067	0.075	0.074	0.073
Chester	Chester	0.078	0.069	0.083	0.073	0.074	0.076	0.075	0.076
Chesterfield	Chesterfield	0.075	0.074	0.078	0.074	0.073	0.075	0.075	0.075
Colleton	Ashton	0.069	0.071	0.072	0.078	0.072	0.070	0.073	0.074
Darlington	Pee Dee	0.075	0.076	0.079	0.076	0.073	0.076	0.077	0.076
Edgefield	Trenton	0.068	0.071	0.071	0.068	0.073	0.070	0.070	0.070
Oconee	Long Creek	0.079	0.075	0.075	0.065	0.076	0.076	0.071	0.072
Pickens	Clemson	0.078	0.074	0.081	0.081	0.081	0.077	0.078	0.081
Richland	Cong. Swamp/ Bluff	0.074	0.067	0.074	0.072	0.071	0.071	0.071	0.072
Richland	Parklane	0.075	0.082	0.082	0.082	0.077	0.079	0.082	0.080
Richland	Sandhill	0.083	0.082	0.086	0.078	0.084	0.083	0.082	0.082
Spartanburg	N. Spartan. FD	0.079	0.082	0.082	0.085	0.083	0.081	0.083	0.083
Union	Delta	0.078	0.072	0.078	0.077	0.076	0.076	0.075	0.077
Williamsburg	Indiantown	0.069	0.069	0.068	0.073	0.071	0.068	0.070	0.070
York	York	0.076	0.071	0.079	0.078	0.08	0.075	0.076	0.079

December 2007







2600 Bull Street
Columbia, SC 29201-1708

Bureau of Environmental Services
Division of Air Quality Analysis
8231 Parklane Road
Columbia, South Carolina 29223
(803) 896-0902 FAX (803) 896-0980

December 6, 2007

Mr. J. I. Palmer, Jr.
US EPA, Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303

Mr. Palmer:

In order to allow all South Carolina Early Action Compact areas to meet the protocol timelines and consistent with the requirements in 40 CFR§ 58.15, with this letter I certify that all South Carolina SLAMS ozone ambient monitoring and the associated quality assurance data for the 2007 Ozone season (through October 2007) are completely submitted to AQS and are accurate to the best of my knowledge, taking into consideration the quality assurance findings. A summary report generated through AQS should provide accurate 2007 ozone summary statistics for the State of South Carolina.

Consistent with the 2006 revisions of §58, I am also certifying of all South Carolina ozone Special Purpose Monitor (SPM) criteria pollutant data collected using reference or equivalent methods. All South Carolina SPM ozone monitors and sites are operated consistent with the requirements of 40 CFR §58 Appendix A.

Consistent with the requirements for submission for annual data and precision and accuracy summaries, I have attached copies of a recent Quick Look Report (AQS AMP 450 and AMP 450NC) and Precision and Accuracy Reporting Organization Summary (AQS AMP 240) for all SLAMS and SPM ozone monitors operated by South Carolina DHEC through the end of the 2007 ozone season. Please note the Precision and Accuracy Reporting Organization Summary (AQS AMP 240) does not show data for fourth quarter 2007 because that quarter is not yet complete. I have confirmed that all ozone precision and accuracy data for the 2007 ozone season has been correctly entered into AQS. The ozone summary statistics and precision and accuracy summaries for the full calendar year will be included in the submission accompanying the certification of the remainder of the South Carolina data.

Sincerely yours,

Scott A. Reynolds, Director
Division of Air Quality Analysis

Attachments

cc: Mr. David Lutz, Data Certification Contact
Ambient Air Monitoring Group, OAQPS (electronic)
Doug Neeley, Chief, APTMB, US EPA Region IV
Artra Cooper, EPA Region IV (w/o attachments)
Robert J. Brown, Director, DAPDOIS
SC DHEC BAQ (w/o attachments)

User ID: DSB

QUICKLOOK CRITERIA PARAMETERS

Report Request ID: 487314 Report Code: AMP450 Dec. 5, 2007

Tribal	GEOGRAPHIC SELECTIONS														
	State	County	Site	Parameter	POC	City	AQCR	UAR	MSA	CMSA	EPA Region	Method	Duration	Begin Date	End Date
	45			44201										2007	2007

SELECTED OPTIONS					SORT ORDER	
Option Type		Option Value			Order	Column
EVENTS PROCESSING		EXCLUDE REGIONALLY CONCURRED EVENTS			1	PARAMETER_CODE
MERGE PDF FILES		YES			2	STATE_CODE
					3	COUNTY_CODE
					4	SITE_ID
					5	POC
					6	DATES
					7	EDT_ID

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 5, 2007

EXCEPTIONAL DATA TYPES

EDT	DESCRIPTION
0	NO EVENTS
1	EVENTS EXCLUDED
2	EVENTS INCLUDED
3	EXCEPTIONAL EVENTS EXCLUDED
4	NATURAL EVENTS EXCLUDED
5	EVENTS WITH CONCURRENCE EXCLUDED
6	EXCEPTIONAL EVENTS WITH CONCURRENCE EXCLUDED
7	NATURAL EVENTS WITH CONCURRENCE EXCLUDED

Note: The * indicates that the mean does
not satisfy summary criteria.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 5, 2007

Ozone (44201)

South Carolina

Parts per million (007)

1-HOUR

SITE ID	P O C	PQAO	CITY	COUNTY	ADDRESS	YEAR	METH	VALID	NUM	1ST	2ND	3RD	4TH	DAY	EST	MISS	CERT	EDT
								DAYS	DAYS	MAX	MAX	MAX	MAX	MAX>/=	DAYS>/=	DAYS<		
								MEAS	REQ	1-HR	1-HR	1-HR	1-HR	0.125	.125	0.125		
45-001-0001	1	0971	Due West	Abbeville	59 JIM SCOTT LANE	2007	047	213	214	.103	.098	.091	.090	0	0.0	1	0	
45-003-0003	2	0971	Jackson	Aiken	8217 ATOMIC ROAD (INDIAN DRIVE - SCHOOL)	2007	047	209	214	.105	.101	.099	.099	0	0.0	1	0	
45-011-0001	2	0971	Not in a city	Barnwell	5795 SEVEN PINES ROAD	2007	047	213	214	.084	.081	.081	.080	0	0.0	1	0	
45-015-0002	1	0971	Not in a city	Berkeley	River Oak Drive (Goose Creek)	2007	047	196	214	.104	.081	.080	.076	0	0.0	0	0	
45-019-0046	1	0971	Not in a city	Charleston	390 BULLS ISLAND ROAD (AWENDAW)	2007	047	209	214	.090	.078	.076	.076	0	0.0	5	0	
45-021-0002	1	0971	Not in a city	Cherokee	MCGINNIS ROAD (OLD SC 110)	2007	047	211	214	.085	.082	.077	.076	0	0.0	0	0	
45-023-0002	1	0971	Not in a city	Chester	100 LUSCOMBE DRIVE	2007	047	210	214	.093	.092	.090	.084	0	0.0	2	0	
45-025-0001	1	0971	Not in a city	Chesterfield	RT 2 BOX 100 MCBEE (SC145)	2007	047	209	214	.093	.086	.080	.079	0	0.0	2	0	
45-029-0002	2	0971	Not in a city	Colleton	Ashton Road (Islandton)	2007	047	213	214	.087	.085	.083	.081	0	0.0	1	0	
45-031-0003	1	0971	Not in a city	Darlington	2200 POCKET ROAD (DARLINGTON)	2007	047	211	214	.085	.084	.084	.083	0	0.0	3	0	
45-037-0001	1	0971	Not in a city	Edgefield	660 WOODYARD ROAD	2007	047	212	214	.088	.083	.081	.081	0	0.0	2	0	
45-073-0001	1	0971	Not in a city	Oconee	ROUND MOUNTAIN TOWER ROAD (Mountain Rest, SC)	2007	047	208	214	.104	.093	.091	.082	0	0.0	1	0	
45-077-0002	1	0971	Not in a city	Pickens	106 HOPEWELL ROAD	2007	047	212	214	.102	.096	.093	.089	0	0.0	2	0	
45-079-0007	1	0971	Dentsville (Dents)	Richland	8311 PARKLANE ROAD	2007	047	210	214	.101	.094	.091	.089	0	0.0	4	0	

Note: The * indicates that the mean does
not satisfy summary criteria.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 5, 2007

Ozone (44201)

South Carolina

Parts per million (007)

1-HOUR

SITE ID	P O C	PQAO	CITY	COUNTY	ADDRESS	YEAR	METH	VALID DAYS MEAS	NUM DAYS REQ	1ST MAX 1-HR	2ND MAX 1-HR	3RD MAX 1-HR	4TH MAX 1-HR	DAY MAX>/= 0.125	EST DAYS>/= .125	MISS DAYS< 0.125	CERT EDT
45-079-0021	1	0971	Not in a city	Richland	1850 SOUTH CEDAR CREEK ROAD (GADSDEN)	2007	047	202	217	.237	.088	.084	.084	1	1.1	3	5
45-079-1001	1	0971	Not in a city	Richland	900 CLEMSON ROAD	2007	047	206	214	.106	.098	.098	.097	0	0.0	3	0
45-083-0009	1	0971	Not in a city	Spartanburg	1556 JOHN DODD ROAD	2007	047	214	214	.098	.096	.095	.095	0	0.0	0	0
45-087-0001	1	0971	Not in a city	Union	1121 DELTA ROAD (WHITMIRE)	2007	047	213	214	.091	.086	.086	.086	0	0.0	1	0
45-089-0001	2	0971	Not in a city	Williamsburg	4951 HEMINGWAY HIGHWAY	2007	047	209	214	.087	.082	.078	.076	0	0.0	0	0
45-091-0006	1	0971	Not in a city	York	2316 CHESTER HIGHWAY (US 321)	2007	047	208	214	.107	.095	.092	.089	0	0.0	1	0

Note: The * indicates that the mean does
not satisfy summary criteria.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 5, 2007

Ozone (44201)

South Carolina

Parts per million (007)

8-HOUR

SITE ID	P O C	PQAO	CITY	COUNTY	ADDRESS	YEAR	METH	%OBS	VALID DAYS MEAS	NUM DAYS REQ	1ST MAX 8-HR	2ND MAX 8-HR	3RD MAX 8-HR	4TH MAX 8-HR	DAY MAX>/= 0.085	CERT EDT
45-001-0001	1	0971	Due West	Abbeville	59 JIM SCOTT LANE	2007	047	98	210	214	.090	.087	.085	.083	3	0
45-003-0003	2	0971	Jackson	Aiken	8217 ATOMIC ROAD (INDIAN DRIVE - SCHOOL)	2007	047	97	207	214	.084	.084	.083	.082	0	0
45-011-0001	2	0971	Not in a city	Barnwell	5795 SEVEN PINES ROAD	2007	047	99	211	214	.076	.076	.073	.073	0	0
45-015-0002	1	0971	Not in a city	Berkeley	River Oak Drive (Goose Creek)	2007	047	91	194	214	.072	.070	.065	.060	0	0
45-019-0046	1	0971	Not in a city	Charleston	390 BULLS ISLAND ROAD (AWENDAW)	2007	047	95	204	214	.079	.070	.070	.069	0	0
45-021-0002	1	0971	Not in a city	Cherokee	MCGINNIS ROAD (OLD SC 110)	2007	047	98	209	214	.074	.068	.067	.067	0	0
45-023-0002	1	0971	Not in a city	Chester	100 LUSCOMBE DRIVE	2007	047	98	210	214	.086	.085	.083	.074	2	0
45-025-0001	1	0971	Not in a city	Chesterfield	RT 2 BOX 100 MCBEE (SC145)	2007	047	97	207	214	.081	.079	.074	.073	0	0
45-029-0002	2	0971	Not in a city	Colleton	Ashton Road (Islandton)	2007	047	99	212	214	.076	.075	.073	.072	0	0
45-031-0003	1	0971	Not in a city	Darlington	2200 POCKET ROAD (DARLINGTON)	2007	047	99	212	214	.076	.076	.075	.073	0	0
45-037-0001	1	0971	Not in a city	Edgefield	660 WOODYARD ROAD	2007	047	99	212	214	.076	.075	.074	.073	0	0
45-073-0001	1	0971	Not in a city	Oconee	ROUND MOUNTAIN TOWER ROAD (Mountain Rest, SC)	2007	047	97	207	214	.090	.084	.084	.076	1	0
45-077-0002	1	0971	Not in a city	Pickens	106 HOPEWELL ROAD	2007	047	99	212	214	.093	.086	.083	.081	2	0
45-079-0007	1	0971	Dentsville (Dents)	Richland	8311 PARKLANE ROAD	2007	047	98	210	214	.089	.084	.080	.077	1	0
45-079-0021	1	0971	Not in a city	Richland	1850 SOUTH	2007	047	93	202	217	.091	.076	.072	.071	1	5

Note: The * indicates that the mean does
not satisfy summary criteria.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 5, 2007

Ozone (44201)

South Carolina

Parts per million (007)

8-HOUR

SITE ID	P O C	PQAO	CITY	COUNTY	ADDRESS	YEAR	METH	%OBS	VALID	NUM	1ST	2ND	3RD	4TH	DAY	CERT	EDT
									DAYS	DAYS	MAX	MAX	MAX	MAX	MAX>/=		
									MEAS	REQ	8-HR	8-HR	8-HR	8-HR	0.085		
45-079-1001	1	0971	Not in a city	Richland	900 CLEMSON ROAD	2007	047	93	217	233	.090	.087	.085	.084	3		0
45-083-0009	1	0971	Not in a city	Spartanburg	1556 JOHN DODD ROAD	2007	047	100	213	214	.087	.086	.085	.083	3		0
45-087-0001	1	0971	Not in a city	Union	1121 DELTA ROAD (WHITMIRE)	2007	047	100	213	214	.079	.079	.078	.076	0		0
45-089-0001	2	0971	Not in a city	Williamsburg	4951 HEMINGWAY HIGHWAY	2007	047	97	208	214	.077	.074	.072	.071	0		0
45-091-0006	1	0971	Not in a city	York	2316 CHESTER HIGHWAY (US 321)	2007	047	94	202	214	.085	.083	.082	.080	1		0

Note: The * indicates that the mean does not satisfy summary criteria.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 5, 2007

METHODS USED IN THIS REPORT

PARAMETER	METHOD CODE	COLLECTION METHOD	ANALYSIS METHOD
44201	047	INSTRUMENTAL	ULTRA VIOLET

Note: The * indicates that the mean does
not satisfy summary criteria.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 5, 2007

PQAOS USED IN THIS REPORT

PQAO	AGENCY DESCRIPTION
0971	South Carolina Department Health And Environmental Control

Note: The * indicates that the mean does not satisfy summary criteria.

User ID: DSB

QUICKLOOK ALL PARAMETERS

Report Request ID: 487321 Report Code: AMP450NC Dec. 5, 2007

Tribal	GEOGRAPHIC SELECTIONS														
	State	County	Site	Parameter	POC	City	AQCR	UAR	MSA	CMSA	EPA Region	Method	Duration	Begin Date	End Date
	45			44201										2007	2007

SELECTED OPTIONS		SORT ORDER	
Option Type	Option Value	Order	Column
EVENTS PROCESSING	EXCLUDE REGIONALLY CONCURRED EVENTS	1	STATE_CODE
MERGE PDF FILES	YES	2	COUNTY_CODE
		3	SITE_ID
		4	PARAMETER_CODE
		5	POC
		6	DATES
		7	EDT_ID

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM

QUICKLOOK ALL PARAMETERS

Dec. 5, 2007

EXCEPTIONAL DATA TYPES

EDT	DESCRIPTION
0	NO EVENTS
1	EVENTS EXCLUDED
2	EVENTS INCLUDED
3	EXCEPTIONAL EVENTS EXCLUDED
4	NATURAL EVENTS EXCLUDED
5	EVENTS WITH CONCURRENCE EXCLUDED
6	EXCEPTIONAL EVENTS WITH CONCURRENCE EXCLUDED
7	NATURAL EVENTS WITH CONCURRENCE EXCLUDED

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM

QUICKLOOK ALL PARAMETERS

Dec. 5, 2007

Parameter	Unit	P O C	PQAO	Year	Meth	# Obs	1st Max Value	2nd Max Value	3rd Max Value	4th Max Value	Arith. Mean	Duration	EDT
Site ID: 45-001-0001	City: Due West		County: Abbeville				Address: 59 JIM SCOTT LANE						
44201 Ozone	Parts per million	1	0971	2007	047	6014	.103	.098	.091	.090	.0609	1 HOUR	0
Site ID: 45-003-0003	City: Jackson		County: Aiken				Address: 8217 ATOMIC ROAD (INDIAN DRIVE - SCHOOL)						
44201 Ozone	Parts per million	2	0971	2007	047	5910	.105	.101	.099	.099	.0586	1 HOUR	0
Site ID: 45-011-0001	City: Not in a city		County: Barnwell				Address: 5795 SEVEN PINES ROAD						
44201 Ozone	Parts per million	2	0971	2007	047	5980	.084	.081	.081	.080	.0541	1 HOUR	0
Site ID: 45-015-0002	City: Not in a city		County: Berkeley				Address: River Oak Drive (Goose Creek)						
44201 Ozone	Parts per million	1	0971	2007	047	5312	.104	.081	.080	.076	.0457	1 HOUR	0
Site ID: 45-019-0046	City: Not in a city		County: Charleston				Address: 390 BULLS ISLAND ROAD (AWENDAW)						
44201 Ozone	Parts per million	1	0971	2007	047	7044	.090	.078	.076	.076	.0517	1 HOUR	0
Site ID: 45-021-0002	City: Not in a city		County: Cherokee				Address: MCGINNIS ROAD (OLD SC 110)						
44201 Ozone	Parts per million	1	0971	2007	047	7174	.085	.082	.077	.076	.0526	1 HOUR	0
Site ID: 45-023-0002	City: Not in a city		County: Chester				Address: 100 LUSCOMBE DRIVE						
44201 Ozone	Parts per million	1	0971	2007	047	6009	.093	.092	.090	.084	.0572	1 HOUR	0
Site ID: 45-025-0001	City: Not in a city		County: Chesterfield				Address: RT 2 BOX 100 MCBEE (SC145)						
44201 Ozone	Parts per million	1	0971	2007	047	7166	.093	.086	.080	.079	.0570	1 HOUR	0
Site ID: 45-029-0002	City: Not in a city		County: Colleton				Address: Ashton Road (Islandton)						
44201 Ozone	Parts per million	2	0971	2007	047	7219	.087	.085	.083	.081	.0522	1 HOUR	0
Site ID: 45-031-0003	City: Not in a city		County: Darlington				Address: 2200 POCKET ROAD (DARLINGTON)						
44201 Ozone	Parts per million	1	0971	2007	047	5956	.085	.084	.084	.083	.0558	1 HOUR	0
Site ID: 45-037-0001	City: Not in a city		County: Edgefield				Address: 660 WOODYARD ROAD						
44201 Ozone	Parts per million	1	0971	2007	047	7236	.088	.083	.081	.081	.0547	1 HOUR	0
Site ID: 45-073-0001	City: Not in a city		County: Oconee				Address: ROUND MOUNTAIN TOWER ROAD (Mountain Rest, SC)						
44201 Ozone	Parts per million	1	0971	2007	047	7143	.104	.093	.091	.082	.0567	1 HOUR	0

Note: The * indicates that the mean does not satisfy summary criteria.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM

QUICKLOOK ALL PARAMETERS

Dec. 5, 2007

Parameter	Unit	PQAO	Year	Meth	# Obs	1st Max Value	2nd Max Value	3rd Max Value	4th Max Value	Arith. Mean	Duration	EDT
Site ID: 45-077-0002	City: Not in a city	County: Pickens				Address: 106 HOPEWELL ROAD						
44201 Ozone	Parts per million	1	0971	2007	047	5907	.102	.096	.093	.089	.0616	1 HOUR 0
Site ID: 45-079-0007	City: Dentsville (Dents)	County: Richland				Address: 8311 PARKLANE ROAD						
44201 Ozone	Parts per million	1	0971	2007	047	7227	.101	.094	.091	.089	.0592	1 HOUR 0
Site ID: 45-079-0021	City: Not in a city	County: Richland				Address: 1850 SOUTH CEDAR CREEK ROAD (GADSDEN)						
44201 Ozone	Parts per million	1	0971	2007	047	6658	.237	.088	.084	.084	.0556	1 HOUR 5
Site ID: 45-079-1001	City: Not in a city	County: Richland				Address: 900 CLEMSON ROAD						
44201 Ozone	Parts per million	1	0971	2007	047	5971	.106	.098	.098	.097	.0608	1 HOUR 0
Site ID: 45-083-0009	City: Not in a city	County: Spartanburg				Address: 1556 JOHN DODD ROAD						
44201 Ozone	Parts per million	1	0971	2007	047	5719	.098	.096	.095	.095	.0623	1 HOUR 0
Site ID: 45-087-0001	City: Not in a city	County: Union				Address: 1121 DELTA ROAD (WHITMIRE)						
44201 Ozone	Parts per million	1	0971	2007	047	5679	.091	.086	.086	.086	.0579	1 HOUR 0
Site ID: 45-089-0001	City: Not in a city	County: Williamsburg				Address: 4951 HEMINGWAY HIGHWAY						
44201 Ozone	Parts per million	2	0971	2007	047	5845	.087	.082	.078	.076	.0516	1 HOUR 0
Site ID: 45-091-0006	City: Not in a city	County: York				Address: 2316 CHESTER HIGHWAY (US 321)						
44201 Ozone	Parts per million	1	0971	2007	047	5814	.107	.095	.092	.089	.0570	1 HOUR 0

Note: The * indicates that the mean does not satisfy summary criteria.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM

QUICKLOOK ALL PARAMETERS

Dec. 5, 2007

METHODS USED IN THIS REPORT

PARAMETER	METHOD CODE	COLLECTION METHOD	ANALYSIS METHOD
44201	047	INSTRUMENTAL	ULTRA VIOLET

Note: The * indicates that the mean does not
satisfy summary criteria.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM

QUICKLOOK ALL PARAMETERS

Dec. 5, 2007

PQAOS USED IN THIS REPORT

PQAO	AGENCY DESCRIPTION
0971	South Carolina Department Health And Environmental Control

Note: The * indicates that the mean does not
satisfy summary criteria.

User ID: DSB

P/A REPORTING ORG SUMMARY

Report Request ID: 487330 Report Code: AMP240 Dec. 5, 2007

GEOGRAPHIC SELECTIONS															
Tribal	State	County	Site	Parameter	POC	City	AQCR	UAR	MSA	CMSA	EPA Region	Method	Duration	Begin Date	End Date
	45			44201										2007	2007

SELECTED OPTIONS		SORT ORDER	
Option Type	Option Value	Order	Column
MERGE PDF FILES	YES	1	AGENCY_CODE
		2	PARAMETER_CODE
		3	DATES

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SUBSYSTEM
P/A REPORTING ORG SUMMARY

Dec. 5, 2007

PLEASE NOTE: Data selection based upon geography may result in output including more reporting organizations than you would expect.
When geographic selection is used, every reporting organization that has authority to submit data for the selected geography will be included in the output, if those reporting organizations submitted any precision or accuracy data for any monitors anywhere (not just the geographical selection) during the date range specified.

REPORT ORG: 0971 South Carolina Department Health And Environmental Control

AGENCY TYPE: F

PARAMETER															
CODE	DESCRIPTION	**** PRECISION DATA ****						***** ACCURACY DATA *****							
REC MODE	YEAR	Q	# OF	PRECIS	PROB	LIM	LOC PRI	ACC	AUDIT	NO AUDITS	PROB LIM	PROB LIM	PROB LIM	PROB LIM	
AUDIT CLASS					LO	UP	STD	TYPE	TYPE	L1-3	L4	LO-L1-UP	LO-L2-UP	LO-L3-UP	LO-L4-UP
44201	Ozone														
CONTINUOUS	2007		4	60	- 5.6	11.5	PHOTOMETER	PE	AUDIT	446	0	- 6.4	8.6 - 5.2	7.2 - 6.6	9.4
ANALYTICAL							(VERIFIED)		ONLY						
		1	4	7	- 8.9	19.5	PHOTOMETER	PE	AUDIT	129	0	- 8.8	8.8 - 7.0	7.0 - 8.2	9.5
							(VERIFIED)		ONLY						
		2	4	26	- 5.7	11.2	PHOTOMETER	PE	AUDIT	212	0	- 5.2	7.9 - 4.6	7.4 - 6.6	9.8
							(VERIFIED)		ONLY						
									BY RO						
		3	4	27	- 4.9	9.9	PHOTOMETER	PE	AUDIT	105	0	- 4.6	8.8 - 3.3	6.5 - 4.7	8.1
							(VERIFIED)		ONLY						
									BY RO						

Enclosure 2

December 2007

FINAL EAC Progress Report Document South Carolina's Comprehensive Maintenance Plan



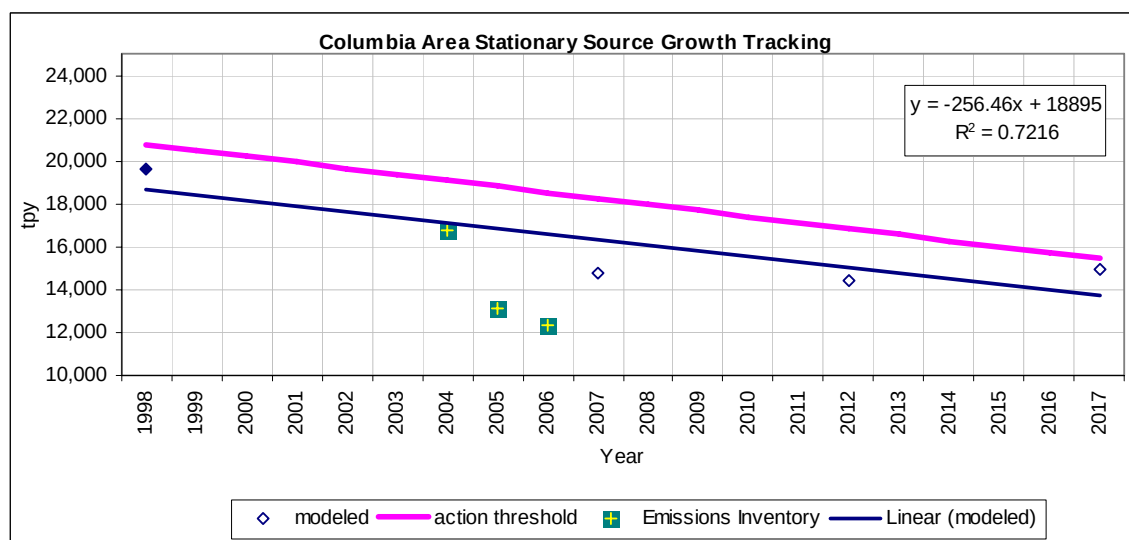
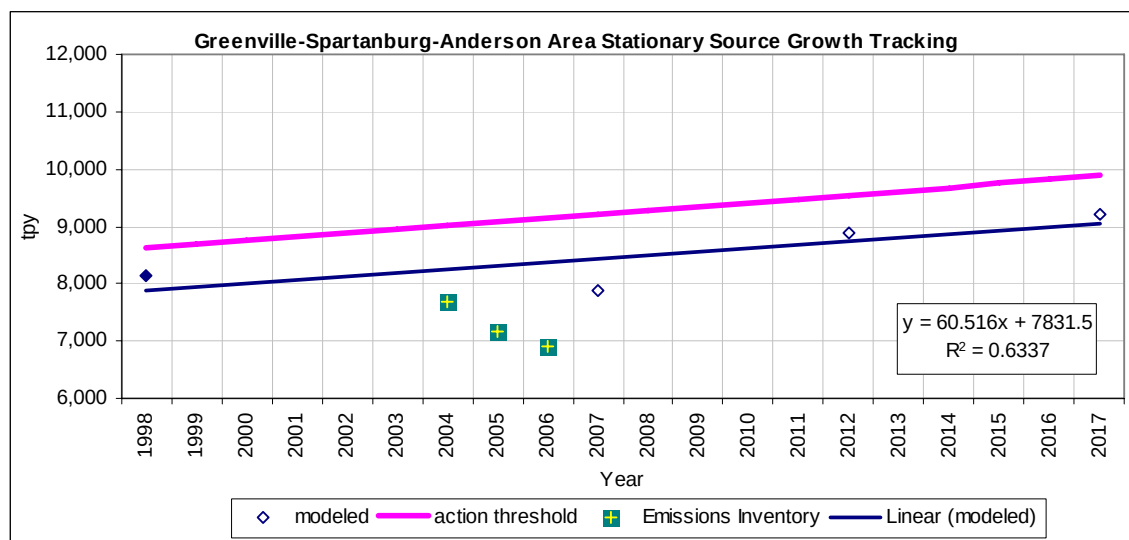
Enclosure 2
South Carolina's Ozone Early Action Compact
December 2007 Progress Report
Comprehensive Maintenance Plan

South Carolina has committed to a comprehensive maintenance plan. This commitment far exceeds the maintenance requirements in the EAC protocol. The South Carolina EAC maintenance plan is similar to the requirements for section 175A of the Clean Air Act, none of which are required for EAC areas. A Notice of General Public Interest was published in the *State Register* on May 27, 2005, scheduling a thirty-day public notice and comment period. A public hearing was held on June 30, 2005.

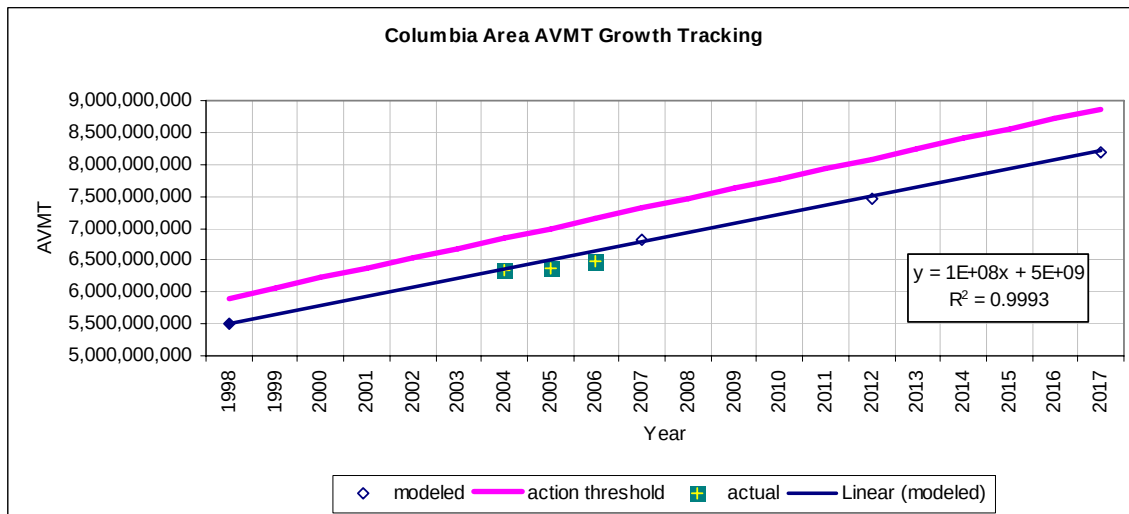
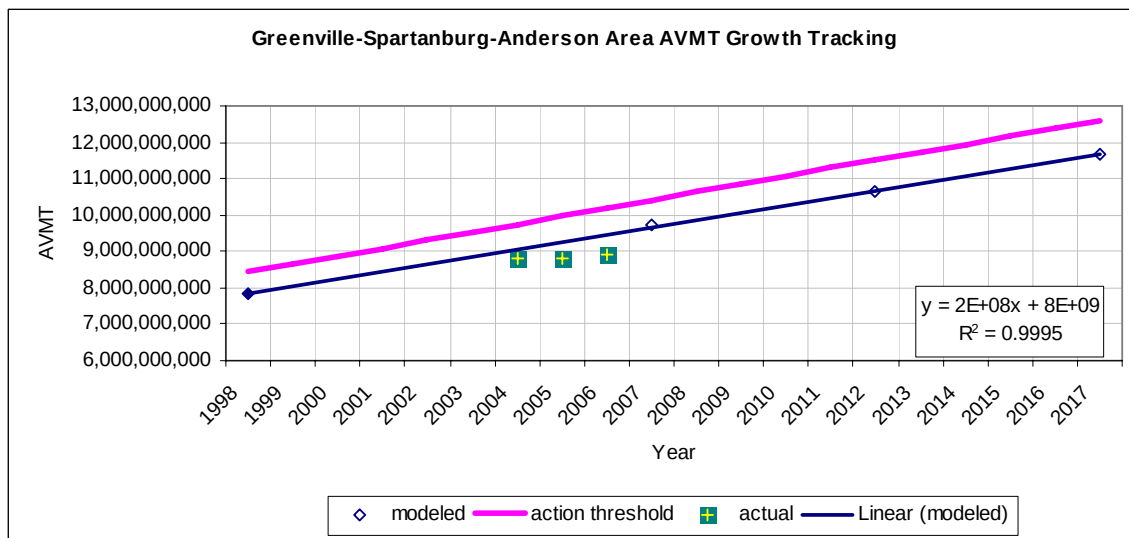
South Carolina's commitment included an annual review of growth (highway mobile and stationary NO_x sources) to ensure emission reduction strategies and growth are adequate as well as identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates. Results of the first annual review, (December 2005) revealed that for both areas designated nonattainment with the effective date deferred, the actual emissions were lower than the forecasted modeled data and the 2004 VMT was well below the action trigger. The second annual review (December 2006) for both deferred areas, revealed the actual emissions remained lower than the forecasted modeled data and the 2005 VMT remained well below the action trigger. The third annual review (December 2007) for both deferred areas, once again revealed that the actual emissions remained lower than the forecasted modeled data and the 2006 VMT remained well below the action trigger.

Annual Review of Growth

The most recent emissions inventory (2006) was compared to the emissions used in the ozone modeling analysis with a base year of 1998. In order to compare the annual emissions to the assumptions made in the model, a regression equation for each deferred area was developed in order to forecast the emissions for years not modeled. The modeled data, forecasted data, the 10 percent “action level” and actual emissions for 2004, 2005 and 2006 were then plotted in order to determine whether the actual emissions were still comparable to the ozone modeling assumptions. For both deferred areas, the actual emissions were lower than the forecasted modeled data. The ozone modeling analysis could not be run on partial counties, so for the Columbia deferred area, the review of growth took the county wide emissions into account. Therefore, the number for the Columbia deferred area represents a conservative estimate of the emissions.



The most recent annual VMT (2006) was compared with the projected VMT from the ozone modeling analysis with a base year of 1998. The VMT for analysis years 1998, 2007, 2012 and 2017 for Greenville, Spartanburg and Anderson Counties was combined and a trend line established. The actual 2004, 2005 and 2006 VMT for the three-counties was slightly below the trend line and well below the action trigger. Because full county VMT data was used for the ozone modeling analysis, it was necessary to use combined full county data from Richland and Lexington Counties to represent the Columbia nonattainment area. For the Columbia and Greenville deferred areas, the review revealed that the 2004, 2005 and 2006 VMT was slightly below the modeled trend line.



Attachment 1

Appalachian Area

**December 2007
FINAL EAC Progress Reports**



A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$)	H. Additional Information
11 South Carolina State Measures							
Comments: Modeling for 2007, shows attainment without including measures beyond national and regional measures already finalized.. 2012 and 2017 also shows attainment.							
11 Appalachian, SC (Effective date of nonattainment designation deferred) - Anderson County							
Green Building Conference	Clemson University Emerging Green Builders held the Second Annual GreenExpo and Conference Feb. 27-28 at the Madren Conference Center on campus.	The event included a best-practices workshop, tours of Clemson's LEED-certified facilities and a daylong exposition with product representatives, architects, contractors and service companies from across the Southeast, according to a statement from the university. The GreenExpo, sponsored by Clemson University's Emerging Green Builders and the South Carolina U.S. Green Building Council, featured recent advances in products and practices of commercial and residential Green Building.	2007	N/A	N/A	N/A	Anderson, Greenville and Spartanburg
Anderson Area Chamber of Commerce, Health Safety and Environment Committee	Made presentation to the committee on possible impact of new ozone standards	Industry representatives agreed to evaluate local voluntary measures they might implement and report back to the group	10-Oct-07				Anderson
Regional Transportation Plan Presentation	A small map of highway improvements recommended in the plan is shown below. Proposed mass transit, bicycle, and pedestrian improvement plans will be presented as well. More information is available by calling Greenville County Planning Department at (864) 467-7270, or visit our website http://www.greenvilleplanning.com and pick the "transportation planning" link.	A Public Presentation of the Regional Transportation Plan was held Tuesday, August 21. Presentation: 1:00 p.m., Drop-in Open House: 2:00 to 6:00 p.m. The Greenville-Pickens Area Transportation Study Planning area includes: cities of Easley, Fountain Inn, Greenville, Greer, Liberty, Mauldin, Pickens, Simpsonville, and Travelers Rest; and counties of Anderson, Greenville, Laurens, Pickens, and Spartanburg	August 21, 2007				
Outdoor Burning Billboards	Three "Call before you burn" billboards are dotting the landscape across Anderson County thanks to the Illegal Outdoor Burning Prevention Task Force. County Councilman Michael Thompson (pictured), District 5, initiated the Taskforce in September 2006 to mitigate the burning of household trash and to educate residents about outdoor burning.	The billboards are currently located on US Highway 28 Bypass in front of Wal-Mart, the intersection of Mall Road and Whitehall Road, and US Highway 81 South near Masters Boulevard. Throughout the next 12 months, the billboards will be cycled throughout various locations in the County. Advertising space was donated as a public service announcement by Fairway Outdoor Advertising of Anderson. Funds for the vinyl and screen-printing were provided by SC Department of Health and Environmental Control (DHEC) and District 5 recreation account funds.	Oct-07	N/A	N/A	N/A	Anderson
"Safe Routes to School" grant	SCDOT approved funding to develop comprehensive bicycle and pedestrian programs as part of the "Safe Routes to School Program." Partnering with SCDOT, local governments, parents, local law enforcement and educators, each school and community will develop a plan that encompasses both infrastructure and non-infrastructure components. One of the purposes outlined in the funding legislation for this program includes facilitating the planning, development, and implementation of projects and activities that will reduce traffic congestions, fuel consumption and air pollution in the vicinity of primary and middle schools. Selected schools receive up to \$200,00.00.	Anderson County - Wren elementary/Middle School was awarded the "Safe Routes to School" grant for the 2007 funding cycle. Spartanburg County - Lone Oak Elementary School and Pine Street Elementary School were both awarded the "Safe Routes to School" grant for the 2007 funding cycle.	2007 funding cycle Press release September 28, 2007	*All Pollutants	Anderson and Spartanburg counties		
BMW	Methane from landfill powers BMW plant	The BMW plant in Greer is getting more than 60 percent of its energy from the methane gas generated at a nearby Waste Management landfill. The operation, in cooperation with the Texas landfill firm Waste Management, captures the methane gas, which otherwise would escape into the atmosphere, and converts it to energy. Waste Management, which has gas-to-energy projects in more than 20 states, announced recently that it intends to create about 60 additional renewable energy facilities within five years — including two more in South Carolina. The two new plants will be located at landfills in Dorchester and Jasper counties. The BMW project and Waste Management's gas-to-energy plant in Kershaw County generate nearly 16 megawatts of electricity, or enough to power at least 15,000 homes for a year. The methane gas from the Spartanburg County landfill travels nine miles by pipeline to the BMW Manufacturing plant, where it fuels turbines that generate electricity for the facility. About 63 percent of the plant's energy comes from the landfill gas project. The methane used as a fuel saves the company at least \$1 million reduces emissions of carbon dioxide, a greenhouse gas, by about 60,000 tons annually.	September 26, 2007 News Article out of Greenville	*All Pollutants	Greenville, Spartanburg, Anderson		
Upstate stakeholder meeting	Met with business leaders and County employees to discuss continuing the effort initiated for Ozone EAC and expanding that to include PM mitigation measures.	The leaders of the upstate committee will continue to work on ozone and PM reduction measures.	September 28, 2007		Anderson, Greenville and Spartanburg		
Local Government Partnerships/Outreach Greenville County Council	Greenville County Council passed Resolution No. 1272 encouraging EPA to maintain the current NAAQS for ground-level ozone and to continue the early action compact program. The resolution requested EPA to support local governments in their attempt to improve air quality at the local level and also reaffirmed Greenville County Council's commitment to improving air quality in the upstate region. The resolution also encourages the citizens and businesses of Greenville County to act in manner that will preserve and protect the quality of the air in the community. The resolution was submitted to the EPA Docket in response to the proposed 8-hour Ozone standard.	Resolution passed and submitted as comments to the proposed 8-hour Ozone Standard.	October 2, 2007		Greenville and other counties within the Upstate Region		
Student Renewable Energy Conference	The fourth annual Student Renewable Energy Conference conference took place February 16-18, 2007 at Clemson University in Clemson, SC	Students and community members from across the Southeast joined in Clemson, SC February 16-18 to help build the youth movement for clean, just energy here in the Southeast. The SSREC brought together hundreds of students from across the region for a weekend of education, inspiration, trainings, networking, fun and more.	2007	N/A	N/A	N/A	Anderson, Greenville and Spartanburg
U.S. Green Building Council South Carolina Chapter	The newly formed Upstate branch of the U.S. Green Building Council's South Carolina Chapter aims to lead the charge in educating people on green building and sustainable design.	The organization's first official meeting, held April 19, 2007, drew nearly 40 participants.	April 19, 2007				Anderson, Greenville and Spartanburg
"Energy Partner of the Year" Award	The U.S. Environmental Protection Agency has named BMW Manufacturing and its partner, Durr Systems., as the Landfill Methane Outreach Program "Energy Partner of the Year."	Currently, 63 percent of BMW Manufacturing's energy is provided by the renewable resource, saving the company at least \$1 million a year. It also reduces emissions of carbon dioxide, a greenhouse gas, by about 60,000 tons and provides enough energy to heat 15,000 homes a year.	January 2007				
Land Conservation	The mission of the non-profit land trust Upstate Forever is to establish agreements with private landowners to preserve rural farmland	In 2006, Upstate Forever signed 15 land-protection agreements covering more than 3,005 acres. The organization now has 39 agreements protecting about 8,000 acres throughout the Upstate.	2006	N/A	N/A	N/A	Upstate

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Fleet Biodiesel Use	Biodiesel fuel is now used in all the diesel-operated equipment used by the city.	The city switched to the alternative fuel late last year. Several other cities, including Greenville and Rock Hill, also have converted to the fuel, which is a blend of petroleum-based diesel and a by-product of domestic soybean oils. The city is using B20 — a mixture of 20 percent biodiesel and 80 percent petroleum-based diesel. Biodiesel is being used in all the city's diesel vehicles, except fire apparatus. The city uses between 8,000 and 10,000 gallons of biodiesel per month. All 5 Anderson County School Districts are fueling all diesel vehicles with "ultra-low sulfur B20" bio-diesel fuel. The City of Anderson is fueling all diesel vehicles with "ultra-low sulfur B20" diesel fuel.	2006	N/A	N/A	N/A	Greenville, Anderson
BMW "Energy Partner of the Year" Award	The U.S. Environmental Protection Agency has named BMW Manufacturing and its partner, Durr Systems., as the Landfill Methane Outreach Program "Energy Partner of the Year."	The award, presented Wednesday in Baltimore, recognized the two companies for one of the most ambitious landfill gas-to-energy projects in North America -- recycling methane from Palmetto Landfill in Spartanburg County to provide energy to BMW's paint shop. Durr built the paint shop. Before the paint shop was converted to use methane last year, BMW's Greer plant used methane for other power needs. Currently, 63 percent of BMW Manufacturing's energy is provided by the renewable resource, saving the company at least \$1 million a year. It also reduces emissions of carbon dioxide, a greenhouse gas, by about 60,000 tons and provides enough energy to heat 15,000 homes a year."	2007	N/A	N/A	N/A	Greenville, Spartanburg, Anderson
Tree City USA	Tree City USA encourages municipalities and areas to have strong urban forestry programs. The Tree City USA program is sponsored by The National Arbor Day Foundation in cooperation with the USDA Forest Service and the National Association of State Foresters.	Anderson County has been a Tree City for 3 years. Spartanburg has been a Tree City for 25 years. Greenville has been a Tree City for 24 years. Members of the West Greenville Neighborhood Association will be planting trees Friday as part of a revitalization project, said association president Vardrey Fleming. The trees will be planted in a new park, which is located at the corner of Queen and Rochester Streets. Tree expert Jimmy Walters of the S.C. Forestry Commission will teach about the trees and the proper way to plant.	through 2007				Anderson, Greenville and Spartanburg
Truck Stop Electrification Project	51 spaces outfitted with Idle Aire Technology	In process of identifying additional truck stops that are willing to install technology.	February 2005	1,836 tons/year	36.21 tons/year	State Grant	CO reductions 15.3 tons/year December 2004 EAC SIP - Appendix 16 December 2004 Progress Report June 2005 Progress Report
School Bus Retrofit Project	Approximately 47 diesel buses will be retrofitted particulate filters during 2006. (additional reductions of PM are also expeted)	Seeking funding to equip additional buses with technology.	2006 and beyond	391 lbs/year	N/A	N/A	CO reductions 2,737 lbs/year December 2004 EAC SIP - Appendix 16
Gas Can Exchange Project	On September 10, 2005, Anderson County in conjunction with SC DHEC and several corporate sponsors such as Michelin, Wal-Mart and Sonic, held a gas can exchange for the residents of Anderson County. Anderson County intends to periodically hold these events throughout the county to promote the use of ventless gas cans.	83 gas cans that vents VOC into the atmosphere were traded in for ventless gas cans. Seeking additional funds to hold additional exchanges in 2006.	2005	355 lbs/year	N/A	N/A	
News release, PSA, and web page awareness tools	Comments #7 and 8	All news releases concerning items relating to the Early Action Compact are released on the county website and sent to local news outlets	2006-2007	N/A	N/A	N/A	http://andersoncountysc.org

DECEMBER 2007 PROGRESS REPORT FOR ANDERSON COUNTY

Based on stakeholder consultation and taking into consideration resource and political constrains, the following control measures are under consideration pending modeling that demonstrates compliance in 2007 by SCDHEC. It is anticipated these measures under consideration will assist the County of Anderson, Greenville, Spartanburg, South Carolina, in achieving and/or maintaining the 8-hour ozone standard by 2007.

Air Quality Awareness and Improvement Policy	Memorandum sent to all County departments for the purpose of establishing certain principles that will guide the recurring activities of County government. Purpose of policy is to establish certain principles that will guide the recurring activities of Anderson County government. 1. Encourage employee car-pooling opportunities, when feasible, especially when travel in County vehicles is involved. 2. Purchase the lowest-emission vehicles practical to meet County needs. This may include the purchase of Tier II compliant vehicles, alternative fueled vehicles or hybrids. It is the goal of this county, that where practicable, to purchase hybrid or AFV's when conditions warrant and allow. 3. Ensure that all County vehicles and equipment are operating according to the manufacturer's specifications. 4. Restrict vehicle idling to no more than 5 minutes. Exceptions include emergency vehicles, traffic/weather conditions, and vehicles being repaired, maintained, or inspected. 5. Where feasible and practicable, restrict mowing and use of gas powered lawn equipment on County property on Ozone Action Days. 6. Restrict all County-sponsored outdoor burning on Ozone Action Days. 7. Practice energy conservation in all County facilities. The County will set a goal of reducing energy use by encouraging 8. Include environmental considerations in purchasing decisions for goods and services. An example of such would be to 9. Departments are encouraged to Refuel vehicles where possible at times of the day that will have the least impact on O. SEE Comment #6	County staff is currently implementing portions of the memo applicable to each division.	Effective immediately - October 12, 2004	N/A	N/A	N/A	The commitment to address these activities has been assured by the County Administrator by establishing the Air Quality Awareness and Improvement Policy for County Government. 1. See comment #6.
1. Support SCDHEC statewide efforts to reduce ozone levels.	Stakeholder group to support and participate in modeling efforts. Develop stakeholder group to participate in development of regulations (NOx - BACT (Best Available Control Technology Economically Achievable), restrict open burning).	December 2004 EAC SIP did include Appendix 16 - 1. SC61-62.2 "Prohibition of Open Burning" regulation with reductions for 2007 calendar year - reductions expected during the ozone season for residential construction waste 2. SC61-62.5, Std. 5.2 "Control of Oxides of Nitrogen) reduction amount for both existing and new sources combined across Anderson, Greenville, Spartanburg for 2007 calendar year June 24, 2004 - Participated in Upstate Air Quality Steering Committee meeting held at BMW. See Comment #4.	1. June 25, 2004 2. June 25, 2004	28.04 tons/season N/A	5.90 tons/season 234.1 tons/yr	N/A	See Comments #1, #2, #3, #6
2. Designate an Ozone Action Coordinator	Designate a staff person in each County who will be responsible for coordination of counties ozone programs	Current Air Quality Contacts are Burriss Nelson and Greg Smith.	March 2003	N/A	N/A	N/A	
3. Seek low sulfur fuels as early as possible	Continue to coordinate with representatives of Colonial and Plantation pipelines, refiners, and State representatives to ensure that the upstate has the opportunity to receive low sulfur fuels at the earliest date as they can be provided.	We continue to coordinate with the aforementioned entities, and eagerly await the date at which we will receive low-sulfur fuels. The Environmental Protection Agency's ultra-low sulfur diesel fuel requirements went into effect on June 1, 2006. Ultra-low sulfur diesel fuel will be available at retail stations beginning summer 2006. Anderson County started using low sulfur fuels (less than 15 parts per million) in all of its diesel equipment starting September 1, 2006.	June 1, 2006	N/A	N/A	N/A	

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
4. Design and implement congestion management and Intelligent Transportation System (ITS) measures.	Implement congestion management projects: intersection and signalization improvements to alleviate traffic congestion, therefore, reducing emissions from idling vehicles; Implement Intelligent Traffic Systems such as automated advisory/alert messages to drivers on interstate highways. For example: advise motorist about an accident ahead and the use of alternate routes to avoid congestion, which minimize emissions from idle vehicles. Encourage and support improved traffic operational planning, engineering and maintenance for existing and future transportation infrastructure.	County in the process of implementing congestion management plan on several major thoroughfares; cameras and variable message boards have been installed on I-85 through Anderson, Greenville and Spartanburg Counties. Anderson County Council, at its December 6, 2005 meeting, passed a resolution creating a committee to investigate capital funding projects for roads and bridges; within that commission, they will also be looking at funding for projects to relieve congestion on county roads and the addition of bike lanes on county roads. Report will be completed by July 2006. In March 2006, Anderson County, in conjunction with the City of Anderson, completed a traffic synchronization project on East Greenville Street, one of the busiest streets in Anderson. The synchronization will reduce the idling time of vehicles along East Greenville Street, reducing the amount of VOCs entering the atmosphere. The Greenville-Pickens Area Transportation Study	Implementation began in 2005. Synchronization project was completed March 2006. • SCDOT is installing an ITS billboard between mile marker 37 and 38 in Anderson County. Installation should be completed in early 2007.	N/A	N/A	N/A	
5. Use of hybrid vehicles	Encourage people, public and private organizations to purchase hybrid vehicles as they replace vehicles/fleet Encourage that 10% of public agencies fleet have hybrid vehicles (use of hybrid vehicles does not require changes in infrastructure for dispensing fuel). Encourage public agencies to require purchasing hybrid electric vehicles (HEVs) through the State vehicle contract.	June 2005 Progress Report - countywide resolution to purchase cars alternatively fueled or hybrid vehicles. On June 1, 2006 the Governor signed the H*4312(Rat #0371) General Bill. Act 312, R371, H4312 Bill may be viewed at http://www.scstatehouse.net/sess116_2005-2006/bills/4312.htm and its caption reads: An act to amend the Code of Laws of South Carolina, 1976, by adding Section 12-6-3377 so as to allow a state income tax credit equal to twenty percent of certain new hybrid, fuel cell, alternative fuel, or lean burn technology motor vehicle. Credits allowed against a taxpayer's federal income tax liability.	Completed in 2005 and continuing. County will purchase hybrid vehicles as they become feasible to the job performance.	N/A	N/A	N/A	See measure 12 for additional information.
		• Anderson County Fleet Services is studying the feasibility of adding electric powered vehicles for use in high traffic congestion areas of the county, generally around the City of Anderson. Purchases will be proposed in the '08-'09 budget. • The Anderson County fleet currently is operating 19 hybrid/AF Vehicles. Hybrid and/or alternative fuel vehicles are continually added to the fleet as availability and need dictate.					
6. Use higher efficiency engines for school buses	Require purchase of high efficiency engines for school buses as they are replaced. In South Carolina, the SC Department of Education is in charge of maintenance of school buses. DHEC is working with SC Department of Education to obtain grants from EPA. Promote an Adopt-A-School-Bus Program. Endorse a statewide recommendation for the State to take the lead	In 2006, approximately 47 diesel buses will be retrofitted with particulate filters. The school buses may not be retrofitted until 2007 when ultra-low sulfur diesel is more widely available since the retrofitting technology being applied works best with this new fuel type. The South Carolina Department of Education (SDE) has been awarded a Clean School Bus USA Grant for \$499,099 to retrofit some buses in South Carolina with diesel oxidation catalysts and crankcase filters, replace some older buses and conduct a biodiesel pilot and an idle-reduction device pilot. State education superintendent Inez Tenenbaum signed an order on June 20, 2006 to buy 630 new school buses with roughly \$36 million appropriated by the Legislature. The benefits from these SDE funding sources will be distributed throughout the state. SDE is partnering with private companies and local school districts to provide specific funding for school bus retrofits and clean air programs. Since 2006 the Anderson County Schools Transportation Department (all school districts) has placed 43 "new generation" diesel bus in service.	Completed. Implementation began in 2006 and is continuing.	N/A	N/A	N/A	Reductions accounted for under School Bus Retrofit Project
7.a. Develop incentive programs and opportunity for citizens to choose alternative transportation modes. Establish intermodal connections with an emphasis on mass transit	WALKING/BIKING Encourage local government to increase pedestrian/bicycle infrastructure spending (the Upstate spends 2 cents per person compared to SC spending 22 cents per person). Establish safer bike routes with better signs marking lanes and routes. Increase highway funding for bike paths, walking or mass transit including high-speed rail. Support the federal transportation enhancement program. Install bike racks on all transit vehicles to encourage intermodal transportation. New buses purchased through the state's bus purchase program will have bike racks. PARK and RIDE Establish mass transportation between a plant and a park-and-ride site. CARPOOLING Work with local government to offer incentives employees to car pool. MASS TRANSIT Offer a free trolley service running in a loop in downtown areas and nearby restaurants, especially during lunch hours; Research past feasibility studies on free downtown shuttles. Potential for sponsorship with local area restaurants and businesses for a lunch time shuttle could defer the operational costs of the endeavor. Support mass transit (transportation choices and alternatives): While the only local mass transit choice that is currently available is the transit bus, example of future options such as bus rapid transit, commuter passenger service offered by trains on existing rail systems, a diesel multiple unit or "light rail" should be supported.	• Clemson Area Transit (CAT) bus lines include the Anderson 4U Route with service to Tri-County Tech and the City of Anderson. This route connects with Electric City Transit. The CAT buses are equipped with bicycle racks for easier transport of bicyclists within the various CAT bus routes. The CAT bus system is a free option, and Electric City Transit offers free rides during the Christmas holiday season (late November-December.) • Anderson County has attempted to work with owners of vacant stores for use of their parking lot, and with industries to shuttle employees; however each owner does not wish for the potential liability in their parking lot. Industries seem amenable, no definitive answer was given. • The County is currently working with the City of Anderson to possibly reserve parking spaces in the downtown lots for carpooling people. • In October 2006, the Clemson Area Transit, a free bus service serving Anderson and Pickens Counties, expanded its service area to Oconee County, providing free service to those people traveling to Anderson County for school and recreation purposes.	Completed in 2005 and continuing.	N/A	N/A	N/A	
7.b. Offer free or reduced transportation cost on high ozone days.	MASS TRANSIT: Implement a coordinated high ozone day alert action plan to include public notification and free or reduced ozone fares from the transportation providers.	As funding is acquired for the incentives, the programs will be implemented. • Since 2002 Clemson Area Transit has provided a free shuttle system connecting Anderson University, Tri-County Technical College, Southern Wesleyan University and Clemson University in addition to the City of Clemson, the City of Anderson, and the Towns of Central and Pendleton. Clemson Area Transit has the largest ridership for a fare-free bus line in the United States. It is also South Carolina's most frequently used transit system. The fare-free system is funded through federal grants and matching funds from the city and University. CAT has the most modern fleet of buses east of the Mississippi River. • Electric City Transit provides discount fares to senior citizens, the disabled, Medicare card holders, students, and children (free). • Since free and discount fares are already available, when county funding is acquired for the incentives, the programs will be further implemented or expanded. • At its May 11, 2006 meeting, business leaders in the Air Quality Advisory Committee recommended contacting the Chamber of Commerce and request assistance	Completed in 2005 and continuing.	N/A	N/A	N/A	

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7.c. Reduce vehicle miles traveled by developing efficient user-friendly transit systems.	Integrate transportation planning with land use planning so public transit can make a comprehensive contribution to economic development and mobility. Remove local barriers to densification in downtowns, infill areas, and transit stations and corridors.	The Clemson Area Transit (CAT) system coordinates with the Electric City Transit (ECT) system to provide free or low cost public transportation to Anderson and Pendleton, SC. • CAT buses are equipped with wheelchair ramps and bicycle racks. CAT also provides personal escorts by appointment to aid new passengers in finding their way around and learning to read the bus map. CAT has partnered with C.U. Parking Services to coordinate a shuttle service from the Park and Ride lot. • All ECT buses are permitted to leave their regular route at the request of riders who live outside the regular routes. • In September 2006, Anderson County officials asked state officials for \$44,000 to look at whether the area's transit system should be expanded to offer residents more options to get to work. A \$40,000 grant could pay for the feasibility study. Officials from local transit providers and social service agencies have identified that available transportation as a "primary barrier" to finding a job. Creating a more comprehensive transit system will be the first step towards a more regional transit authority.	Some actions have been completed prior to 2006. Implementation of additional actions will take place as funding is acquired.	N/A	N/A	N/A	
		• October 26, 2007 Anderson County officials met with South Carolina Department of Transportation officials to discuss and find funding for "light rail" mass transit. The light rail project aims to provide passenger service between Anderson and the Clemson University campus. This project is listed for funding in the State Transportation Improvement Plan ("STIP") as well as the local Anderson Area Transportation Study ("ANATS"). • October 29, 2007 Anderson County Officials met with Georgia Rail Consultants, a mass transit consulting firm. Georgia Rail is providing substantial information about rider-ship, cost savings and improved air quality benefits.					
8. Review and update air emission inventory for the Upstate	Ensure all industrial sources still operating. Review industrial sources for plant closures. Identify major sources of NOx Map the locations of point sources (10% of point sources cannot be found). Map the specific locations and the area sources where coal is burned.	Completed. This information was included in the December 10, 2003 Early Action Compact Milestone on pages 20 through 37.	Completed in 2003	N/A	N/A	N/A	SCDHEC
9. Support SCDHEC in evaluating and seeking reductions from major sources based on modeling	Coordinate with Duke Power to determine what NOx reductions are planned for the Lee Steam Plant Coordinate with the Williams Company to determine what NOx reductions are planned for the TRANSCO Pipeline. Support NOx reduction strategies in the State Implementation Plan Develop an Early Reduction Program with incentives for industrial facility (Tier Two Type emissions NOx sources)	See info on Duke Power included in Appendix 16 of EAC SIP (link in Comment #6). June 2004: • Transcontinental Gas Pipe Line Corporation (Transco) Station 140, Moore, SC; Operating Permit 2060-0179. Transco has 14 natural gas fired internal combustion (IC) engines that collectively accounted for 3,822 tons of ozone season NOx emissions during 1997. Transco has submitted a construction permit application to put on NOx controls that will result only 1,261 tons of ozone season NOx emissions. The permit was approved on April 27, 2004. • The Williams Company has received DHEC permits to replace outdated "uncontrolled" compressors on the pipeline located in Duncan. Replacement of the compressors began in late 2004 and continued until late 2005. This will result in a significant NOx reduction for the Upstate. • NOx reduction at the Duke Power Lee Steam Plant: Coal fired Unit #2 is now operating with the new NOx burners and final manufacture set up for acceptance is to be conducted in June 2006. Monitoring data indicates that the burner should at least meet the 0.23 #NOx/MMBTU's. • Unit #2 will operate this entire NOx season with the Low NOx burners. Coal fired Unit #1 will continue to operate with the existing burners. • Both units will complete final construction permit testing during June, July and August 2006.	Implementation began in 2004 and was completed May 2006.	N/A	40%	N/A	
10. Develop a program to offer to purchase or repair smoking vehicles (known as cash for clunkers).	Use funds generated from a license plate sales, registration fees, or license plate tax program to buy or repair high emitting vehicles from individuals. Purchase such vehicles from non-profit groups such as the Kidney Foundation, Goodwill, Salvation Army when they have been donated as charitable gifts. Consider accelerated vehicle retirement (scrapage) programs to encourage vehicle owners to voluntarily retire their vehicles sooner than they would have otherwise.	• During its August 5, 2003, the AQ Staff Advisory Committee discussed this strategy. A high emission vehicle buyback or repair program appears to be cost effective for VOC emissions, but is less clear for NOx emissions. It is hard to quantify the success rate of the program in the various states the program has been implemented, but the program seems to make intuitive sense. This type of program will become increasingly more important as the new vehicle pollution control systems increase the gap between the new vehicle's emissions and the "smoking" vehicle's emissions. Recommendation: funding the high emission vehicle buyback or repair program as a pilot program with a set yearly target for the number of vehicles that will be either repaired or scrapped. A follow-up study on this pilot program would need to be implemented to determine the impact on emissions (ozone) for the upstate. • In the summer 2006, staff from the Air Quality Staff Advisory Committee will meet with Goodwill Industries, Salvation Army and Kidney Foundation representatives to discuss alternatives to re-selling clunker vehicles donated to these organizations. • As funding is acquired for the incentives, the programs will be implemented.	Implementation began in 2003. Completion of this measure will depend on discussions with the non-profit organizations.	N/A	N/A	Use funds from license plate sales	
11. Ban open burning of on-site commercial clearing debris during ozone season (April - October)	Use SCDHEC model to determine the most effective method to ban open burning. Discuss modeling results with all local governments to consider adoption.	• At the November 2005 Air Quality Steering Committee meeting, the Committee directed staff to coordinate with local governments to enforce DHEC's burning ban year-round. • DHEC encourages Anderson, Greenville, and Spartanburg to actively notify all residents that the statewide ban is now in force and violations are punishable by law. • A DHEC press release was issued to the upstate on November 8, 2005 Anderson County Council heard a presentation from County Fire Chief Gibson, including supporting information from Brian Barnes from DHEC, about fire safety and the impact of open burning on particulate matter air pollution. The task force began working to plan a public awareness outreach effort to start on January 22. Task Force meeting scheduled to report results of week-long outreach campaign. Report will be sent to Anderson County Council for review. Plans are to use this information to plan for future open burning awareness campaigns.	Completed on June 25, 2004 with the passage of regulation SC 61-62.2 "Prohibition of Open Burning".	N/A	N/A	N/A	
	An Ordinance to Regulate Open Burning in the Town of Pendleton	The Town of Pendleton passed Ordinance number 07-03 "An Ordinance to Regulate Open Burning in the Town of Pendleton" which bans open burning within the Town of Pendleton on April 2, 2007.	April 7, 2007				

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		• Three "Call before you burn" billboards are dotting the landscape across Anderson County thanks to the Illegal Outdoor Burning Prevention Task Force. County Councilman Michael Thompson, District 5, initiated the Taskforce in September 2006 to mitigate the burning of household trash and to educate residents about out door burning. SCDHEC and Duke Power grant funds were used to fund this public awareness project.	2007				
12. Create incentives for the purchase of high efficiency and low emissions vehicles.	Offer tax credits for vehicles with high efficiency gas consumption or low emissions. Offer tax credits for low mileage vehicles instead of high mileage vehicles	• Developing draft bill to offer reduced tax incentives for those purchasing low emitting vehicles. • A bill titled; An act concerning the promotion Of alternative use fuel, and hybrid propulsion System For transportation purposes was submitted to the SC House of representatives in January 2005. • On June 1, 2006 the Governor signed the H*4312(Rat #0371) General Bill. Act 312, R371, H4312 Bill may be viewed at http://www.scstatehouse.net/sess116_2005-2006/bills/4312.htm and its caption reads: AN ACT TO AMEND THE CODE OF LAWS OF SOUTH CAROLINA, 1976, BY ADDING SECTION 12-6-3377 SO AS TO ALLOW A STATE INCOME TAX CREDIT EQUAL TO TWENTY PERCENT OF CERTAIN NEW HYBRID, FUEL CELL, ALTERNATIVE FUEL, OR LEAN BURN TECHNOLOGY MOTOR VEHICLE CREDITS ALLOWED AGAINST A TAXPAYER'S FEDERAL INCOME TAX LIABILITY.	Implementation began in 2005 and was completed June 1, 2006.	N/A	N/A	N/A	
****Develop air quality best management practices (BMPs)_ for construction sites	Develop a generic list of BMPs Develop management practices for construction debris. Develop management practices for emissions from construction vehicles. Develop management practices for traffic controls during construction.			N/A	N/A	N/A	not included in March 2004 submittal was included in December 2003....
13. Use land-use and transportation planning to improve air quality	Include air quality measures as a part of the land-use and transportation planning process.	• Highlights of the Anderson County Land Use and Development Standards include items that develop standards with respect to landscaping and open space, promote public health and safety through the reduction of noise pollution, storm water runoff and air pollution. Also included are development standards with "Greenways" defined which link residential areas with other open space areas. These Greenways may contain bicycle paths, footpaths, and bridle paths. Additionally, intensity standards (designed principally to regulate land use in accordance with the design function and carrying capacity of the road on which it is located) are being developed. • In the review process, Transportation staff does employ traffic thresholds that require various levels of congestion mitigation to reduce idling times, and they have been using the internal thresholds for two years. However, these thresholds are not defined in the ordinance, and so the review is intended as guidance for future use to show where potential problems are most likely to occur in the future.	Completed in 2004.	N/A	N/A	N/A	
14. Implement a program to encourage use of green power.	Capture emissions from landfills to produce green power, e.g., BMW is utilizing Palmetto Landfill emissions to produce energy for its plant. Implement a Purchase Green Power program when available. Green power is electricity generated by renewable resources like solar, wind, and even decomposing garbage in selected landfills. These resources are replenished naturally and minimize harm to the environment.	In 2005, Blue Ridge Electric Cooperative in Anderson County has begun offering the purchase of "Green Power" to its members. The Green Power is Generated by Santee Cooper, who is the source of power for all of the electric cooperatives in South Carolina. Santee Cooper is constructing a Green Power station at the Anderson Regional Landfill that will enter commercial operation in 2006.	Completed in 2005 and continuing.	N/A	N/A	N/A	Please go to http://www.santeecooper.com/greenpower/newsroom/newsletters/gpnews_fall2005.pdf for the Fall newsletter and http://www.santeecooper.com/greenpower/newsroom/letters.html for the "Green Power" newsletter.
15. Promote route efficiency for delivery vehicles, trash collection etc.	Encourage business to consolidate distribution and collection routes to improve efficiency and reduce emissions from their fleets. Maximize route efficiency for public services such as garbage collection, delivery vehicles, and other vehicle trips to reduce fuel usage.	• The Solid Waste Division, since 2003, has encouraged and continues to encourage all its trash haulers to use the most direct route to pick up trash. This will reduce driving time and reduce emissions. • Delivery companies currently use GPS mapping programs to map the most cost effective route to save gasoline. The local public transportation system have designated routes, but they take steps to reduce idling time of the buses, such as reducing speeds and an 2 minute tardy schedule to make sure no one is left behind at a bus stop. They have been implementing these gas saver items since 2000.	Completed in 2003 and continuing.	N/A	N/A	N/A	
16. Establish a clean air partnership with business and industry.	Encourage and coordinate alternate work schedules such as staggered work hours for business, industry and local governments. Establish park and ride lots serving perimeter counties along major corridors. Make the public aware of the park-and-ride concept: media could assist in publicizing which programs are available. Encourage carpooling/vanpooling as an option where employees living in the same area agree to ride to work together rather than to drive their individual vehicle to work. Consider parking facility controls that can include employers offering a tax-free transit/vanpool benefits and which limit the amount of parking and encourage carpooling, mass transit, etc. Encourage telecommuting. Adopt a Bus Program. Develop funding to be used for matching grants fund for several EAP strategies. Develop a core competency and assisting the Upstate EAP group in writing grant proposal.	• In 2004 staffs of Greenville County Planning Commission, Greenville Transit Authority and Greater Greenville Chamber of Commerce have begun joining effort to develop a feasibility study for Park-n-Ride program and/or Ride-Share program for Greenville County. Information will be shared with Anderson and Spartanburg counties. • Michelin North America, on November 29, 2005 announced that their two Anderson County plants have qualified for membership in the National Environmental Performance Track program. They are among 400 facilities nationwide that have met the stringent requirements. Michelin is also investing \$80 million to expand and upgrade the two plants to reduce environmental impacts within Anderson County. • Duke Power has agreed to reduce the idling time for their vehicles during ozone season. During ozone season, all vehicles will not idle for more than 30 seconds before the vehicle is shut down. With the 88 diesel trucks and 265 gasoline trucks in use in Anderson County, that equates to a reduction of 530 pounds VOC reduced and 765 pounds NOx reduced during ozone season. • Michelin, Wal-Mart and Sonic were corporate sponsors for the gas can exchange event. • In the November 2005, the Air Quality Steering Committee directed staff to begin a study. • In early 2006, Associated Fuel Pump Systems Corporation (AFCO) announced that • Businesses and industry have established its own production schedule, based upon	Completed in 2005 but progress and improvements will continue on this strategy.	530 lbs/year	765 lbs/year	N/A	http://greenvilleonline.com/apps/pbcs.dll/article?AID=/20051129/BUSINESS/511290340

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17. Establish an active public awareness campaign.	Develop an editorial board to discuss air quality issues and a development of a relationship with media. Use alert messages year round, not only during ozone season; Utilize public service announcement, newspapers, weather channels, and other media outlets to notify citizens of high ozone days; Utilize TV Channels to issue high ozone alerts using the crawl bar at bottom of TV screens. Encourage health organizations to sponsor ozone alerts in media. Enhance ozone awareness (Outreach-communication): assign a local agency to develop and implement a program to educate and motivate individuals to take actions to minimize ozone pollution. Includes a focused distribution of educational materials, dissemination of SCDHEC ground-level ozone forecast, increased media alerts to specific audiences, and includes action oriented components (i.e. ridesharing, telecommuting, etc.). Develop a campaign to encourage things such as refueling vehicles during evenings, not topping off tanks when refueling, using lawnmowers during evenings instead of during high ozone hours, using of electric lawn mowers. Develop a license plate program to generate revenue to implement the public awareness campaign. Develop awareness program on tax savings for purchasing high efficiency vehicles.	- Anderson County held a gas can exchange program on September 10, 2005, taking in 83 old cans. - Anderson County Staff sent out a news release (03/28/05) on Ground-level Ozone (GLO) Awareness Week and promoted this week on a local radio station, WRIX 103.1 FM. An article on GLO was also placed on their county webpage: www.andersoncountysc.org. - Anderson County received and distributed 200 Ozone and Your Health brochures. June 2006: An Ozone-No-zone seminar was held as a local education program teaching how ground level ozone affects our daily lives. 4-U Transit system connecting Anderson, Pendleton, Clemson and Central; - Anderson's Electric City Transit "FARE Free" program; light rail project; - Tree legacy program, Tree I.D. program; Arbor Day plantings; City of Iva continual member of "Tree City USA" Ozone Awareness Week; - Earth camp, offered at the Anderson Co. Recycling Education Center covered Air Quality, Recycling, and Trees. - July 31, 2006, Greenville News published "More air woes could blow Upstate's way." - July 16, 2006, Greenville News published "Emissions levels suit creates cloud of uncertainty for industry."	Completed in 2005. Education and outreach are continuing.	N/A	N/A	N/A	
		Anderson County continues to keep its citizens aware of the importance of having good air quality. Here is a list of groups receiving air quality awareness information: In September, October and November '07 Anderson County Staff continue with the awareness campaign, speaking before public and private groups that included: Anderson County Board of Education, Anderson School District 3 School Board, Anderson County School District 5 School Board, Anderson County Council, Anderson County Economic Development Advisory Board, Anderson County Economic Development Partnership Board, Anderson County Planning Commission, Anderson Area Chamber of Commerce Executive Committee, Anderson Area Chamber of Commerce Environmental and Public Health Committee.	2007				
18. Promote research in energy efficiency at local universities, industries, energy companies, federal government, and other institutions that improve air quality.	Establish programs to research energy efficiencies at local universities, e.g., Institute for Energy Studies at Clemson University. Encourage business and industry to utilize the research from these programs to make the best decision concerning the purchase or upgrade of furnaces and boilers.	- Members of the Air Quality Staff Advisory Committee met with staff from the SC Institute for Energy Studies (SCIES) from Clemson University in late summer 2003. As a result, researchers from SCIES made a presentation to the Committee on November 18, 2003. The South Carolina Institute for Energy Studies (SCIES) based at Clemson University is a state-chartered research and development organization established in 1981. Its objectives are to promote energy research and development in and for the state; to transfer energy technology developed by others to South Carolina applications; to contribute to national energy issues in areas of excellence; and to promote statewide energy-education activities. (Source: http://www.clemson.edu/scies/AboutSCIES.htm). Researchers from SCIES became members of the Air Quality Staff Advisory Committee mailing list to transfer knowledge and latest undertakings on these efforts. - ALTERNATIVE FUELS: In 2005, Clemson University Chemical engineering professor Mark C. Thies received an \$856,000 award from the Department of Energy (DOE) to develop more efficient processes for the centralized production of hydrogen by splitting water. The award was	Completed November 2003 but will continue monitoring progress of ongoing research.	N/A	N/A	N/A	
19. Use of alternate fuels.	Direct local Planning Commissions to identify areas where alternative fuels will be best suited. Encourage the use of alternate fuels; Assist with establishing alternative fuel infrastructure for private sector clean fuel fleets. Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternate fuels include bio-diesel, electricity, ethanol, hydrogen, liquefied petroleum gas, methanol, and natural gas. Encourage a clean-fuel fleet program for centrally fueled fleets of more than 10 vehicles. Anderson county owns 37 alternative fuel vehicles and purchased 1,520 gallons of biodiesel in 2004.	- There were 1,520 gallons of biodiesel purchased in 2004 in Anderson County. - Currently there are no ethanol refueling facilities in Anderson County, but plans call for the construction of one by the end of 2005. - There is currently one Spinx station that offers Ethanol 85% fuel in Anderson County. There are 5 other Ethanol 85% stations and 5 biodiesel stations within a 25 mile radius of downtown Anderson. Stations can be located using the U.S. Department of Energy Alternative Fuels Data Center Website at http://www.eere.energy.gov/afdc/infrastructure/locator.html - ALTERNATE FUELS: In 2005, Clemson University Professor James G. Goodwin, Jr., chair of the Clemson's chemical and biomolecular engineering department, received a DOE grant for energy research through DOE's State Technologies Advancement Collaborative. Goodwin's work focuses on the performance of iron-based bimetallic catalysts that are crucial to synthesis of clean fuels, additives and lubricants derived from coal and biomass gasification. Clemson will lead a partnership that includes Louisiana State University, the S.C. State Energy Office, the Louisiana State Energy	Completed in 2005 and continuing.	N/A	N/A	N/A	

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20. Evaluate the use of High Occupancy Vehicle (HOV) lanes using existing lanes.	Evaluate use of HOV on three (3) lane interstate highways; Show the advantages of designating HOVs; Pass laws establishing regulations on HOVs lanes such as the threshold in the number of passengers (perhaps two) in the vehicle using HOVs lanes and time of day for the lane to be designated as HOV (rush hour). Pass laws authorizing issuance of tickets for violations of HOVs lanes regulations, i.e., one-passenger vehicles using HOV lanes on designated hours.	- During its August 5, 2003, the AQ Staff Advisory Committee discussed and evaluated the implementation of this strategy. The Committee concluded that "HOV lanes work best where an interstate or a limited access arterial lead directly to major employment centers, usually within a central business district (CBD). With the exception of I-385 leading to the Greenville CBD, Upstate interstates (especially I-85) generally link the cities of Anderson, Greenville, and Spartanburg via peripheral routes, not conducive to the addition of HOV lanes. In addition, inter-county work trends do not show major volumes that would support car-pooled trips. Making the third lane of I-85 an HOV lane would severely increase congestion, emissions, and future accidents. The addition of new lanes would be cost prohibitive, and would not be allowed to revert to a single occupancy vehicle (SOV) status without reimbursement to the federal government." - Traffic engineers with SCDOT indicate that because traffic volumes on I-85 exceed 100,000 vehicles daily on the 3 lanes of the interstate it would be unwise to convert one of the three lanes to a HOV lane. The offsetting increase in congestion is	Completed in 2004.	N/A	N/A	N/A	
21. Modify speed limits for optimum fuel efficiency.	Direct SCDHEC and SCDOT to take the lead role. Direct Planning Commissions to assist SCDHEC in modeling.	The ANATS MPO was designated as urban by the US Census following the 2000 census and as a result speed limits on the interstate highways for the majority of Anderson County has been established at 60 mph. No further action is planned.	Completed in 2005.	N/A	N/A	N/A	
22. Develop process for evaluating and minimizing impact of major projects such as shopping centers, schools, and subdivisions.	Study impact of post construction traffic flow. Study impact of construction activities.	- If land is zoned for the intended use of the property, the traffic impacts are monitored via trip monitors that measure the traffic flow through a particular stretch of roadway to use in future planning of road widening projects. - If land is not zoned for the type of land use a developer wishes to use it for, he or she must petition the County Council to change the zoning for the new purpose. - Planning officials will also inform Council whether it approves of or disapproves of the zoning request, depending on the current population density, the current condition of the road, and the potential for increase in congestion. Although the Planning division can disapprove of a project, the developer can still make the request of the Council. - At the Council meeting, residents in the affected areas can also state their wishes for the development. The Council takes all this information under consideration, but ultimately it will be up to the Council to approve or deny. - These policies were enacted July 20, 1999, and revised April 15, 2003.	Completed in 2003.	N/A	N/A	N/A	
23. Community Schools to reduce vehicle miles traveled and encourage biking and walking for students and parents by encouraging smaller community-based schools that are integrated into neighborhoods	Eliminate minimum acreage requirements for school sites. Cap student populations per facilities. Require coordination among school boards and local governments to plan school sites and avoid conflicts with local planning goals. Favor restoration and construction of community-based small schools over new construction of remote mega schools.	- Anderson County encourages the State to modify the state law that dictates minimum acreage for schools, and also encourages the school districts to refurbish existing schools. If the school districts and the state ever decided this would become policy, Anderson County would not have any hesitation to wholeheartedly back all the school districts within the county in their efforts to create community schools to reduce traffic - The South Carolina School District Reorganization and Realignment Act of 2006 was introduced in the House on January 24, 2006 and is currently residing in the House Committee on Education and Public works. This bill states that the Education and Oversight Committee shall study and examine the optimum size, including both geographic area and student population. A copy of this bill is available online at http://www.scstatehouse.net/sess116_2005-2006/bills/4488.htm - Anderson County is awaiting the committee's recommendations and the manner in which they may take effect if this bill is enacted.	Completed in 2006 and continuing.	N/A	N/A	N/A	- SECTION 203 SCHOOL SITES 203.1 South Carolina Code Ann. § 59-23-250 (to be codified at Supp. 2003) eliminates minimum acreage requirements for public school sites. However, school districts must receive approval from the South Carolina Department of Education prior to property acquisition or additions on existing properties. 203.2 The State Department of Education encourages districts to consider acreage for school sites as established by the Council of Educational Facility Planners International (CEFPI).
Comments: 1. December 2004 - SC EAC SIP - activity not quantified for several reasons (first) in accordance with EAC Protocol, after all adopted Federal and State controls were accounted for in the modeling, it was determined that local controls were not necessary to demonstrate attainment of the 8-hour ozone standard. Measures were submitted by the local areas to show their continued support and commitment to the EAC process. (second) this activity is directionally sound and should provide air quality benefits and in some cases measurable results. The progress toward implementing this activity and the benefits derived will be documented as a part of the ongoing reporting requirements. 2. December 2003 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac.html - additional information provided by the county to include "findings", "advantages/disadvantages", "recommendations", "costs", etc.... 3. March 2004 - Local Early Action Plan - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0304.asp 4. June 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0604.asp 5. December 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_1204.asp 6. December 2004 - SC EAC SIP - Including Appendix 8 (Local Early Action Plans and the Air Quality Awareness and Improvement Policy) and Appendix 16 (County Level Emission Reductions and Descriptions for the Ozone EAC Areas) - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 7. April 20, 2005 - Correspondence to Mr. Palmer including clarifying supplemental information to the EAC SIP submittal of December 2004. - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 8. June 2005 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0605.asp							

December 2007 - Early Action Compact Progress Report
Anderson County

In an effort to keep your contact information updated we have provided the following information for our county:

	Name	Telephone	E-mail Address
Administrator/Manager	Joey R. Preston	(864) 260-4031	jpreston@andersoncountysc.org
EAC contact	Burriss Nelson	(864) 260-4231	bnelson@andersoncountysc.org
	Greg Smith	(864) 260-1001	gsmith@andersoncountysc.org

The following measures were not included in the South Carolina Early Action Compact SIP but are directionally sound and are anticipated to assist the Counties of Anderson, Greenville, Spartanburg, South Carolina, in achieving and/or maintaining the 8-hour ozone standard by 2007.

Anderson, Greenville, and Spartanburg Resolution

Anderson County, Greenville County, and Spartanburg County each entered into a resolution as a cooperative means of improving air quality to meet applicable state and federal air quality standards. By entering into this resolution, the Counties agreed to the following:

1. Each County will provide individuals to serve on a Steering Committee. The Steering Committee will strive to finalize an Upstate Air Quality Action Plan. The Air Quality Action Plan is intended to be a guide for implementation of proactive measures that will bring the Participating Counties into compliance with the 8-hour ozone standard consistent with DHEC's Early Action Plan. The Steering Committee will consist of no more than 21 voting members (7 from each county). Advisory (non-voting) members may be appointed up to a maximum of seven from each county.
2. Implementation costs of the air Quality Action Plan will be specified and quantified by the Steering Committee including ongoing direct and indirect costs that will be incurred by state and local governments, businesses, and individual taxpayers.
3. The Steering Committee will prepare a report detailing and quantifying the economic impact and costs associated with non-attainment status that have been incurred by the four geographic non-attainment areas most closely located near Anderson, Greenville and Spartanburg.
4. Once an Air Quality Action Plan is developed by the Steering Committee, each of the Participating Counties will consider adoption of the Air Quality Action Plan within the boundaries of the respective participating Counties consistent with the goals of the Early Action Program.

Air Quality Awareness and Improvement Policy

Memorandum sent to all County departments for the purpose of establishing certain principles that will guide the recurring activities of County government.

Purpose of policy is to establish certain principles that will guide the recurring activities of Anderson County government.

1. Encourage employee car-pooling opportunities, when feasible, especially when travel in County vehicles is involved.
2. Purchase the lowest-emission vehicles practical to meet County needs. This may include the purchase of Tier II compliant vehicles, alternative fueled vehicles or hybrids. It is the goal of this county, that where practicable, to purchase hybrid or AFV's when conditions warrant and allow.
3. Ensure that all County vehicles and equipment are operating according to the manufacturer's specifications.
4. Restrict vehicle idling to no more than 5 minutes. Exceptions include emergency vehicles, traffic/weather conditions, and vehicles being repaired, maintained, or inspected.
5. Where feasible and practicable, restrict mowing and use of gas powered lawn equipment on County property on Ozone Action Days.
6. Restrict all County-sponsored outdoor burning on Ozone Action Days.
7. Practice energy conservation in all County facilities. The County will set a goal of reducing energy use by encouraging the wise use of electronically powered equipment, HVAC systems and lighting.
8. Include environmental considerations in purchasing decisions for goods and services. An example of such would be to purchase Energy Star equipment.
9. Departments are encouraged to refuel vehicles where possible at times of the day that will have the least impact on ozone levels.

News release, PSA, and web page awareness tools

All news releases concerning items relating to the Early Action Compact are released on the county website and sent to local news outlets, as well as our county web site, www.andersoncountysc.org.

Truck Stop Electrification Project

Fifty-one spaced have been outfitted with Idle Aire Technology in Anderson County.

Based on stakeholder consultation and taking into consideration resource and political constraints, the following control measures are under consideration pending modeling that demonstrates compliance in 2007 by SCDHEC. It is anticipated these measures under consideration will assist the County of Anderson, Greenville, Spartanburg, South Carolina, in achieving and/or maintaining the 8-hour ozone standard by 2007.

ATTACHMENT 1

To South Carolina Department of Health and Environmental Control
Environmental Protection Administration
From: Anderson County, South Carolina
Date December, 2007

Reference: Summary of progress in implementing air quality strategies adopted by Anderson County and included in our Early Action Compact.

1. Support SCDHEC statewide efforts to reduce ozone levels **Priority A**

Description of Measure

Stakeholder group to support and participate in modeling efforts; Develop stakeholder group to participate in development of regulations (NOx-BACT (Best Available Control Technology), restrict open burning.

June 2004:

- Members of the Upstate Air Quality Staff Advisory Committee participated with SCDHEC in the development of new regulations aimed at reducing NOx emissions (June 2005 Progress Report).
- June 24, 2004 - Participated in Upstate Air Quality Steering Committee meeting held at BMW.
- The county supported SCDHEC in the promulgation of the following regulations: SC 61-62.2 "Prohibition of Open Burning" and SC 61-62.5 Std. 5.2 "Control of Oxides of Nitrogen. These regulations were published in the State Register on June 25, 2004. Estimated reductions are for both existing and new sources combined across Anderson, Greenville, and Spartanburg counties for the 2007 calendar year with additional reductions expected past 2007. The expected reductions from SC61-62.2 "Prohibition of Open Burning" are 13.73 tons per ozone season of NOx and 65.23 tons per ozone season of VOCs. In addition, 58.37 tons per year of PM will also be reduced. The expected reductions from SC 61-62.5 Std. 5.2 "Control of Oxides of Nitrogen is 234.1 tons per year of NOx.

June 2006:

- On May 11, 2006, the Upstate Air Quality Staff Advisory Committee recommended developing a business partnership plan to involve local industries in announcing ozone alerts and participating in ride share programs. Local Chambers of Commerce will be contacted by members of the Committee to request their assistance.

December 2007:

- In the September 28, 2007 Stakeholder meeting Anderson County in cooperation with SCDHEC has agreed and is providing a list locations for the placing of an Ozone monitor and a PM2.5 monitor. Anderson County has employed the services of Kestrel Horizons, a local, environmental engineering, consulting firm in finding a number of suitable sites for SCDHEC's site process.

Estimate of Emission Reductions (if available)

Equivalent to removing 359,500 cars from the road or 7190 tons of VOC. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed June 25, 2004.

Designate an Ozone Action Coordinator Priority A**Description of Measure**

Designate a staff person in each County who will be responsible for coordination of counties ozone programs.

March 2003:

- Anderson County will designate a staff person responsible for coordination of counties ozone programs. This measure was completed in March 2003.

June 2006:

- The Air Quality Contacts are Vic Carpenter and David Scott. SCDHEC maintains a current list of all EAC contacts and it is available on their website:
<http://www.scdhec.gov/eqc/baq/pubs/EAP/EACcontacts.xls>.

December 2007:

- Current Air Quality Contacts are Burriss Nelson and Greg Smith. SCDHEC maintains a current list of all EAC contacts and it is available on their website:
<http://www.scdhec.gov/eqc/baq/pubs/EAP/EACcontacts.xls>.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed March 2003 and continuing.

3. Seek low sulfur fuels as early as possible Priority A**Description of Measure**

Continue to coordinate with representatives of Colonial and Plantation pipelines, refiners, and State representatives to ensure that the upstate has the opportunity to receive low sulfur fuels at the earliest date as they can be provided.

A date has not been given to us by the aforementioned entities, but we continue to coordinate with the aforementioned entities, and eagerly await the date at which we will receive low-sulfur fuels.

December 2004:

- The Committee has continued to coordinate with representatives of Colonial and Plantation pipelines, refiners. Based upon an unofficial status report from Kay Clamp with the SC Petroleum Institute “. We are fortunate in the Southeast because we receive much of our supply from the Gulf Coast, and 60% of the nation's refineries are in that area. A simple translation of that fact is that we are not dependant on one or two refineries for our fuel, and reap the benefits of a large number of refineries producing lower sulfur fuels.
- The maximum allowable sulfur level in gasoline for 2004 is 350 ppm with a corporate average of 120 ppm. Plantation Pipeline tests product entering their pipeline from every refinery, every day...their average from this testing has been and is 150 ppm in gasoline. Colonial Pipeline is also testing product from its shippers; the average sulfur levels for gasoline batches entering their pipeline YTD 2004 are 145 ppm for fungible regular gasoline and 62 ppm for fungible premium. Colonial did note that these averages are not volume weighted; they did not, however, think there would much difference if it were volume weighted. They also assumed that the regular and premium are averaged together for compliance.
- Both of the pipelines had the lower sulfur fuel in their facilities by late 2003; the fuel was at terminals serving South Carolina by January 2004, and was "on the street" by March 1, 2004”.

June 2006:

- The Environmental Protection Agency’s ultra-low sulfur diesel fuel requirements went into effect on June 1, 2006. Ultra-low sulfur diesel fuel will be available at retail stations beginning summer 2006.

December 2006

- Anderson County started using low sulfur fuels (less than 15 parts per million) in all of its diesel equipment starting September 1, 2006.

December 2007:

- All 5 Anderson County School Districts are fueling all diesel vehicles with “ultra-low sulfur B20” bio-diesel fuel.
- Since 2006 the Anderson County Schools Transportation Department (all school districts) has placed 43 ‘new generation” diesel bus in service.
- The City of Anderson is fueling all diesel vehicles with “ultra-low sulfur B20” diesel fuel.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Using the EPA’s Diesel Emission quantifier (<http://cfpub.epa.gov/quantifier/>), it is estimated that the switch will reduce nitrogen oxide emissions by 191,200 pounds (95.6 tons) per year and reduce particulate matter emissions by 8090 pounds (4.04 tons) per year.

Implementation Date

Implementation began in 2004 and was completed in 2006.

4. **Design and implement congestion management and Intelligent Transportation System (ITS) measures** **Priority A**

Description of Measure

Implement congestion management projects: intersection and signalization improvements to alleviate traffic congestion, therefore, reducing emissions from idling vehicles; Implement Intelligent Traffic Systems such as automated advisory/alert messages to drivers on interstate highways. For example: advise motorist about an accident ahead and the use of alternate routes to avoid congestion, which minimize emissions from idle vehicles; Encourage and support improved traffic operational planning, engineering and maintenance for existing and future transportation infrastructure.

June 2005:

- County in the process of implementing congestion management plan on several major thoroughfares; cameras and variable message boards have been installed on I-85 through Anderson, Greenville and Spartanburg Counties.

December 2005:

- Anderson County Council, at its December 6, 2005 meeting, passed a resolution creating a committee to investigate capital funding projects for roads and bridges; within that commission, they will also be looking at funding for projects to relieve congestion on county roads and the addition of bike lanes on county roads. Report will be completed by July 2006.

June 2006:

- In March 2006, Anderson County, in conjunction with the City of Anderson, completed a traffic synchronization project on East Greenville Street, one of the busiest streets in Anderson. The synchronization will reduce the idling time of vehicles along East Greenville Street, reducing the amount of VOCs entering the atmosphere.
- The Greenville-Pickens Area Transportation Study (GPATS) held two public workshops June 1 & 6, 2006. The workshops included a brief presentation and provided an opportunity for citizens to influence which projects would be implemented in the region. The GPATS study area includes areas in Anderson, Greenville, Laurens, Pickens and Spartanburg Counties.

December 2006

- SCDOT is installing an ITS billboard between mile marker 37 and 38 in Anderson County. Installation should be completed in early 2007.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Implementation began in 2005 and was completed in 2006.

5. Use of hybrid vehicles

Priority A

Description of Measure

Encourage people, public and private organizations to purchase hybrid vehicles as they replace vehicles/fleet. Encourage that 10% of public agencies fleet have hybrid vehicles (use of hybrid

vehicles does not require changes in infrastructure for dispensing fuel). Encourage public agencies to require purchasing hybrid electric vehicles (HEVs) through the State vehicle contract.

December 2004:

- There are approximately 109 alternative fuel vehicles operating within federal, state, county and municipal government. Of that amount 37 belong to the county. As directed by the County Administrator all future purchases will be either Hybrids or Alternative Fuel Vehicles, if practicable.

June 2005:

- Anderson County Administrator Joey R. Preston authorized a countywide resolution to purchase cars alternatively fueled or hybrid vehicles. County will purchase hybrid vehicles as they become feasible to the job performance. Vehicles that will be used primarily for transport of persons and light goods will be the first to be equipped with the flex and/or alternative fuel designations, as the demand on these vehicles are less than diesel and other heavy-duty vehicles. As more heavy duty vehicles are placed on the State contract for bids, preferential choices should and will go to vehicles that can perform the same task, but also has a flex/alternative fuel as an option.

June 2006:

- On June 1, 2006 the Governor signed the H*4312(Rat #0371) General Bill. Act 312, R371, H4312 Bill may be viewed at http://www.scstatehouse.net/sess116_2005-2006/bills/4312.htm and its caption reads: An act to amend the Code of Laws of South Carolina, 1976, by adding Section 12-6-3377 so as to allow a state income tax credit equal to twenty percent of certain new hybrid, fuel cell, alternative fuel, or lean burn technology motor vehicle. Credits allowed against a taxpayer's federal income tax liability.

December 2007:

- Anderson County Fleet Services is studying the feasibility of adding electric powered vehicles for use in high traffic congestion areas of the county, generally around the City of Anderson. Purchases will be proposed in the '08-'09 budget.
- The Anderson County fleet currently is operating 19 hybrid/AF Vehicles. Hybrid and/or alternative fuel vehicles are continually added to the fleet as availability and need dictate.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005 and continuing.

Additional Information

See measure 12 for additional information on hybrid vehicle incentives.

6. Use higher efficiency engines for school buses

Priority A

Description of Measure

Require purchase of high efficiency engines for school buses as they are replaced. In South Carolina, the SC Department of Education is in charge of maintenance of school buses. DHEC is

working with SC Department of Education to obtain grants from EPA. Promote an Adopt-A-School-Bus Program. Endorse a statewide recommendation for the State to take the lead.

December 2005:

- In 2006, approximately 23 diesel buses will be retrofitted with particulate filters, which will create additional PM reductions. The school buses may not be retrofitted until 2007 when ultra-low sulfur diesel is more widely available since the retrofitting technology being applied works best with this new fuel type.

June 2006:

- The South Carolina Department of Education (SDE) has been awarded a Clean School Bus USA Grant for \$499,099 to retrofit some buses in South Carolina with diesel oxidation catalysts and crankcase filters, replace some older buses and conduct a biodiesel pilot and an idle-reduction device pilot.
- State education superintendent Inez Tenenbaum signed an order on June 20, 2006 to buy 630 new school buses with roughly \$36 million appropriated by the Legislature. These buses should be on South Carolina roads by the end of the year. These new buses will replace vehicles from 1984 and 1985 which are not fuel efficient and produce higher levels of polluted emissions than more modern vehicles.
- The benefits from these SDE funding sources will be distributed throughout the state. The SDE has agreed to make York County and the five deferred areas the top priority in assigning new and retrofitted buses to service. SDE is also partnering with private companies and local school districts to provide specific funding for school bus retrofits and clean air programs.

December 2007:

- Since 2006 the Anderson County Schools Transportation Department (all school districts) has placed 43 'new generation' diesel bus in service vehicles are continually added to the fleet as availability and need dictate.

Estimate of Emission Reductions (if available)

VOC reduction is expected to be 355 lbs/yr. CO reductions of 2,737 lbs/year are expected, according to the December 2004 EAC SIP – Appendix 16.

Implementation Date

Completed. Implementation began in 2006 and is continuing.

7. a. Develop incentive programs and opportunity for citizens to choose alternative transportation modes; Establish inter-modal connections with an emphasis on mass transit. Priority A

Description of Measure

WALKING/BIKING

Encourage local government to increase pedestrian/bicycle infrastructure spending (the Upstate spends 2 cents per person compared to SC spending 22 cents per person).

Establish safer bike routes with better signs marking lanes and routes.

Increase highway funding for bike paths, walking or mass transit including high-speed rail. Support the federal transportation enhancement program. Install bike racks on all transit vehicles to encourage inter-modal transportation. New buses purchased through the state's bus purchase program will have bike racks.

PARK and RIDE

Establish mass transportation between a plant and a park-and-ride site.

CARPOOLING

Work with local government to offer incentives employees to car pool.

MASS TRANSIT

Offer a free trolley service running in a loop in downtown areas and nearby restaurants, especially during lunch hours;

Research past feasibility studies on free downtown shuttles. Potential for sponsorship with local area restaurants and businesses for a lunchtime shuttle could defer the operational costs of the endeavor.

Support mass transit (transportation choices and alternatives): While the only local mass transit choice that is currently available in some areas is the transit bus, example of future options such as bus rapid transit, commuter passenger service offered by trains on existing rail systems, a diesel multiple unit or "light rail" should be supported.

June 2006:

- Clemson Area Transit (CAT) bus lines include the Anderson 4U Route with service to Tri-County Tech and the City of Anderson. This route connects with Electric City Transit. The CAT buses are equipped with bicycle racks for easier transport of bicyclists within the various CAT bus routes. The CAT bus system is a free option, and Electric City Transit offers free rides during the Christmas holiday season (late November-December.)
- Anderson County has attempted to work with owners of vacant stores for use of their vacant parking lot, and with industries to use the parking lot as a point to shuttle workers to and from an industry; however each owner does not wish for the potential liability in their parking lot, and although industries seem amenable, no definitive answer was given from any of the industries.
- The County is currently working with the City of Anderson to possibly reserve parking spaces in the downtown lots for carpooling people. We have not received a response as of yet.

December 2006

- In October 2006, the Clemson Area Transit, a free bus service serving Anderson and Pickens Counties, expanded its service area to Oconee County, providing free service to those people traveling to Anderson County for school and recreation purposes.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed prior to 2005 and continuing.

7.b. Offer free or reduced transportation cost on high ozone days

Priority A

Description of Measure

MASS TRANSIT:

Implement a coordinated high ozone day alert action plan to include public notification and free or reduced ozone fares from the transportation providers.

June 2005:

- A staff person from the South Carolina Department of Transportation (SCDOT) has been designated to receive SCDHEC's Ground-level Ozone Forecast and to distribute it via email to approximately 5,000 staff. SCDOT also plans to utilize the SCDHEC Ozone Forecast Internet link for the forecast on their webpage. SCDOT roadside emergency signs in the Upstate and Midlands will be utilized for Ground-level Ozone Action Alerts. Anderson has 1 sign.

June 2006:

- Since 2002 Clemson Area Transit has provided a free shuttle system connecting Anderson University, Tri-County Technical College, Southern Wesleyan University and Clemson University in addition to the City of Clemson, the City of Anderson, and the Towns of Central and Pendleton. Clemson Area Transit has the largest ridership for a fare-free bus line in the United States. It is also South Carolina's most frequently used transit system. The fare-free system is funded through federal grants and matching funds from the city and University. CAT has the most modern fleet of buses east of the Mississippi River.
- Electric City Transit provides discount fares to senior citizens, the disabled, Medicare card holders, students, and children (free).
- Since free and discount fares are already available, when county funding is acquired for the incentives, the programs will be further implemented or expanded.
- At its May 11, 2006 meeting, business leaders in the Air Quality Advisory Committee recommended contacting the Chamber of Commerce and request assistance with conducting fundraising activities to support this program

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005 and continuing.

7.c. Reduce vehicle miles traveled by developing efficient user-friendly transit systems.**Priority A****Description of Measure**

Integrate transportation planning with land use planning so public transit can make a comprehensive contribution to economic development and mobility;

Remove local barriers to densification in downtowns, infill areas, and transit stations and corridors.

June 2006:

- The Clemson Area Transit (CAT) system coordinates with the Electric City Transit (ECT) system to provide free or low cost public transportation to Anderson and Pendleton, SC.
- CAT buses are equipped with wheelchair ramps and bicycle racks. CAT also provides personal escorts by appointment to aid new passengers in finding their way around and

learning to read the bus map. CAT has partnered with C.U. Parking Services to coordinate a shuttle service from the Park and Ride lot.

- All ECT buses are permitted to leave their regular route at the request of riders who live outside the regular routes.

December 2006

- In September 2006, Anderson County officials asked state officials for \$44,000 to look at whether the area's transit system should be expanded to offer residents more options to get to work. A \$40,000 grant could pay for the feasibility study. Officials from local transit providers and social service agencies have identified that available transportation as a "primary barrier" to finding a job. Creating a more comprehensive transit system will be the first step towards a more regional transit authority. Such a regional system would then fit in well with a high-speed rail system that the state transportation department is looking at to connect South Carolina cities and other cities in the Southeast.

December 2007:

- August 21, 207 Regional Transportation Plan Presentation A small map of highway improvements recommended in the plan is shown below. Proposed mass transit, bicycle, and pedestrian improvement plans will be presented as well. More information is available by calling Greenville County Planning Department at (864) 467-7270, or visit our website <http://www.greenvilleplanning.com> and pick the "transportation planning" link. A Public Presentation of the Regional Transportation Plan was held Tuesday, August 21. Presentation: 1:00 p.m., Drop-in Open House: 2:00 to 6:00 p.m. The Greenville-Pickens Area Transportation Study Planning area includes: cities of Easley, Fountain Inn, Greenville, Greer, Liberty, Mauldin, Pickens, Simpsonville, and Travelers Rest; and counties of Anderson, Greenville, Laurens, Pickens, and Spartanburg
- October 26, 2007 Anderson County officials met with South Carolina Department of Transportation officials to discuss and find funding for "light rail" mass transit. The light rail project aims to provide passenger service between Anderson and the Clemson University campus. This project is listed for funding in the State Transportation Improvement Plan ("STIP") as well as the local Anderson Area Transportation Study ("ANATS").
- October 29, 2007 Anderson County Officials met with Georgia Rail Consultants, a mass transit consulting firm. Georgia Rail is providing substantial information about rider-ship, cost savings and improved air quality benefits.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Some actions have been completed prior to 2006. Implementation of additional actions will take place as funding is acquired.

8. Review and update air emission inventory for the Upstate

Priority A

Description of Measure

Ensure all industrial sources still operating. Review industrial sources for plant closures. Identify major sources of NO_x; Map the locations of point sources (10% of point sources cannot be found); Map the specific locations and the area sources where coal is burned.

December 2003:

- Requested list of all NOx emitting sources from Emission Inventory to verify they are still in operation in Anderson County.

Estimate of Emission Reductions (if available)

Not available.

Implementation Date

Completed. This information was included in the December 10, 2003 Early Action Compact Milestone on pages 20 through 37.

9. Support SCDHEC in evaluating and seeking reductions from major sources based on modeling. Priority A

Description of Measure

Coordinate with Duke Power to determine what NOx reductions are planned for the Lee Steam Plant. Coordinate with the Williams Company to determine what NOx reductions are planned for the TRANSCO Pipeline. Support NOx reduction strategies in the State Implementation Plan. Develop an Early Reduction Program with incentives for industrial facility (Tier Two Type emissions NOx sources) See info on Duke Power included in Appendix 16 of EAC SIP located at www.scdhec.gov/eqc/baq/html/eap_sip.html.

June 2004:

- Transcontinental Gas Pipe Line Corporation (Transco) Station 140, Moore, SC; Operating Permit 2060-0179. Transco has 14 natural gas fired internal combustion (IC) engines that collectively accounted for 3,822 tons of ozone season NOx emissions during 1997. Transco has submitted a construction permit application to put on NOx controls that will result only 1,261 tons of ozone season NOx emissions. The permit was approved on April 27, 2004.

December 2004:

- The Williams Company has received DHEC permits to replace outdated “uncontrolled” compressors on the pipeline located in Duncan. Replacement of the compressors began in late 2004 and continued until late 2005. This will result in a significant NOx reduction for the Upstate.

June 2006:

- NOx reduction at the Duke Power Lee Steam Plant: Coal fired Unit #2 is now operating with the new NOx burners and final manufacture set up for acceptance is to be conducted in June 2006. Monitoring data indicates that the burner should at least meet the 0.23 #NOx/MMBTU's.
- Unit #2 will operate this entire NOx season with the Low NOx burners. Coal fired Unit #1 is currently off line. It will be coming back on line in July 2006 with new NOx burners installed. If the results are similar to Unit #2 Duke Power will also operate this unit the entire NOx season at the 0.23 #NOx/MMBTU's rate or lower. This unit will operate approximately 4-6 weeks and final set up will be conducted.
- Both units will complete final construction permit testing during June, July and August 2006. Duke Power has commitment to install the Low NOx burners on the 2 remaining coal fired units at the Lee Steam Plant. Unit #1 burners were installed April-May 2006 and start-up with Low NOx burners was May 19, 2006. Unit #2 burners were installed March-April 06 and start-up with Low NOx burners was April 15, 2006.

Estimate of Emission Reductions (if available)

Not available.

Implementation Date

Implementation began in 2004 and was completed May 2006.

**10. Develop a program to offer to purchase or repair smoking vehicles (known as cash for clunkers).
Priority A****Description of Measure**

Use funds generated from a license plate sales, registration fees, or license plate tax program to buy or repair high emitting vehicles from individuals.

Purchase such vehicles from non-profit groups such as the Kidney Foundation, Goodwill, and Salvation Army when they have been donated as charitable gifts. Consider accelerated vehicle retirement (scrappage) programs to encourage vehicle owners to voluntarily retire their vehicles sooner than they would have otherwise.

- The reduction of the vehicle tax has hampered all efforts to stimulate the beginnings of this program. County Council has stated several times that they as a body will not increase the tax burden on its constituents, and any effort to implement an increase of revenue via millage or tax increase would be voted down.

December 2003:

- During its August 5, 2003, the AQ Staff Advisory Committee discussed this strategy: A high emission vehicle buyback or repair program appears to be cost effective for VOC emissions, but is less clear for NOx emissions. It is hard to quantify the success rate of the program in the various states the program has been implemented, but the program seems to make intuitive sense. This type of program will become increasingly more important as the new vehicle pollution control systems increase the gap between the new vehicle's emissions and the "smoking" vehicle's emissions. Recommendation: funding the high emission vehicle buyback or repair program as a pilot program with a set yearly target for the number of vehicles that will be either repaired or scrapped. A follow-up study on this pilot program would need to be implemented to determine the impact on emissions (ozone) for the upstate.

June 2006:

- In the summer 2006, staff from the Air Quality Staff Advisory Committee will meet with Goodwill Industries, Salvation Army and Kidney Foundation representatives to discuss alternatives to re-selling clunker vehicles donated to these organizations.
- As funding is acquired for the incentives, the programs will be implemented.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Implementation began in 2003. Completion of this measure will depend on discussions with the non-profit organizations.

11. Ban open burning of on-site commercial clearing debris during ozone season (April - October)

Priority A

Description of Measure

Use SCDHEC model to determine the most effective method to ban open burning. Discuss modeling results with all local governments to consider adoption.

December 2005:

- At the November 2005 Air Quality Steering Committee meeting, the Committee directed staff to coordinate with local governments to enforce DHEC's burning ban year-round.
- DHEC encourages Anderson, Greenville, and Spartanburg to actively notify all residents that the statewide ban is now in force and violations are punishable by law.
- A DHEC press release was issued to the upstate on November 8, 2005

December 2007:

- Three "Call before you burn" billboards are dotting the landscape across Anderson County thanks to the Illegal Outdoor Burning Prevention Task Force. County Councilman Michael Thompson, District 5, initiated the Taskforce in September 2006 to mitigate the burning of household trash and to educate residents about out door burning. SCDHEC and Duke Power grant funds were used to fund this public awareness project.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed on June 25, 2004 with the passage of regulation SC 61-62.2 "Prohibition of Open Burning".

12. Create incentives for the purchase of high efficiency and low emissions vehicles.

Priority A

Description of Measure

Offer tax credits for vehicles with high efficiency gas consumption or low emissions.

Offer tax credits for low mileage vehicles instead of high mileage vehicles December 2004 –SC State led developing draft bill to offer reduced tax incentives for those purchasing low emitting vehicles. See below

****Develop air quality best management practices (BMPs)_ for construction sites - Develop a generic list of BMPs

Develop management practices for construction debris.

Develop management practices for emissions from construction vehicles.

Develop management practices for traffic controls during construction.

December 2004:

- Developing draft bill to offer reduced tax incentives for those purchasing low emitting vehicles.

June 2005:

- A bill titled; An act concerning the promotion of alternative use fuel, and hybrid propulsion System For transportation purposes was submitted to the SC House of representatives in January 2005. The bill is now in committee. In summary, the bill provides tax credit for vehicles using alternative fuel or hybrid propulsion vehicles. The credit is allowed against the tax imposed by for the purchase of vehicles licensed in South Carolina which use, or which are converted within 120 days of purchase to use, clean-burning fuel. Specifically the intent of the bill will apply for income tax years beginning on or after January 1, 2004, but prior to January 1, 2013. The tax credit will be allowed for the purchase of an alternative fuel or hybrid propulsion vehicle, and for a motor vehicle that is converted to use alternative fuel, for the replacement of the power source with a power source that uses alternative fuel.

June 2006:

- On June 1, 2006 the Governor signed the H*4312(Rat #0371) General Bill. Act 312, R371, H4312 Bill may be viewed at http://www.scstatehouse.net/sess116_2005-2006/bills/4312.htm and its caption reads: AN ACT TO AMEND THE CODE OF LAWS OF SOUTH CAROLINA, 1976, BY ADDING SECTION 12-6-3377 SO AS TO ALLOW A STATE INCOME TAX CREDIT EQUAL TO TWENTY PERCENT OF CERTAIN NEW HYBRID, FUEL CELL, ALTERNATIVE FUEL, OR LEAN BURN TECHNOLOGY MOTOR VEHICLE CREDITS ALLOWED AGAINST A TAXPAYER'S FEDERAL INCOME TAX LIABILITY.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Implementation began in 2005 and was completed June 1, 2006.

13. Use land-use and transportation planning to improve air quality Priority A

Description of Measure

Include air quality measures as a part of the land-use and transportation planning process.

December 2004:

- Highlights of the Anderson County Land Use and Development Standards include items that develop standards with respect to landscaping and open space, promote public health and safety through the reduction of noise pollution, storm water runoff and air pollution. Also included are development standards with "Greenways" defined which link residential areas with other open space areas. These Greenways may contain bicycle paths, footpaths, and bridle paths. Additionally, intensity standards (designed principally to regulate land use in accordance with the design function and carrying capacity of the road on which it is located) are being developed.

June 2006:

- In the review process, Transportation staff does employ traffic thresholds that require various levels of congestion mitigation to reduce idling times, and they have been using the internal thresholds for two years. However, these thresholds are not defined in the ordinance, and so the review is intended as guidance for future use to show where potential problems are most likely to occur in the future.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2004.

14. Implement a program to encourage use of green power. Priority A**Description of Measure**

Capture emissions from landfills to produce green power, e.g., BMW is utilizing Palmetto Landfill emissions to produce energy for its plant. Implement a Purchase Green Power program when available. Green power is electricity generated by renewable resources like solar, wind, and even decomposing garbage in selected landfills. These resources are replenished naturally and minimize harm to the environment.

December 2005:

- In 2005, Blue Ridge Electric Cooperative in Anderson County has begun offering the purchase of "Green Power" to its members. The Green Power is generated by Santee Cooper, who is the source of power for all of the electric cooperatives in South Carolina.
- Santee Cooper is constructing a Green Power station at the Anderson Regional Landfill that will enter commercial operation in 2006.

December 2007:

- The BMW plant in Greer is getting more than 60 percent of its energy from the methane gas generated at a nearby Waste Management landfill. The operation, in cooperation with the Texas landfill firm Waste Management, captures the methane gas, which otherwise would escape into the atmosphere, and converts it to energy.
- The BMW project and Waste Management's gas-to-energy plant in Kershaw County generate nearly 16 megawatts of electricity, or enough to power at least 15,000 homes for a year.
- The methane gas from the Spartanburg County landfill travels nine miles by pipeline to the BMW Manufacturing plant, where it fuels turbines that generate electricity for the facility. About 63 percent of the plant's energy comes from the landfill gas project. The methane used as a fuel saves the company at least \$1 million a year. It also reduces emissions of carbon dioxide, a greenhouse gas, by about 60,000 tons annually.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005 and continuing.

15. Promote route efficiency for delivery vehicles, trash collection etc. Priority A

Description of Measure

Encourage business to consolidate distribution and collection routes to improve efficiency and reduce emissions from their fleets. Maximize route efficiency for public services such as garbage collection, delivery vehicles, and other vehicle trips to reduce fuel usage.

June 2006:

- The Solid Waste Division, since 2003, has encouraged and continues to encourage all its trash haulers to use the most direct route to pick up trash. This will reduce driving time and reduce emissions.
- Delivery companies currently use GPS mapping programs to map the most cost effective route to save gasoline. The local public transportation system have designated routes, but they take steps to reduce idling time of the buses, such as reducing speeds and an 2 minute tardy schedule to make sure no one is left behind at a bus stop. They have been implementing these gas saver items since 2000.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2003 and continuing.

16. Establish a clean air partnership with business and industry. Priority A

Description of Measure

Encourage and coordinate alternate work schedules such as staggered work hours for business, industry and local governments. Establish park and ride lots serving perimeter counties along major corridors. Make the public aware of the park-and-ride concept: media could assist in publicizing which programs are available. Encourage carpooling/vanpooling as an option where employees living in the same area agree to ride to work together rather than to drive their individual vehicle to work. Consider parking facility controls that can include employers offering a tax-free transit/vanpool benefits and which limit the amount of parking and encourage carpooling, mass transit, etc. Encourage telecommuting.

Adopt a Bus Program. Develop funding to be used for matching grants fund for several EAP strategies. Develop a core competency and assisting the Upstate EAP group in writing grant proposal.

June 2004:

- Staffs of Greenville County Planning Commission, Greenville Transit Authority and Greater Greenville Chamber of Commerce have begun joining effort to develop a feasibility study for Park-n-Ride program and/or Ride-Share program for Greenville County. Information will be shared with Anderson and Spartanburg counties.

December 2005:

- Michelin North America, on November 29, 2005 announced that their two Anderson County plants have qualified for membership in the National Environmental Performance Track program. They are among 400 facilities nationwide that have met the stringent requirements. Michelin is also investing \$80 million to expand and upgrade the two plants to reduce environmental impacts within Anderson County.

- Duke Power has agreed to reduce the idling time for their vehicles during ozone season. During ozone season, all vehicles will not idle for more than 30 seconds before the vehicle is shut down. With the 88 diesel trucks and 265 gasoline trucks in use in Anderson County, that equates to a reduction of 530 pounds VOC reduced and 765 pounds NOx reduced during ozone season.
- Michelin, Wal-Mart and Sonic were corporate sponsors for the gas can exchange event that was held in Anderson County on September 10, 2005.
- In the November 2005, the Air Quality Steering Committee directed staff to begin addressing this strategy before the 2006 ozone season.

June 2006:

- In early 2006, Associated Fuel Pump Systems Corporation (AFCO) announced that they also have qualified for membership in the National Environmental Performance Track program.
- Businesses and industry have established its own production schedule, based upon the demands placed upon them by their customers, and have not, to this point, determined that an alternative work schedule will keep them in business. As of yet, we have not received word from them to note that telecommuting would be a beneficial act for their businesses as well. As far as carpooling, Michelin NA does have stenciled parking spots for carpoolers, but in other cases it is individual drivers wishing to carpool that are driving the efforts.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005 but progress and improvements will continue on this strategy.

17. Establish an active public awareness campaign.

Priority A

Description of Measure

Develop an editorial board to discuss air quality issues and development of a relationship with media. Use alert messages year round, not only during ozone season; Utilize public service announcement, newspapers, weather channels, and other media outlets to notify citizens of high ozone days; Utilize TV Channels to issue high ozone alerts using the crawl bar at bottom of TV screens. Encourage health organizations to sponsor ozone alerts in media. Enhance ozone awareness (Outreach-communication): assign a local agency to develop and implement a program to educate and motivate individuals to take actions to minimize ozone pollution. Includes a focused distribution of educational materials, dissemination of SCDHEC ground-level ozone forecast, increased media alerts to specific audiences, and includes action oriented components (i.e. ridesharing, telecommuting, etc.). Develop a campaign to encourage things such as refueling vehicles during evenings, not topping off tanks when refueling, using lawnmowers during evenings instead of during high ozone hours, using of electric lawn mowers. Develop a license plate program to generate revenue to implement the public awareness campaign. Develop awareness program on tax savings for purchasing high efficiency vehicles.

December 2005:

- Anderson County held a gas can exchange program on September 10, 2005, taking in 83 old cans.

- Anderson County Staff sent out a news release (03/28/05) on Ground-level Ozone Awareness Week and promoted this week on a local radio station, WRIX 103.1 FM. An article on Ground-level Ozone was also placed on their county webpage: www.andersoncountysc.org. Anderson County received and distributed 200 Ozone and Your Health brochures.

June 2006:

Anderson County continues to keep its citizens aware of the importance of having good air quality. Here is a list of things we have done and are currently doing:

- An Ozone-No-zone seminar with Keep America Beautiful of Anderson County and Anderson County Environmental Services Division held a, a local education program teaching how ground level ozone affects our daily lives.
- 4-U Transit system connecting Anderson, Pendleton, Clemson and Central; Anderson's Electric City Transit "FARE Free" program; light rail project;
- Tree legacy program, Tree I.D. program; Arbor Day plantings; City of Iva continual member of "Tree City USA" Ozone Awareness Week;
- Earth camp, offered at the Anderson Co. Recycling Education Center, provides children with stimulating outdoor learning experiences about the ecology of soils, water, forests and wildlife and the stewardship of these important resources. Topics covered include Air Quality, Recycling, and Trees.

December 2006

- On July 31, 2006, the Greenville News published an article titled "More air woes could blow Upstate's way."
- On July 16, 2006 the Greenville News published an article titled "Emissions levels suit creates cloud of uncertainty for industry."

December 2007:

Anderson County continues to keep its citizens aware of the importance of having good air quality. Here is a list of groups receiving air quality awareness information:

- In September, October and November '07 Anderson County Staff continue with the awareness campaign, speaking before public and private groups that included: Anderson County Board of Education, Anderson School District 3 School Board, Anderson County School District 5 School Board, Anderson County Council, Anderson County Economic Development Advisory Board, Anderson County Economic Development Partnership Board, Anderson County Planning Commission, Anderson Area Chamber of Commerce Executive Committee, Anderson Area Chamber of Commerce Environmental and Public Health Committee.
- Anderson Area Chamber of Commerce, Health Safety and Environment Committee made a presentation to the committee on possible impact of new ozone standards. Industry representatives agreed to evaluate local voluntary measures they might implement and report back to the group. October 10, 2007.
- Greenville County Council passed Resolution No. 1272 encouraging EPA to maintain the current NAAQS for ground-level ozone and to continue the early action compact program. The resolution requested EPA to support local governments in their attempt to improve air quality at the local level and also reaffirmed Greenville County Council's commitment to improving air quality in the upstate region. The resolution also encourages the citizens and businesses of Greenville County to act in manner that will preserve and protect the quality of the air in the community. The resolution was submitted to the EPA Docket in response to the proposed 8-hour Ozone standard.

Estimate of Emission Reductions (if available)

VOC reductions of 355 lbs/year are expected from the gas can exchange program. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005. Education and outreach are continuing.

18. Promote research in energy efficiency at local universities, industries, energy companies, federal government, and other institutions that improve air quality.**Priority A****Description of Measure**

Establish programs to research energy efficiencies at local universities, e.g., Institute for Energy Studies at Clemson University. Encourage business and industry to utilize the research from these programs to make the best decision concerning the purchase or upgrade of furnaces and boilers.

June 2004:

- Members of the Air Quality Staff Advisory Committee met with staff from the SC Institute for Energy Studies (SCIES) from Clemson University in late summer 2003. As a result, researchers from SCIES made a presentation to the Committee on November 18, 2003. The South Carolina Institute for Energy Studies (SCIES) based at Clemson University is a state-chartered research and development organization established in 1981. Its objectives are to promote energy research and development in and for the state; to transfer energy technology developed by others to South Carolina applications; to contribute to national energy issues in areas of excellence; and to promote statewide energy-education activities. (Source: <http://www.clemson.edu/scies/AboutSCIES.htm>). Researchers from SCIES became members of the Air Quality Staff Advisory Committee mailing list to transfer knowledge and latest undertakings on these efforts.

December 2005:

- **ALTERNATIVE FUELS:** In 2005, Clemson University Chemical engineering professor Mark C. Thies received an \$856,000 award from the Department of Energy (DOE) to develop more efficient processes for the centralized production of hydrogen by splitting water. The award was one of only three made nationwide under DOE's Nuclear Hydrogen initiative. In addition to Thies, the project team includes fellow Clemson David Bruce, John O'Connell from the University of Virginia and Max Gorenssek from Savannah River National Lab. The Clemson team will interact not only with U. S. engineers and scientists but also with those in France, Italy, and Japan, all of whom have teams working on related processes.
- Clemson University is developing the International Center for Automotive Research (Clemson-ICAR) in Greenville, SC. The ICAR project will be the premier automotive and motor sports research and educational center in SC. Research will emphasize development of innovative materials and processing technologies, which will enable the development of more efficient and environment friendly vehicles, as well as electrical power generators.

June 2006:

- Clemson University chemical engineering professor Mark C. Thies continues investigating the centralized production of hydrogen via water splitting. (Source: <http://www.ces.clemson.edu/chemeng/research.html>)

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed November 2003 but will continue monitoring progress of ongoing research.

19. Use of alternate fuels.**Priority B****Description of Measure**

Direct local Planning Commissions to identify areas where alternative fuels will be best suited. Encourage the use of alternate fuels; Assist with establishing alternative fuel infrastructure for private sector clean fuel fleets. Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternate fuels include bio-diesel, electricity, ethanol, hydrogen, liquefied petroleum gas, methanol, and natural gas. Encourage a clean-fuel fleet program for centrally fueled fleets of more than 10 vehicles. Anderson County owns 37 alternative fuel vehicles and purchased 1,520 gallons of biodiesel in 2004.

December 2004:

- There were 1,520 gallons of biodiesel purchased in 2004 in Anderson County.
- Currently there are no ethanol refueling facilities in Anderson County, but plans call for the construction of one by the end of 2005.

December 2005:

- **ALTERNATE FUELS:** In 2005, Clemson University Professor James G. Goodwin, Jr., chair of the Clemson's chemical and biomolecular engineering department, received a DOE grant for energy research through DOE's State Technologies Advancement Collaborative. Goodwin's work focuses on the performance of iron-based bimetallic catalysts that are crucial to synthesis of clean fuels, additives and lubricants derived from coal and biomass gasification. Clemson will lead a partnership that includes Louisiana State University, the S.C. State Energy Office, the Louisiana State Energy Office, North Carolina's Research Triangle Institute, Rentech and Sud-Chemie Inc. This grant reflects \$875,499 in DOE-STAC funds and \$294,499 in cost sharing by the industrial and governmental participants. Anderson County is presently applying for a grant from the EPA to fund an E85 gasoline pump at a gas station within Anderson to promote alternative fuel usage within the county.
- There is currently one Spinx station that offers Ethanol 85% fuel in Anderson County. There are 5 other Ethanol 85% stations and 5 biodiesel stations within a 25 mile radius of downtown Anderson. Stations can be located using the U.S. Department of Energy Alternative Fuels Data Center Website at <http://www.eere.energy.gov/afdc/infrastructure/locator.html>

June 2006:

- There are currently 2 public Spinx stations that offer E85 in Anderson County. Both Spinx stations currently offer Biodiesel. Stations can be located using the U.S. Department of Energy Alternative Fuels Data Center Website at <http://www.eere.energy.gov/afdc/infrastructure/locator.html>

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005 and continuing.

20. Evaluate the use of High Occupancy Vehicle (HOV) lanes using existing lanes.**Priority B****Description of Measure**

Evaluate use of HOV on three (3) lane interstate highways; Show the advantages of designating HOVs; Pass laws establishing regulations on HOVs lanes such as the threshold in the number of passengers (perhaps two) in the vehicle using HOVs lanes and time of day for the lane to be designated as HOV (rush hour); Pass laws authorizing issuance of tickets for violations of HOVs lanes regulations, i.e., one-passenger vehicles using HOV lanes on designated hours.

December 2003:

- During its August 5, 2003, the AQ Staff Advisory Committee discussed and evaluated the implementation of this strategy. The Committee concluded that "HOV lanes work best where an interstate or a limited access arterial lead directly to major employment centers, usually within a central business district (CBD). With the exception of I-385 leading to the Greenville CBD, Upstate interstates (especially I-85) generally link the cities of Anderson, Greenville, and Spartanburg via peripheral routes, not conducive to the addition of HOV lanes. In addition, inter-county work trends do not show major volumes that would support car-pooled trips. Making the third lane of I-85 an HOV lane would severely increase congestion, emissions, and future accidents. The addition of new lanes would be cost prohibitive, and would not be allowed to revert to a single occupancy vehicle (SOV) status without reimbursement to the federal government."

December 2004:

- Traffic engineers with SCDOT indicate that because traffic volumes on I-85 exceed 100,000 vehicles daily on the 3 lanes of the interstate it would be unwise to convert one of the three lanes to a HOV lane. The offsetting increase in congestion in the two remaining lanes would predictably increase NOx emissions by an amount exceeding the any reductions gained from traffic moving in the HOV lane. HOV lanes work best when they are paralleled by at least 4 or more free-flow lanes. No further actions are planned.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2004.

21. Modify speed limits for optimum fuel efficiency.**Priority B****Description of Measure**

Direct SCDHEC and SCDOT to take the lead role. Direct Planning Commissions to assist SCDHEC in modeling.

December 2005:

- The ANATS MPO was designated as urban by the US Census following the 2000 census and as a result speed limits on the interstate highways for the majority of Anderson County have been established at 60 mph. According to the Department of Energy, gas mileage decreases rapidly at speeds above 60 mph.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005.

22. Develop process for evaluating and minimizing impact of major projects such as shopping centers, schools, and subdivisions.

Priority B

Description of Measure

Study impact of post construction traffic flow. Study impact of construction activities.

June 2006:

- If land is zoned for the intended use of the property, the traffic impacts are monitored via trip monitors that measure the traffic flow through a particular stretch of roadway to use in future planning of road widening projects.
- If land is not zoned for the type of land use a developer wishes to use it for, he or she must petition the County Council to change the zoning for the new purpose.
- Planning officials will also inform Council whether it approves of or disapproves of the zoning request, depending on the current population density, the current condition of the road, and the potential for increase in congestion. Although the Planning division can disapprove of a project, the developer can still make the request of the Council.
- At the Council meeting, residents in the affected areas can also state their wishes for the development. The Council takes all this information under consideration, but ultimately it will be up to the Council to approve or deny.
- These policies were enacted July 20, 1999, and revised April 15, 2003.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2003.

23. Community Schools to reduce vehicle miles traveled and encourage biking and walking for students and parents by encouraging smaller community-based schools that are integrated into neighborhoods

Priority B

Description of Measure

Eliminate minimum acreage requirements for school sites. Cap student populations per facilities. Require coordination among school boards and local governments to plan school sites and avoid conflicts with local planning goals. Favor restoration and construction of community-based small schools over new construction of remote mega schools.

June 2006:

- Anderson County encourages the State to modify the state law that dictates minimum acreage for schools, and also encourages the school districts to refurbish existing schools. If the school districts and the state ever decided this would become policy, Anderson County would not have any hesitation to wholeheartedly back all the school districts within the county in their efforts to create community schools to reduce traffic
- The South Carolina School District Reorganization and Realignment Act of 2006 was introduced in the House on January 24, 2006 and is currently residing in the House Committee on Education and Public works. This bill states that the Education and Oversight Committee shall study and examine the optimum size, including both geographic area and student population. A copy of this bill is available online at http://www.scstatehouse.net/sess116_2005-2006/bills/4488.htm
- Anderson County is awaiting the committee's recommendations and the manner in which they may take effect if this bill is enacted.

December 2007:

- SCDOT approved funding to develop comprehensive bicycle and pedestrian programs as part of the "Safe Routes to School Program." Partnering with SCDOT, local governments, parents, local law enforcement and educators, each school and community will develop a plan that encompasses both infrastructure and non-infrastructure components. One of the purposes outlined in the funding legislation for this program includes facilitating the planning, development, and implementation of projects and activities that will reduce traffic congestions, fuel consumption and air pollution in the vicinity of primary and middle schools.
- Selected schools receive up to \$200,00.00.
- Anderson County - Wren elementary/Middle School was awarded the "Safe Routes to School" grant for the 2007 funding cycle.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2006 and continuing.

Additional Information

- SECTION 203 SCHOOL SITES
203.1 South Carolina Code Ann. § 59-23-250 (to be codified at Supp. 2003) eliminates minimum acreage requirements for public school sites. However, school districts must

receive approval from the South Carolina Department of Education prior to property acquisition or additions on existing properties.

203.2 The State Department of Education encourages districts to consider acreage for school sites as established by the Council of Educational Facility Planners International (CEFPI).

Anderson County Illegal Outdoor Burning Taskforce

Billboard Advertising Initiative

Advertising spaces provided by Fairway Outdoor Advertising of Anderson, SC



Mall Road and Whitehall Road, central Anderson



US Highway 28 Bypass in front of Wal-Mart



US Highway 81 South near Masters Boulevard

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Appalachia, SC (Designated - Attainment)							
DECEMBER 2007 CHEROKEE COUNTY Based on stakeholder consultation and taking into consideration resource and political constraints, the following emission reduction strategies remain under consideration. The County will continue to evaluate the air quality within the county and may implement one or more of the following measures under consideration.							
Support SCHDEC statewide efforts to reduce ozone levels	DHEC representatives met with Cherokee County EAC to present grant funding and other information about public awareness and promoting ozone educational efforts.	Completed.	Feb-06	Related.	Related.	n/a	
Public Awareness efforts.	Dennis Fowler, manager, WAGI Radio, agreed to broadcast ozone alert messages for Cherokee County.	Completed.	March 10, 2006	Related.	Related.	n/a	
Public Education	Chairman and staff advisor to Cherokee County EAC Committee travelled to Columbia, SC for information about monitoring sites in SC.	Completed.	15-Mar-06	n/a directionally sound	n/a directionally sound	n/a	
	PSA to Cherokee Chronicle for Ozone season at the beginning of the season. Proclamation to an editor for ozone awareness week in April. Committee meeting May 22, 2007. Brian Barnes gave a presentation in the local library. 5 in attendance.						
Public Awareness efforts.	Presented news release for Ozone Awareness Week.	2007: The EAC contact, Mason Harris, provided an ozone awareness public service announcement to the Cherokee Chronicle at the beginning of Ozone season. The Governor's Proclamation was also provided to the editor for Ozone Awareness Week in April.	5/15/2006, April 2007	Related.	Related.	n/a	
Committee Meeting	A committee meeting was held May 22, 2007. Brian Barnes from SCDHEC gave a presentation in the local library. The presentation covered recent updates to the National Ambient Air Quality Standards, the consequences of non-attainment and Cherokee County's ability to positively influence air quality.	5 committee members were in attendance.	22-May-07				
Lee Nuclear Station	Lee Nuclear Station Activities	Lee Nuclear Station is providing the scrap steel to a recycler and we will retain the waste concrete on site for use as rip-rap and engineered fill. Also they are requiring the demolition contractor to implement anti-idle policies for their demolition equipment.	2007	n/a directionally sound	n/a directionally sound	n/a	
Duke Biodiesel Test	Biodiesel could give Duke and other power generators another option to diesel or natural gas to generate backup power. Tests run in July at Mill Creek, a combustion-turbine plant that can generate enough power to run 80,000 homes, were the largest U.S. trial of biodiesel on a plant of that type and size.	Duke tested 100 percent biodiesel and three biofuel-diesel blends ranging from 20 percent to 80 percent biodiesel.	Jul-07				

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
11 South Carolina State Measures							
Comments: Modeling for 2007, shows attainment without including measures beyond national and regional measures already finalized.. 2012 and 2017 also shows attainment. <i>Our continuing EAC programs are also related to maintenance.</i>							
11 Appalachian, SC (Effective date of nonattainment designation deferred) - Greenville County							
Furman University Commits to American College and University Presidents Climate Commitment	The Presidents Climate Commitment is a bold effort to put colleges and universities in the forefront of the mushrooming national emphasis on sustainability, environmental awareness and energy independence. Modeled after a successful initiative adopted by many of the nation's major cities, it focuses on garnering institutional commitments to reduce and eventually eliminate global warming emissions on campus.	October 29, 2007 Furman University sponsored a ceremony at which David Shi will officially sign the "President's Climate Commitment," which is a formal pledge by college presidents across the country to address the problems of global warming and pursue the goal of making their campuses climate neutral. The ceremony also launched the North Village Kill-A-Watt Challenge, a competition that encourages students to conserve electricity. Sponsored by Furman's Environmental Action Group, the challenge encourages students to turn off lights and other appliances when not in use, keep windows closed when the air/heat is turned on and to use compact florescent light bulbs.	October 29, 2007				
VPSI proposes "turnkey" van pool service		VPSI has met with the executive directors of public transportation systems in Columbia and Greenville. The Executive Director of the Regional Transport Authority and Appalachian COG representatives have had several good meetings with VPSI representatives.	Aug-07				
Transit feasibility public meeting	Residents will get the chance to sound off for the final time on a possible mass transit plan for Easley on Aug. 7. A final transit feasibility public meeting was held at 6:30 p.m. at the Hampton Memorial Library by URS Corp., the group doing the study for Easley.	The group identified the need for mass transit through two public information meetings and almost 200 surveys they received from the public. This will be the third public meeting.	August 7, 2007				
Tire Recycling Plant	Rubber Recycling Technologies LLC will collect used tires from area businesses, bring them to their warehouse and break them down to be used in other products. Tire tread will be used to make rubber mulch and sidewalls can become playground material. Other parts can be used in asphalt, textiles, or tire-derived fuel in place of coal.	Opened August 1, 2007	August 1, 2007				
Upstate stakeholder meeting	Met with business leaders and County employees to discuss continuing the effort initiated for Ozone EAC and expanding that to include PM mitigation measures.	The leaders of the upstate committee will continue to work on ozone and PM reduction measures.	September 28, 2007				Anderson, Greenville and Spartanburg
Michelin North America 2007 SmartWay Excellence award	Michelin North America, Inc., based in Greenville, SC, was among 34 businesses honored by the U.S. Environmental Protection Agency (EPA) at a ceremony this week during the annual conference of the Council of Supply Chain Management Professionals in Philadelphia. The 2007 SmartWay Excellence award winners were recognized for environmental leadership in reducing fuel consumption and lowering greenhouse-gas emissions from big trucks.	Michelin is part of EPA's SmartWay® Transport Partnership, an innovative collaboration between EPA and the freight industry to increase energy efficiency while significantly reducing greenhouse gases and air pollution.	October 24, 2007				
Regional Transportation Plan Presentation	A small map of highway improvements recommended in the plan is shown below. Proposed mass transit, bicycle, and pedestrian improvement plans will be presented as well. More information is available by calling Greenville County Planning Department at (864) 467-7270, or visit our website http://www.greenvilleplanning.com and pick the "transportation planning" link.	A Public Presentation of the Regional Transportation Plan was held Tuesday, August 21. Presentation: 1:00 p.m., Drop-in Open House: 2:00 to 6:00 p.m. The Greenville-Pickens Area Transportation Study Planning area includes: cities of Easley, Fountain Inn, Greenville, Greer, Liberty, Mauldin, Pickens, Simpsonville, and Travelers Rest; and counties of Anderson, Greenville, Laurens, Pickens, and Spartanburg	August 21, 2007				
BMW	Methane from landfill powers BMW plant	The BMW plant in Greer is getting more than 60 percent of its energy from the methane gas generated at a nearby Waste Management landfill. The operation, in cooperation with the Texas landfill firm Waste Management, captures the methane gas, which otherwise would escape into the atmosphere, and converts it to energy. Waste Management, which has gas-to-energy projects in more than 20 states, announced recently that it intends to create about 60 additional renewable energy facilities within five years — including two more in South Carolina. The two new plants will be located at landfills in Dorchester and Jasper counties. The BMW project and Waste Management's gas-to-energy plant in Kershaw County generate nearly 16 megawatts of electricity, or enough to power at least 15,000 homes for a year. The methane gas from the Spartanburg County landfill travels nine miles by pipeline to the BMW Manufacturing plant, where it fuels turbines that generate electricity for the facility. About 63 percent of the plant's energy comes from the landfill gas project. The methane used as a fuel saves the company at least \$1 million a year. It also reduces emissions of carbon dioxide, a greenhouse gas, by about 60,000 tons annually.	September 26, 2007 News Article out of Greenville	*All Pollutants	Greenville, Spartanburg, Anderson		
Fountain Inn Elementary B2@School	Kick-off to introduce and promote the anti-idling campaign for cars and buses and to celebrate the new garden area (see below for detailed description of new garden area)	A Kick-off / Groundbreaking Ceremony for the program was held on Friday, October 12, 2007. The ceremony included welcoming statements by the Mayor of Fountain Inn and the school principal, Greenville County officials addressed the state of the air quality and Amy Curran (SC DHEC - BAQ) gave an overview of the B2- Breathe Better Program. EPA Region 4 presented Fountain Inn Elementary School with a certificate of appreciation for their efforts and offered comments as well. There was a reception following.	October 12, 2007	*All Pollutants	Greenville		

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Fountain Inn Elementary B2@School	New Garden Area / Tree Planting Project - Greenville County has enhanced/expanded the B2-Breathe Better program at Fountain Inn Elementary School with additional tree planting and landscaping the courtyard area.	The tree planting project will solve the serious erosion problem with the deteriorating soil conditions at the entrance of the school, and improve air quality in the surrounding areas of the school. Fountain Inn Elementary is working with several volunteer organizations such as TreesGreenville and the Mater Gardner program in the fall of 2007 to plant trees along the entrance drive into the school including the newly graded expansion site of the school (courtyard area). The TreesGreenville program will also be providing supplemental curriculum materials for the appropriate grade levels that focuses on Environmental Education. Instead of planting grass the school has chosen to plant a tree garden in this area. The project's committee intends to plant native trees that will have an impact in reducing ozone, particle pollution, and soil erosion. The trees will also offer shade to parents waiting in cars to pick up their children, encouraging them to reduce idling by turning off their engines. Most important is that this project will be a great learning experience for the students attending this school.	Fall of 2007	*All Pollutants	Greenville		
Upstate stakeholder meeting	Met with business leaders and County employees to discuss continuing the effort initiated for Ozone EAC and expanding that to include PM mitigation measures.	The leaders of the upstate committee will continue to work on ozone and PM reduction measures.	September 28, 2007		Anderson, Greenville and Spartanburg		
Local Government Partnerships/Outreach Greenville County Council	Greenville County Council passed Resolution No. 1272 encouraging EPA to maintain the current NAAQS for ground-level ozone and to continue the early action compact program. The resolution requested EPA to support local governments in their attempt to improve air quality at the local level and also reaffirmed Greenville County Council's commitment to improving air quality in the upstate regiona. The resolution also encourages the citizens and businesses of Greenville County to act in manner that will preserve and protect the quality of the air in the community. The resolution was submitted to the EPA Docket in response to the proposed 8-hour Ozone standard.	Resolution passed and submitted as comments to the proposed 8-hour Ozone Standard.	October 2, 2007		Greenville and and other counties within the Upstate Region		
GTA adds bike racks	All 13 regular buses and two spares will have the racks which will help people who want to cycle but have trouble connecting because of a lack of ideal places in some areas.	The total price tag is about \$12,500 though the bus system took advantage of a 95 percent federal match for bike-related capital costs, reducing GTA's investment to about \$650.	August 2007				
GTA Survey	More than one-third of the respondents to an online survey said they would use an improved public transportation system to get to work in Greenville, and nearly half of them said they might use such a system, according to results of the poll. The survey, taken over three weeks, was not a random sample poll and therefore not necessarily a representation of the opinions of Greenville County residents.	The 1,253 people who answered 27 questions on the Greenville County Web site gave a strong indication that a system that would extend into the suburbs and offer more efficient, comfortable transportation has a chance of finding riders	July 2007				
Fountain Inn Trees	Trees will be planted near the new Harrison Bridge Road interchange, in the Country Gardens subdivision and at Fountain Inn Elementary School, said Dan Powell, Fountain Inn staff planner with the Greenville County Planning Commission.	Fountain Inn has received 84 trees worth about \$5,000 from Palmetto Pride to plant in three locations. Palmetto Pride, a state nonprofit anti-litter organization, donated the trees.	October 2007				
Fountain Inn Sidewalk	The city plans to install handicap-accessible sidewalks from North Main Street to Valley View Drive. The estimated \$225,000 project would be paid for using state and federal money	July 17, 2007 city officials met at the Civic Center to give them updates about when the project is scheduled to begin and how long it will take to finish.	July 2007				
Habitat EarthCraft house near Travellers Rest	The project is a joint effort through the South Carolina Association of Realtors and the Greater Greenville Association of Realtors. EarthCraft House is a green building program that promotes environmentally sustainable and energy-efficient practices.	Fundraising is underway, but products such as lumber, concrete and goods are still needed in the amount of more than \$14,000. Ground was broken September 13, 2007. The house will be the second Habitat EarthCraft House built in the county.	September 2007				
Seminar: Green Building and Remodeling	Addison Homes will present a free consumer seminar on Green Building and remodeling at the company's EarthCraft House Demonstration Home. The interactive seminar will cover the latest green building practices for energy efficiency, environmentally friendly construction, and healthy living. Seminar participants will be able to see green building techniques utilized in the home, including insulation, air sealing, radiant heat barriers, and a conditioned crawlspace. Home energy testing will also be demonstrated.	Saturday, November 3 at Carilion Community in Greenville at 9:30 a.m.	November 3, 2007				
Swamp Rabbit Tram Trail	The trail owned by Greenville County and operated by the Greenville County Recreation District will link downtown Travelers Rest, to Furman University, to downtown Greenville along the former Greenville and Northern Railway. The city's "concept plan" calls for converting the rail line into a multi-use trail that can be used for recreational and motorized transit. A 7-foot-wide microbus would travel a 10-foot wide asphalt strip constructed over the railroad bed, carrying passengers between downtown Greenville and downtown Travelers Rest.	The county's nonprofit Economic Development Corporation bought that 11.8-mile railway, established in the 1880s and abandoned in 1998, in June 1999 for \$1.3 million. Removal of the railroad's metal rails is almost complete. Wooden railroad ties are being pulled and that will be complete in six weeks. After design and engineering work, construction on the trail (at first just a gravel trail) will begin. Within six months people will be walking, jogging and biking along the trail. And within 18 months, it should be paved.Later, a hybrid tram will shuttle from Travelers Rest to Greenville making it a new method of mass transit. A 2 percent hospitality tax on restaurants in unincorporated areas of the county will provide up to \$2 million for trail construction as well as \$25,000 annually for upkeep. Greenville Hospital System announced a \$1 million donation to support promotion of the trail, health-related programming and signs for the trail. The city of Greenville built and paved a 1.2-mile section of the trail at the southern end of the 11.8-mile route. It connects downtown, Falls Park, the West End, Cleveland Park and RiverPlace and is flooded with walkers, c	2007				
Greenville Master Trail Plan	The city of Greenville released its master plan last week, and the extensive network of trails connect parks, schools, neighborhoods, downtown, shopping areas and more with what appears to be a labyrinth of walking and biking routes.	A year ago, it opened the 1.3-mile "CSX section" of trail connecting Linky Stone Park, Meadowbrook Park, Mayberry Park, and the Willard Street junior golf facility. It also linked to Cleveland Park and Reedy River Falls Park, effectively creating an 8-mile network of trails. Now, the city is extending the trail south toward Greenville Technical College. Its contractor is surveying the 1.5-mile path that will link Cleveland Park and the college along the Reedy River. Meeker said it should be finished no later than next summer. The section of the Swamp Rabbit tram trail from Travelers Rest to Furman University is expected to open in December. The county also is getting ready to select a Greenways Master Plan consultant, who will create a countywide trails plan similar to the city's.	October 2007				

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Mauldin Middle School, Solar School	Mauldin Middle School has become the first in the Upstate to earn the title of "Green Power Solar School." The program is designed to provide a teaching, research and hands-on demonstration opportunity for sixth-grade students at the school.	Laurens Electric Cooperative and Santee Cooper have installed a 2-kilowatt solar power system at the school, according to a press statement from the Cooperative. Mauldin Middle has been provided an Internet-based monitoring system that provides real-time access to information regarding the system's performance from any Internet-enabled computer.	September 18, 2007				http://view2.fatspaniel.net/SSH/SchoolView.jsp?school=mauldin
General Electric Co.'s new solar energy system	The Greenville complex became one of the first GE sites partly powered by the sun Thursday when an executive switched on a new solar energy system	GE powered up the system -- consisting of 495 reflective modules -- during a special ceremony at its Garlington Road campus to showcase its clean-energy initiatives. The system can produce nearly 150,000 kilowatt-hours of electricity per year. The system can also reduce the site's CO2 emissions by 200,988 lbs per year	April 19, 2007				
U.S. Green Building Council South Carolina Chapter	The newly formed Upstate branch of the U.S. Green Building Council's South Carolina Chapter aims to lead the charge in educating people on green building and sustainable design.	The organization's first official meeting, held April 19, 2007, drew nearly 40 participants.	April 19, 2007				Anderson, Greenville and Spartanburg
Car Care Event	Greenville County is offering a Car Care Event in May. They are targeting the lower-income northern areas of the county.	They have partnered with Goodwill Industries to have trained mechanics working the event to check tire air pressure, tire tread, air filters, fluids, and gas caps. Other partners may include Greenville Technical College, and other local community groups.	May 2007				
Greer Pedestrian Plan	In January, Greer residents participated in one of the sessions to discuss a potential pedestrian plan for the neighborhoods surrounding the downtown and the \$19.2 million municipal complex now under construction.	The final plan was unveiled April 24-25.	2007				
Greenville-Pickens Area Transportation Study	The forum is one of five that will be held by the Greenville-Pickens Area Transportation Study to present preliminary recommendations for an updated long-range transportation plan.	On Thursday, February 15, 2007 Long-range transportation plans were discussed in a public forum 4-7:30 p.m.	February 2007				
Smart Growth -- City of Greenville	Smart Growth America has said about the City of Greenville, "The city has the right idea about how communities should be designed." It has chosen Greenville as one of four cities and counties nationwide to work with to turn smart growth ideas into better development for Greenville. Efforts include spreading the kind of development happening downtown to its more suburban edges including more sidewalks, buildings closer to the street, smaller parking lots and more landscaping.	These smart growth development efforts are continuing in the redevelopment along the Reedy River that flows through downtown Greenville. The Reedy River Development Plan outlines a 6 step plan for developing sustainable, condensed, mixed use communities with greenspaces for bicycle and pedestrian transportation and recreation.	2002 through 2007				
Greenville County Planning Commission Survey	Residents in Greenville County Council District 28 are invited to offer suggestions for future county planning in the area through an online survey on the Greenville County Planning Commission's Web site. The survey is intended to discover the priorities of residents for future planning options.	The survey was made available late February, 2007.	February 2007				the survey was available at: www.greenvillecountysc.gov/survey_district28/district28survey.asp
Greenville County Tree Policy	A proposed county law protecting trees would set minimum tree standards on all new development. The 14-page recommendation says developers should file a tree protection plan for new projects, and that no trees would be removed without an inspection.	Developers, foresters, landscape architects and planners contributed to the committee's recommendations over nearly a year, then ratified it by a unanimous vote. The Ordinance is currently being pursued.	2007				
TreeGreenville Educational Garden	The new educational tree garden planted at League Academy is designed as a model for all Upstate public and private schools to teach students the importance of trees and plants in preserving water, air, and life quality. Sponsors of the tree garden include League Academy PTA, Schneider Trees, Landscapes for Learning, Greater Greenville Master Gardeners, Palmetto Bank, Done Right LLC, Stone Lake Garden Club, Friends of Elayne Finkelstein, Terri James, chair of League Academy PTA Beautification, and more than 60 other parents, teachers and community volunteers.	Funding for the tree garden was provided, in part, by the Urban and Community Forestry Grant Assistance program, administered by the South Carolina Forestry Commission.	April 2007				
Enoree Landfill Recycling Station	The former active landfill at 1311 Anderson Ridge Road, Greer, now has a new name and revised mission -- the Enoree Residential Waste and Recycling Center.	The landfill had reached its maximum capacity and closed Feb. 9. The new convenience center opened Feb. 13 at the same site.	2007				Greenville
Low-impact development breakfast seminars	The Home Builders Association of Greenville and Upstate Forever hosted a Low-Impact Development seminar April 3 from 7:45 a.m. to 9 a.m. at the University Center in Greenville.	The low-impact breakfast series is part of a partnership between the Home Builders and Upstate Forever that began in 2005. The monthly seminars cover numerous low-impact development ideas and highlight the economic benefits. Other seminars are scheduled for May 1-- low cost strategies for reducing impervious cover, June 5 -- benefits of dispersed storm water management and July 10 -- making sure storm water facilities are functional and attractive. The presentations, which include breakfast, are free.	2007				Greenville
Furman Year of the Environment	Furman designated its 2007-08 academic year as the Year of the Environment	The state's first certified "green" Habitat for Humanity house is being built in Travelers Rest. Furman's Class of 2007 voted to make the project its senior class gift. The seniors raised money to build the house, partly with campus activities, mailings to alumni and donating their own \$200-per-student campus housing deposits. Furman University was presented an award for energy conservation and efficient facilities management by the South Carolina Wildlife Federation at the 42nd Annual Conservation Award Banquet. Upstate Forever, in partnership with Furman, the Carolina Climate Network and the Southern Alliance for Clean Energy held the first event in the Climate Change Speaker Series March 14, 2007.	2007				Greenville
"The Economic Benefits of Greenways for Greenville County"	A public presentation by Charles Flink Founder and President of Greenways Incorporated, Co-author of Greenways: A Guide to Planning, Design and Development.	Held Tuesday, November 28, 2006, 8 p.m. at Younts Conference Center, Furman University. Event was free of charge	28-Nov-06				Greenville
Green Building Conference	Clemson University Emerging Green Builders held the Second Annual GreenExpo and Conference Feb. 27-28 at the Madren Conference Center on campus.	The event includee a best-practices workshop, tours of Clemson's LEED-certified facilities and a daylong exposition with product representatives, architects, contractors and service companies from across the Southeast, according to a statement from the university. The GreenExpo, sponsored by Clemson University's Emerging Green Builders and the South Carolina U.S. Green Building Council, featured recent advances in products and practices of commercial and residential Green Building.	2007				Anderson, Greenville and Spartanburg

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Student Renewable Energy Conference	The fourth annual Student Renewable Energy Conference conference took place February 16-18, 2007 at Clemson University in Clemson, SC	Students and community members from across the Southeast joined in Clemson, SC February 16-18 to help build the youth movement for clean, just energy here in the Southeast. The SSREC brought together hundreds of students from across the region for a weekend of education, inspiration, trainings, networking, fun and more.	2007				Anderson, Greenville and Spartanburg
Pilot Bus Routes in Greer	County Councilman Tony Trout has been working closely with the Greenville Transit Authority to run a pilot project in Greer that would gauge interest in bus service.	The initial investment of \$3,500 should fund four weeks of test routes, with buses running weekdays.	2007				
"Clean Air Kid" Promotional Balloon	Greenville County has had a promotional balloon made in the form of the "Clean Air Kid".	The inflatable air cloud kid's dimensions are 6 feet tall by 5 feet wide. Greenville County confirmed that it was okay for them to utilize the "Clean Air Kid" image for their work.	2007				
"Energy Partner of the Year" Award	The U.S. Environmental Protection Agency has named BMW Manufacturing and its partner, Durr Systems., as the Landfill Methane Outreach Program "Energy Partner of the Year."	Currently, 63 percent of BMW Manufacturing's energy is provided by the renewable resource, saving the company at least \$1 million a year. It also reduces emissions of carbon dioxide, a greenhouse gas, by about 60,000 tons and provides enough energy to heat 15,000 homes a year.	January 2007				
Fountain Inn Air Quality Improvement Policy	Fountain Inn City Council adopted a policy statement, a voluntary plan of action to conserve energy or reduce idling. Its policies for city employees as a model for the city as a whole include: 1) Encourage employees to carpool; recognize walking and biking as beneficial alternatives. 2) Ensure city vehicles operate according to manufacturers' specifications. 3) Limit vehicle idling time. 4) Continue education on city-wide ban on open burning. 5) Encourage city employees to conserve HVAC, turn off lights and computers. 6) Include environmental considerations with new construction. 7) Refuel mornings or evenings. 8) Expand recycling.	In the Fall of 2006 the City of Fountain Inn adopted a progressive policy aimed at improving air quality. Fountain Inn put out an April Newsletter highlighting some of the steps Fountain Inn is taking to reduce air pollution. It includes information on Fountain Inn Elementary's participation in B2@school, the Gas Can Exchange, the Recycling program, Designation as a Tree City USA, and Energy Conservation.	Fall of 2006				
Fountain Inn Elementary B2@School	Greenville County was the recipient of a 2006 EPA grant to raise public awareness about air quality, and implement an anti-idling campaign in one county school. The anti-idling campaign is called B2@School, and the idea is to spread the program through out the county-wide school district. The program will involve parents and local community organizations. Baseline idling rates for cars and buses will be measured in Spring 2007. Starting next Fall, the school will adopt policy restricting the idling of cars and buses on campus. This policy will be promoted in the parent – teacher handbook, the school newsletter, and by placing anti-idling signs around campus. Fourth and fifth graders will take surveys to document the reduction in car and bus idling times during drop off and pick up. They will also track rates of nurse room visits for respiratory related illness.	Fountain Inn Elementary volunteered and was selected by Greenville County to pilot the B2 @ School program. Initial meetings have already taken place between Greenville County, City of Fountain Inn, the elementary school principal, and the teachers. Data collection is set to begin this spring.	2006 through 2007				
Fountain Inn Elementary Learning Garden	Fountain Inn Elementary is working with area Garden Clubs, arborists, master gardeners, PTA, Hillcrest High School, City and County governments to install learning gardens on their school campus. This will reduce the area needing mowing, and involve the community in this part of the city and county-wide air quality campaign.	Funds are being provided in part by Greenville County as a part of the "Breathe Better Air at School" and public awareness campaign.	2007 News article published on August 1, 2007				
Fountain Inn Gas Can Exchange	The city of Fountain Inn and Greenville County conducted a gas can exchange from 10 a.m. to 1 p.m. Saturday April 21, 2007. The event took place in front of the civic center in Fountain Inn, located at 315 N. Main St. Residents can exchange their empty old gas cans for a free, environmentally friendly no-spill CARB-compliant gas container.	The gas can exchange estimates they had about 150 participants. They collected 92 surveys and gave out 250 gas cans.	April 21, 2007				
Tree City USA	Tree City USA encourages municipalities and areas to have strong urban forestry programs. The Tree City USA program is sponsored by The National Arbor Day Foundation in cooperation with the USDA Forest Service and the National Association of State Foresters.	Anderson County has been a Tree City for 3 years. Spartanburg has been a Tree City for 25 years. Greenville has been a Tree City for 24 years. Members of the West Greenville Neighborhood Association will be planting trees as part of a revitalization project. The trees will be planted in a new park, which is located at the corner of Queen and Rochester Streets. Tree expert Jimmy Walters of the S.C. Forestry Commission will teach about the trees and the proper way to plant.	through 2007				Anderson, Greenville and Spartanburg
Planning Commission meeting	Improving air quality in the Upstate was the topic of discussion at the Greer Planning Commission meeting on May 19, 2007. Dan Powell has addressed several cities and asked them to consider adopting air quality policies.	Dan Powell and several other clean-air advocates have met with each of the county's municipality governments and planning commissions to present ideas on how to meet the EPA requirements.	May 19, 2007				
Gas Can Exchange Event	June 28, 2003; 115 cans exchanged.	115 old gas cans exchanged for new environmentally safe cans.	June 28, 2003	711 lbs/year	N/A	Resources were obtained from several local vendors	See Comment #6
School Bus Retrofit Project	Approximately 47 diesel buses will be retrofitted particulate filters during 2006. (additional reductions of PM are also expected)		2006	799 lbs/year	N/A	N/A	CO reductions 5,593 lbs/year December 2004 EAC SIP - Appendix 16

GREENVILLE COUNTY, SC DECEMBER 2007 EAC PROGRESS REPORT
Based on stakeholder consultation and taking into consideration resource and political constraints, the following control measures are under consideration pending modeling that demonstrates compliance in 2007 by SCDHEC. It is anticipated these measures under consideration will assist the County of Anderson, Greenville, Spartanburg, South Carolina, in achieving and/or maintaining the 8-hour ozone standard by 2007.

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Air Quality Awareness and Improvement Policy	Memorandum sent to all County departments for the purpose of establishing certain principles that will guide the recurring activities of County government. Purpose of policy is to establish certain principles that will guide the recurring activities of Anderson County government. Memorandum sent to all County employees for the purpose of establishing certain principles that will guide the recurring activities of County government in the following areas: 1. Ensure that all county employees are notified of upcoming alerts for Ozone Action Days during ozone season (April – October) of each year. 2. Ensure that County residents are aware of the new State's restrictions on outdoor burning, especially during ozone season. 3. Greenville County will explore and adopt, when feasible DHEC's Take a Break from the Exhaust Program or a program with a similar purpose, and Flex-scheduling and car-pooling opportunities. 4. Ensure that all County vehicles and equipment are operating according to the manufacturer's specifications. 5. Ensure preventative maintenance schedules are timely performed. Vehicles should be maintained according to manufacturer's specifications. 6. Avoid long idling. The worst mileage a vehicle can get is zero (0) miles per gallon. 7. Continue considering purchasing low-emission vehicles to meet County requirements. 8. Fill fuel tanks in the morning, or when the temperature is coolest. Unleaded gasoline is best. 9. Clean out the trunk or storage area. Every 200 lbs. Of unnecessary weight reduces fuel economy. 10. Operate vehicles with the speed limit and eliminate hasty starts. Driving slowly is better than driving fast. 11. Develop efficient routing plans. Utilize routes with minimal traffic lights, stop signs, and curves. 12. Encourage carpooling when appropriate. Utilize fuel-efficient vehicles or hybrids. 13. Greenville County has been improving landscaping at all County facilities. 14. Greenville County is committed to energy conservation programs and practices. 15. Greenville County partnered with the SC Energy Department in 2003 with the goal of reducing energy consumption. 16. The following measures will continue to be implemented and reminders will be given: - Turn OFF all office lights when leaving every day. - Turn OFF all office equipment when leaving every day.	· Greenville County is preparing a grant application due to USEPA Region 4 on December 23, 2005, in advance of the 2006 Ozone Season. The County is planning on conducting an extensive public awareness campaign should the grant application be approved. Items would include: radio and TV advertisements, informational wheels, brochures, involvement in community activities, and funds to enable the Greenville Transit Authority to provide free transit services during high ozone alert days.	Effective immediately - October 12, 2004	directionally sound	directionally sound	N/A	The commitment to address these activities has been assured by the County Administrator by establishing the Air Quality Awareness and Improvement Policy for County Government. 1. See comment No. 6.
1. Support SCDHEC statewide efforts to reduce ozone levels.	Stakeholder group to support and participate in modeling efforts. Develop stakeholder group to participate in development of regulations (NOx - BACT (Best Available Control Technology Economically Achievable), restrict open burning). · Members of the Upstate Air Quality Staff Advisory Committee participated WITH dhcc in the development of new regulations aimed at reducing NOx emissions. As a result, new regulations requiring Nox- BACT (Best Available Control Technology Economically Achievable) were adopted in mid 2004.	December 2004 EAC SIP did include Appendix 16 - 1. SC61-62.2 "Prohibition of Open Burning" regulation with reductions for 2007 calendar year - reductions expected during the ozone season for residential construction waste 2. SC61-62.5, Std. 5.2 "Control of Oxides of Nitrogen" reduction amount for both existing and new sources combined across Anderson, Greenville, Spartanburg for 2007 calendar year 3. June 24, 2004 - Participated in Upstate Air Quality Steering Committee meeting held at BMW. See Comment #4. 4. November 2004 - Greenville County submitted letter supporting SIP. See Comment #5. 5. Greenville County implemented the following measures during 2004 and 2005: purchased alternate fuel vehicles (Greenville purchased 19 such vehicles since November 2004); published and distributed brochures about improving air quality; sent out notices on high ozone days and developed audio commercials for local radio stations to broadcast during ozone awareness week and ozone season; broadcasted radio announcements and information through the County's Cable TV channel, and alerted all stakeholders of DHEC's high ozone alerts. During its May 11, 2006, the Upstate Air Quality Staff Advisory Committee met to discuss the need for greater public awareness.	June 25, 2004	65.23 tons/season N/A	13.73 tons/season 234.1 tons/yr	N/A N/A	Upstate Air Quality Staff Advisory committee will be developing a business partnership plan to involve local industries in announcing ozone alerts, participating in ride share programs and adopting the same or similar list of initiatives that Greenville County adopted from the SELC. See Comments #1, #2, #3, #5, #6, #8
		· Met with Carol Kemker (Deputy Director for Air, Pesticides and Toxics Management Division, USEPA-Region 4) and Myra Reece (Chief, Bureau of Air Quality, SCDHEC) on October 11, 2006, to discuss improved coordination and cooperation between DHEC, EPA and the Upstate counties. · Met with Myra Reece (Chief, Bureau of Air Quality, SCDHEC) and other SCDHEC representatives on November 8, 2006 for an update on air quality issues (ground level ozone and PM2.5). EPA and SCDHEC committed additional staff assistance to local governments. Local DHEC staff has been added to our EAC staff committee. · Air quality committee members attended and participated in the Environmental Issues Briefing on November 2, 2006. Beverly Banister, Director of Air, Pesticides and Toxics Management Division, USEPA-Region 4 and Robert King from SCDHEC, among other speakers, discussed air quality issues facing the Upstate and the need for greater public awareness.					
		· Stakeholders, SC DHEC, and County Staff toured several potential sites for the downtown PM2.5 monitor. The group agreed to pursue the SC Employment Security Commission property located on Pendleton Street in Greenville, SC. · City, County, SC DHEC staff will meet December 12 to discuss future partnerships and initiatives to address Air Quality outreach programs. · The City of Greenville planted 500 trees with municipal crews and 317 through contractors on Stone Ave and McBee Station.					
2. Designate an Ozone Action Coordinator	Designate a staff person in each County who will be responsible for coordination of counties ozone programs	Completed. County has 2 Ozone Coordinators. Ozone Action Coordinators were designated in 2003, John Owings and Sandra Yudice. · The City of Greenville hired Tom Keith as the new Environmental Program Manager as part of its focus and commitment to work, in part, on Air Quality issues and coordinate with the regulatory community. County staff will work closely with the City on air quality issues, programs, and initiatives. · Kevin Robinson was designated as an additional coordinator for Greenville County. · County staff will continue looking for and participating in future training opportunities available nation-wide.	March 2003	N/A	N/A	N/A	See Comment #5

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3. Seek low sulfur fuels as early as possible	Continue to coordinate with representatives of Colonial and Plantation pipelines, refiners, and State representatives to ensure that the upstate has the opportunity to receive low sulfur fuels at the earliest date as they can be provided.	Committee continues to coordinate with representatives of Colonial and Plantation pipelines, refiners. During 2005, Colonial Pipeline conducted studies that indicates that S.C., as well as others along the Colonial Pipeline are receiving sulfur levels that should help many of the non-attainment areas. Specifically: M and V are the grades used in South Carolina. The sulfur content averages shown below are by batch not volumetric weighted values. • M Grades: Average 139 High 330 • V Grades: Average 74 High 300. Ultra Low Sulfur Diesel will be available at retail stations beginning summer 2006. The City is working to ensure that all of its fleet is using ULSD fuel. This will be documented for the purposes of the Mayor's climate change committee activities.	Implementation began in 2004, was completed in 2006. Additional Measures are being taken in 2007 for the Mayor's climate change committee activities.	directionally sound	directionally sound	N/A	See Comment #5. • Committee continues to coordinate quarterly with representatives of Colonial and Plantation pipelines, refiners. During 2005, Colonial Pipeline conducted studies that indicates that South Carolina are receiving sulfur levels that should help many of the non-attainment areas. • The Environmental Protection Agency's ultra-low sulfur diesel fuel requirements went into effect on June 1, 2006. Ultra-low sulfur diesel fuel will be available at retail stations beginning summer 2006.
4. Design and implement congestion management and Intelligent Transportation System (ITS) measures.	Implement congestion management projects: intersection and signalization improvements to alleviate traffic congestion, therefore, reducing emissions from idling vehicles; Implement Intelligent Traffic Systems such as automated advisory/alert messages to drivers on interstate highways. For example: advise motorist about an accident ahead and the use of alternate routes to avoid congestion, which minimize emissions from idle vehicles. Encourage and support improved traffic operational planning, engineering and maintenance for existing and future transportation infrastructure.	Greenville County completed implementing the congestion management plan on several major thoroughfares; cameras and variable message boards have ben installed on I-85 through Anderson, Greenville and Spartanburg Counties. In December 2005, the Greenville County Planning Commission retained the services of a transportation consultant to update the Long Range Transportation plan including an updated congestion management plan and a bicycle and pedestrian plan. The current long range transportation plan may be found at www.greenvilleplanning.com . • The Greenville-Pickens Area Transportation Study (GPATS) held two public workshops June 1 & 6, 2006. The workshops included a brief presentation and provided an opportunity for citizens to influence which projects would be implemented in the region. The GPATS study area includes areas in Anderson, Greenville, Laurens, Pickens and Spartanburg Counties.	Completed in 2005. Supplementary Projects are continuing.	directionally sound	directionally sound	N/A	
		Greenville City's application was awarded a CMAC grant to synchronize traffic lights in the congested Woodruff Road area. This synchronization of lights will reduce idling times and traffic congestion on the busy Woodruff Road corridor. This project will be implemented during 2007. Plans are to extend this project to the other congested areas of the city. Greenville City Internet home page lists current traffic conditions, repairs, and provides a traffic camera picture of I-385 that is updated every 60 seconds. This enables visitors to know about traffic conditions in the area before traveling. Efforts continue to upgrade traffic lights throughout the city to energy efficient LED. To date, 156 of the 189 city traffic lights have been replaced with energy efficient LED lights. Plans are to continue implementing this across the city, until all lights all LED.	2007				
		• The Greenville County Recreation District (GCRD) hired Ty Houck, the new Director of Greenways. • The GCRD hired Chuck Flink with Greenways, Inc. to draft a County-wide Greenway Master Plan.					
		• Greenville Master Trail Plan. The City of Greenville released its master plan and the extensive network of trails connect parks, schools, neighborhoods, downtown, shopping areas and more with what appears to be a labyrinth of walking and biking routes. A year ago, the City opened the 1.3-mile "CSX section" of trail connecting Linky Stone Park, Meadowbrook Park, Mayberry Park, and the Willard Street junior golf facility. It also linked to Cleveland Park and Reedy River Falls Park, effectively creating an 8-mile network of trails. Now, the City is extending the trail south toward Greenville Technical College. Its contractor is surveying the 1.5-mile path that will link Cleveland Park and the College along the Reedy River. It should be finished no later than next summer. http://www.greenville.com/city_services/GreenwaysMasterPlan.asp					
		• The City of Fountain Inn has constructed a greenway which is currently a half mile in length. There are plans to interconnect the whole community with three to four of greenways. The Country Gardens Park and Greenway did not exist a year ago. Now, a beautiful natural habitat exists because neighborhood residents, the Fountain Inn Garden Club, city government employees, and community volunteers devoted numerous labor hours to this greenway park. The Country Gardens Greenway Park kickoff celebration brought approximately 200 people together to fellowship and to enjoy nature. Fountain Inn is extremely excited about the greenway project. City government has already provided finances and human resources. The Fountain Inn Garden Club has secured additional trees for the Country Gardens Greenway Park. Youth and children are riding their bicycles on the existing trail, and families are taking walks as exercise. The trail is providing families a place to bond and to exercise and thereby address the childhood obesity problem. The trail is also improving air quality and the environment because people can remain in their neighborhood.					
		• The City of Greenville reduced vehicle emissions by implementing the Woodruff Road Signal Timing Project, which resulted in reduced vehicle delay time with estimated air quality improvement as presented in the table in the word document.					
5. Use of hybrid vehicles	Encourage people, public and private organizations to purchase hybrid vehicles as they replace vehicles/fleet Encourage that 10% of public agencies fleet have hybrid vehicles (use of hybrid vehicles does not require changes in infrastructure for dispensing fuel). Encourage public agencies to require purchasing hybrid electric vehicles (HEVs) through the State vehicle contract.	• In October 2004, principles were issued guiding County operations to improve air quality including considering low-emission vehicles. June 2005:The Administrator signed a document with intent to purchase low emitting vehicles. Greenville has purchased 19 alternative fuel vehicles since November 2004, bringing the total number to 56 (ethanol). There are approximately 122 alternative fuel vehicles operating within federal, state, county and municipal government. June 2006: Members of the Upstate EAC counties and other stakeholders worked on statewide legislation to provide tax incentives for purchase and construction of alternative and hybrid vehicles and fuels. The Governor signed Hybrid vehicle bill H4312 on June 1, 2006. • Information on hybrid vehicles will be included in the "Improving Air Quality Public Awareness Campaign". • The County implemented measures to procure higher fuel efficient vehicles. On July 18, 2006, ozone coordinators contacted the UPS Fleet Manager to discuss UPS utilizing delivery hydraulic hybrid vehicles in Upstate SC.	Initiated in 2004 and completed June 1, 2006. The Governor signed Hybrid vehicle bill H4312 on June 1, 2006.	directionally sound	directionally sound	N/A	See Comment #5

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		The City of Greenville continues to expand its fleet of alternative fueled vehicles, including electric GEM vehicles. They now have 7 total, and plan to purchase another 19 next year. These GEM vehicles are fully electric, and are used for traffic ticketing, and events. The downtown parking garage offers electric ports for public use, and is also used to recharge the GEM vehicles. The city police fleet includes several bicycle patrols that patrol the downtown Main Street area. The police fleet also includes one ATV that is used in the city park; the ATV is gas-powered, but is more fuel efficient than the car that was used in the past. • The City of Greenville placed 15 E-85 vehicles into service.	2007				
6. Use higher efficiency engines for school buses	Require purchase of high efficiency engines for school buses as they are replaced. In South Carolina, the SC Department of Education is in charge of maintenance of school buses. DHEC is working with SC Department of Education to obtain grants from EPA. Promote an Adopt-A-School-Bus Program. Endorse a statewide recommendation for the State to take the lead	• School Bus Retrofit Project: approximately 47 diesel buses will be retrofitted with particulate filters during 2006. The school buses may not be retrofitted until 2007 when ultra-low sulfur diesel is more widely available. • The South Carolina Department of Education (SDE) purchased 61 new buses to be on the road in late 2005. • The SDE has been awarded a Clean School Bus USA Grant for \$499,099 to retrofit some buses in South Carolina with diesel oxidation catalysts and crankcase filters, replace some older buses and conduct a biodiesel pilot and an idle-reduction device pilot. • Inez Tenenbaum signed an order on June 20, 2006 to buy 630 new school buses with roughly \$36 million appropriated by the Legislature. • On June 20, 2006, the SC Education Department Transportation Director announced that in the fall of 2006, all South Carolina buses will use a blend of 20 percent biodiesel ultra low-sulfur fuel, which reduces soot emissions about 10 percent from standard diesel fuel. The state is also using \$1 million to purchase 140 particulate traps.	Completed in 2006	N/A	N/A	N/A	Reductions accounted for under School Bus Retrofit Project
7.a. Develop incentive programs and opportunity for citizens to choose alternative transportation modes. Establish intermodal connections with an emphasis on mass transit	WALKING/BIKING Encourage local government to increase pedestrian/bicycle infrastructure spending (the Upstate spends 2 cents per person compared to SC spending 22 cents per person). Establish safer bike routes with better signs marking lanes and routes. Increase highway funding for bike paths, walking or mass transit including high-speed rail. Support the federal transportation enhancement program. Install bike racks on all transit vehicles to encourage intermodal transportation. New buses purchased through the state's bus purchase program will have bike racks. PARK and RIDE Establish mass transportation between a plant and a park-and-ride site. CARPOOLING Work with local government to offer incentives employees to car pool. MASS TRANSIT Offer a free trolley service running in a loop in downtown areas and nearby restaurants, especially during lunch hours; Research past feasibility studies on free downtown shuttles. Potential for sponsorship with local area restaurants and businesses for a lunch time shuttle could defer the operational costs of the endeavor. Support mass transit (transportation choices and alternatives): While the on	1. December 2004 Park and Ride: Staffs of Greenville County Planning Commission, Greenville Transit Authority (GTA) and Greater Greenville Chamber of Commerce have begun joing effort to develop a feasibility study for Park-n-Ride program and/or Ride-Share program for Greenville County. Information will be shared with Anderson and Spartanburg counties. 2. June 2005 - County contract with consultant to prepare a Transit Development Plan for the most rapidly growing portion of Greenville County, toinclude a Park and Ride and Rideshare Feasibility study. The transit development plan may be viewed at www.greenvilleplanning.com See Comment #8. 3. November 2005, the transportation consultant completed the transit study for Mauldin and Simpsonville and recommended alternatives for providing transit to this portion of Greenville County. Currently the cities of Mauldin and Simpsonville are considering the recommendations included in the transit study. June 2006: Increased transit offered by GTA and Phase I of interim use plan for G&N rail walking trail.	Implementation began in 2004 and was completed in 2006. Supplementary projects are continuing.	directionally sound	directionally sound	N/A	See Comment #5
		Greenville County Economic Development Corporation (GCEDC) is negotiating with a contractor to salvage the rail track on the Greenville and Northern (G&N) Railroad to convert the rail bed to a tram/trail. The former G&N Railroad runs between the cities of Travelers Rest and Greenville. The GCEDC initiated discussions with the Greenville Transit Authority (GTA) to determine if GTA could develop a funding mechanism to purchase and operate a hybrid or fuel efficient tram. • The downtown trolley that the City of Greenville began operating in June 2006 (see June 2006 updated above) was such a success that the City began operating a second trolley in September 2006. The trolleys hold 37 passengers each and the service is free. • The Greenville Transit Authority is considering the five-year plan completed in January 2006 concerning coordinating with Pickens County to provide service in the vicinity of Easley, SC. The City of Easley will begin in late November 2006 a \$50,000 state-federal-funded study of public transportation.					
		• City of Greenville: o Installed 24 bicycle racks throughout downtown Greenville. o Completed of a City-wide Trails & Greenways Master Plan. The purpose of the plan was to develop a framework for building an integrated system of pathways that will link residents to the outdoors. The future network will provide residents with close-to-home and close-to-work access to bicycle and pedestrian trails that connect to the City's most popular destinations. The trails and greenways will serve transportation and recreation needs and help to encourage quality, sustainable economic growth. o Started construction on a 1.5 mile greenway that will connect Greenville's Cleveland Park and Downtown with several neighborhoods, churches, recreation centers, and education facilities. o Expanded the trolley route beginning November 2007 to serve the northern part of the downtown and Heritage Green areas.					
7.b. Offer free or reduced transportation cost on high ozone days.	MASS TRANSIT: Implement a coordinated high ozone day alert action plan to include public notification and free or reduced ozone fares from the transportation providers.	Greenville County is working on a grant application due to USEPA Region 4 on December 23, 2005, in preparation for the 2006 Ozone Season. December 2006: The Greenville Transit Authority and staff have determined the approximate cost of providing free transit services during high ozone days; however, funds have not been secured. Greenville County is offering free rides to residents and visitors during high ground level ozone days in 2007. Ridership information will be tracked so that estimates can be made on the positive impact on air quality this provides. Plans are to extend this program into the future.	Implementation began in 2005. Completed in 2007.	directionally sound	directionally sound	N/A	

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7.c. Reduce vehicle miles traveled by developing efficient user-friendly transit systems.	Integrate transportation planning with land use planning so public transit can make a comprehensive contribution to economic development and mobility; Remove local barriers to densification in downtowns, infill areas, and transit stations and corridors.	1. December 2004 - Greenville County (GC) Planning Commission completed update to county Zoning Ordinance - adopted November 30, 2004. New provisions will eliminate minimum lot size requirements, encourage cluster developments, grant density bonuses for developments with access to public transportation, allow some commercial developments to include housing within the development. 2. June 2005 - county council passed ordinances updating Zoning Ordinance and Land Development Regulations; changes focus on adding flexibilities to encourage cluster developments, neo-traditional development and mixed-use developments. See Comment #8. Planning Commission on behalf of the City of Mauldin and The City of Simpsonville has retained Day Wilburn Associates to prepare a Transit Development Plan for the Mauldin-Simpsonville (MS) Urbanized Area. See update on strategy 7.a. The MS transit study has been completed and the GC Planning Commission met with the cities to seek matching funds to begin additional public transit services. Recommendations are currently being considered.	Zoning Ordinance complete June 2005 and Transit Study completed in January 2006.	directionally sound	directionally sound	N/A	Comments #7
		Completed in 2004, the Falls Park Bridge and surrounding park along the Reedy River in downtown Greenville covers 18 acres. It is a part of a much larger system of bike and foot trails that network through the densely commercial and residential downtown area. These urban trails are valuable to the commuting and recreational citizen, including educational gardens, safety marking and traffic calming devices, as well as many bike racks. These trails connect the downtown area to surrounding residential areas, local bus stations, as well as local attractions such as the ball park and County Zoo. • The City of Greenville has begun plans for a Greenway to extend from downtown Greenville north into the city Travelers Rest and Furman University. The Greenville County Economic Development Committee owns the rail line. When developed, this hard surface tramline can act as a trail and transportation line between Travelers Rest and downtown Greenville, with stops along the way. These plans are designed to incorporate with a high-speed commuter rail that will be built.	2004 and 2007				
8. Review and update air emission inventory for the Upstate	Ensure all industrial sources still operating. Review industrial sources for plant closures. Identify major sources of NOx Map the locations of point sources (10% of point sources cannot be found). Map the specific locations and the area sources where coal is burned.	This was completed and forwarded to SCDHEC on a previous updated progress report. The information allowed DHEC to having more accurate emissions inventory.	Completed. This information was included in the December 10, 2003 Early Action Compact Milestone on pages 20 through 37.	directionally sound	directionally sound	N/A	SCDHEC
9. Support SCDHEC in evaluating and seeking reductions from major sources based on modeling	Coordinate with Duke Power to determine what NOx reductions are planned for the Lee Steam Plan Coordinate with the Williams Company to determine what NOx reductions are planned for the TRANSCO Pipeline. Support NOx reduction strategies in the State Implementation Plan Develop an Early Reduction Program with incentives for industrial facility (Tier Two Type emissions NOx sources)	See info on Duke Power included in Appendix 16 of EAC SIP (link in Comment #6). - The Williams Company received DHEC permits to replace outdated "uncontrolled" compressors on the pipeline located in Duncan. Replacement of the compressors began in late 2004 and continue until late 2005. This will result in a significant Nox reduction for the Upstate. Duke Power Lee Steam Plant coal fired Units #1 and #2 will complete final construction and permit testing for new low NOx burners during June, July and August 2006. Duke Power has commitment to install Low NOx burners on the 2 remaining units at Lee Steam Plant. Unit #1 burners were installed April-May 2006 and start-up with Low NOx burners was May 19, 2006. Unit #2 burners were installed March-April 06 and start-up with Low NOx burners was April 15, 2006.	Implementation began in 2005 and was completed in May 2006.	N/A	40%	N/A	
10. Develop a program to offer to purchase or repair smoking vehicles (known as cash for clunkers).	Use funds generated from a license plate sales, registration fees, or license plate tax program to buy or repair high emitting vehicles from individuals. Purchase such vehicles from non-profit groups such as the Kidney Foundation, Goodwill, Salvation Army when they have been donated as charitable gifts. Consider accelerated vehicle retirement (scrappage) programs to encourage vehicle owners to voluntarily retire their vehicles sooner than they would have otherwise.	During its August 5, 2003, the AQ Staff Advisory Committee discussed this strategy: A high emission vehicle buyback or repair program appears to be cost effective for VOC emissions, but is less clear for NOx emissions. Recommendation: funding the high emission vehicle buyback or repair program as a pilot program with a set yearly target for the number of vehicles that will be either repaired or scrapped. In the summer of 2006, staff from the Air Quality Staff Advisory Committee will meet with Goodwill Industries, Salvation Army and Kidney Foundation representatives to discuss alternatives to re-selling clunker vehicles donated to these organizations. December 2006: Met with Goodwill Industries and Miracle Hills executive directors to discuss air quality efforts and the "cash for clunkers" strategy. Conference call with the Kidney Foundation (Kidney Car Program) to discuss air quality efforts and the "cash for clunkers" strategy.	2005. Completion of this measure will depend on discussion with the non-profit organizations.	directionally sound	directionally sound	Use funds from license plate sales	
11. Ban open burning of on-site commercial clearing debris during ozone season (April - October)	Use SCDHEC model to detrmine the most effective method to ban open burning. Discuss modeling results with all local governments to consider adoption.	DHEC adopted regulations in mid 2004 restricting open burning. See Comment #6.November 2005 Air Quality Steering Committee meeting, staff directed to coordinate with local governments to enforce burning ban year-round. Greenville County notified local business and government about the ban at monthly subdivision review team meetings. The County is running a PSA on the County's Cable TV channel permanently. As part of the "Improving Air Quality Public Awareness campaign" the County will distribute brochures/information about open burning regulations locally. November 7, 2006, staff presented to the Fire Chief Association (FCA) outlining problems and solutions to air quality issues in the Upstate. Staff distributed "Learn Before You Burn" brochures to the FCA and the Library System for public distribution. The Fire Chiefs requested information on approaching County Council about a more restrictive open burning ordinance. Began radio broadcasting a PSA on open burning and air quality information during the month of November 2006 in an effort to make citizens aware and minimize the burning of leaves or yard debris.	Completed in 2004.	directionally sound	directionally sound	N/A	See Comment #6
12. Create incentives for the purchase of high efficiency and low emissions vehicles.	Offer tax credits for vehicles with high efficiency gas consumption or low emissions. Offer tax credits for low mileage vehicles instead of high mileage vehicles	December 2004 - developing draft bill to offer reduced tax incentives for those purchasing low emitting vehicles. A Bill titled "An act concerning the promotion of alternative use fuel, and hybrid propulsion system for transportation purposes" was submitted to the SC House of Representatives in January 2005. On June1, 2006 the Governor signed the H*4312(Rat #0371) General Bill to allow state income tax credit equal to 20% of certain new hybrid, fuel cell, alternative fuel or lean burn technology motor vehicle credits allowed against a taxpayers federal income tax liability. This information and its positive effects on air quality will be included in the "Improving Air Quality Public Awareness Campaign" currently under enhancement.	Implementation began in 2004 and was completed June 1, 2006.	directionally sound	directionally sound	N/A	See Comment #5
****Develop air quality best management practices (BMPs)_ for construction sites	Develop a generic list of BMPs Develop management practices for construction debris. Develop management practices for emissions from construction vehicles. Develop management practices for traffic controls during construction.			directionally sound	directionally sound	N/A	See Comment #2

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13. Use land-use and transportation planning to improve air quality	Include air quality measures as a part of the land-use and transportation planning process.	1. June 2005 - County Council passed ordinances updating Zoning Ordinance and Land Development Regulations; changes focus on adding flexibilities to encourage cluster developments, neo-traditional development and mixed-use developments. A copy of this ordinance may be viewed at www.greenvilleplanning.com . 2007: Downtown revitalization efforts continue to offer an expanding choice of mixed-use developments. Greenville Pickens Area Transportation Study (GPATS) Committee adopted the Long Range Transportation Plan on November 5, 2007. The plan contains recommendations for coordinating transportation improvements with the County's Comprehensive Plan. Greenville County Council and the Planning Commission held a workshop on November 14, 2007 to discuss the process to update County's Comprehensive Plan, which will include the coordination of land use and transportation elements. It is expected the plan will be adopted in early 2009.	Completed in 2005.	directionally sound	directionally sound	N/A	See Comment #8
14. Implement a program to encourage use of green power.	Capture emissions from landfills to produce green power, e.g., BMW is utilizing Palmetto Landfill emissions to produce energy for its plant. Implement a Purchase Green Power program when available. Green power is electricity generated by renewable resources like solar, wind, and even decomposing garbage in selected landfills. These resources are replenished naturally and minimize harm to the environment.	BMW Manufacturing Corp. and its partners launched a \$12 million methane gas-to-energy project. Methane from the Palmetto Landfill is used to power four onsite turbines and cogenerate electricity and hot water for the plant. December 2004, green power options are limited to the north-western portion of Greenville County served by Blue Ridge Electric Cooperative. The Enoree Landfill is scheduled for closure during 2007. Greenville County will advertise in the summer 2006 for a developer to capture and recover methane gas at the Enoree Landfill. • In early November 2006, Greenville County began installing the active methane gas collection system. About 10 of the 50 well-heads have been installed. Once the well-heads have been installed and connected to the blower system, the County will install a flare. When the flare system is up and running, the developer has six months to find a green power use. If the contractor fails to find a partner, Greenville County will own the gas rights and can partner with another company.	Completed in 2003 but continue exploring implementation (see June 2006 update). The system should be flaring gas by the end of January 2007. It is expected that the Enoree Landfill would be producing green power by the summer 2007. However, if the current developer can not perform, the process would begin again.	directionally sound	directionally sound	N/A	
		Under consideration is a methane gas landfill energy project from a Greenville County landfill located near Mauldin, a rapidly growing part of the county. The most recent research has shown that the targeted landfill may not be optimal due to excess moisture in the methane. However, the city is working to verify this information, and is interested in using this technology in other locations, possibly including wastewater treatment plants. There is one such water treatment facility using this technology in Greenville, and they have been very satisfied with the savings and the positive feedback from local residents.	2007				
		• The County continues flaring the methane gas produce at the landfill. Although this is not a desirable solution, it is the preferable method than allowing it escape to the atmosphere. The County issued a request for proposals in the summer 2006 to procure services from companies capable of (a) providing an efficient and effective means of gas collection, distribution and usage, (b) ensuring safe and environmentally sound operating practices, and (c) arranging for the full utilization of methane gas generated over an extended period of time. The County continues negotiating a contract. • The SC Office of Regulatory Staff announced that three investor-owned utilities (Duke Energy, Progress Energy and SCE&G) will provide a green power option for customers in South Carolina beginning January 2008. The Palmetto Clean Energy (PaCE) program will procure power from renewable energy sources in the Southeast from solar, wind, or biomass. http://www.regulatorystaff.sc.gov/ORSCcontent.asp?type=news&newsID=143					
15. Promote route efficiency for delivery vehicles, trash collection etc.	Encourage business to consolidate distribution and collection routes to improve efficiency and reduce emissions from their fleets. Maximize route efficiency for public services such as garbage collection, delivery vehicles, and other vehicle trips to reduce fuel usage.	In June 2004, Fleet Management Division sent memorandum to all department managers outlining actions to maximize fuel efficiency including: Ensure tires are properly inflated. Fill fuel tanks in the morning, or when temperature is coolest, do no overfill tank and stop pumping when the nozzle cuts off. Clean out the trunk or storage area. Avoid long idling. Operate vehicles within the speed limit and eliminate "jackrabbit" starts. Ensure preventative maintenance schedules are timely performed. Develop efficient routing plans. Encourage carpooling when appropriate for meetings and training. In February 2006 a consultant for the GTA completed the transit development plan. An element of that plan was an efficiency analysis of public trasport routes which were determined to be the most efficient considering budget limitations. The School District of Greenville County requested the SC Department of Education to conduct a school bus routing efficiency study. The study began in early 2006 and should be completed in early 2007. Source: http://www.greenville.k12.sc.us/district/news/release/2006a/progress.pdf	Completed in June 2006 but progress and improvements will continue.	directionally sound	directionally sound	N/A	See Comment #5
16. Establish a clean air partnership with business and industry.	Encourage and coordinate alternate work schedules such as staggered work hours for business, industry and local governments. Establish park and ride lots serving perimeter counties along major corridors. Make the public aware of the park-and-ride concept: media could assist in publicizing which programs are available. Encourage carpooling/vanpooling as an option where employees living in the same area agree to ride to work together rather than to drive their individualvehicle to work. Consider parking facility controls that can include employers offering a tax-free transit/vanpool benefits and which limit the amount of parking and encourage carpooling, mass transit, etc. Encourage telecommuting. Adopt a Bus Program. Develop funding to be used for matching grants fund for several EAP strategies. Develop a core competency and assisting the Upstate EAP group in writing grant proposal.	June 2004 - Staffs of Greenville County Planning Commission (GCPC), Greenville Transit Authority and Greater Greenville Chamber of Commerce have begun joining effort to develop a feasibility study for Park-n-Ride program and/or Ride-Share program for Greenville County. Information will be shared with Anderson and Spartanburg counties. In the November 2005, the Air Quality Steering Committee directed staff to begin addressing this strategy before the 2006 ozone season. July 2006: Since that time, a committee has been formed to meet the commitments outlined in the resolution. This Committee is comprised of local county staff from recycling, legal, public works, and transportation. SCDHEC has been in attendance at two of the three meetings, and has an open invitation. The last meeting was February 13, and plans are to invite more local stakeholders into the committee by the next meeting on March 13. This committee is required to report to City Council once every three months, and is working to develop a plan to document and reduce greenhouse gas emissions. These greenhouse gas reduction efforts will also help re	2004 through 2006	directionally sound	directionally sound	N/A	See Comment #4

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	• The City and County of Greenville, Service Master (a regional diesel engine fleet service company), and North Carolina State University formed a partnership and submitted an application to EPA-Region 4 for the Southeast Diesel Collaborative program to test a new emission reduction technology for diesel fueled engines. As we strive toward attaining the 8-hour ozone standard by December 31, 2007, a project of this magnitude could have positive impacts on our continued efforts next year and the future. Greenville County is committing to providing in-kind (personnel) services to the project from the County Administrator's Office, the Planning Department, the Procurement Services Division, and the Office of Management and Budget. The County will advertise the request for proposals and handle the review process along with the City of Greenville to determine the best technology provider/respondent. The County will also handle all progress reporting of data, financial, and final reporting to the EPA, should this proposal be successful.	The City of Greenville is hosting The Alliance for Innovation's Transforming Local Government Conference, in June 2008. The topic for 2008 is "Creating Sustainable Futures: Global Issues/Local Solutions." With a partnership between the Innovation Group, the International City/County Management Association (ICMA), and the School of Public Affairs from Arizona State University (ASU), the mission of the Alliance for Innovation is to transform local government and advance community excellence through the discovery and application of leading innovative ideas and practices. The Alliance brings professionals, local governments, academics, and private sector partners together to discover and apply the best ideas, practices and solutions to the challenges confronting local government and communities. During the Conference, the City and County of Greenville will provide a display area, where other local government leaders may view an example of one of the converted fleet vehicles and the technology behind the conversion. This display will explain, in layman's terms, information and the concept behind the emissions reduction technology and the North Carolina State University (NCSU) will provide the on-board emission measurement technology and the	2008				
17. Establish an active public awareness campaign.	Develop an editorial board to discuss air quality issues an development of a relationship with media. Use alert messages year round, not only during ozone season; Utilize public service announcement, newspapers, weather channels, and other media outlets to notify citizens of high ozone days; Utilize TV Channels to issue high ozone alerts using the crawl bar at bottom of TV screens. Encourage health organizations to sponsor ozone alerts in media. Enhance ozone awareness (Outreach-communication): assign a local agency to develop and implement a program to educate and motivate individuals to take actions to minimize ozone pollution. Includes a focused distribution of educational materials, dissemination of SCDHEC ground-level ozone forecast, increased media alerts to specific audiences, and includes action oriented components (i.e. ridesharing, telecommuting, etc.). Develop a campaign to encourage things such as refueling vehicles during evenings, not topping off tanks when refueling, using lawnmowers during evenings instead of during high ozone hours, using of electric lawn mowers. Develop a license plate program to generate revenue to implement the public awareness program. Develop awareness program on tax savings for purchasing high efficiency vehicles.	1. June 2004 Progress Report - Complete list of strategies for public review and comments were made available through the Greenville County Library system and the Greenville County Planning Commission from March 29, 2004 to May 31, 2004. Responses positive, but limited - less than 25 people called or sent letters. 2. December 2004 - DHEC Ozone forecast updated daily on county cable TV Channel; TV Weather channel announces Ozone Forecasts; county posted DHEC's link on County's website - front page; alerts for 2005 will resume; reviewing and considering materials to be used during 2005 public awareness campaign; Develop editorial board to discuss air quality issues and development of a relationship with media; encourage health organizations to sponsor ozone alerts in media; enhance ozone awareness; develop campaign to encourage things such as refueling vehicles during evenings, not topping off tanks, using lawnmowers during evenings, using electric lawn mowers; develop license plate program to generate revenue to implement public awareness campaign; develop awareness program on tax savings for purchasing high efficiency vehicles. See Comment #5. In 2005, Greenville County conducted an educational campaign to encourage things such as refueling vehicles during evenings, not topping off tanks when refueling, using lawnmowers during evenings instead of during high ozone hours, using of electric lawn mowers.	Completed Fall 2004 but will continue with implementation, progress and improvements.	directionally sound	directionally sound	N/A	See Comment #4
		• Continued implementing the public awareness campaign and the news media continued publishing articles on initiatives and developments regarding air quality issues and alerts, including coverage on October 2, 2007 about SCDHEC reviewing data indicating that South Carolina "will meet federal Clean Air Act ozone standards." The activities held between July and December 2007 are detailed in a table in the attached word document.					
18. Promote research in energy efficiency at local universities, industries, energy companies, federal government, and other institutions that improve air quality.	Establish programs to research energy efficiencies at local universities, e.g., Institute for Energy Studies at Clemson University. Encourage business and industry to utilize the research from these programs to make the best decision concerning the purchase orupgrade of furnaces and boilers.	ALTERNATIVE FUELS:In 2005, Clemson University Chemical engineering professor Mark C. Thies received an \$856,000 award from the Department of Energy (DOE) to develop more efficient processes for the centralized production of hydrogen by splitting water. In addition to Thies, the project team includes fellow Clemson David Bruce, John O'Connell from the University of Virginia and Max Gorenssek from Savannah River National Lab. The Clemson team will interact not only with U. S. engineers and scientists but also with those in France, Italy, and Japan, all of whom have teams working on related processes. Clemson University is developing the International Center for Automotive Research (Clemson-ICAR) in Greenville, SC. The ICAR project will be the premier automotive and motorsports research and educational center in SC. Summer 2003: Members of the Air Quality Staff Advisory Committee met with staff from the SC Indstitute for Energy Studies (SCIES) from Clemson University. SCIES made a presentation to the Committee November 18, 2003.	Completed November 2003 but will continue monitoring progress of ongoing research.	directionally sound	directionally sound	N/A	See Comment #5
		The City of Greenville is working to conserve electricity, and find alternative sources of electricity. Two City Fire Station has recently installed a solar powered water heater, and have realized savings of 4% in the City's annual electric bill. City Hall has recently upgraded their chiller system in order to reduce its energy consumption. In all city facilities, outdated heating units are being replaced with highly energy efficient models.	2007				
		• Furman University and Duke Energy formed a partnership to create a demonstration laboratory on campus to showcase the latest technological advances in energy efficiency and sustainability. A Southern Living Showcase Home will be a model of "green" design and will be completed by June 2008. The building will highlight energy efficiency, green design and use of natural materials and products. The showcase home will host public tours for one year and be converted into Furman University's Center for Sustainability in 2009. • In February 2007, Clemson University completed a study of the "Potential Economic Impact of an Off-Shore Wind Farm in South Carolina." (Source: http://www.strom.clemson.edu/publications/flynn/Wind_Farm_Impact.pdf)					

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
19. Use of alternate fuels.	Direct local Planning Commissions to identify areas where alternative fuels will be best suited. Encourage the use of alternate fuels; Assist with establishing alternative fuel infrastructure for private sector clean fuel fleets. Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternate fuels include bio-diesel, electricity, ethanol, hydrogen, liquefied petroleum gas, methanol, and natural gas. Encourage a clean-fuel fleet program for centrally fueled fleets of more than 10 vehicles.	June 2005 - local company began selling E-85 at 2 stations along Interstate 85; sub-committee of Upstate Air Quality Staff Advisory Committee develop wording for bill concerning the promotion of alternative use fuel. By the end of 2005, there will be at least 12 additional distribution stations. ALTERNATE FUELS: In 2005, Clemson University Professor James G. Goodwin, Jr., chair of the Clemson's chemical and biomolecular engineering department, received a DOE grant for energy research through DOE's State Technologies Advancement Collaborative. Goodwin's work focuses on the performance of iron-based bimetallic catalysts that are crucial to synthesis of clean fuels, additives and lubricants derived from coal and biomass gasification. June 2006 - There are currently 12 public Spinx stations that offer E85 in Greenville County. Eight Spinx stations in the county offer Biodiesel. December 2006: • The number of stations offering E85 and other alternative fuels has increased from 12 in June to 26 in October.	Completed in 2005 and continuing.	directionally sound	directionally sound	N/A	See Comment #5 See Comment #8
		• On June 19, 2007, the SC General Assembly passed the Hydrogen Bill. The passage of this monumental energy bill will provide millions of dollars starting in 2008 for tax incentives, sales tax rebates, and incentive payments to encourage the development of renewable fuels and alternative energy in South Carolina. Additionally, H.3749 was passed that included a provision to establish a Renewable Energy Grants and Loans program. (Source: http://www.palmettocleanfuels.org/#news). The following are a list of incentives included in the bill:					
20. Evaluate the use of High Occupancy Vehicle (HOV) lanes using existing lanes.	Evaluate use of HOV on three (3) lane interstate highways; Show the advantages of designating HOVs; Pass laws establishing regulations on HOVs lanes such as the threshold in the number of passengers (perhaps two) in the vehicle using HOVs lanes and time of day for the lane to be designated as HOV (rush hour). Pass laws authorizing issuance of tickets for violations of HOVs lanes regulations, i.e., one-passenger vehicles using HOV lanes on designated hours.	• During its August 5, 2003, the AQ Staff Advisory Committee discussed and evaluated the implementation of this strategy. • In June 2004, Planning Commission staff met with traffic engineers from SCDOT to discuss this strategy. Traffic engineers indicated that because traffic volumes on I-85 exceed 100,000 vehicles daily on the three lanes of the interstate, it was recommended that the Upstate consider converting one of the three lanes on I-85 or I-385 to a HOV lane. The offsetting increase in congestion in the two remaining lanes would predictably increase NOx emissions by an amount exceeding the any reductions gained from traffic moving in the HOV lane. HOV lanes work best when they are paralleled by at least 4 or more free flow lanes.	Completed in 2004.	directionally sound	directionally sound	N/A	
21. Modify speed limits for optimum fuel efficiency.	Direct SCDHEC and SCDOT to take the lead role. Direct Planning Commissions to assist SCDHEC in modeling.	• In Summer 2005, the speed limits on the interstate highways in Greenville County have been established at 60 mph because the county is defined as urban by the US Census and the FHWA. • The GPATS MPO was designated as urban by the US Census following the 2000 census and as a result speed limits on the interstate highways in Greenville and Pickens Counties (GPATS MPO BOUNDARY) have been established at 60 mph. According to the Department of Energy, gas mileage decreases rapidly at speeds above 60 mph. No further actions are planned.	Completed in 2005.	directionally sound	directionally sound	N/A	
22. Develop process for evaluating and minimizing impact of major projects such as shopping centers, schools, and subdivisions.	Study impact of post construction traffic flow. Study impact of construction activities. Greenville County Planning Commission (GCPC)	• In August 16, 2005, the GCPC staff met the City of Greenville Traffic Engineering Department staff. • In late 2005, the GCPC staff presented to the Planning Commission. • In April 2006, the GCPC approved a staff proposal to develop an ordinance requiring a traffic impact studies. • In May 2006, the GCPC approved a staff proposal to develop an amendment to the County Land Development Regulations. • Planning staff will meet with the Traffic Impact Study Advisory Committee on June 28, 2006, to begin reviewing a proposed ordinance. It is expected that the proposed ordinance will be presented to County Council before the end of 2006. • In September 2006 the GCPC recommended to GC Council: a set of design standards for big box retail development, the adoption of a traffic impact ordinance that will require a traffic impact study must be completed before issuing a building permit, and the adoption of criteria that will require inter-connectivity between residential subdivisions and commercial developments. Public hearings will be held in early 2007.	Implementation began in 2005 and is continuing.	directionally sound	directionally sound	N/A	See Comment #5
23. Community Schools to reduce vehicle miles traveled and encourage biking and walking for students and parents by encouraging smaller community-based schools that are integrated into neighborhoods	Eliminate minimum acreage requirements for school sites. Cap student populations per facilities. Require coordination among school boards and local governments to plan school sites and avoid conflicts with local planning goals. Favor restoration and construction of community-based small schools over new construction of remote mega schools.	Greenville County's Land Development Regulations were amended in January 2005 to require sidewalks to be installed in all new subdivisions. Greenville County's Zoning Ordinance was amended in January 2005 to allow cluster type developments, multifamily developments as part of commercial and office developments and to encourage Neo-traditional developments. Increased design flexibilities were added as incentives to develop pedestrian friendly designs. Fountain Inn Elementary is under review for a Greenway project to connect the school with surrounding neighborhoods and a two local parks. Fountain Inn Elementary is the only elementary school serving the City of Fountain Inn, and wishes to promote safe bike and pedestrian commuting of its students. The school and Greenville County are discussing plans to reclaim a county right of way in order to install a safe passage for student onto the campus from a large local neighborhood. This path would be the start of a greenway that would eventually lead to an outdoor classroom, picnic area, and ball field that is the planned location for a treehouse-themed park.	Completed in 2006 and continuing.	directionally sound	directionally sound	N/A	• The South Carolina School District Reorganization and Realignment Act of 2006 was introduced in the House on January 24, 2006 and is currently residing in the House Committee on Education and Public works. This bill states that the Education and Oversight Committee shall study and examine the optimum size, including both geographic area and student population. A copy of this bill is available online at http://www.scstatehouse.net/sess116_2005-2006/bills/4488.htm • SECTION 203 SCHOOL SITES 203.1 South Carolina Code Ann. § 59-23-250 (to be codified at Supp. 2003) eliminates minimum acreage requirements for public school sites. However, school districts must receive approval from the South Carolina Department of Education prior to property acquisition or additions on existing properties. 203.2 The State Department of Education encourages districts to consider acreage for school sites as established by the Council of Educational Facility Planners.

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Comments: 1. December 2004 - SC EAC SIP - activity not quantified for several reasons (first) in accordance with EAC Protocol, after all adopted Federal and State controls were accounted for in the modeling, it was determined that local controls were not necessary to demonstrate attainment of the 8-hour ozone standard. Measures were submitted by the local areas to show their continued support and commitment to the EAC process. (second) this activity is directionally sound and should provide air quality benefits and in some cases measurable results. The progress toward implementing this activity and the benefits derived will be documentd as a part of the ongoing reporting requirements. 2. December 2003 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac.html - additional information provided by the county to include "findings", "advantages/disadvantages", "recommendations", "costs", etc.... 3. March 2004 - Local Early Action Plan - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0304.asp 4. June 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0604.asp 5. December 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_1204.asp 6. December 2004 - SC EAC SIP - Including Appendix 8 (Local Early Action Plans and the Air Quality Awareness and Improvement Policy) and Appendix 16 (County Level Emission Reductions and Descriptions for the Ozone EAC Areas)- See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 7. April 20, 2005 - Correspondence to Mr. Palmer including clarifying supplemental information to the EAC SIP submittal of December 2004. - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 8. June 2005 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0605.asp							

December 2007 - Early Action Compact Progress Report
GREENVILLE COUNTY
 Prepared by Sandra Yudice, John Owings, and Dan Powell

In an effort to keep our contact information updated we have provided the following information for the county:

	Name	Telephone	E-mail Address
Administrator	Joseph Kernell	(864) 467-7105	jkernell@greenvillecounty.org
EAC contacts	John Owings	(864) 467-7270	jowings@greenvillecounty.org
	Dan Powell	(864) 467-7270	dpowell@greenvillecounty.org
	Sandra Yudice	(864) 467-7409	syudice@greenvillecounty.org

Anderson, Greenville, and Spartanburg Resolution

Anderson County, Greenville County, and Spartanburg County each entered into a resolution as a cooperative means of improving air quality to meet applicable state and federal air quality standards. Greenville County adopted its resolution on November 19, 2002. By entering into this resolution, the Counties agreed to the following:

1. Each County will provide individuals to serve on a Steering Committee. The Steering Committee will strive to finalize an Upstate Air Quality Action Plan. The Air Quality Action Plan is intended to be a guide for implementation of proactive measures that will bring the Participating Counties into compliance with the 8-hour ozone standard consistent with DHEC's Early Action Plan. The Steering Committee will consist of no more than 21 voting members (7 from each county). Advisory (non-voting) members may be appointed up to a maximum of seven from each county.
2. Implementation costs of the air Quality Action Plan will be specified and quantified by the Steering Committee including ongoing direct and indirect costs that will be incurred by state and local governments, businesses, and individual taxpayers.
3. The Steering Committee will prepare a report detailing and quantifying the economic impact and costs associated with non-attainment status that have been incurred by the four geographic non-attainment areas most closely located near Anderson, Greenville and Spartanburg.
4. Once an Air Quality Action Plan is developed by the Steering Committee, each of the Participating Counties will consider adoption of the Air Quality Action Plan within the boundaries of the respective participating Counties consistent with the goals of the Early Action Program.

Air Quality Awareness and Improvement Policy for County Government

In June 2004, the Fleet Management Division sent a memorandum to all department managers outlining several actions to maximize fuel efficiency. These actions included:

1. Ensure tires are properly inflated.
2. Fill fuel tanks in the morning, or when temperature is coolest, do no overfill tank and stop pumping when the nozzle cuts off.
3. Clean out the trunk or storage area.
4. Avoid long idling.
5. Operate vehicles within the speed limit and eliminate "jackrabbit" starts.
6. Ensure preventative maintenance schedules are timely performed.
7. Develop efficient routing plans.
8. Encourage carpooling when appropriate for meetings and training.

In addition, in October 2004, a memorandum was sent to all County departments for the purpose of establishing certain principles that will guide the recurring activities of County government to improve air quality. The purpose of the policy is to establish certain principles that will guide the recurring activities of the Greenville County government. The memorandum was sent to all County employees for the purpose of establishing certain principles that will guide the recurring activities of County government in the following areas:

1. Ensure that all county employees are notified of upcoming alerts for Ozone Action Days during ozone season (April – October) of each year.
2. Ensure that County residents are aware of the new State's restrictions on outdoor burning, especially during ozone season.
3. Greenville County will explore and adopt, when feasible DHEC's Take a Break from the Exhaust Program or a program with a similar purpose, and Flex-scheduling and car-pooling opportunities.
4. Ensure that all County vehicles and equipment are operating according to the manufacturer's specifications.
5. Ensure preventative maintenance schedules are timely performed. Vehicles and equipment, which operate in construction areas or off-road, require additional maintenance to ensure fuel efficiency.
6. Avoid long idling. The worst mileage a vehicle can get is zero (0) miles per gallon, which occurs when the engine idles. Unnecessary idling causes additional engine wear and premature engine failure. Additionally, idling with air conditioning turned "ON" reduces fuel efficiency by 20% and produce emissions that pollute the air unnecessarily.
7. Continue considering purchasing low-emission vehicles to meet County needs according to the vehicle replacement plan. This may include purchasing Tier II compliant vehicles.
8. Fill fuel tanks in the morning, or when the temperature is coolest. Unleaded gasoline is densest when cold. Do not overfill tank and stop pumping when the nozzle cuts off automatically. Overfilling causes contamination to the fuel purge system and heat causes fuel to expand and overflow. Overfilling also causes fuel vapors to evaporate into the atmosphere causing air pollution.
9. Clean out the trunk or storage area. Every 200 lbs. Of unnecessary weight reduce one mile of fuel efficiency.
10. Operate vehicles with the speed limit and eliminate hasty starts. Driving too fast wastes gas. Traveling at 65 mph uses 15% more fuel than driving at 55 mpg. It makes good sense, when possible, to set the cruise control at the speed limit when traveling on highways. Using cruise control reduces fuel consumption, lowering emissions.
11. Develop efficient routing plans. Utilize routes with minimal traffic lights, when possible. This decreases engine idling at stoplights. Eliminate more than one vehicle traveling to the same location, when possible.
12. Encourage carpooling when appropriate. Utilize fuel-efficient vehicles or motor pool vehicles when traveling out of town to meetings, conferences, and training sessions.
13. Greenville County has been improving landscaping at all County facilities with the goals of improving the environment by minimizing turf areas and replacing them with shrubs, bed areas, and trees; enhance appearance; and reducing maintenance and associated costs. The County has accomplished these efforts at four (4) sites and will expand and continue implementing them as funding becomes available or facilities are renovated.
14. Greenville County is committed to energy conservation programs and practices, which will result in less energy consumption and reduction of emissions from power plants. The goal is to expand these programs and practices to all County facilities.
15. Greenville County partnered with the SC Energy Department in 2003 with the goal of reducing energy consumption at County facilities and stabilizing energy cost. The County initiated the lighting retrofit program at County Square and conducted an energy study at four (4) other County facilities. The study identified areas of improvements in three major facilities.
16. The following measures will continue to be implemented and reminders will be sent to all County employees and tenants:
 - Turn OFF all office lights when leaving every day,
 - Electric space heaters are not allowed in County facilities (exceptions are made only for medical reasons with a written statement from a doctor),
 - Ensure that electric equipment such as lamps, coffee pots, monitors, printers, copy machines, etc. is turned OFF when leaving every day.

- To further increase energy conservation, the County will encourage, when practical, to make environmental considerations in purchasing decisions for goods and services such as Energy Star equipment.

Smart Growth America has said about the City of Greenville, "The city has the right idea about how communities should be designed." It has chosen Greenville as one of four cities and counties nationwide to work with to turn smart growth ideas into better development for Greenville. Efforts include spreading the kind of development happening downtown to its more suburban edges including more sidewalks, buildings closer to the street, smaller parking lots and more landscaping.

December 2006:

- On September 1, 2006, the County Administrator released a memorandum and two presentations to all county employees to increase awareness of air quality issues. The presentations provide helpful and important information about why education on these pollutants is important, not just health wise but also for the region's economic development future. The Improving Air Quality in Greenville County, SC – The Challenge: Air Pollution provides background information such as what ground level ozone and PM_{2.5} are and how they form. The Improving Air Quality in Greenville County, SC – The Solution: Awareness address the type of health problems these pollutants cause, what we can do individually to help reduce their formation, how to prevent exposure and take precautions, and where additional information and daily air quality forecasts may be found. The presentations are posted on our websites, Intranet and Internet, for the public and employees to gain this valuable knowledge. The presentations may be found under "County Highlights/Air Quality" at "<http://www.greenvillecounty.org>"
- The fleet manager for Greenville County in cooperation with the GCEMS director reminded crews that whenever possible to stop engines and avoid idling when it is not necessary.

June 2007:



Staff has been actively involved in the Improving Air Quality Public Awareness Campaign since fall 2006. [Click here to go directly to strategy 17 to view the complete list of our local activities.](#)

Smart Highways - An Innovation as the Result of the EAC Process

The Smart Highways effort through the EAC process addresses transportation planning and any impact transportation might have on air quality. This approach is not a requirement of the EAC and is not being

done in any other EAC area in the country. It is an example of the commitment by air quality and transportation agencies at the local, state, and federal level. As a result of this effort, each of the four Metropolitan Planning Organizations (MPOs) in deferred nonattainment areas (Greenville, Anderson, Spartanburg, Richland and Lexington counties) demonstrated that their respective long-range transportation plan eliminates or reduces violations of the national ambient air quality standards (NAAQS). Copies of the four MPO reports may be found at http://www.scdhec.gov/eqc/baq/html/eap_Smart_Highways.html . Preliminary indications are that federal requirements (Tier II/low sulfur) coupled with transportation improvements to the respective networks will result in approvable long-range plans. For example, in Greenville County between the years of 2002 and 2007 the emission reductions are modeled to be approximately 3,151 tons/year for NOx and 2,054 for VOC. The out years beyond 2007 are even greater.

Although not part of these efforts, the private sector is locally advertising a campaign called "Live Green, Go Yellow." This campaign aims to increase consumer knowledge on ethanol (E85) as an alternate fuel, which reduce greenhouse gas emissions.

December 2007:

- According to the South Carolina Department of Health and Environmental Control data review of ozone readings, it is anticipated that Greenville County will be designated as an attainment area under the current ozone standards.
- Although this document completes the EAC requirement to submit semi-annual progress reports to DHEC and EPA, Greenville County will continue implementing the Spare the Air Public Awareness Campaign through 2008. Progress reports for the awareness campaign will be submitted to EPA-Region 4, per the air quality grant requirements.

The following pages detail those measures under consideration as described in the Early Action Compact adopted by the Upstate Air Quality Steering Committee on December 2, 2003.

ATTACHMENT 1

To South Carolina Department of Health and Environmental Control
Environmental Protection Administration
From: Greenville County South Carolina
Date June 6, 2007

Reference: Summary of progress in implementing air quality strategies adopted by Greenville County and included in our local Early Action Plan.

1. Support SCDHEC statewide efforts to reduce ozone levels.

Priority A

Description of Measure

- Stakeholder group to support and participate in modeling efforts.
- Develop stakeholder group to participate in development of regulations (NOx - BACT (Best Available Control Technology Economically Achievable), restrict open burning).

June 2004:

- June 24, 2004 - Participated in Upstate Air Quality Steering Committee meeting held at BMW.

December 2004:

- Members of the Upstate Air Quality Staff Advisory Committee participated with DHEC in the development of new regulations aimed at reducing NOx emissions. As a result, new regulations requiring NOx- BACT (Best Available Control Technology Economically Achievable) were adopted in mid 2004.
- SC61-62.2 "Prohibition of Open Burning" regulation with reductions for 2007 calendar year - reductions expected during the ozone season for residential construction waste. Emissions reduction: VOC: 65.23 tons/season; NOx: 13.73 tons/season.
- SC61-62.5, Std. 5.2 "Control of Oxides of Nitrogen" reduction amount for both existing and new sources combined across Anderson, Greenville, Spartanburg for 2007 calendar year. Emissions reduction of NOx: 234.1 tons/yr.
- November 2004 - Greenville County submitted letter supporting SIP.
- Greenville County implemented the following measures during 2004 and 2005: purchased alternate fuel vehicles (Greenville purchased 19 such vehicles since November 2004); published and distributed brochures about improving air quality ; sent out notices on high ozone days and developed audio commercials for local radio stations to broadcast during ozone awareness week and ozone season; broadcasted radio announcements and information through the County's Cable TV channel, and alerted all stakeholders of DHEC's high ozone alerts.

June 2006:

- During its May 11, 2006, the Upstate Air Quality Staff Advisory Committee recommended to develop a business partnership plan to involve local industries in announcing ozone alerts and participating in ride share programs. Members of the Committee will contact and request the assistance from the Greater Greenville Chamber of Commerce.

December 2006:

- Met with Carol Kemker (Deputy Director for Air, Pesticides and Toxics Management Division, USEPA-Region 4) and Myra Reece (Chief, Bureau of Air Quality, SCDHEC) on October 11, 2006, to discuss improved coordination and cooperation between DHEC, EPA and the Upstate counties.
- Met with Myra Reece (Chief, Bureau of Air Quality, SCDHEC) and other SCDHEC representatives on November 8, 2006 for an update on air quality issues (ground level ozone and PM2.5). EPA and SCDHEC committed additional staff assistance to local governments. Local DHEC staff has been added to our EAC staff committee.
- Air quality committee members attended and participated in the Environmental Issues Briefing on November 2, 2006. Beverly Banister, Director of Air, Pesticides and Toxics Management Division, USEPA-Region 4 and Robert King from SCDHEC, among other speakers, discussed air quality issues facing the Upstate and the need for greater public awareness.

June 2007:

- Members of the Air Quality Staff Advisory Committee and County staff attended frequent meetings with EPA and DHEC staff to assist in updating the statewide Air Quality Monitoring Network.
 - o Attended a training workshop in Columbia conducted by DHEC, which demonstrated to attendees how the air quality monitoring network functions. The workshop also included field visits, which provided a first hand opportunity for attendees to learn how air quality is measured at specific sites.
 - o Staff provided assistance with field visits to all air quality monitors in the Upstate. The purpose of this exercise was to evaluate each site for compliance with EPA siting criteria.
 - o Provided aerial photos of each monitoring site showing adverse conditions affecting the monitoring sites.



- o Staff is currently developing aerial photos of potential locations, which will comply with EPA's siting criteria.

December 2007:

- Stakeholders, SC DHEC, and County Staff toured several potential sites for the downtown PM2.5 monitor. The group agreed to pursue the SC Employment Security Commission property located on Pendleton Street in Greenville, SC.
- City, County, SC DHEC staff will meet December 12 to discuss future partnerships and initiatives to address Air Quality outreach programs.
- The City of Greenville planted 500 trees with municipal crews and 317 through contractors on Stone Ave and McBee Station.

Estimate of Emission Reductions (if available)

Equivalent to removing 359,500 cars from the road or 7190 tons of VOC. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed June 25, 2004.

2. Designate an Ozone Action Coordinator

Priority A

Description of Measure

- The County will designate a staff person who will be responsible for coordination of the county's ozone programs.

March 2003:

- Ozone Action Coordinators were designated in 2003, John Owings and Sandra Yudice.

June 2007:

- Dan Powell was designated as an additional coordinator for Greenville County.

December 2007:

- The City of Greenville hired Tom Keith as the new Environmental Program Manager as part of its focus and commitment to work, in part, on Air Quality issues and coordinate with the regulatory community. County staff will work closely with the City on air quality issues, programs, and initiatives.
- Kevin Robinson was designated as an additional coordinator for Greenville County.
- County staff will continue looking for and participating in future training opportunities available nationwide.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in March 2003.

Additional Information

Since appointed, the ozone action coordinators have assisted with facilitating air quality meetings, preparing progress reports, resolutions, correspondence, developing a public awareness campaign. Other activities related to improving air quality involvement include, but are not limited to, preparing proposals for the zoning ordinance, procurement of traffic consultant services, planning sessions for community activities, grant writing, attending conferences on air quality, and planning activities for the 2006 EAC Summit.

3. Seek low sulfur fuels as early as possible.

Priority A

Description of Measure

- Continue to coordinate with representatives of Colonial and Plantation pipelines, refiners, and State representatives to ensure that the upstate has the opportunity to receive low sulfur fuels at the earliest date as they can be provided.

December 2004:

- The Committee has continued to coordinate with representatives of Colonial and Plantation pipelines, refiners. Based upon an unofficial status report from Kay Clamp with the SC Petroleum Institute ". We are fortunate in the Southeast because we receive much of our supply from the Gulf Coast, and 60% of the nation's refineries are in that area. A simple translation of that fact is that we are not dependant on one or two refineries for our fuel, and reap the benefits of a large number of refineries producing lower sulfur fuels.
- The maximum allowable sulfur level in gasoline for 2004 is 350 ppm with a corporate average of 120 ppm. Plantation Pipeline tests product entering their pipeline from every refinery, every day...their average from this testing has been and is 150 ppm in gasoline. Colonial Pipeline is also testing product from its shippers; the average sulfur levels for gasoline batches entering their pipeline YTD 2004 are 145 ppm for fungible regular gasoline and 62 ppm for fungible premium. Colonial did note that these averages are not volume weighted; they did not, however, think there would much difference if it were volume weighted. They also assumed that the regular and premium are averaged together for compliance.
- Both of the pipelines had the lower sulfur fuel in their facilities by late 2003; the fuel was at terminals serving South Carolina by January 2004, and was "on the street" by March 1, 2004".

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Implementation began in 2004 and was completed in 2006.

Additional Information

- Committee continues to coordinate quarterly with representatives of Colonial and Plantation pipelines, refiners. During 2005, Colonial Pipeline conducted studies that indicates that South Carolina, as well as others along the Colonial Pipeline are receiving sulfur levels that should help many of the non-attainment areas. Specifically: M and V are the grades used in South Carolina. The sulfur content averages shown below are by batch not volumetric weighted values. M Grades: Average 139, High 330. V Grades: Average 74, High 300.
- The Environmental Protection Agency's ultra-low sulfur diesel fuel requirements went into effect on June 1, 2006. Ultra-low sulfur diesel fuel will be available at retail stations beginning summer 2006.

4. Design and implement congestion management and Intelligent Transportation System (ITS) measures. Priority A

Description of Measure

- Implement congestion management projects: intersection and signalization improvements to alleviate traffic congestion, therefore, reducing emissions from idling vehicles;
- Implement Intelligent Traffic Systems such as automated advisory/alert messages to drivers on interstate highways. For example: advise motorist about an accident ahead and the use of alternate routes to avoid congestion, which minimize emissions from idle vehicles.
- Encourage and support improved traffic operational planning, engineering and maintenance for existing and future transportation infrastructure.

June 2005:

- Greenville County completed implementation of phase 1 of the congestion management plan. Wade Hampton Boulevard, Woodruff Road and Pelham roads now have cameras, fiber optic cables and computer linked traffic signals in place. The consultant will conduct air quality sampling to determine if the system improved air quality along the corridors. Several more roads are scheduled for completion in 2006 and 2007. In July 2005, the Planning staff will select a consultant to update the congestion management study
- Cameras and variable message boards have been installed on I-385 in Greenville County and along I-85 through Anderson, Greenville and Spartanburg counties.

December 2005:

- Greenville County completed implementing the congestion management plan on several major thoroughfares; cameras and variable message boards have been installed on I-85 through Anderson, Greenville and Spartanburg Counties. In December 2005, the Greenville County Planning Commission retained the services of a transportation consultant to update the Long Range Transportation plan including an updated congestion management plan and a bicycle and pedestrian plan. The current long range transportation plan may be found at http://www.greenvilleplanning.com/transportation_planning/grats/LRTP%20Amendment%20desc%20w%20tables%20map.pdf

June 2006:

- The Greenville-Pickens Area Transportation Study (GPATS) held two public workshops June 1 & 6, 2006. The workshops included a brief presentation and provided an opportunity for citizens to influence which projects would be implemented in the region. The GPATS study area includes areas in Anderson, Greenville, Laurens, Pickens and Spartanburg Counties.
- SCDOT District Traffic Engineer for the Upstate has coordinated with SCDHEC to utilize the variable message boards on I-85 and I-385 to notify motorists of high ozone days.

December 2006:

- The development of the Long Range Transportation Plan for GPATS continued. The Regional Bicycle element of the Plan was presented to GPATS in November 2006. Some of the recommendations of the Plan were to develop four types of bicycle facilities:
 - o Off-street trails – through parks, along creeks and rivers, or on abandoned rail lines,
 - o Bicycle lanes – four-foot wide on-street lanes at the shoulder of the road,
 - o Wide outside lanes – a 14-foot wide lane that can be shared by autos and bikes,
 - o Paved shoulders – not a designated bicycle facility, but provides some extra space and margin of safety for those who ride with traffic.
- Source: http://www.greenvilleplanning.com/land_development/Newsletter_Summer06.pdf
- Community leaders are developing plans to connect a trail system from Lake Conestee in southern Greenville County through the City of Greenville and connect with the tram/trail (see strategy #7a below) currently being developed along the Reedy River through the Furman University campus to

the City of Travelers Rest in northern Greenville County. The tram/trail system provides opportunities for both recreation and transportation. FHWA enhancement funds have been approved for the Lake Conestee trail link.

June 2007:

- Greenville County awarded a contract to remove the rails from the railroad right-of-way on the former Greenville & Northern rail line. This line extends for about 12 miles from downtown Greenville to north of Travelers Rest. It is expected that the rail removal/salvage operations will be completed by the end of summer 2007. When salvage operations are completed the trail will be open to the public. As funds become available the trail will be paved and the Greenville Transit Authority will operate a tram connecting Travelers Rest, Furman University, and Greenville.



Rails Being Removed on former Greenville and Northern Line

- The Conestee Foundation opened the Lake Conestee Nature Park Trail system in May 2007. This system will eventually connect with the trail from Greenville to Travelers Rest (shown above). When complete, the trail system will provide a complete pedestrian linkage from Travelers Rest in Northern Greenville County to Lake Conestee in Southern Greenville County. The major connecting points along the trail are Furman University, Falls Park and Cleveland Park in downtown Greenville, the Greenville Municipal Stadium, Greenville Technical College campus, and the Lake Conestee Nature Park.



Trail Under Construction



Paved Trail

- Congestion management

- o The consultant developing the Long Range Transportation Plan for Greenville County held community meetings to discuss the areas of greatest congestion in the County. Pictures of one of these meetings are shown below.



Community Meeting Addressing Traffic Congestion – May 2007

- City of Greenville's Greenway System:
 - o The City of Greenville's one-mile Rail-to-Trail Multi-Use Pathway addition along the Reedy River is complete. This new trail connects several existing City landmarks such as Downtown Greenville, Falls Park, The West End, Cleveland Park, and RiverPlace. Eventually, this trail will link a planned Greenville County Trail System from Travelers Rest through Furman University to the downtown Greenville trails. The new City's trail is 12 ft. wide and features both 8 ft. of paved surface for bicycles, skaters, and walkers with an additional 4 ft. of rubberized surface for runners. Amenities along the trail include lighting, picnic areas, benches, water fountains, restrooms, signage, and bicycle racks. Source: http://www.greatergreenville.com/city_services/RailstoTrails.asp
 - o The City of Greenville held meetings to discuss an extensive trail system within the City. Topics discussed at the meetings included (Source: http://www.greatergreenville.com/city_government/newsreleases/archive/2007/Greenways.pdf):
 - Creating an interconnected system of trail corridors for all parts of the City,
 - Increasing walking, biking, and trail usage throughout the City,
 - Developing trail environments that provide confidence and safety for all users,
 - Promoting walking and biking as an alternative transportation mode,
 - Providing trail access to underserved areas of the community,
 - Protecting and enhancing Greenville's natural resources and assets.





Falls Park Liberty Bridge.

December 2007:

- The Greenville County Recreation District (GCRD) hired Ty Houck, the new Director of Greenways.
- The GCRD hired Chuck Flink with Greenways, Inc. to draft a County-wide Greenway Master Plan.
- The Swamp Rabbit Tram Trail continues under construction thanks to an innovative partnership between Greenville Hospital System, the Greenville County Economic Development Corporation, and the Greenville County Recreation District. Volunteers have been working on sections of the trail since October 2007 and removed old ties left after salvage operations.

The proposed 10-mile trail, built along a former rail line running from Greenville to Travelers Rest, will offer a healthy venue for walkers, joggers and cyclists and possibly a hybrid tourist tram. The trail could be open by January 2009 with construction slated to begin in fall 2007. "The Swamp Rabbit Tram Trail is the catalyst for future trails and greenways development in the City of Greenville and Greenville County," said Gene Smith, executive director of the Greenville County Recreation District. "The recreation district's vision is a network of trails and greenways throughout Greenville County that will connect to trails and greenways created by the municipalities. This exciting partnership with GHS will have lasting benefits for our community for decades to come." Funding is currently being secured by the recreation district to support the development of a county-wide trails and greenways master plan. The City of Travelers Rest is currently working on a downtown master plan centered around the Swamp Rabbit Tram Trail, and several other entities, including Furman University, Paris Mountain State Park and the Cherrydale Area Council, are looking at how to connect to the trail through pedestrian connection points or spur trails. (<http://www.gcrd.org/swamprabbit.html>).



- Greenville Master Trail Plan. The City of Greenville released its master plan and the extensive network of trails connect parks, schools, neighborhoods, downtown, shopping areas and more with what appears to be a labyrinth of walking and biking routes. A year ago, the City opened the 1.3-mile

"CSX section" of trail connecting Linky Stone Park, Meadowbrook Park, Mayberry Park, and the Willard Street junior golf facility. It also linked to Cleveland Park and Reedy River Falls Park, effectively creating an 8-mile network of trails. Now, the City is extending the trail south toward Greenville Technical College. Its contractor is surveying the 1.5-mile path that will link Cleveland Park and the College along the Reedy River. It should be finished no later than next summer.

http://www.greatergreenville.com/city_services/GreenwaysMasterPlan.asp

- The City of Fountain Inn has constructed a greenway which is currently a half mile in length. There are plans to interconnect the whole community with three to four of greenways. The Country Gardens Park and Greenway did not exist a year ago. Now, a beautiful natural habitat exists because neighborhood residents, the Fountain Inn Garden Club, city government employees, and community volunteers devoted numerous labor hours to this greenway park. The Country Gardens Greenway Park kickoff celebration brought approximately 200 people together to fellowship and to enjoy nature. Fountain Inn is extremely excited about the greenway project. City government has already provided finances and human resources. The Fountain Inn Garden Club has secured additional trees for the Country Gardens Greenway Park. Youth and children are riding their bicycles on the existing trail, and families are taking walks as exercise. The trail is providing families a place to bond and to exercise and thereby address the childhood obesity problem. The trail is also improving air quality and the environment because people can remain in their neighborhood and do not have to use gasoline to drive to a place or facility to exercise. Community support for the Fountain Inn Greenway Project continues to build.



- The City of Greenville reduced vehicle emissions by implementing the Woodruff Road Signal Timing Project, which resulted in reduced vehicle delay time with estimated air quality improvement as presented in the following table:

Air Quality Analysis			
Mobile Source Emission Category	Annual Delay Benefit (veh-hrs)	Idle Emissions Average Rate (grams/hr)	Annual Air Quality Benefit (lbs)
Hydrocarbons	-19,633	19.5	-844
Carbon Monoxides	-19,633	5.42	-235
Nitrous Oxides	-19,633	299	-12944

Source: City of Greenville, SC

Estimate of Emission Reductions (if available)

No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP. See table above.

Implementation Date

Completed in 2005. Supplementary efforts are continuing.

Additional Information

Although not part of these efforts, the Southern Connector (I-185 toll road) opened in 2001 “in order to relieve congestion on main traffic arteries” in I-85 and I-385. The Southern Connector links I-385 to I-85 in the southern part of Greenville County. (Source: <http://www.southernconnector.com/home.htm>).

5. Use of hybrid vehicles.

Priority A

Description of Measure

- Encourage people, public and private organizations to purchase hybrid vehicles as they replace vehicles/fleet.
- Encourage that 10% of public agencies fleet have hybrid vehicles (use of hybrid vehicles does not require changes in infrastructure for dispensing fuel).
- Encourage public agencies to require purchasing hybrid electric vehicles (HEVs) through the State vehicle contract.

December 2004:

- In October 2004, the Greenville County Administrator issued principles to guide County operations to improve air quality which include considering purchasing low-emission vehicles.

June 2005:

- The Greenville County Administrator signed a document that sets forth the intent to purchase low emitting vehicles for the county fleet. To follow that commitment Greenville has purchased 19 alternative fuel vehicles since November 2004, bringing the total number of alternative fuel vehicles operated by the county government to 56 (ethanol). There are approximately 122 alternative fuel vehicles operating within federal, state, county and municipal government.

June 2006:

- Members of the Upstate EAC counties (Anderson, Greenville, and Spartanburg) in coordination with the Palmetto State Clean Fuels Coalition and the South Carolina Chapter of the Sierra Club, worked on statewide legislation that will provide tax incentives for purchase of alternative fuel and hybrid-propulsion vehicles and help reduce costs and provide tax credits for production and infrastructure for alternative fuels. The goal was to have it introduced to South Carolina General Assembly during the 2005 legislative session. The Governor signed Hybrid vehicle bill H4312 on June 1, 2006.
- The purchase of hybrid vehicles and how their use helps to clean the air and tax incentives available state wide will be included in the "Improving Air Quality Public Awareness Campaign," which is currently under enhancement.
- The County implemented the following measures to procure higher fuel efficient vehicles:
 - o Downsized fleet by 87 pursuit vehicles from full size (V-8) to mid-size (V-6) vehicles.
 - o Downsized fleet by 31 from SUVs and full size pick up trucks to intermediate size Chevy S10 Pickups and Ford Ranger Pickups.
 - o Downsized law enforcement support and administrative vehicles from full size V8 Engines to intermediate size V6 Engine vehicles.

December 2006:

- On July 18, 2006, ozone coordinators contacted the United Parcel Service (UPS) Fleet Manager to discuss the possibility of UPS utilizing delivery hydraulic hybrid vehicles in Upstate SC. However, the use of these experimental vehicles has been limited to the area where the vehicles are being manufactured. We will follow up in spring 2007 to find out if UPS plans to expand the use of these vehicles to other areas and the possibility of using them in Upstate SC.

June 2007:

- Greenville County has purchased eight alternate fuel vehicles this year. Seven of the eight vehicles were downsized from SUVs to pick up trucks.
- The City of Greenville has the following green vehicles:
 - o Three flat bed dump trucks that run using compressed natural gas. These trucks are used daily for yard waste collection.
 - o Seven electric vehicles assigned to the parking Control Officers and Beautification Crews. The City is in the process of replacing these vehicles with new electrics.

- o In 2006, the City converted its entire fleet of diesel powered vehicles and equipment to operate on bio-diesel, which is a blend of 20% soy bean oil (made locally) and 80% petro-diesel.
- o The City has one hybrid-electric vehicle, which is use daily by the Building and Zoning Administrator. This vehicle averages over 40 mpg in town.

December 2007:

- The City of Greenville placed 15 E-85 vehicles into service.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Initiated in 2004 and completed June 1, 2006. Efforts will continue to encourage delivery services to use hybrid or fuel efficient vehicles for their deliveries in the Upstate.

Additional Information

Act 312, R371, H4312 Bill may be viewed at http://www.scstatehouse.net/sess116_2005-2006/bills/4312.htm and its caption reads:

An act to amend the Code of Laws of South Carolina, 1976, by adding Section 12-6-3377 so as to allow a state income tax credit equal to twenty percent of certain new hybrid, fuel cell, alternative fuel, or lean burn technology motor vehicle. Credits allowed against a taxpayer's federal income tax liability.

6. Use higher efficiency engines for school buses.

Priority A

Description of Measure

- Require purchase of high efficiency engines for school buses as they are replaced. In South Carolina, the SC Department of Education is in charge of maintenance of school buses. DHEC is working with SC Department of Education to obtain grants from EPA.
- Promote an Adopt-A-School-Bus Program.
- Endorse a statewide recommendation for the State to take the lead.

December 2005:

- School Bus Retrofit Project: approximately 47 diesel buses will be retrofitted with particulate filters during 2006. Additional reductions of PM are also expected. The school buses may not be retrofitted until 2007 when ultra-low sulfur diesel is more widely available since the retrofitting technology being applied works best with this new fuel type.
- The South Carolina Department of Education purchased 61 new buses that should be on the road in late 2005.

June 2006:

- The South Carolina Department of Education (SDE) has been awarded a Clean School Bus USA Grant for \$499,099 to retrofit some buses in South Carolina with diesel oxidation catalysts and crankcase filters, replace some older buses and conduct a biodiesel pilot and an idle-reduction device pilot.
- State education superintendent Inez Tenenbaum signed an order on June 20, 2006 to buy 630 new school buses with roughly \$36 million appropriated by the Legislature. These buses should be on South Carolina roads by the end of the year. These new buses will replace vehicles from 1984 and 1985 which are not fuel efficient and produce higher levels of polluted emissions than more modern vehicles.
- The benefits from these SDE funding sources will be distributed throughout the state. The SDE has agreed to make York County and the five deferred areas the top priority in assigning new and retrofitted buses to service. SDE is also partnering with private companies and local school districts to provide specific funding for school bus retrofits and clean air programs.

December 2006:

- On June 20, 2006, the SC Education Department Transportation Director announced that in the fall of 2006, all South Carolina buses will use a blend of 20 percent biodiesel ultra low-sulfur fuel, which reduces soot emissions about 10 percent from standard diesel fuel. The state is also using \$1 million to purchase 140 particulate traps. These filters will help capture emissions coming out of the bus engines according to an environmental health manager with the SCDHEC. Source: <http://ed.sc.gov/news/more.cfm?articleID=671>

June 2007:

- South Carolina Legislation passed a bill this year establishing a regular school bus replacement cycle. State officials indicated that they will buy about 380 buses every year; therefore, buses will be replaced every 15 years. The new buses run cleaner and use less fuel. As a result of this replacement plan, the SC Department of Education assigned 15 new school buses to the Greenville County School District.

When the 2006-2007 school-year began, the Greenville County School District had about 100 buses that were 20 or more years old. In addition to the 15 new buses, the district also received an additional 26 replacement buses from the state since January. Although these 26 buses were not new, they are far more efficient than the buses they replaced.



Sample photo of one of the new buses assigned to the Greenville County School District.

Estimate of Emission Reductions

799 lbs/year. CO reductions 5,593 lbs/year. December 2004 EAC SIP - Appendix 16

No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2006.

Additional Information

Santee Cooper provided \$1 million for a Supplemental Environmental Project which will provide diesel retrofit technology, specifically diesel particulate filters, for York County school buses. Greenville will receive an unspecified portion of "spillover" from the retrofitting technology provided to York County.

- 7a. Develop incentive programs and opportunity for citizens to choose alternative transportation modes.
Establish intermodal connections with an emphasis on mass transit. Priority A

Description of Measure

WALKING/BIKING:

- Encourage local government to increase pedestrian/bicycle infrastructure spending (the Upstate spends 2¢ per person compared to SC spending 22¢ per person).
- Establish safer bike routes with better signs marking lanes and routes.
- Increase highway funding for bike paths, walking or mass transit including high-speed rail. Support the federal transportation enhancement program.
- Install bike racks on all transit vehicles to encourage intermodal transportation. New buses purchased through the state's bus purchase program will have bike racks.

PARK and RIDE:

- Establish mass transportation between a plant and a park-and-ride site.

CARPOOLING:

- Work with local government to offer incentives for employees to car pool.

MASS TRANSIT:

- Offer a free trolley service running in a loop in downtown areas and nearby restaurants, especially during lunch hours;
- Research past feasibility studies on free downtown shuttles. Potential for sponsorship with local area restaurants and businesses for a lunch time shuttle - could defer the operational costs of the endeavor.
- Support mass transit (transportation choices and alternatives): While the only local mass transit choice that is currently available in some areas is the transit bus, example of future options such as bus rapid transit, commuter passenger service offered by trains on existing rail systems, a diesel multiple unit or "light rail" should be supported.

December 2004:

- Park and Ride: Staffs of Greenville County Planning Commission, Greenville Transit Authority and Greater Greenville Chamber of Commerce began joining efforts to develop a feasibility study for Park-n-Ride program and/or Ride-Share program for Greenville County. Information will be shared with Anderson and Spartanburg counties.

June 2005:

- Mass Transit: County contracted with consultant to prepare a Transit Development Plan for the most rapidly growing portion of Greenville County, to include a Park and Ride and Rideshare Feasibility study. The transit development plan may be viewed at http://www.greenvilleplanning.com/transportation_planning/TDP%20FINAL%20DOCUMENT.pdf

December 2005:

- In November 2005, the transportation consultant completed the transit study for Mauldin and Simpsonville and recommended several alternatives for providing transit services to this area of Greenville County.

June 2006:

- The Greenville Transit Authority extended bus service between downtown Greenville, County Square, and nearby vicinities.
- During baseball games, the Downtown Greenville Trolley runs between the Drive Stadium located at the West End near downtown and County Square. In addition, the Trolley operates back and forth on Main Street (downtown business district) on Fridays (6 p.m. to 11 p.m.), Saturdays (10 a.m. to 11 p.m.), and Sundays (1 p.m. to 6 p.m.). Information may be found at <http://www.greengreenville.com/visitors/forms/TrolleySchedule.pdf>
- The Greenville County Planning Commission presented proposals to the cities of Mauldin on February 20, 2006, and Simpsonville on February 28, 2006, to establish the additional bus service

recommended by the consultant in the Mauldin/Simpsonville Transit Plan. Currently the cities of Mauldin and Simpsonville are considering the recommendations included in the transit study.

- Greenville County Economic Development Corporation (GCEDC) is preparing a request for proposals to salvage the railroad tracks, ties, and other property to initiate Phase I of an interim use plan for Greenville and Northern (G&N) Railroad. The G&N line runs between the cities of Travelers Rest and Greenville. Interim use is permitted and required under the US Department of Transportation's Surface Transportation Board regulations for "railbanking" to preserve railroad rights-of-way. The plan offers many benefits to the community, including improving air quality. The interim use plan calls for the conversion of the G&N rail line into a walking trail initially followed by bicycles and a passenger tram as soon as funding is available. The trail would remain in place until such time the demand and need of a light rail exist for people to commute between the cities of Travelers Rest and Greenville.
- The Greenville County Planning Commission developed the Greenville County Long Range Transportation Plan – Bike Routes in April 2006. The bike plan may be viewed at http://www.greenvilleplanning.com/transportation_planning/Bike_Routes/Bike%20Routes.pdf

December 2006:

- Greenville County Economic Development Corporation (GCEDC) is negotiating with a contractor to salvage the rail track on the Greenville and Northern (G&N) Railroad to convert the rail bed to a tram/trail. The former G&N Railroad runs between the cities of Travelers Rest and Greenville. If negotiations are successful, the contractor is expected to begin removing the rails in early 2007 and complete the task in about six months.

The GCEDC and the Greenville County Recreation District (GCRD) entered into an agreement for the GCRD to operate and maintain the trail. The GCEDC initiated discussions with the Greenville Transit Authority (GTA) to determine if GTA could develop a funding mechanism to purchase and operate a hybrid or fuel efficient tram.

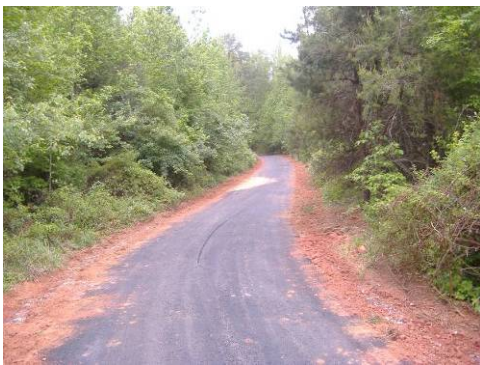
- The downtown trolley that the City of Greenville began operating in June 2006 (see June 2006 updated above) was such a success that the City began operating a second trolley in September 2006. The trolleys hold 37 passengers each and the service is free. (Source: http://www.greengrville.com/city_government/newsreleases/archive/2006/2ndTrolley.pdf)
- The Greenville Transit Authority is considering the five-year plan completed in January 2006 concerning coordinating with Pickens County to provide service in the vicinity of Easley, SC. The City of Easley will begin in late November 2006 a \$50,000 state-federal-funded study of public transportation. GTA is awaiting the outcome of this study to determine opportunities to provide transit services.

June 2007:

- On April 24, 2006, the City of Greenville adopted a Resolution to "Declare that the City of Greenville Endorses the American League of Bicyclists Action Plan for Bicycle Friendly Community Designation." A copy of the Resolution may be found at <http://www.greengrville.com/Bike2Work/pdfs/Ordinance.pdf>

The City of Greenville held its first "Bike2Work Day" event on May 18, 2007. The 2-mile route spotlighted several bicycle friendly streets as well as the newly opened rail-to-trail along the Reedy River that will eventually connect with Furman University and Travelers Rest. The 30-minute group bike tour concluded with a free light breakfast in Downtown Greenville at 8 a.m. Source: <http://www.greengrville.com/Bike2Work/>

- For updated information see Strategy No. 4 (click on link below):



Lake Conestee Nature Park Trail

December 2007:

- Regional Transportation Plan Presentation. A Public Presentation of the Regional Transportation Plan was held Tuesday, August 21, 2007, for the the Greenville-Pickens Area Transportation Study Planning area, which includes the cities of Easley, Fountain Inn, Greenville, Greer, Liberty, Mauldin, Pickens, Simpsonville, and Travelers Rest; and counties of Anderson, Greenville, Laurens, Pickens, and Spartanburg. Greenville County Planning Department staff presented proposed mass transit, bicycle, and pedestrian improvement plans. (<http://www.greenvilleplanning.com> and pick the "transportation planning" link).
- Greenville Transit Authority:
 - o GTA survey. The 1,253 people who answered 27 questions on the Greenville County Web site gave a strong indication that a system that would extend into the suburbs and offer more efficient, comfortable transportation has a chance of finding riders. More than one-third of the respondents to an online survey said they would use an improved public transportation system to get to work in Greenville, and nearly half of them said they might use such a system, according to results of the poll. The survey, taken over three weeks, was not a random sample poll and therefore not necessarily a representation of the opinions of Greenville County residents.
 - o GTA and the City of Greenville installed bike racks. All 13 regular buses and two spares have the racks which will help people who want to cycle but have trouble connecting because of a lack of ideal places in some areas. The racks carry 2 bicycles and are very easy to use. The total price tag is about \$12,500 though the bus system took advantage of a 95 percent federal match for bike-related capital costs, reducing GTA's investment to about \$650.
- City of Greenville:
 - o Installed 24 bicycle racks throughout downtown Greenville.
 - o Completed of a City-wide Trails & Greenways Master Plan. The purpose of the plan was to develop a framework for building an integrated system of pathways that will link residents to the outdoors. The future network will provide residents with close-to-home and close-to-work access to bicycle and pedestrian trails that connect to the City's most popular destinations. The trails and greenways will serve transportation and recreation needs and help to encourage quality, sustainable economic growth.
 - o Started construction on a 1.5 mile greenway that will connect Greenville's Cleveland Park and Downtown with several neighborhoods, churches, recreation centers, and education facilities.
 - o Expanded the trolley route beginning November 2007 to serve the northern part of the downtown and Heritage Green areas.
- Sidewalks in Fountain Inn and Simpsonville. The City of Fountain Inn has installed handicap-accessible sidewalks from North Main Street to Valley View Drive (Hwy 14) using state and federal funds. Simpsonville installed sidewalks in the downtown area.

- The City of Fountain Inn adopted a Parking and Street Connectivity Ordinance. The ordinance reduces the parking requirements by more than half. In addition it allows for more pedestrian oriented connectivity for new developments.
- Easley, SC: Residents had an opportunity to speak for the final time on a possible mass transit plan for Easley on August 7, 2007. A final transit feasibility public meeting was held at 6:30 p.m. at the Hampton Memorial Library by URS Corp., the group doing the study for Easley. The group identified the need for mass transit through two public information meetings and almost 200 surveys they received from the public. This will be the third public meeting. Easley (Pickens County) is about 12 miles from downtown Greenville.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed 2006.

Additional Information

Ozone coordinators will continue working with the GCEDC on the interim use rail-to-tram/trail project.

7b. Offer free or reduced transportation cost on high ozone days.

Priority A

Description of Measure

- Implement a coordinated high ozone day alert action plan to include public notification and free or reduced ozone fares from the transportation providers.

December 2005:

- Greenville County is working on a grant application due to USEPA Region 4 on December 23, 2005, in preparation for the 2006 Ozone Season. The County is planning on including a request for funds to enable the Greenville Transit Authority to provide free transit services during high ozone alert days.

June 2006:

- Because resources were limited the grant application did not include funding for this type of activity.
- At its May 11, 2006 meeting, business leaders in the Air Quality Advisory Committee recommended contacting the Chamber of Commerce and request assistance with conducting fundraising activities to support this program.

December 2006:

- The Greenville Transit Authority and staff have determined the approximate cost of providing free transit services during high ozone days; however, funds have not been secured.

June 2007:

- In early 2007, the City and the County of Greenville began discussions to restructure the Greenville Transit Authority. This strategy will be reconsidered until the City and County reach an agreement.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completion of this measure will depend on securing funds to implement this strategy.

7c. Reduce vehicle miles traveled by developing efficient user-friendly transit systems. Priority A

Description of Measure

- Integrate transportation planning with land use planning so public transit can make a comprehensive contribution to economic development and mobility;
- Remove local barriers to densification in downtowns, infill areas, and transit stations and corridors.

December 2004:

- The Greenville County Planning Commission has completed an update of the County Zoning Ordinance. The updated County Zoning Ordinance was adopted by Greenville County Council on November 30, 2004. New provisions will eliminate minimum lot size requirements, encourage cluster developments, grant density bonuses for developments with access to public transportation, and allow some commercial developments to include housing within the development among many other changes. This shift in the land use plan should reduce vehicle miles traveled and encourage use of transit services. Copy of the updated County Zoning Ordinance may be viewed at http://www.greenvilleplanning.com/land_development/Z-Ord-Final-with%20Ord%204004%20included-Apr2006.pdf

June 2005:

- Greenville County Council passed ordinances updating Zoning Ordinance and Land Development Regulations; changes focus on adding flexibilities to encourage cluster developments, neo-traditional development and mixed-use developments.
- Planning Commission on behalf of the City of Mauldin and the City of Simpsonville has retained a consultant to prepare a Transit Development Plan for the Mauldin-Simpsonville Urbanized Area. See update on strategy 7.a.

June 2006:

- The transit study has been completed and the GC Planning Commission met with the cities of Mauldin February 20, 2006, and Simpsonville on February 28, 2006, to seek the matching funds to begin the additional public transit services. Currently the cities of Mauldin and Simpsonville are considering the recommendations included in the transit study. The study may be viewed at http://www.greenvilleplanning.com/transportation_planning/TDP%20FINAL%20DOCUMENT.pdf

December 2006:

- See update on strategies Nos. 4 for the bicycle study and 7a for the tram/trail and trolley services expansion.

June 2007:

- In early 2007, the City and the County of Greenville began discussions to restructure the Greenville Transit Authority. This strategy will be reconsidered until the City and County reach an agreement.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Zoning Ordinance complete June 2005 and Transit Study completed in January 2006.

8. Review and update air emission inventory for the Upstate

Description of Measure

- Ensure all industrial sources still operating. Review industrial sources for plant closures.
- Identify major sources of NOx.
- Map the locations of point sources (10% of point sources cannot be found).
- Map the specific locations and the area sources where coal is burned.

Implementation Date

Fall 2003. Completed December 2003. This information was included in the December 10, 2003 Early Action Compact Milestone on pages 20 through 37.

9. Support SCDHEC in evaluating and seeking reductions from major sources based on modeling.
Priority A

Description of Measure

- Coordinate with Duke Power to determine what NOx reductions are planned for the Lee Steam Plant.
- Coordinate with the Williams Company to determine what NOx reductions are planned for the Transco Pipeline.
- Support NOx reduction strategies in the State Implementation Plan.
- Develop an Early Reduction Program with incentives for industrial facility (Tier Two Type emission NOx sources)

December 2003:

- The Early Reduction Program was completed and forwarded to SCDHEC on a previous updated progress report. The information allowed DHEC to having more accurate emissions inventory.

June 2004:

- The Williams Company has received DHEC permits to replace outdated “uncontrolled” compressors on the pipeline located in Duncan. Replacement of the compressors will begin in late 2004 and continue until late 2005. This will result in a significant NOx reduction for the upstate.
- Transcontinental Gas Pipe Line Corporation (Transco) Station 140, Moore, SC; Operating Permit 2060-0179. Transco has 14 natural gas fired internal combustion (IC) engines that collectively accounted for 3,822 tons of ozone season NOx emissions during 1997. Transco has submitted a construction permit application to put on NOx controls that will result only 1,261 tons of ozone season NOx emissions. The permit was approved on April 27, 2004.

December 2004:

- The Williams Company received DHEC permits to replace outdated “uncontrolled” compressors on the pipeline located in Duncan, SC. Replacement of the compressors began in late 2004 and will continue until late 2005. This will result in a significant NOx reduction for the Upstate.

June 2006:

NOx reduction at the Duke Power Lee Steam Plant

- Coal fired Unit #2 is now operating with the new NOx burners and final manufacture set up for acceptance is to be conducted in June 2006. Monitoring data indicates that the burner should at least meet the 0.23 #NOx/MMBTU's. Unit #2 will operate this entire NOx season with the Low NOx burners.
- Coal fired Unit #1 is currently off line. It will be coming back on line in July 2006 with new NOx burners installed. If the results are similar to Unit #2 Duke Power will also operate this unit the entire NOx season at the 0.23 #NOx/MMBTU's rate or lower. This unit will operate approximately 4-6 weeks and final set up will be conducted.
- Both units will complete final construction permit testing during June, July and August 2006. Duke Power has commitment to install the Low NOx burners on the two remaining coal fired units at the Lee Steam Plant. Unit #1 burners were installed April-May 2006 and start-up with Low NOx burners was May 19, 2006. Unit #2 burners were installed March-April 06 and start-up with Low NOx burners was April 15, 2006.

June 2007:

- The City of Greenville replaced coal fired boilers with energy efficient gas boilers at several Fire Department stations. In addition, fire house gas water heaters are being replaced with solar units. The City has also replaced interior lighting with energy efficient lights.

December 2007:

- City and County of Greenville and DHEC staff continue meeting and discussing outreach programs and initiatives for 2008.

Estimate of Emission Reductions (if available)

- 2,000-4,000 tpy NO_x from SIP Call
- Potential 500-1000 tpy NO_x (Tier Two)

No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Implementation began in 2005 and was completed May 2006.

10. Develop a program to offer to purchase or repair smoking vehicles (known as cash for clunkers).
Priority A

Description of Measure

- Use funds generated from a license plate sales, registration fees, or license plate tax program to buy or repair high emitting vehicles from individuals.
- Purchase such vehicles from non-profit groups such as the Kidney Foundation, Goodwill, and Salvation Army when they have been donated as charitable gifts.
- Consider accelerated vehicle retirement (scrapage) programs to encourage vehicle owners to voluntarily retire their vehicles sooner than they would have otherwise.

December 2003:

During its August 5, 2003, the AQ Staff Advisory Committee discussed this strategy: A high emission vehicle buyback or repair program appears to be cost effective for VOC emissions, but is less clear for NOx emissions. It is hard to quantify the success rate of the program in the various states the program has been implemented, but the program seems to make intuitive sense. This type of program will become increasingly more important as the new vehicle pollution control systems increase the gap between the new vehicle's emissions and the "smoking" vehicle's emissions. Recommendation: funding the high emission vehicle buyback or repair program as a pilot program with a set yearly target for the number of vehicles that will be either repaired or scrapped. A follow-up study on this pilot program would need to be implemented to determine the impact on emissions (ozone) for the upstate.

2004 and 2005:

- Development of this program did not take place due to lack of funding.

June 2006:

- In the summer 2006, staff from the Air Quality Staff Advisory Committee will meet with Goodwill Industries, Salvation Army and Kidney Foundation representatives to discuss alternatives to re-selling clunker vehicles donated to these organizations.

December 2006:

- Met with Goodwill Industries and Miracle Hills executive directors to discuss air quality efforts and the "cash for clunkers" strategy included in the air quality list of strategies to improve air quality. The executive directors were receptive to the proposal to scrap rather than resell vehicles that could exacerbate air quality problems. They indicated that most of the donated vehicles are scrapped and sold for parts rather than being put back on the road.
- Conference call with the Kidney Foundation (Kidney Car Program) to discuss air quality efforts and the "cash for clunkers" strategy included in the air quality list of strategies to improve air quality.
- Goodwill reported statistics through the fiscal year ending on June 30, 2006, that of the 1,756 vehicles donated 588 were likely put back on the road and the remaining 1,198 were sold for parts or salvage. For the prior fiscal year, 2,672 vehicles were donated, 908 were likely back on the road and 1,764 were sold for parts or salvage.
- Staff will request statistics from the other non-profit organizations indicating the total number of vehicles donated, the number that were put back on the road, and the number that were salvaged.

December 2007:

- Cash for Clunkers strategy was not pursued due to lack of funding.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Implementation began in 2003. Completion of this measure will depend on discussions with the non-profit organizations.

Additional Information

No SIP credit has been taken for this measure.

11. Ban open burning of on-site commercial clearing debris during ozone season (April to October).
Priority A

Description of Measure

- Use SCDHEC model to determine the most effective method to ban open burning.
- Discuss modeling results with all local governments to consider adoption.
- DHEC adopted regulations in mid 2004 restricting open burning.

2004:

- SCDHEC adopted regulations in mid 2004 restricting open burning.

June 2005:

- Greenville County has notified all fire departments, all municipal and county codes departments, the Greenville Home Builders Association and others about the ban
- Greenville County is running a public service announcement in the County's Cable TV channel permanently.
- DHEC encourages Anderson, Greenville, and Spartanburg to actively notify all residents that the statewide ban is now in force and violations are punishable by law.

December 2005:

- At the November 2005 Air Quality Steering Committee meeting, the Committee directed staff to coordinate with local governments to enforce DHEC's burning ban year-round. Greenville County has notified all fire departments, all municipal and county codes departments, the Greenville Home Builders Association and others about the ban at the monthly subdivision review team meetings. The County is running a public service announcement in the County's Cable TV channel permanently.

June 2006:

- As part of the enhanced "Improving Air Quality Public Awareness Campaign," the County will distribute brochures and information about DHEC's regulations concerning open burning to all local fire departments, the Home Builders Association, and the Association of General Contractors.
- The County continues running a public service announcement on the County's website and the Cable TV channel.

December 2006:

- On November 7, 2006, staff met and presented to the Fire Chief Association a PowerPoint presentation outlining the problems and solutions to the air quality issues facing the Upstate region. Also staff distributed the "Learn Before You Burn" brochure to the Association and to the Library System for distribution to the public. The Fire Chiefs requested information on how they can approach County Council to make the open burning ordinance more restrictive.
- The County continues running a public service announcement on the County's website and the Cable TV public access channel.
- Began radio broadcasting a PSA on open burning and air quality information during the month of November 2006 in an effort to make citizens aware and minimize the burning of leaves or yard debris.
- In October 2006, SCDHEC Chief Air Quality Bureau Myra Reece, through a state-wide press release, encouraged homeowners to consider composting as an alternative to burning their yard waste this fall.

June 2007:

- County staff monitored the ban on open burning ordinance passed by Lexington County. Staff will review this ordinance.
- Continue distributing the "Learn Before You Burn" brochure at community events and air quality presentations.



Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2004 and further efforts conducted in 2006.

12. Create incentives for the purchase of high efficiency and low emissions vehicles. Priority A

Description of Measure

- Offer tax credits for vehicles with high efficiency gas consumption or low emissions.
- Offer tax credits for low mileage vehicles instead of high mileage vehicles

December 2004:

- Developing draft bill to offer reduced tax incentives for those purchasing low emitting vehicles.

December 2005:

- A bill titled "An act concerning the promotion of alternative use fuel, and hybrid propulsion system for transportation purposes" was submitted to the SC House of Representatives in January 2005. The bill is now in committee. In summary, the bill provides tax Credit for vehicles using alternative fuel or hybrid propulsion vehicles. The credit is allowed against the tax imposed by for the purchase of vehicles licensed in South Carolina which use, or which are converted within 120 days of purchase to use, clean-burning fuel. Specifically the intent of the bill will apply for income tax years beginning on or after January 1, 2004, but prior to January 1, 2013. The tax credit will be allowed for the purchase of an alternative fuel or hybrid propulsion vehicle, and for a motor vehicle that is converted to use alternative fuel, for the replacement of the power source with a power source that uses alternative fuel.

June 2006:

- On June 1, 2006 the Governor signed the H*4312(Rat #0371) General Bill. Act 312, R371, H4312 Bill may be viewed at http://www.scstatehouse.net/sess116_2005-2006/bills/4312.htm and its caption reads:
AN ACT TO AMEND THE CODE OF LAWS OF SOUTH CAROLINA, 1976, BY ADDING SECTION 12-6-3377 SO AS TO ALLOW A STATE INCOME TAX CREDIT EQUAL TO TWENTY PERCENT OF CERTAIN NEW HYBRID, FUEL CELL, ALTERNATIVE FUEL, OR LEAN BURN TECHNOLOGY MOTOR VEHICLE CREDITS ALLOWED AGAINST A TAXPAYER'S FEDERAL INCOME TAX LIABILITY.
- The purchasing of hybrid vehicles and how their use helps to clean the air and tax incentives available state wide will be included in the "Improving Air Quality Public Awareness Campaign" currently under enhancement.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed June 1, 2006.

13. Use land-use and transportation planning to improve air quality.

Priority A

Description of Measure

- Include air quality measures as a part of the land-use and transportation planning process.

June 2005:

- County Council passed ordinances updating Zoning Ordinance and Land Development Regulations; changes focus on adding flexibilities to encourage cluster developments, neo-traditional development and mixed-use developments. A copy of this ordinance may be viewed at http://www.greenvilleplanning.com/land_development/Z-Ord-Final-with%20Ord%204004%20included-Apr2006.pdf

June 2007:

- The City of Greenville encourages land use development where people can live, work, and shop in the same area promoting more walking and less automobile travel. For example, walking and biking trails have been designed into the International Center for Automotive Research (ICAR) from Clemson University. McBee Station is another example of mixed-use development that would encourage people to walk rather than driving. Finally, River Place is also a mixed use development located across South Main Street from Fall Park. This development includes condominiums, restaurants, a hotel, small business, and artist lofts.

December 2007:

- VPSI proposes "turnkey" van pool service:
VPSI has met with the executive directors of public transportation systems in Columbia and Greenville. The Executive Director of the Regional Transport Authority and Appalachian COG representatives have had several good meetings with VPSI representatives.
- Transit feasibility public meeting in Easley, Pickens County, SC:
Residents will get the chance to sound off for the final time on a possible mass transit plan for Easley on August 7, 2007. A final transit feasibility public meeting was held at 6:30 p.m. at the Hampton Memorial Library by URS Corp., the group doing the study for Easley, which is in Pickens County only about 12 miles from downtown Greenville. The group identified the need for mass transit through two public information meetings and almost 200 surveys they received from the public. This will be the third public meeting.
- Greenville Pickens Area Transportation Study (GPATS) Committee adopted the Long Range Transportation Plan on November 5, 2007. The plan contains recommendations for coordinating transportation improvements with the County's Comprehensive Plan.
- Greenville County Council and the Planning Commission held a workshop on November 14, 2007 to discuss the process to update County's Comprehensive Plan, which will include the coordination of land use and transportation elements. It is expected the plan will be adopted in early 2009.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed the revised Land Development Regulations in December 2004 and the revised Zoning Ordinance in June 2005.

14. Implement a program to encourage use of green power.

Priority A

Description of Measure

- Capture emissions from landfills to produce green power, e.g., BMW is utilizing Palmetto Landfill emissions to produce energy for its plant.
- No local action has taken place on this strategy Implement a Purchase Green Power program when available. Green power is electricity generated by renewable resources like solar, wind, and even decomposing garbage in selected landfills. These resources are replenished naturally and minimize harm to the environment.

2003:

- BMW Manufacturing Corp. and its partners launched a \$12 million methane gas-to-energy project. Methane from the Palmetto Landfill will be used to power four onsite turbines and cogenerate electricity and hot water for the manufacturing plant in Spartanburg.

December 2004:

- Currently, green power options are limited to the north-western portion of Greenville County served by Blue Ridge Electric Cooperative. Indications are that additional opportunities may be available in 2006.

June 2006:

- The Enoree Landfill is scheduled for closure during 2007. Greenville County will advertise in the summer 2006 for a developer to capture and recover methane gas at the Enoree Landfill. Depending upon responses, the County could install a system during the summer 2006 or wait until the spring 2007 when the final cover is constructed at the landfill.

December 2006:

- In early November 2006, Greenville County began installing the active methane gas collection system. About 10 of the 50 well-heads have been installed. Once the well-heads have been installed and connected to the blower system, the County will install a flare. When the flare system is up and running, the developer has six months to find a green power use. If the contractor fails to find a partner, Greenville County will own the gas rights and can partner with another company. The system should be flaring gas by the end of January 2007. It is expected that the Enoree Landfill would be producing green power by the summer 2007. However, if the current developer can not perform, the process would begin again.

June 2007:

- In January 2007, Greenville County closed the Enoree Landfill. The County continues flaring the methane gas produce at the landfill. Although this is not a desirable solution, it is the preferable method than allowing it escape to the atmosphere. The County issued a request for proposals in the summer 2006 to procure services from companies capable of (a) providing an efficient and effective means of gas collection, distribution and usage, (b) ensuring safe and environmentally sound operating practices, and (c) arranging for the full utilization of methane gas generated over an extended period of time. Currently, the County is negotiating a contract.

December 2007:

- The County continues flaring the methane gas produce at the landfill. Although this is not a desirable solution, it is the preferable method than allowing it escape to the atmosphere. The County issued a request for proposals in the summer 2006 to procure services from companies capable of (a) providing an efficient and effective means of gas collection, distribution and usage, (b) ensuring safe and environmentally sound operating practices, and (c) arranging for the full utilization of methane gas generated over an extended period of time. The County continues negotiating a contract.

- The SC Office of Regulatory Staff announced that three investor-owned utilities (Duke Energy, Progress Energy and SCE&G) will provide a green power option for customers in South Carolina beginning January 2008. The Palmetto Clean Energy (PaCE) program will procure power from renewable energy sources in the Southeast from solar, wind, or biomass.
<http://www.regulatorystaff.sc.gov/ORSContent.asp?type=news&newsID=143>

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2003 but continue exploring implementation (see June 2006 update above).

15. Promote route efficiency for delivery vehicles, trash collection etc.

Priority A

Description of Measure

- Encourage business to consolidate distribution and collection routes to improve efficiency and reduce emissions from their fleets.
- Maximize route efficiency for public services such as garbage collection, delivery vehicles, and other vehicle trips to reduce fuel usage.

December 2004:

- In June 2004, the Fleet Management Division sent a memorandum to all department managers outlining several actions to maximize fuel efficiency. These actions included:
 - o Ensure tires are properly inflated.
 - o Fill fuel tanks in the morning, or when temperature is coolest, do no overfill tank and stop pumping when the nozzle cuts off.
 - o Clean out the trunk or storage area.
 - o Avoid long idling.
 - o Operate vehicles within the speed limit and eliminate "jackrabbit" starts.
 - o Ensure preventative maintenance schedules are timely performed.
 - o Develop efficient routing plans.
 - o Encourage carpooling when appropriate for meetings and training.

June 2006:

- In February 2006, a consultant for the Greenville Transit Authority (GTA) completed the transit development plan. An element of that plan was an efficiency analysis of public transportation routes. The consultant concluded that GTA's routes are the most efficient considering budget limitations.
- The School District of Greenville County requested the SC Department of Education to conduct a school bus routing efficiency study. The study began in May 2006 and should be completed before the next school year.

December 2006:

- The Greenville County School District's Transportation Department is working with the State Department of Education to study school bus routes efficiency. State representatives will ride each route with the bus driver to evaluate the bus route. Rider counts will be incorporated to determine if there is a better way of routing the bus. The study began in early 2006 and should be completed in early 2007. Source: <http://www.greenville.k12.sc.us/district/news/release/2006a/progress.pdf>

June 2007:

- The SC Department of Education's Transportation Division continues performing the study. The Department divided the district into smaller sections for manageability and two sections were completed in the 2005-06 school year. These areas included 1) the Berea/Travelers Rest High school areas plus elementary and middle schools in that area, and 2) the Hillcrest/Mauldin High school areas plus elementary and middle schools in that area. The two areas studied in 2005-06 resulted in an overall additional allocation of five buses and some shifting of buses as well as major re-routing in the areas studied. They are currently performing a study of the Southside/Woodmont High areas plus the elementary and middle schools in that area.

The State's main focus of the study are the district's current bus routes, reviewing them to determine if the routes are run in the most efficient manner, that the routes conform to state rules and regulations, ensuring that the buses get to school on time, and that Greenville County Schools allocation of state buses is appropriate. This has included determining the most direct routes with the least number of stops necessary.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

June 2006 but progress and improvements will continue.

16. Establish a clean air partnership with business and industry.

Priority A

Description of Measure

- Encourage and coordinate alternate work schedules such as staggered work hours for business, industry and local governments.
- Establish park and ride lots serving perimeter counties along major corridors.
- Make the public aware of the park-and-ride concept: media could assist in publicizing which programs are available.
- Encourage carpooling/vanpooling as an option where employees living in the same area agree to ride to work together rather than to drive their individual vehicles to work.
- Consider parking facility controls that can include employers offering a tax-free transit/vanpool benefits and which limit the amount of parking and encourage carpooling, mass transit, etc.
- Encourage telecommuting.
- Adopt a Bus Program.
- Develop funding to be used for matching grants fund for several EAP strategies.
- Develop a core competency and assisting the Upstate EAC group in writing grant proposals.

June 2004:

- Staffs of Greenville County Planning Commission, Greenville Transit Authority and Greater Greenville Chamber of Commerce have begun joining effort to develop a feasibility study for Park-n-Ride program and/or Ride-Share program for Greenville County. Information will be shared with Anderson and Spartanburg counties.

June 2005:

- Ozone coordinator contacted an automobile support industry company and requested assistance with funding to print a 27'x 9' "Spare the Air in Greenville County" banner. The banner was paid for with private funds and it will be displayed during ozone season at the Recycling Center located at County Square at the intersection of University Ridge and Church Street in downtown Greenville (SC). Thousands of vehicles travel by this intersection every day.

December 2005:

- In the November 2005, the Air Quality Steering Committee directed staff to begin addressing this strategy before the 2006 ozone season.

June 2006:

- The Greenville County Planning Commission (GCPC) has contracted with a consulting firm to assist staff in the update of the Long Range Transportation Plan (LRTP) for the Greenville Pickens Area Transportation Study (GPATS). The consultant began work in February 2006 and will complete the study in February 2007. GCPC provides staff support for GPATS, which is the Metropolitan Planning Organization (MPO) for the Greenville Urbanized Area. This plan update will provide a comprehensive evaluation of the regional transportation system, land use patterns, congestion, public transportation and related environmental issues in the GPATS study area. The study will also update the travel demand forecast model, and will provide staff training. The result of the study will be the 2030 Long Range Transportation Plan for the GPATS to guide the development of the Transportation Improvement Plan (TIP), e.g. park-and-ride, carpooling, mass transit, and other multi-modal transportation options.
- Greenville City's new baseball team operates the Downtown Greenville Trolley to facilitate transportation in the downtown area. During baseball games, the Trolley runs between the Drive Stadium located at the West End near downtown and County Square (Greenville County Government Complex), which has a designated parking area during baseball games. In addition, the Trolley operates back and forth on Main Street (downtown business district) on Fridays (6 p.m. to 11 p.m.), Saturdays (10 a.m. to 11 p.m.), and Sundays (1 p.m. to 6 p.m.). Information may be found at <http://www.greatergreenville.com/visitors/forms/TrolleySchedule.pdf>

- In June 2006, the Ozone Coordinator contacted a few county employees to find out about their interest in carpooling. Employees' response was positive and carpooling among these employees will begin in July 2006.

December 2006:

- Responses to a carpooling pilot program for County employees were positive; however, it was discovered that a "guarantee ride" back home element was needed to fully implement a program. Staff will continue working on this concept.

June 2007:

- The County continues partnering with private businesses and public and non-profit organizations:
 - o Gas Can Exchange (April 21, 2007): Greenville County partnered with Spinx, the City of Fountain Inn, SCDHEC, Duke Energy, Fountain Inn Chamber of Commerce, Laurens Electric Cooperative, and Caterpillar Corporation to exchange old gas cans with new air friendly CARB complaint cans. During this event, we exchanged approximately 250 gas cans, which were recycled. The contents of the cans were recycled as well.



Gas Can Exchange Event, April 21, 2007, City of Fountain Inn

- o Car Care Clinic Fair for Clean Air: Greenville County partnered with Greenville Technical College's Automotive Center, Michelin, SCDHEC, Spinx, AAA Auto Club, NAPA, Quick Lane Fairway Ford, Duke Energy, Goodwill Industries, and Clear Channel Communications to conduct a car care clinic on May 19, 2007. About 70 vehicles were checked for tire pressure, basic engine maintenance, and emissions. We are currently analyzing the data from the surveys and the vehicle check-up forms.



Car Care Clinic Fair for Clean Air, May 19, 2007, City of Greenville

December 2007:

- Rubber Recycling Technologies (RRT) LLC opened on August 1, 2007. RRT collects and recycles used tires from area businesses to be used in other products. Tire tread is recycled to make rubber

mulch and sidewalks that can become playground material. Other parts can be used in asphalt, textiles, or tire-derived fuel in place of coal.

- The City and County of Greenville, Service Master (a regional diesel engine fleet service company), and North Carolina State University formed a partnership and submitted an application to EPA-Region 4 for the Southeast Diesel Collaborative program to test a new emission reduction technology for diesel fueled engines. As we strive toward attaining the 8-hour ozone standard by December 31, 2007, a project of this magnitude could have positive impacts on our continued efforts next year and the future. Greenville County is committing to providing in-kind (personnel) services to the project from the County Administrator's Office, the Planning Department, the Procurement Services Division, and the Office of Management and Budget. The County will advertise the request for proposals and handle the review process along with the City of Greenville to determine the best technology provider/respondent. The County will also handle all progress reporting of data, financial, and final reporting to the EPA, should this proposal be successful.

The City of Greenville is hosting The Alliance for Innovation's Transforming Local Government Conference, in June 2008. The topic for 2008 is "Creating Sustainable Futures: Global Issues/Local Solutions." With a partnership between the Innovation Group, the International City/County Management Association (ICMA), and the School of Public Affairs from Arizona State University (ASU), the mission of the Alliance for Innovation is to transform local government and advance community excellence through the discovery and application of leading innovative ideas and practices. The Alliance brings professionals, local governments, academics, and private sector partners together to discover and apply the best ideas, practices and solutions to the challenges confronting local government and communities. During the Conference, the City and County of Greenville will provide a display area, where other local government leaders may view an example of one of the converted fleet vehicles and the technology behind the conversion. This display will explain, in layman's terms, information and the concept behind the emissions reduction technology and the anticipated environmental outcomes and outputs. We are optimistic that through this conference the City and County of Greenville will be able to share the information that is available at the time on this demonstration project with as many as 12,000+ local government professionals. The City of Greenville will provide the cost of in-kind services to disseminate the information during the conference. In addition, the City and County of Greenville will provide website links, where attendees can view updated reports on the status of emissions reductions in Greenville County as a result of this demonstration project. The County will also request that the successful respondent to the emissions reduction technology RFP provide a link on its website to the County's website.

North Carolina State University (NCSU) will provide the on-board emission measurement technology and the protocols for industry-standard emission gathering data, will collect emission data for existing emissions and post-retrofit emissions, and the durability test of emissions reductions. The University will take three samples of emissions from each vehicle during the course of this study in phases: Phase 1) prior to retrofitting vehicles with the technology; Phase 2) during testing with the technology; and Phase 3) at the end of six months testing period. In this way, the County and City of Greenville will be able to track and measure whether the proposed demonstration is achieving the desired results of reduced emissions (PM2.5, NOx, CO and/or VOCs).

- Michelin North America 2007 SmartWay Excellence award. Michelin North America, Inc., based in Greenville, SC, was among 34 businesses honored by the U.S. Environmental Protection Agency (EPA) during the annual conference of the Council of Supply Chain Management Professionals in Philadelphia. The 2007 SmartWay Excellence award winners were recognized for environmental leadership in reducing fuel consumption and lowering greenhouse-gas emissions from big trucks. Michelin is part of EPA's SmartWay® Transport Partnership, an innovative collaboration between EPA and the freight industry to increase energy efficiency while significantly reducing greenhouse gases and air pollution.

- Greenville County has had two Air Quality Summits since 2002. County staff will initiate discussions with the Greater Greenville Chamber of Commerce's Environmental Issues Committee to develop a program for a third air quality summit in Upstate SC to be held in 2008.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2004 but progress and improvements will continue on this strategy.

17. Establish an active public awareness campaign.

Priority A

Description of Measure

- Develop an editorial board to discuss air quality issues and development of a relationship with media.
- Use alert messages year round, not only during ozone season; Utilize public service announcement, newspapers, weather channels, and other media outlets to notify citizens of high ozone days.
- Utilize TV Channels to issue high ozone alerts using the crawl bar at bottom of TV screens.
- Encourage health organizations to sponsor ozone alerts in media.
- Enhance ozone awareness (Outreach-communication): assign a local agency to develop and implement a program to educate and motivate individuals to take actions to minimize ozone pollution. Includes a focused distribution of educational materials, dissemination of SCDHEC ground-level ozone forecast, increased media alerts to specific audiences, and includes action oriented components (i.e. ridesharing, telecommuting, etc.).
- Develop a campaign to encourage things such as refueling vehicles during evenings, not topping off tanks when refueling, using lawnmowers during evenings instead of during high ozone hours, using of electric lawn mowers.
- Develop a license plate program to generate revenue to implement the public awareness campaign.
- Develop awareness program on tax savings for purchasing high efficiency vehicles.

June 2004:

- Complete list of strategies for public review and comments were made available through the Greenville County Library System and the Greenville County Planning Commission from March 29, 2004 to May 31, 2004. Responses positive, but limited - less than 25 people called or sent letters.
- Greenville County requested 200 Ozone and Your Health brochures, 200 Learn Before You Burn brochures, 100 Spare the Air Coloring books, 150 Pencils, 1 Display and 1 Air Quality PSA to distribute during the 2004 Ozone Season.

December 2004:

- Conducted a gas can exchange in June 2003: 115 old gas cans exchanged for new environmentally safe cans.
- DHEC Ozone forecast updated daily on county cable TV Channel; TV Weather channel announces Ozone Forecasts; county posted DHEC's link on County's website - front page; alerts for 2005 will resume; reviewing and considering materials to be used during 2005 public awareness campaign.
- On August 26, 2004, the Greenville News published an article titled "Worst air sets bar that may choke growth."
- Memorandum sent to all County departments in October 2004 for the purpose of establishing certain principles that will guide the recurring activities of County government. The areas addressed are listed in the introductory paragraph Air Quality Awareness and Improvement Policy for County Government.

June 2005:

- In April 2005, County staff and members of the staff advisory committee met with Channel 4 representatives to discuss coverage of air quality stories during the 2005 Ozone season.
- Greenville County conducted an educational campaign during Ozone Awareness Week which was held March 28 – April 1, 2005 and included: radio commercials, a display in the main lobby of Greenville County Square, presentations in schools and 27'x 9' banners displayed in the windows of the recycling center located in downtown Greenville. This educational campaign will continue throughout the current Ozone Season. The DHEC Ozone Forecast is updated daily on the County Cable TV Channel (except for Sundays). The TV Weather channel announces the Ozone Forecasts. Greenville County has posted DHEC's link on the County's home (front) page for Ozone Forecast. Greenville County printed and distributed air quality informational brochures to the public through schools and the Greenville County Library System. The County set up a display at County Square during Ozone Awareness Week Distributed bookmarks to public at Greer Track Club Event on Earth

Day. Distributed bookmarks to public at Greer Track Club Event on Earth Day. Update daily the ozone forecast on County's Cable TV Channel.

- On June 24, 2005, Channel 4 broadcast an interview with an Air Quality Staff Advisory Committee member discussing the Ozone Orange Level Alert issued by SCDHEC for that date.

December 2005:

- Updated the ozone forecast daily on the County's Cable TV Channel and Radio ads. Sent an e-mail to employees and Air Quality Steering Committee when DHEC forecast Orange Alerts.
- Broadcast air quality related radio ads.
- Send e-mails to employees when DHEC forecast Orange Alerts and to Air Quality Steering Committee.
- On November 16, 2005, the Greenville News published an article titled "Upstate's hazy record on air could cloud business climate."
- Greenville County is preparing a grant application due to USEPA Region 4 on December 23, 2005, in advance of the 2006 Ozone Season. The County is planning on conducting an extensive public awareness campaign should the grant application be approved. Items would include: radio and TV advertisements, informational wheels, brochures, involvement in community activities, and funds to enable the Greenville Transit Authority to provide free transit services during high ozone alert days.

June 2006:

- On February 9, 2006, the Greenville News published an editorial titled "Upstate must fix pollution."
- County staff is actively participating with SCDHEC in the planning of the 2006 SC Early Action Compact Summit, which will be held in Columbia, SC on August 16 and 17, 2006.
- USEPA notified in April 2006 that Greenville County was selected to submit a final grant application. The final application was submitted in May 2006. The County is expecting an award notice by July 2006 to begin developing public awareness materials and the campaign. Funding will be from July 2006 through June 2008.
- The 27'x 9' "Spare the Air in Greenville County" banner is being displayed during ozone season at the Recycling Center located at County Square at the intersection of University Ridge and Church Street in downtown Greenville (SC). The traffic count for this intersection is approximately 23,000 vehicles per day.
- On May 22, 2006, County administration notified and requested all department heads, appointed and elected officials their assistance in distributing information to employees on USEPA's EnviroFlash forecast delivery system services.
- On June 22, 2006, the Greenville News published an article titled "Ozone alert issued for today" on its website.
- On June 23, 2006, the Greenville News published an article titled "Ozone levels near danger zone."
- On June 23, 2006, the Greenville News published an article titled "Air quality expected to improve today" on its website.
- Continue updating ozone information on website, air quality forecasts on the County's Cable TV Channel, and sending e-mail alerts to employees when DHEC forecast Yellow and Orange Alerts.

December 2006:

- EPA approved grant on July 24, 2006.
- Submitted request to purchasing on July 26, 2006 for air quality PSAs.
- Continued broadcasting air quality forecast and information on Cable TV public access channel and website.
- Met with Goodwill Industries Executive Director to discuss air quality efforts and the "cash for clunkers" strategy included in the air quality list of strategies to improve air quality.
- Published air quality articles in "La Opinión" a Hispanic newspaper in Upstate SC.
- Greenville News continued covering air quality efforts and published articles in print media and website. As a result of an increased coverage of the print media about our efforts to make the public aware, citizens are becoming more concerned about air quality problems and solutions in the Upstate. This is evidenced by calls received, letters to the editor, and quotes in news articles.

- Four County employees attended the 2006 Early Action Compact (EAC) Summit held on August 16 – 17, 2006 in Columbia, SC
 - John Gardner, Kimberly Grissop, John Owings, and Sandra Yudice
- Continued advertising in radio, TV Channel, website, newspapers (both stories on air quality and editorial) in English and Spanish.
- Continued broadcasting alerts to County employees during Ozone Action Days.
- Met with volunteers to design outreach materials.
- Met with School District's and SCDHEC's representatives to discuss the Breathe Better Air at School (B²@School) pilot program and school district "no idling" policy.
- Met with Miracle Hills Executive Director to discuss air quality efforts and the "cash for clunkers" strategy included in the air quality list of strategies to improve air quality.
- Conference call with the Kidney Foundation (Kidney Car Program) to discuss air quality efforts and the "cash for clunkers" strategy included in the air quality list of strategies to improve air quality.
- Greenville News continued covering air quality efforts and published articles in print media and the newspaper's website.
- Released presentations to County employees and to the general public (posted on website and broadcast on TV public access channel):
 - Improving Air Quality in Greenville County, SC – The Challenge: Air Pollution
 - Improving Air Quality in Greenville County, SC – The Solution: Awareness
- Mailed letters explaining air quality efforts to municipalities, local chambers of commerce, school superintendent, non-profit organizations, media (TV and print), public and private schools. Included CDs with information and PowerPoint presentations.
- Ordered EPA and SCDHEC brochures and pencils.
- Began designing information wheel and t-shirts.
- Continued discussions with school district on the B2@School program.
- Greenville News continued covering air quality efforts and published articles in print media and website.
- Mailed letters explaining air quality efforts to Greenville County Library System and 30+ fire chiefs. Included CDs with information.
- Continued designing information wheel, t-shirts, and other materials and ordered pencils.
- Began making community presentations: Fountain Inn Planning Commission and City Council.
- Provided additional information to school district on the B2@School program.
- Distributed brochures through library system, meetings, and other venues.
- Attended the Environmental Issues Briefing sponsored by private businesses.
- Made presentations to the Greenville County Fire Chief Association, Fountain Inn City Council, and Planning Commission and Fountain Inn Rotary Club.
- Completed design of information wheels, t-shirts, bookmarks, and other materials.
- Submitted request to purchasing to order information wheels, t-shirts, radio PSA, and bookmarks.
- Broadcasted air quality/open burning PSA on radio.
- Continued broadcasting air quality information on Cable TV public access channel.
- Distributed brochures through library system and meetings.
- Provided letter of support for a grant application to EPA from the Greenville Hospital System - Children's Hospital. Greenville County committed to collaborate in building a broad-based stakeholder group to educate the public on air quality issues and children's health. This initiated discussions with Greenville Hospital Systems representatives to form a coalition to educate the public on air quality issues, especially how they affect children who suffer from asthma and other respiratory illnesses.
- After a presentation on air quality by the Greenville County Planning Commission staff, the City of Fountain Inn agreed that the issue is very important. In December 2006, City Council began considering issuing a city-wide policy statement or resolution. The City is also drafting a flyer that will be distributed to all City residents.

June 2007:

- With the accomplishment of some of the major elements such as low sulfur fuels arriving in the Upstate, Duke Energy converting to low NOx boilers at the Lee Steam Plant, the County is now focused on conducting a public awareness campaign. EPA awarded Greenville County a grant to fund this campaign. We had many volunteers participating along with business, public and non-profit agencies in various air quality improvement community events and presentations. The summary below provides the month by month activities from January through June 2007:

January 2007:

- Began distribution of "Spare the Air" t-shirts, customized brochure, bookmarks, pencils.
- Hosted the USEPA Diesel Retrofit Grant Workshop for the Upstate SC.
- On January 24, 2007, met with Principal of Fountain Inn Elementary School to discuss the Breathe Better Air at School (B2@School) program.
- On January 30, 2007, met with Goodwill Industries representatives to discuss implementation of the Car Care event in May 2007.
- On January 31, 2007, met with staff and faculty of the Fountain Inn Elementary School to discuss implementation of the B2@School program.
- Contacted Greenville Rotary Club to make Air Quality presentation to members.
- Media (radio and print) provided coverage of air quality issues through news stories and public service announcements.
- Redesigned and revamped the County's air quality website at <http://www.greenvillecounty.org/air%5Fquality/>
- Continued publishing air quality information on the County's TV Cable channel.

February 2007:

- Made presentation to the Professional Networks Connection on February 8, 2007. There were 25 attendees.
- Attended the USEPA 2007 National Air Quality Conference in Orlando, FL, to become more knowledgeable of various public awareness strategies being implemented nationwide.
- Discussed with DHEC staff the steps to implement the B2@School program.
- Media continued covering/publishing stories on air quality matters and the Breathe Better Air at School pilot program.
- Continued planning the Gas Can Exchange and the Car Care events to be held in April and May, respectively.
- Continued distributing materials at community and planning meetings.
- Met with Goodwill Industries and continued planning the Car Care event to be held in May 2007.
- Continued publishing air quality information on the County's TV Cable channel.

March 2007:

- Met with volunteers to design the courtyard gardens at Fountain Inn Elementary School. The B²@School program seeks to educate the public about the value of reducing the amount of lawn that must be mowed by replacing that area with plant beds and gardens both in schools and at home. The original plans for the enclosed courtyard at the school expansion retained an area that would have to be reseeded with grass requiring mowing during school hours. Replacing the grassed area with gardens, has the following benefits (a) the need to mow grass will be eliminated; (b) students will not be distracted by the noise; and (c) more importantly emissions and dust from lawnmowers will also be eliminated.
- Made presentation to Simpsonville City Planning Commission on March 6 (17 people attended). Also distributed materials to all attendees.
- Made presentation to Greer Planning Commission on March 19 (15 people attended). Also distributed materials to all attendees.
- Made presentation to Simpsonville City Council on March 27 (28 people attended). Also distributed materials to all attendees.
- Met with Goodwill Industries and continued planning the Car Care event to be held on May 12, 2007.

- Ordered inflatable, no idling signs, flyers featuring the B²@School program, the Gas Can Exchange event, and additional information on air quality.



- Continued designing information wheels.
- Continued planning the Gas Can Exchange event to be held on April 21, 2007, at Fountain Inn, SC.
- Began broadcasting air quality radio ads during the last week in March 2007.
- Media continued covering/publishing stories on air quality matters, air quality presentations made to different organizations, and the B²@School program. WYFF (Channel 4) began including air quality forecast announcements with each weather segment.
- Continued publishing air quality information on the County's TV Cable channel.

April 2007:

- Continued broadcasting air quality radio ads.
- Participated in Furman University's and the Greenville County Library Systems' Earth Day celebration on April 14, 2007. Distributed t-shirts and information to approximately 150 people.



Earth Day Celebration, Greenville County Library System, Hughes Library, Greenville, SC

- Distributed t-shirts and information to Greenville Technical College Public Speaking class (about 20 students) on April 16, 2007.
- Held the Gas Can Exchange event on April 21, 2007 in Fountain Inn, SC. Estimate that we had about 150 participants. We collected 92 surveys and gave out 250 gas cans. This event was publicized in a local newspaper. The April 2007 issue of the Living in South Carolina magazine published by Laurens Electric Cooperative also contained an article featuring the gas can exchange event. In addition, SCDHEC, Environmental Quality Control Division, promoted the event in its website.





Gas Can Exchange Event, Fountain Inn, SC, April 21, 2007

- Participated in the Greenville County Earth Day celebration for County employees on April 19 and 20 at County Square. About 50 people received t-shirts and materials.
- Participated in the Friends of Paris Mountain Day event on April 28th. Approximately 1,000 people attended.
- On April 27th, staff attended the 2007 SC Energy Efficiency Summit to become more knowledgeable of energy efficiency programs that help improve air quality.

May 2007:

- Showed Forecast Earth: Air Pollution movie during Ozone Awareness Week on May 4th to Greenville County employees. Set up a display and gave out t-shirts.
- Held the Car Care Day on May 19, 2007. About 70 vehicles were checked.
- Made presentation to the Fountain Inn Elementary School PTA on May 14, 2007. About 80 people attended the meeting.
- Set up an Air Quality display at the Freedom Weekend Aloft festival held in Simpsonville, SC, May 25-28. Approximately 150,000+ people attend this event annually. Gave out about 850 bags containing information, tips, and ideas about how to improve air quality.





Freedom Weekend Aloft Festival, Simpsonville, SC (May 25-28, 2007) – Air Quality Display

June 2007:

- Continue broadcasting radio ads.
- Developed plans for the 2007 Conservation Day activities at the Greenville Zoo on June 9th with an air quality display.
- Currently developing plans for other community events and presentations during the 2007 ozone season.

December 2007:

- Continued implementing the public awareness campaign and the news media continued publishing articles on initiatives and developments regarding air quality issues and alerts, including coverage on October 2, 2007 about SCDHEC reviewing data indicating that South Carolina “will meet federal Clean Air Act ozone standards.” The following activities were held between July and December 2007:

July 2007:

- Continue broadcasting radio ads.
- Made the following presentations:
 - o City of Greenville Planning Commission on July 12, 2007
- Continue meeting with partners to plan and design the courtyard and tree planting project at Fountain Inn Elementary School (B²@School program).

August 2007:

- Made presentation to Greer City Council on August 14, 2007.
- Set up information table at Fountain Inn Elementary School Meet Your Teacher Day on August 17, 2007.
- Set up an air quality booth at the City of Greenville's Saturday Market on August 18, 2007
- Continue meeting with partners to plan and design the courtyard and tree planting project at Fountain Inn Elementary School (B²@School program).
- Approved billboards for publication. Billboards will run for eight months at different locations beginning August 2007.
- Completed fundraising efforts to complement funding for the B²@School's courtyard project.
- Met with art teacher to discuss design of the activity calendars.
- News media covered courtyard project at Fountain Inn Elementary School.

September 2007:

- Set up booth at Country Gardens Park and Greenway Kick off in Fountain Inn on September 8, 2007. About 300 people attended.
- Set up booth at Harvest Festival in Travelers Rest on September 22, 2007. Estimate that 200 people attended. 23 people took a pledge card and pledge to do at least one thing to “Spare the Air.”

October 2007:

- Attended the “Green is Good for Business” conference in Columbia, SC.
- Continue advertising on cable TV channel, radio, and billboards.
- Participated in the “Walk to School Day” at Fountain Inn Elementary School on October 3, 2007. Estimate that 150 - 200 children and 30 – 40 adults, teachers and parents walked.
- B²@School and courtyard garden project kick-off on October 12, 2007 to introduce and promote the anti-idling campaign for cars and buses and to celebrate the new garden area. The ceremony included welcoming statements by the Mayor of Fountain Inn and the school principal, Greenville County officials addressed the state of the air quality and Amy Curran (SC DHEC - BAQ) gave an overview of the B²- Breathe Better Program. EPA Region 4 presented Fountain Inn Elementary School with a certificate of appreciation for their efforts and offered comments as well. There was a reception following.
- Set up booth at Greer Health Fair on October 13, 2007. Estimate that 200 people attended.
- Continue advertising on cable TV channel, radio, and billboards.
- With the assistance from DHEC, Fountain Inn Elementary School developed the air quality curriculum to teach students.

November 2007:

- Continued billboard advertising.
- Held a planting day on November 30, 2007, at the Fountain Inn Elementary School courtyard as part of the B²@School program. The courtyard would have been a grassy area but instead it will be a native garden/educational area for students. Two more planting days are scheduled for March 2008. The dedication ceremony of the courtyard is scheduled for April 2008.

Partners include TreesGreenville, Fountain Inn Elementary School (faculty, students, staff, and parents), Greenville County, City of Fountain Inn, Clemson University’s Landscape for Learning Program, Master Gardeners Clubs, Greenville County School District, Greenville County Recreation District, SCDHEC, USEPA, Kiwanis Club, Fountain Inn Rotary Club, Fountain Inn Chamber of Commerce, RBC Mutual, Carolina First, Palmetto Bank, Bloomers Nursery.

December 2007:

- Continued billboard advertising.
- Held a planting day on December 1, 2007, at the Fountain Inn Elementary School courtyard as part of the B²@School program. The courtyard would have been a grassy area but instead it will be a native garden/educational outdoor classroom for students. Two more planting days are scheduled for March 2008. The dedication ceremony of the courtyard is scheduled for April 2008.
- Made a presentation before the Greenville County School District Board of Trustees on December 3 and 10, 2007 to discuss air quality issues and expansion of the Breathe Better at School (anti-idling) program to other schools.
- Distributed 2000 air quality activity calendars for 2008 at Fountain Inn Elementary School.

The following are pictures of the planting days at Fountain Inn Elementary School on November 30 and December 1, 2007.



Estimate of Emission Reductions (if available)

711 lbs/year. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed Fall 2004 but will continue with implementation, progress and improvements.

Additional Information

- Greenville responded to the 8-hour Ozone Early Action Tool sent by SCDHEC in March of 2006. The Ozone coordinators indicated that the County had already implemented eight of the 18 listed action strategies. The county contacts also indicated they planned to implement three additional action items: promoting Car Care Awareness, adopting the Governors proclamation, and suggesting to the local NPR/ETV station to do a story covering ozone awareness. Greenville requested information on four other action items: SmartRide, Breathe Better at School, GreenScaping, and Energy Star.
- With the grant received from EPA, the enhanced public awareness campaign will include information on tax savings measures approved on June 1, 2006 by the State Legislature and the Governor for purchasing high efficiency vehicles.
- The grant received from EPA will provide funding for an enhanced public awareness campaign from July 2006 to June 2008. Therefore, the license plate program to generate revenue will not be pursued.

18. Promote research in energy efficiency at local universities, industries, energy companies, federal government, and other institutions that improve air quality. Priority A

Description of Measure

- Establish programs to research energy efficiencies at local universities, e.g., Institute for Energy Studies at Clemson University.
- Encourage business and industry to utilize the research from these programs to make the best decision concerning the purchase or upgrade of furnaces and boilers.
- Encourage fuel cell and other hydrogen based research.

June 2004:

- Members of the Air Quality Staff Advisory Committee met with staff from the SC Institute for Energy Studies (SCIES) from Clemson University in late summer 2003. As a result, researchers from SCIES made a presentation to the Committee on November 18, 2003. The South Carolina Institute for Energy Studies (SCIES) based at Clemson University is a state-chartered research and development organization established in 1981. Its objectives are to promote energy research and development in and for the state; to transfer energy technology developed by others to South Carolina applications; to contribute to national energy issues in areas of excellence; and to promote statewide energy-education activities. (Source: <http://www.clemson.edu/scies/AboutSCIES.htm>). Researchers from SCIES became members of the Air Quality Staff Advisory Committee mailing list to transfer knowledge and latest undertakings on these efforts.

December 2005:

- Alternative fuels: Clemson University chemical engineering professor Mark C. Thies has received an \$856,000 award from the Department of Energy (DOE) to develop more efficient processes for the centralized production of hydrogen by splitting water. The award was one of only three made nationwide under DOE's Nuclear Hydrogen initiative. In addition to Thies, the project team includes fellow Clemson David Bruce, John O'Connell from the University of Virginia and Max Gorenssek from Savannah River National Lab. The Clemson team will interact not only with U. S. engineers and scientists but also with those in France, Italy, and Japan, all of whom have teams working on related processes.
- Clemson University is developing the International Center for Automotive Research (Clemson-ICAR) in Greenville, SC. The ICAR project will be the premier automotive and motorsports research and educational center in SC. Research will emphasize development of innovative materials and processing technologies, which will enable the development of more efficient, and environment friendly vehicles, as well as electrical power generators.

June/December 2006:

- Clemson University chemical engineering professor Mark C. Thies continues investigating the centralized production of hydrogen via water splitting.
(Source: <http://www.ces.clemson.edu/chemeng/research.html>;
http://www.ces.clemson.edu/chemeng/facultypages/thies/research_ProducingHydrogenCarbonFree.html)

December 2007:

- **Furman University Commits to American College and University Presidents Climate Commitment:** The Presidents Climate Commitment is a bold effort to put colleges and universities in the forefront of the mushrooming national emphasis on sustainability, environmental awareness and energy independence. Modeled after a successful initiative adopted by many of the nation's major cities, it focuses on garnering institutional commitments to reduce and eventually eliminate global warming emissions on campus.

On October 29, 2007, Furman University sponsored a ceremony at which David Shi will officially sign the "President's Climate Commitment," which is a formal pledge by college presidents across the

country to address the problems of global warming and pursue the goal of making their campuses climate neutral. The ceremony also launched the North Village Kill-A-Watt Challenge, a competition that encourages students to conserve electricity. Sponsored by Furman's Environmental Action Group, the challenge encourages students to turn off lights and other appliances when not in use, keep windows closed when the air/heat is turned on and to use compact florescent light bulbs.

- Furman University and Duke Energy formed a partnership to create a demonstration laboratory on campus to showcase the latest technological advances in energy efficiency and sustainability. A Southern Living Showcase Home will be a model of "green" design and will be completed by June 2008. The building will highlight energy efficiency, green design and use of natural materials and products. The showcase home will host public tours for one year and be converted into Furman University's Center for Sustainability in 2009.
- Habitat EarthCraft house near Travelers Rest. The project is a joint effort through the South Carolina Association of Realtors and the Greater Greenville Association of Realtors. EarthCraft House is a green building program that promotes environmentally sustainable and energy-efficient practices. Fundraising is underway, but products such as lumber, concrete and goods are still needed in the amount of more than \$14,000. Ground was broken September 13, 2007. The house will be the second Habitat EarthCraft House built in the county.
- Seminar on November 3, 2007 on green building and remodeling. Addison Homes will present a free consumer seminar on Green Building and remodeling at the company's EarthCraft House Demonstration Home. The interactive seminar will cover the latest green building practices for energy efficiency, environmentally friendly construction, and healthy living. Seminar participants will be able to see green building techniques utilized in the home, including insulation, air sealing, radiant heat barriers, and a conditioned crawlspace. Home energy testing will also be demonstrated.
- Mauldin Middle School, Solar School. Mauldin Middle School became the first in the Upstate to earn the title of "Green Power Solar School." The program is designed to provide a teaching, research and hands-on demonstration opportunity for sixth-grade students at the school. On September 17, 2007, Laurens Electric Cooperative and Santee Cooper installed a 2-kilowatt solar power system at the school, according to a press statement from the Cooperative. Mauldin Middle has been provided an Internet based monitoring system that provides real-time access to information regarding the system's performance from any Internet-enabled computer. The Green Power Solar Schools initiative is designed to encourage interest in the environment and demonstrate the feasibility and limitations of renewable power generation. The solar power system provides a teaching, research and hands-on demonstration opportunity for the students. A focus of the project is the use of a new renewable energy curriculum that meets the South Carolina state science standards, which makes this a unique dynamic learning opportunity. This installation is one of 19 similar systems being installed at middle schools across South Carolina by Santee Cooper and The Electric Cooperatives of South Carolina. Using Internet-based monitoring, students will be able to compare the energy performance at this site to the output of other sites.
(<http://view2.fatspaniel.net/SSH/SchoolView.jsp?school=mauldin>)
- General Electric. The Greenville complex became one of the first GE sites partly powered by the sun when an executive switched on a new solar energy system in April 2007. GE powered up the system -- consisting of 495 reflective modules -- during a special ceremony at its Garlington Road campus to showcase its clean-energy initiatives. The system can produce nearly 150,000 kilowatt-hours of electricity per year. The system can also reduce the site's CO2 emissions by 200,988 lbs per year.
- In February 2007, Clemson University completed a study of the "Potential Economic Impact of an Off-Shore Wind Farm in South Carolina." (Source: http://www.strom.clemson.edu/publications/flynn/Wind_Farm_Impact.pdf)

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed November 2003 but will continue monitoring progress of ongoing research.

19. Use of alternate fuels.

Priority B

Description of Measure

- Direct local Planning Commissions to identify areas where alternative fuels will be best suited.
- Encourage the use of alternate fuels.
- Assist with establishing alternative fuel infrastructure for private sector clean fuel fleets. Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternate fuels include bio-diesel, electricity, ethanol, hydrogen, liquefied petroleum gas, methanol, and natural gas.
- Encourage a clean-fuel fleet program for centrally fueled fleets of more than 10 vehicles.

December 2004:

- 2,700 gallons of biodiesel were purchased in 2004 in Greenville County.

June 2005:

- In April 2005, Michelin North America located in Greenville County applied for special projects funding to add biodiesel at their test track (Laurens Proving Grounds). Biodiesel would be used in test vehicles and would be available to others using the test facility. There is the possibility for expanding fuel use throughout their fleet. The project would begin December 2005. The Laurens Proving Grounds operates 12 to 14 diesel-powered vehicles for the purposes of 1) testing tires, 2) maintaining the 3000-acre site, and 3) transporting test tires to and from the site.
- April 22, 2005 was the grand opening of the first ethanol-refueling station within Greenville County that is open to the general public. There are plans for one more location by the end of 2005.

December 2005:

- Alternate Fuel: Clemson University Professor James G. Goodwin, Jr., chair of the Clemson's chemical and bimolecular engineering department, has also received a DOE grant for energy research through DOE's State Technologies Advancement Collaborative. Goodwin's work focuses on the performance of iron-based bimetallic catalysts that are crucial to synthesis of clean fuels, additives and lubricants derived from coal and biomass gasification.
- Clemson will lead a partnership that includes Louisiana State University, the S.C. State Energy Office, the Louisiana State Energy Office, North Carolina's Research Triangle Institute, Rentech and Sud-Chemie Inc. This grant reflects \$875,499 in DOE-STAC funds and \$294,499 in cost sharing by the industrial and governmental participants. (Source: <http://cworld.clemson.edu/archive/2005/spring05/worldview.htm>)

June 2006:

- There are currently 12 public Spinx stations that offer E85 in Greenville County. Eight Spinx stations in Greenville currently offer Biodiesel. Stations can be located using the U.S. Department of Energy Alternative Fuels Data Center Website at <http://www.eere.energy.gov/afdc/infrastructure/locator.html>

December 2006:

- The number of stations offering E85 and other alternative fuels has increased from 12 in June to 26 in October. (Source: <http://www.palmettocleanfuels.org>)

June 2007:

- *"South Carolina is at the forefront of publicly accessible alternative fuels, such as ethanol and biodiesel. Currently, 43 stations in South Carolina offer E85 (85% ethanol, 15% gasoline) and 43 stations offer B20 (20% biodiesel, 80% diesel). South Carolina ranks 2nd in the nation for number of biodiesel pumps and 7th in the nation for ethanol pumps."* The number of stations in Greenville County offering E85 and other alternative fuels increased from 26 in October 2006 to 29 in May 2007. Source: <http://www.palmettocleanfuels.org/Station%20Locations%20by%20City%20-%20May%202007.pdf>.

- What is now Carolina Biofuels used to be Carolina Polymers, a water-based latex and adhesives plant. Carolina Biofuels made the switch in March of 2007 and is capable of churning out 25 million gallons a year of biodiesel.

December 2007:

- On June 19, 2007, the SC General Assembly passed the Hydrogen Bill. The passage of this monumental energy bill will provide millions of dollars starting in 2008 for tax incentives, sales tax rebates, and incentive payments to encourage the development of renewable fuels and alternative energy in South Carolina. Additionally, H.3749 was passed that included a provision to establish a Renewable Energy Grants and Loans program. (Source: <http://www.palmettocleanfuels.org/#news>). The following are a list of incentives included in the bill:

Beginning July 1, 2007:

- The SC Renewable Energy Infrastructure Development Fund includes a grant program providing planning grants to aid in the time and resources required to submit grant proposals and matching grants for research and development and demonstration projects. The program will also include a low-interest revolving loan program designed to assist entities building renewable energy projects;
- The SC Hydrogen Infrastructure Development Fund provides grants to promote the development and deployment of hydrogen production, storage, distribution, and dispensing infrastructure and related products and services;
- Biofuels marketing program to promote public awareness;
- Free ethanol and biodiesel testing for SC producers;
- Expansion of the solar system tax credit to include electricity generation;
- Increased tax credit for production of ethanol and biodiesel from alternative feedstocks, such as switchgrass, wood, waste cooking oil, animal fats, and algae;
- Requirement that school buses use B20 where feasible; and
- Requirement that construction of large state-owned buildings be "Green Buildings" and meet certain nationally recognized building standards.

Beginning October 1, 2007:

- Sales tax exemption for equipment operated by, used to produce, distribute, manufacture, or research hydrogen or fuel cells. Also includes building materials and machinery used by a research district.

Beginning January 1, 2008:

- Income tax credit of up to \$2,000 for plug-in hybrid vehicles purchases;
- Tax credits of up to \$100,000 for research and development of renewable fuel feedstocks best suited for South Carolina, such as cellulosic ethanol and algae-based biodiesel;
- Income tax credits for contributions made by a taxpayer to the South Carolina Hydrogen Infrastructure Development Fund;
- Tax credits for the purchase and installation of equipment to produce electricity and gas from biomass resources including wood and wood waste, agricultural and animal waste, sewage, landfill gas, and other organic materials; and
- A requirement that all state-owned diesel pumps provide a minimum of five percent biodiesel.

Beginning July 1, 2008:

- Tax rebates up to \$300 for the purchase or lease of vehicles that are flex-fuel (ethanol), hybrid, electric, or fuel efficient with an EPA city fuel economy of 30 mpg or greater;

- Incentive payments for biomass energy users ranging from one cent per kilowatt-hour or 9 cents per therm.

Beginning July 1, 2009:

- Five cents per gallon incentive payments available for retailers selling B20 biodiesel and E85 ethanol.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005 and continuing.

Additional Information

- A private sector company undertook efforts to offer alternative fuels network in Greenville County, SC. Therefore, there was no need for the Greenville County Planning Commission to undertake these efforts.
- Due to budget constraints, Greenville County has not used alternate fuels for its fleet due to the high differential cost between alternate fuels and gasoline/diesel.

20. Evaluate the use of High Occupancy Vehicle (HOV) lanes using existing lanes. Priority B

Description of Measure

- Evaluate use of HOV on three (3) lane interstate highways.
- Show the advantages of designating HOVs.
- Pass laws establishing regulations on HOVs lanes such as the threshold in the number of passengers (perhaps two) in the vehicle using HOVs lanes and time of day for the lane to be designated as HOV (rush hour).
- Pass laws authorizing issuance of tickets for violations of HOVs lanes regulations, i.e., one-passenger vehicles using HOV lanes on designated hours.

December 2003:

- During its August 5, 2003, the AQ Staff Advisory Committee discussed and evaluated the implementation of this strategy. The Committee concluded that "HOV lanes work best where an interstate or a limited access arterial lead directly to major employment centers, usually within a central business district (CBD). With the exception of I-385 leading to the Greenville CBD, Upstate interstates (especially I-85) generally link the cities of Anderson, Greenville, and Spartanburg via peripheral routes, not conducive to the addition of HOV lanes. In addition, inter-county work trends do not show major volumes that would support car-pooled trips. Making the third lane of I-85 an HOV lane would severely increase congestion, emissions, and future accidents. The addition of new lanes would be cost prohibitive, and would not be allowed to revert to a single occupancy vehicle (SOV) status without reimbursement to the federal government."

December 2004:

- In June 2004, Planning Commission staff met with traffic engineers from SCDOT to discuss this strategy. Traffic engineers indicated that because traffic volumes on I-85 exceed 100,000 vehicles daily on the three lanes of the interstate, it was recommended that the Upstate consider converting one of the three lanes on I-85 or I-385 to a HOV lane. The offsetting increase in congestion in the two remaining lanes would predictably increase NOx emissions by an amount exceeding the any reductions gained from traffic moving in the HOV lane. HOV lanes work best when they are paralleled by at least 4 or more free flow lanes. No further actions are planned.

December 2005: no further actions are planned.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2004.

21. Modify speed limits for optimum fuel efficiency.

Priority B

Description of Measure

- Direct SCDHEC and SCDOT to take the lead role.
- Direct Planning Commissions to assist SCDHEC in modeling.

December 2005:

- In Summer 2005, the speed limits on the interstate highways in Greenville County have been established at 60 mph because the county is defined as urban by the US Census and the FHWA.
- The GPATS MPO was designated as urban by the US Census following the 2000 census and as a result speed limits on the interstate highways in Greenville and Pickens Counties (GPATS MPO BOUNDARY) have been established at 60 mph. According to the Department of Energy, gas mileage decreases rapidly at speeds above 60 mph. No further actions are planned.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005.

22. Develop process for evaluating and minimizing impact of major projects such as shopping centers, schools, and subdivisions. Priority B

Description of Measure

- Study impact of post construction traffic flow.
- Study impact of construction activities.

December 2004 - No local action has taken place on this strategy.

December 2005:

- In August 16, 2005, the GC Planning Commission staff met the City of Greenville Traffic Engineering Department staff to learn about developing requirements for new developments to complete a traffic impact study before receiving a building permit in the City of Greenville.
- In late 2005, the Planning Commission staff presented to the Planning Commission a proposal to consider developing requirements for traffic impact studies in the unincorporated areas of Greenville County.

June 2006:

- In April 2006, the Greenville County Planning Commission approved a staff proposal to develop an ordinance requiring a traffic impact study be prepared for all new commercial, industrial and residential developments.
- In May 2006, the Greenville County Planning Commission approved a staff proposal to develop an amendment to the County Land Development Regulations which would require interconnectivity between residential subdivisions and also to develop "access management" policies to ensure interconnectivity between commercial developments. It is expected that the proposed ordinance will be presented to County Council before the end of 2006.
- Planning staff will meet with the Traffic Impact Study Advisory Committee on June 28, 2006, to begin reviewing a proposed ordinance. It is expected that the proposed ordinance will be presented to County Council before the end of 2006.

December 2006:

- Big Box design standards:
 - In September 2006 the Greenville County Planning Commission recommended to Greenville County Council a set of design standards for big box retail development. According to State legislation a big box development is one in which at least one structure contains at least 40,000 square feet. These design standards regulate parking, landscaping, and improved pedestrian access. Public hearings will be held in early 2007.
- Traffic impact studies:
 - In September 2006 the Greenville County Planning Commission recommended to Greenville County Council the adoption of a traffic impact ordinance that will require a traffic impact study must be completed before issuing a building permit. Public hearings will be held in early 2007.
- Street connectivity:
 - In September 2006 the Greenville County Planning Commission recommended to Greenville County Council the adoption of criteria that will require inter-connectivity between residential subdivisions and commercial developments. Public hearings will be held in early 2007.

June 2007:

- Big Box design standards:
 - Greenville County adopted Big Box design standards in April 2007.
- Traffic impact studies:
 - Greenville County held a public hearing in April 2007 on the proposed traffic impact study ordinance.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Implementation began in 2005 and is continuing.

23. Community Schools to reduce vehicle miles traveled and encourage biking and walking for students and parents by encouraging smaller community-based schools that are integrated into neighborhoods.
Priority B

Description of Measure

1. Eliminate minimum acreage requirements for school sites.
2. Cap student populations per facilities.
3. Require coordination among school boards and local governments to plan school sites and avoid conflicts with local planning goals.
4. Favor restoration and construction of community-based small schools over new construction of remote mega schools.

June 2005:

- Greenville County's Land Development Regulations were amended in January 2005 to require sidewalks to be installed in all new subdivisions.
- Greenville County's Zoning Ordinance was amended in January 2005 to allow cluster type developments, multifamily developments as part of commercial and office developments and to encourage Neo-traditional developments. Increased design flexibilities were added as incentives to develop pedestrian friendly designs.

June 2006:

- The Greenville County Schools (S.C.) implemented an aggressive school construction program. This construction program, completely rebuilt or constructed 70 schools (80% of all schools in the District). The construction program will be completed by December 31, 2006. Schools not included in this plan were renovated or built prior to this construction program. Information on the School District's construction plan may be found at <http://www.institutionalresources.com/>
- The Greenville County School District is scheduled to complete the \$800+ million construction program by the end 2006. Therefore, there will not be further action on this strategy.

June 2007:

- Fountain Inn Elementary is under review for a Greenway project to connect the school with surrounding neighborhoods and two local parks. Fountain Inn Elementary is the only elementary school serving the City of Fountain Inn, and wishes to promote safe bike and pedestrian commuting of its students. The school and Greenville County are discussing plans to reclaim a county right of way in order to install a safe passage for student onto the campus from a large local neighborhood. This path would be the start of a greenway that would eventually lead to an outdoor classroom, picnic area, and ball field that is the planned location for a tree house-themed park.

December 2007:

- Fountain Inn Elementary School participated in the Walk to School Day. Estimate that 150-200 children and 30 – 40 adults, teachers, staff, and parents walked to school on this day.
- Fountain Inn Elementary School is exploring the feasibility of implementing the Safe Routes to School program.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2006.

Additional Information

- The South Carolina School District Reorganization and Realignment Act of 2006 was introduced in the House on January 24, 2006 and is currently residing in the House Committee on Education and Public works. This bill states that the Education and Oversight Committee shall study and examine the optimum size, including both geographic area and student population. A copy of this bill is available online at http://www.scstatehouse.net/sess116_2005-2006/bills/4488.htm
- SECTION 203 SCHOOL SITES
203.1 South Carolina Code Ann. § 59-23-250 (to be codified at Supp. 2003) eliminates minimum acreage requirements for public school sites. However, school districts must receive approval from the South Carolina Department of Education prior to property acquisition or additions on existing properties.
203.2 The State Department of Education encourages districts to consider acreage for school sites as established by the Council of Educational Facility Planners International (CEFPI).

Additional Activities taking place in and around Greenville County:

24. U.S. Green Building Council South Carolina Chapter

Description of Measure

The newly formed Upstate branch of the U.S. Green Building Council's South Carolina Chapter aims to lead the charge in educating people on green building and sustainable design. The organization's first official meeting, held April 19, 2007, drew nearly 40 participants.

Implementation Date

April 19, 2007

25. Greer Pedestrian Plan

Description of Measure

In January, Greer residents participated in one of the sessions to discuss a potential pedestrian plan for the neighborhoods surrounding the downtown and the \$19.2 million municipal complex now under construction. The final plan was unveiled April 24-25.

Implementation Date

April 24-25, 2007

26. Greenville County Planning Commission Survey

Description of Measure

Residents in Greenville County Council District 28 are invited to offer suggestions for future county planning in the area through an online survey on the Greenville County Planning Commission's Web site. The survey is intended to discover the priorities of residents for future planning options. The survey was made available late February, 2007. The survey was available at: www.greenvillecountysc.gov/survey_district28/district28survey.asp

Implementation Date

February 2007

28. Tree City USA

Description of Measure

Tree City USA encourages municipalities and areas to have strong urban forestry programs. The Tree City USA program is sponsored by The National Arbor Day Foundation in cooperation with the USDA Forest Service and the National Association of State Foresters. Anderson County has been a Tree City for 3 years. Spartanburg has been a Tree City for 25 years. Greenville has been a Tree City for 24 years. Members of the West Greenville Neighborhood Association will be planting trees as part of a revitalization project. The trees will be planted in a new park, which is located at the corner of Queen and Rochester Streets. Tree expert Jimmy Walters of the S.C. Forestry Commission will teach about the trees and the proper way to plant.

December 2007:

- The City of Fountain Inn has been named a Tree City USA community by the National Arbor Day Foundation for its commitment to community forestry.

Implementation Date

Through 2007

"TreeGreenville Educational Garden"

Description of Measure

The new educational tree garden planted at League Academy is designed as a model for all Upstate public and private schools to teach students the importance of trees and plants in preserving water, air, and life quality. Sponsors of the tree garden include League Academy PTA, Schneider Trees, Landscapes for Learning, Greater Greenville Master Gardeners, Palmetto Bank, Done Right LLC, Stone Lake Garden Club, Friends of Elayne Finkelstein, Terri James, chair of League Academy PTA Beautification, and more than 60 other parents, teachers and community volunteers. Funding for the tree garden was provided, in part, by the Urban and Community Forestry Grant Assistance program, administered by the South Carolina Forestry Commission.

Implementation Date

Completed in 2007

29. Enoree Landfill Recycling Station

Description of Measure

The former active landfill at 1311 Anderson Ridge Road, Greer, now has a new name and revised mission -- the Enoree Residential Waste and Recycling Center. The landfill had reached its maximum capacity and closed Feb. 9. The new convenience center opened Feb. 13 at the same site.

Implementation Date

February 13, 2007

30. Low-impact development breakfast seminars

Description of Measure

The Home Builders Association of Greenville and Upstate Forever hosted a Low-Impact Development seminar April 3 from 7:45 a.m. to 9 a.m. at the University Center in Greenville. The low-impact breakfast series is part of a partnership between the Home Builders and Upstate Forever that began in 2005. The monthly seminars cover numerous low-impact development ideas and highlight the economic benefits. Other seminars are scheduled for May 1-- low cost strategies for reducing impervious cover, June 5 -- benefits of dispersed storm water management and July 10 -- making sure storm water facilities are functional and attractive. The presentations, which include breakfast, are free.

Implementation Date

Throughout Spring and Summer 2007

31. Furman Year of the Environment

Description of Measure

Furman designated its 2007-08 academic year as the Year of the Environment. The state's first certified "green" Habitat for Humanity house is being built in Travelers Rest. Furman's Class of 2007 voted to make the project its senior class gift. The seniors raised money to build the house, partly with campus activities, mailings to alumni and donating their own \$200-per-student campus housing deposits. Furman University was presented an award for energy conservation and efficient facilities management by the South Carolina Wildlife Federation at the 42nd Annual Conservation Award Banquet. Upstate Forever, in partnership with Furman, the Carolina Climate Network and the Southern Alliance for Clean Energy held the first event in the Climate Change Speaker Series March 14, 2007.

Implementation Date

2007 and 2008 academic year

32. "The Economic Benefits of Greenways for Greenville County"

Description of Measure

A public presentation by Charles Flink Founder and President of Greenways Incorporated, Co-author of Greenways: A Guide to Planning, Design and Development. Held Tuesday, November 28, 2006, 8 p.m. at Younts Conference Center, Furman University. Event was free of charge.

Implementation Date

November 28, 2006

33. Green Building Conference

Description of Measure

Clemson University Emerging Green Builders held the Second Annual GreenExpo and Conference Feb. 27-28 at the Madren Conference Center on campus. The event includee a best-practices workshop, tours of Clemson's LEED-certified facilities and a daylong exposition with product representatives, architects, contractors and service companies from across the Southeast, according to a statement from the university. The GreenExpo, sponsored by Clemson University's Emerging Green Builders and the South Carolina U.S. Green Building Council, featured recent advances in products and practices of commercial and residential Green Building.

Implementation Date

February 27-28, 2007

34. Student Renewable Energy Conference

Description of Measure

The fourth annual Student Renewable Energy Conference took place February 16-18, 2007 at Clemson University in Clemson, SC. Students and community members from across the Southeast joined in Clemson, SC February 16-18 to help build the youth movement for clean, just energy here in the Southeast. The SSREC brought together hundreds of students from across the region for a weekend of education, inspiration, trainings, networking, fun and more.

Implementation Date

February 16-18, 2007

35. Pilot Bus Routes in Greer

Description of Measure

County Councilman Tony Trout has been working closely with the Greenville Transit Authority to run a pilot project in Greer that would gauge interest in bus service. The initial investment of \$3,500 should fund four weeks of test routes, with buses running weekdays.

Implementation Date

Spring/Summer 2007

36. "Energy Partner of the Year" Award

Description of Measure

The U.S. Environmental Protection Agency has named BMW Manufacturing and its partner, Durr Systems., as the Landfill Methane Outreach Program "Energy Partner of the Year." Currently, 63 percent of BMW Manufacturing's energy is provided by the renewable resource, saving the company at least \$1 million a year. It also reduces emissions of carbon dioxide, a greenhouse gas, by about 60,000 tons and provides enough energy to heat 15,000 homes a year.

Implementation Date

2007

37. Fountain Inn Air Quality Improvement Policy

Description of Measure

In the Fall of 2006 the City of Fountain Inn adopted a progressive policy aimed at improving air quality. Fountain Inn put out an April Newsletter highlighting some of the steps Fountain Inn is taking to reduce air pollution. It includes information on Fountain Inn Elementary's participation in B2@school, the Gas Can Exchange, the Recycling program, Designation as a Tree City USA, and Energy Conservation.

Fountain Inn City Council adopted a policy statement, a voluntary plan of action to conserve energy or reduce idling. Its policies for city employees as a model for the city as a whole include:

- 1) Encourage employees to carpool; recognize walking and biking as beneficial alternatives.
- 2) Ensure city vehicles operate according to manufacturers' specifications.
- 3) Limit vehicle idling time.
- 4) Continue education on city-wide ban on open burning.
- 5) Encourage city employees to conserve HVAC, turn off lights and computers.
- 6) Include environmental considerations with new construction.
- 7) Refuel mornings or evenings.
- 8) Expand recycling.

December 2007:

- A Kick-off to introduce and promote the anti-idling campaign for cars and buses and to celebrate the new garden area was held on Friday, October 12, 2007. The ceremony included welcoming statements by the Mayor of Fountain Inn and the school principal, Greenville County officials addressed the state of the air quality and Amy Curran (SC DHEC - BAQ) gave an overview of the B2- Breathe Better Program. EPA Region 4 presented Fountain Inn Elementary School with a certificate of appreciation for their efforts and offered comments as well. There was a reception following.
- New Garden Area / Tree Planting Project - Greenville County has enhanced/expanded the B2-Breathe Better program at Fountain Inn Elementary School with additional tree planting and landscaping the courtyard area. The tree planting project will solve the serious erosion problem with the deteriorating soil conditions at the entrance of the school, and improve air quality in the surrounding areas of the school. Fountain Inn Elementary is working with several volunteer organizations such as TreesGreenville and the Mater Gardner program in the fall of 2007 to plant trees along the entrance drive into the school including the newly graded expansion site of the school (courtyard area). The TreesGreenville program will also be providing supplemental curriculum materials for the appropriate grade levels that focuses on Environmental Education. Instead of planting grass the school has chosen to plant a tree garden in this area. The project's committee intends to plant native trees that will have an impact in reducing ozone, particle pollution, and soil erosion. The trees will also offer shade to parents waiting in cars to pick up their children, encouraging them to reduce idling by turning off their engines. Most important is that this project will be a great learning experience for the students attending this school.

Implementation Date

2006

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Appalachia, SC (Designated - Attainment)							
DECEMBER 2007 OCONEE COUNTY							
Based on stakeholder consultation and taking into consideration resource and political constraints, the following emission reduction strategies remain under consideration. The County will continue to evaluate the air quality within the county and may implement one or more of the following measures under consideration.							
Appointment of Ozone Action Coordinator	Designation of county staff person to coordinate education efforts and dissemination of zone related information	Completed	Jun-03	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Ozone Reduction Meetings	Coordination of meetings with municipalities, stakeholder groups, the public, and other entities	Continuing	Fall 2003	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Lower Emissions in County Fleet	County will utilize Capital Improvement Plan to initiate annual review of vehicle and equipment fleet, upgrading and replacing older and less fuel efficient as budget allows; replacing improperly operating catalytic converters.	Continuing	2004	n/a directionally sound	n/a directionally sound	n/a	
Energy-Efficient Buildings	County will utilize Capital Improvement Plan to initiate annual review of needed upgrades to county-owned buildings, performing construction and maintenance to achieve highest level of energy-efficiency practical	Continuing	2004	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Support of Traffic Division	County shall support efforts by County Sheriff to emphasize speed and traffic control (this may or may not include expansion of Traffic Control Division of Sheriff's Department)	Continuing	2004	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Greenspace Requirements	County will amend Land Development and Subdivision Chapter of the Unified Performance Standards Ordinance to mandate minimum greenspace areas in all residential and commercial subdivisions subject to the requirements	Minimum greenspace requirements for parking areas have been recommended by Planning Commission as part of amendment package to be considered by County Council in 2007	2007	n/a directionally sound	n/a directionally sound	n/a	
Comprehensive Plan	County will amend appropriate elements of the Comprehensive Plan to insure consideration of emission reduction in future planning efforts	Completed	2004	n/a directionally sound	n/a directionally sound	n/a	
Inter-Governmental Cooperation	County will encourage and assist municipalities in partnership efforts to reduce emissions	Continuing	2004	n/a directionally sound	n/a directionally sound	n/a	
ADDITIONAL MEASURE: 4-Day Work Week	County adjusted working schedule to 4-day workweek from October 2005 to May 2006 to save on energy consumption. Currently, most departments have returned to a 5-day schedule	Completed	October 2005-May 2006	n/a directionally sound	n/a directionally sound	n/a	
ADDITIONAL MEASURE: Vegetative Buffer Requirement	County adopted ordinance requiring a 25' natural vegetative waterfront buffer for parcels with new residential and commercial projects	Completed	May-06	n/a directionally sound	n/a directionally sound	n/a	
ADDITIONAL MEASURE: Possible Expansion of Vegetative Buffer Requirement	Planning Commission currently considering possibility of expanding 25' natural vegetative waterfront buffer to parcels with existing residential and commercial construction	Continuing	Unknown	n/a directionally sound	n/a directionally sound	n/a	
ADDITIONAL MEASURE: Breathe Better Air at School Program	School District of Oconee County adopted the "Breathe Better Air at School" program, instituting a 'no-idle' policy in pick-up lines	Completed		n/a directionally sound	n/a directionally sound	n/a	
ADDITIONAL MEASURE: Initiation of Public Transit in Oconee County	County assisted City of Seneca in partnering with Clemson Area Transit (CAT) to offer bus service in and around town, and connecting to the entire CAT service area; the possibility of expanding to other areas of the county is being considered	Continuing	Jun-05	n/a directionally sound	n/a directionally sound	n/a	
ADDITIONAL MEASURE: Replacement of Inefficient Capital Equipment	In line with measure to reduce emissions in county fleet (above), Planning Commission's recommended 2007-08 Capital Improvement Plan replaces a number of older pieces of heavy equipment used by the Roads and Bridges Department and Solid Waste	Completed	Jul-07	n/a directionally sound	n/a directionally sound	n/a	
ADDITIONAL MEASURE: Palmetto Pride tree grant	Municipalities, neighborhood associations, gardening clubs and other non-profit groups can obtain the trees through grants.	The City of Simpsonville, the Oconee County Roads Department and the Pickens County Beautification and Environmental Advisory committee are among the 2007-08 tree grant winners.	2007-2008	n/a directionally sound	n/a directionally sound	n/a	
	County currently considering draft zoning ordinance containing performance standards overlays for various areas of the county. Standards under consideration include landscaping requirements, buffers and density limitations.	County Council has taken First Reading	Jun-05	n/a directionally sound	n/a directionally sound	n/a	
CAT ridership increase	During June CAT buses carried a record 11,598 passengers on its residential, business and express routes in Oconee County. The more than 11,500 passengers represent a 14 percent increase over May ridership. "A lot more senior citizens and people in residential areas are riding the bus," Mr. Babinicz said. "The convenience, the rising gas prices and traffic congestion all help people turn to public transportation. Seneca ridership exceeds all expectations. The public wants more public transportation."	CAT has had double-digit increases every month since the buses started rolling in Oconee County and carried well over 75,000 passengers through the first weeks of July.	Summer 2007				
Comments: 1. December 2004 - SC EAC SIP - activity not quantified for several reasons (first) in accordance with EAC Protocol, after all adopted Federal and State controls were accounted for in the modeling, it was determined that local controls were not necessary to demonstrate attainment of the 8-hour ozone standard. Measures were submitted by the local areas to show their continued support and commitment to the EAC process. (second) this activity is directionally sound and should provide air quality benefits and in some cases measurable results. The progress toward implementing this activity and the benefits derived will be documented as a part of the ongoing reporting requirements. 2. December 2003 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac.html - additional information provided by the county to include "findings", "advantages/disadvantages", "recommendations", "costs", etc.... 3. March 2004 - Local Early Action Plan - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0304.asp 4. June 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0604.asp 5. December 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_1204.asp 6. December 2004 - SC EAC SIP - Including Appendix 8 (Local Early Action Plans and the Air Quality Awareness and Improvement Policy) and Appendix 16 (County Level Emission Reductions and Descriptions for the Ozone EAC Areas) - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 7. April 20, 2005 - Correspondence to Mr. Palmer including clarifying supplemental information to the EAC SIP submittal of December 2004. - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 8. June 2005 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0605.asp							

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Appalachia, SC (Designated - Attainment)							
DECEMBER 2007 PICKENS COUNTY Based on stakeholder consultation and taking into consideration resource and political constraints, the following emission reduction strategies remain under consideration. The County will continue to evaluate the air quality within the county and may implement one or more of the following measures under consideration.							
Ozone Public Relations Program	Production of education materials, media alerts, and cooperation with industry/private sector to promote ozone objectives.	program temporarily ceased when air program not funded	July, 2003	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Ozone Advisory Committee	Develop Local EAP	completed	March, 2003	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Participate in Voluntary Heavy-Diesel Retrofit Program	-Select a cleaner fuel by April 2004—Low-sulfur diesel or bio-diesel. -- Evaluate the cost-effectiveness of diesel particulate filters (catalyst coated vss. Low-sulfur catalytic filter vss. fuel-borne catalyst filter). -- Evaluate efficiency of County's emissions control program, and budget, if necessary, to maintain existing and future equipment. -- Prioritize vehicles for retrofitting -- Develop specifications for the purchase of heavy equipment that will assure low emitting diesel engines in future purchases. -- Develop bid specifications that give preference to bidders who utilize low-emission equipment. -- Share this program with other fleet owners in the County (including local school bus maintenance). -- Determine if Pickens County could be eligible for federal funds to retrofit equipment. -- Seek to develop a sponsorship program with private sector to retrofit bus emission systems	no action - air program not funded	Apr-04	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Catalytic Converter Replacement in Light Duty Vehicles	-Evaluate existing maintenance procedure for the County fleet and modify maintenance procedures to assure vehicles are properly assessed for emissions at a frequency to assure minimal emissions. -- Inspect vehicle fleet and replace as needed. -- Develop a public education program to encourage private fleet owners and individual car owners on how to properly maintain catalytic converters and emission systems.	opt to retire older vehicles	2003	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Implement a program to capture methane from landfills.	Methane gas emissions from Easley Landfill will be flared.	completed	Apr-04	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Park and Ride Program	County may wish to develop a park and ride on "empty" sites at the Hwy 123 Industrial Part that may eventually provide parking for prospective industry.	no action - air program not funded	Apr-04	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Contract Specifications	Standard language in service contracts that emphasize/require environmentally friendly equipment and methods to complete contractual task.	no action - air program not funded	July, 2003	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Carpooling Programs for Students	Improve ridership of students delivered to schools by private automobiles.	no action - air program not funded	Aug-04	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Implement a No-Idling Policy for County Fleet Vehicles	County Administration will develop a policy to prohibit idling of vehicles	completed	Apr-04	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Re-evaluate the property tax rules for 1) low-mileage, older vehicles, 2) high efficiency gas consumption vehicles, or 3) ultra-low emissions vehicles	Consideration for fuel economy is not currently considered with the automobile property tax.	no action - program not funded	Jan-05	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Provide incentives that increase ridership on the Clemson Area Transit System.	Evaluate the fees during peak ozone season	no action - program not funded	Apr-04	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Palmetto Pride tree grant	Municipalities, neighborhood associations, gardening clubs and other non-profit groups can obtain the trees through grants.	The City of Simpsonville, the Oconee County Roads Department and the Pickens County Beautification and Environmental Advisory committee are among the 2007-08 tree grant winners.	2007-2008				
Greenville-Pickens Area Transportation Study	The forum is one of five that will be held by the Greenville-Pickens Area Transportation Study to present preliminary recommendations for an updated long-range transportation plan.	On Thursday, February 15, 2007 Long-range transportation plans were discussed in a public forum 4-7:30 p.m.	Feb-07				
Easley Mass Transit Study	Easley officials are pursuing the possibility of mass transit in their city through the Greenville Transit Authority	Easley's transportation committee is launching a study that will determine if residents in the area are interested in mass transit and if they would support it. The five-month process includes a significant amount of public input and will define such issues as a funding mechanism, potential routes, the look of the system and the feasibility of mass transit in the area.	Feb-07				
Regional Transportation Plan Presentation	A small map of highway improvements recommended in the plan is shown below. Proposed mass transit, bicycle, and pedestrian improvement plans will be presented as well. More information is available by calling Greenville County Planning Department at (864) 467-7270, or visit our website http://www.greenvilleplanning.com and pick the "transportation planning" link.	A Public Presentation of the Regional Transportation Plan was held Tuesday, August 21. Presentation: 1:00 p.m., Drop-in Open House: 2:00 to 6:00 p.m. The Greenville-Pickens Area Transportation Study Planning area includes: cities of Easley, Fountain Inn, Greenville, Greer, Liberty, Mauldin, Pickens, Simpsonville, and Travelers Rest; and counties of Anderson, Greenville, Laurens, Pickens, and Spartanburg	August 21, 2007				

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Comments: 1. December 2004 - SC EAC SIP - activity not quantified for several reasons (first) in accordance with EAC Protocol, after all adopted Federal and State controls were accounted for in the modeling, it was determined that local controls were not necessary to demonstrate attainment of the 8-hour ozone standard. Measures were submitted by the local areas to show their continued support and commitment to the EAC process. (second) this activity is directionally sound and should provide air quality benefits and in some cases measurable results. The progress toward implementing this activity and the benefits derived will be documentd as a part of the ongoing reporting requirements. 2. December 2003 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac.html - additional information provided by the county to include "findings", "advantages/disadvantages", "recommendations", "costs", etc.... 3. March 2004 - Local Early Action Plan - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0304.asp 4. June 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0604.asp 5. December 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_1204.asp 6. December 2004 - SC EAC SIP - Including Appendix 8 (Local Early Action Plans and the Air Quality Awareness and Improvement Policy) and Appendix 16 (County Level Emission Reductions and Descriptions for the Ozone EAC Areas)- See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 7. April 20, 2005 - Correspondence to Mr. Palmer including clarifying supplemental information to the EAC SIP submittal of December 2004. - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 8. June 2005 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0605.asp							

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11 South Carolina State Measures							
Comments: Modeling for 2007, shows attainment without including measures beyond national and regional measures already finalized.. 2012 and 2017 also shows attainment. Our continuing EAC programs are also related to maintenance.							
11 Appalachian, SC (Effective date of nonattainment designation deferred) Spartanburg County							
SpartanburgRecognized as the First City in South Carolina to Receive Bicycle-Friendly Community Recognition	The City of Spartanburg has been nationally designated as a Bronze Level, Bicycle-Friendly Community from The League of American Bicyclists and proclaimed as the first city in South Carolina to receive such an honor.	The City of Spartanburg's Bicycle & Pedestrian Advisory Committee was established in February 2006 under the direction of Mayor Barnett. Its chartered purpose is to promote policies, practices and attitudes to increase safety and accessibility of bicycling and walking for both transportation and recreation throughout the City of Spartanburg. The Bike Town Initiative was created in 2004 with the goal of earning Spartanburg the designation as a Bicycle Friendly Community by 2007. It is funded by Mary Black Foundation and directed by Partners for Active Living. The Bicycle-Friendly Community Campaign is an awards program of the League of American Bicyclists that recognizes municipalities that actively support bicycling. On September 29, 2006, the City of Spartanburg was the first in the state to receive Honorable Mention from the Bicycle-Friendly Community Campaign.	September 25, 2007				
Wofford Recyclers	In a program called "Wofford Recyclers," part of the campus' efforts for "going green," bicycles will be used and enjoyed by the campus community – students, faculty and staff. The bicycles will be available as needed in various locations around campus.	The Wofford College Campus Union, Campus Safety Officers and Intramurals and Recreation Office have purchased 30 new bicycles for campus use. A blessing of the bikes and first campus ride will take place November 7th.	November 7, 2007				
Regional Transportation Plan Presentation	A small map of highway improvements recommended in the plan is shown below. Proposed mass transit, bicycle, and pedestrian improvement plans will be presented as well. More information is available by calling Greenville County Planning Department at (864) 467-7270, or visit our website http://www.greenvilleplanning.com and pick the "transportation planning" link.	A Public Presentation of the Regional Transportation Plan was held Tuesday, August 21. Presentation: 1:00 p.m., Drop-in Open House: 2:00 to 6:00 p.m. The Greenville-Pickens Area Transportation Study Planning area includes: cities of Easley, Fountain Inn, Greenville, Greer, Liberty, Mauldin, Pickens, Simpsonville, and Travelers Rest; and counties of Anderson, Greenville, Laurens, Pickens, and Spartanburg	August 21, 2007				
"Safe Routes to School" grant	SCDOT approved funding to develop comprehensive bicycle and pedestrian programs as part of the "Safe Routes to School Program." Partnering with SCDOT, local governments, parents, local law enforcement and educators, each school and community will develop a plan that encompasses both infrastructure and non-infrastructure components. One of the purposes outlined in the funding legislation for this program includes facilitating the planning, development, and implementation of projects and activities that will reduce traffic congestions, fuel consumption and air pollution in the vicinity of primary and middle schools. Selected schools receive up to \$200,00.00.	Anderson County - Wren elementary/Middle School was awarded the "Safe Routes to School" grant for the 2007 funding cycle. Spartanburg County - Lone Oak Elementary School and Pine Street Elementary School were both awarded the "Safe Routes to School" grant for the 2007 funding cycle.	2007 funding cycle Press release September 28, 2007	*All Pollutants	Anderson and Spartanburg counties		
BMW	Methane from landfill powers BMW plant	The BMW plant in Greer is getting more than 60 percent of its energy from the methane gas generated at a nearby Waste Management landfill. The operation, in cooperation with the Texas landfill firm Waste Management, captures the methane gas, which otherwise would escape into the atmosphere, and converts it to energy. Waste Management, which has gas-to-energy projects in more than 20 states, announced recently that it intends to create about 60 additional renewable energy facilities within five years — including two more in South Carolina. The two new plants will be located at landfills in Dorchester and Jasper counties. The BMW project and Waste Management's gas-to-energy plant in Kershaw County generate nearly 16 megawatts of electricity, or enough to power at least 15,000 homes for a year. The methane gas from the Spartanburg County landfill travels nine miles by pipeline to the BMW Manufacturing plant, where it fuels turbines that generate electricity for the facility. About 63 percent of the plant's energy comes from the landfill gas project. The methane used as a fuel saves the company at least \$1 million a year. It also reduces emissions of carbon dioxide, a g	September 26, 2007 News Article out of Greenville	*All Pollutants	Greenville, Spartanburg, Anderson		
Upstate stakeholder meeting	Met with business leaders and County employees to discuss continuing the effort initiated for Ozone EAC and expanding that to include PM mitigation measures.	The leaders of the upstate committee will continue to work on ozone and PM reduction measures.	September 28, 2007			Anderson, Greenville and Spartanburg	
Local Government Partnerships/Outreach Greenville County Council	Greenville County Council passed Resolution No. 1272 encouraging EPA to maintain the current NAAQS for ground-level ozone and to continue the early action compact program. The resolution requested EPA to support local governments in their attempt to improve air quality at the local level and also reaffirmed Greenville County Council's commitment to improving air quality in the upstate region. The resolution also encourages the citizens and businesses of Greenville County to act in manner that will preserve and protect the quality of the air in the community. The resolution was submitted to the EPA Docket in response to the proposed 8-hour Ozone standard.	Resolution passed and submitted as comments to the proposed 8-hour Ozone Standard.	October 2, 2007			Greenville and other counties within the Upstate Region	
County Council Meeting	Improving air quality for Spartanburg residents was a primary focus at the July 16, 2007 county council meeting.	The county appointed a resident-driven Air Quality Advisory committee last summer to scope out the issues and create an action plan to clean up Spartanburg air. The committee has worked closely with DHEC to develop a list of air quality improvement suggestions, which includes changes to the county government's activities and operations, policies, regulations and ordinances and educating the community.	July 16, 2007				
Coca-Cola Recycling Plant	The "bottle-to-bottle" plant -- it recycles collected bottles into new bottles -- will be built in Spartanburg, S.C.	Coke's plastic bottles currently contain about 10 percent recycled PET. The company has a goal of 30 percent by 2010 and hopes to eventually approach 100 percent.	September 2007				

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U.S. Green Building Council South Carolina Chapter	The newly formed Upstate branch of the U.S. Green Building Council's South Carolina Chapter aims to lead the charge in educating people on green building and sustainable design.	The organization's first official meeting, held April 19, 2007, drew nearly 40 participants.	April 19, 2007				Anderson, Greenville and Spartanburg
Spartanburg County Air Quality Committee	Spartanburg County formed an Air Quality Committee in October 2006, comprised of local businesses, government, and medical professionals. This group meets monthly, and is working to recognize local contributions to improving air quality, document on-going activities that benefit air quality, and plan and implement air quality initiatives in the County. Spartanburg is also a part of a larger Air Quality committee for the Upstate area.	Spartanburg requested a presentation by DHEC of up to 10 ideas for improving air quality, and gave specific instructions that the suggestions not be limited by cost of difficulty to implement. That presentation was given in January 2007, and included information on Smart Growth principals and examples, transportation planning, as well as energy efficiency, fuel conservation, and public outreach through awareness campaigns and activities. The Spartanburg Air Quality Committee discussed the need to move forward on long term issues like land use and transportation planning now, so as to be ready for the future. Since these issues will involve processes that may take a long time, the committee is also looking at more immediate activities that will make a difference. Among the options being discussed are restricting idling of school buses, using biodiesel and ethanol in the county fleet, reducing energy consumption, as well as notifying City staff of high level ozone days.	October 2006				Spartanburg
Green Building Conference	Clemson University Emerging Green Builders held the Second Annual GreenExpo and Conference Feb. 27-28 at the Madren Conference Center on campus.	The event includee a best-practices workshop, tours of Clemson's LEED-certified facilities and a daylong exposition with product representatives, architects, contractors and service companies from across the Southeast, according to a statement from the university. The GreenExpo, sponsored by Clemson University's Emerging Green Builders and the South Carolina U.S. Green Building Council, featured recent advances in products and practices of commercial and residential Green Building.	2007				Anderson, Greenville and Spartanburg
Student Renewable Energy Conference	The fourth annual Student Renewable Energy Conference conference took place February 16-18, 2007 at Clemson University in Clemson, SC	Students and community members from across the Southeast joined in Clemson, SC February 16-18 to help build the youth movement for clean, just energy here in the Southeast. The SSREC brought together hundreds of students from across the region for a weekend of education, inspiration, trainings, networking, fun and more.	2007				Anderson, Greenville and Spartanburg
Bicycle Friendly Community	Spartanburg is on the cusp of gaining full "Bicycle Friendly Community" status from the League of American Bicyclists.	Last year, the community received an honorable mention in its quest for the designation that's only been awarded to 60 communities, of the more than 140 communities that applied nationwide. The honorable mention designation allowed Andy Clarke, executive director of the league, to meet with Spartanburg and the five other communities that received honorable mentions to explore what options they could take to give them a higher designation. Clarke held a workshop in February with about 20 city, county and Department of Transportation workers and cyclists. Spartanburg should have 25 new bikes racks and more than three new miles of bike lanes in place before the end of summer.	2007				Spartanburg
Tree City USA	Tree City USA encourages municipalities and areas to have strong urban forestry programs. The Tree City USA program is sponsored by The National Arbor Day Foundation in cooperation with the USDA Forest Service and the National Association of State Foresters.	Anderson County has been a Tree City for 3 years. Spartanburg has been a Tree City for 25 years. Greenville has been a Tree City for 24 years. Members of the West Greenville Neighborhood Association will be planting trees Friday as part of a revitalization project, said association president Vardrey Fleming. The trees will be planted in a new park, which is located at the corner of Queen and Rochester Streets. Tree expert Jimmy Walters of the S.C. Forestry Commission will teach about the trees and the proper way to plant.	through 2007				Anderson, Greenville and Spartanburg
Local 'green' magazine debut	Root is a "green-friendly" quarterly publication focused on Spartanburg.	The premier issue tackles "green" stories such as how to handle the challenges of building an environmentally friendly home as well as highlighting organizations and individuals who have positively effected social change in Spartanburg. The free magazine does not contain any advertisements. Patterson said he and a few friends funded the first publication out of pocket but he hopes to find sponsors, grants or donations to continue the project.	2007				Spartanburg
Official opening of the Duncan Park Trail.	The trail allows bicyclists and pedestrians to connect to the newly built Rail Trail, which is part of the 12-mile Hub City Connector. The Connector is part of the 425-mile S.C. Palmetto Trail.	The 10-foot-wide path runs from the Duncan Park Lake Dam to the playground, next to the baseball stadium, and is two-thirds of a mile long. There are four phases for the expansion project, although funding is available only for the first three. The fourth phase, which would cost about \$30,000, would add 588 feet of new trail behind Duncan Park Stadium.	2007				Spartanburg
"Energy Partner of the Year" Award	The U.S. Environmental Protection Agency has named BMW Manufacturing and its partner, Durr Systems, as the Landfill Methane Outreach Program "Energy Partner of the Year."	Currently, 63 percent of BMW Manufacturing's energy is provided by the renewable resource, saving the company at least \$1 million a year. It also reduces emissions of carbon dioxide, a greenhouse gas, by about 60,000 tons and provides enough energy to heat 15,000 homes a year.	January 2007				
School Bus Retrofit Project	Approximately 20 diesel buses will be retrofitted particulate filters during 2006. (additional reductions of PM are also expeted)		2006	340 lbs/year	N/A	N/A	CO reductions 2,380 lbs/year December 2004 EAC SIP - Appendix 16

SPARTANBURG COUNTY, SC DECEMBER 2007 EAC PROGRESS REPORT

Based on stakeholder consultation and taking into consideration resource and political constraints, the following control measures are under consideration pending modeling that demonstrates compliance in 2007 by SCDHEC. It is anticipated these measures under consideration will assist the County of Anderson, Greenville, Spartanburg, South Carolina, in achieving and/or maintaining the 8-hour ozone standard by 2007.

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Air Quality Awareness and Improvement Policy	Memorandum sent to all County department head as well as elected and appointed officials for the purpose of establishing certain principles that will guide the recurring activities of County government. Effective immediately: 1. Encourage that all county employees are notified of upcoming Ozone Action Days. 2. Encourage car-pooling opportunities. 3. Ensure that all County vehicles and equipment are operating according to the manufacturer's specifications. 4. Restrict vehicle idling to no more than 5 minutes. Exceptions include emergency vehicles, traffic/weather conditions, and vehicles being repaired, maintained, or inspected. 5. Restrict mowing and use of gas powered lawn equipment on County property on Ozone Action Days. 6. Restrict all outdoor burning on Ozone Action Days. 7. Energy energy conservation in all County facilities. 8. Include environmental considerations in purchasing decisions for goods and services. An example of such would be to purchase Energy Star equipment. SEE Comment #6	Policy remains in effect.	Effective immediately - October 6, 2004	directionally sound	directionally sound	N/A	The commitment to address these activities has been assured by the County Administrator by establishing the Air Quality Awareness and Improvement Policy for County Government. 1. See comment....
1. Support SCDHEC statewide efforts to reduce ozone levels.	Stakeholder group to support and participate in modeling efforts. Develop stakeholder group to participate in development of regulations (NOx - BACT (Best Available Control Technology Economically Achievable), restrict open burning). - Members of the Upstate Air Quality Staff Advisory Committee participated WITH dhec in the development of new regulations aimed at reducing NOx emissions. As a result, new regulations requiring Nox- BACT (Best Available Control Technology Economically Achievable) were adopted in mid 2004.	December 2004 EAC SIP did include Appendix 16 - 1. SC61-62.2 "Prohibition of Open Burning" regulation with reductions for 2007 calendar year - reductions expected during the ozone season for residential construction waste 2. SC61-62.5, Std. 5.2 "Control of Oxides of Nitrogen" reduction amount for both existing and new sources combined across Anderson, Greenville, Spartanburg for 2007 calendar year 3. June 24, 2004 - Participated in Upstate Air Quality Steering Committee meeting held at BMW. See Comment #4. 4. November 2004 - Greenville County submitted letter supporting SIP. See Comment #5. 5. Greenville County implemented the following measures during 2004 and 2005: purchased alternate fuel vehicles (Greenville purchased 19 such vehicles since November 2004); published and distributed brochures about improving air quality; sent out notices on high ozone days and developed audio commercials for local radio stations to broadcast during ozone awareness week and ozone season; broadcasted radio announcements and information through the County's Cable TV channel, and alerted all stakeholders of DHEC's high ozone alerts	Completed June 25, 2004	43.01 tons/season N/A	9.06 tons/season 234.1 tons/yr		Upstate Air Quality Staff Advisory committee will be developing a business partnership plan to involve local industries in announcing ozone alerts, participating in ride share programs and adopting the same or similar list of initiatives that Greenville County adopted from the SELC.
2. Designate an Ozone Action Coordinator	Designate a staff person in each County who will be responsible for coordination of counties ozone programs	Spartanburg County Council appointed one Ozone Action Coordinator in March of 2003: Jim D'Amato. Jim D'Amato continues to serve as the Ozone Action Coordinator.	March 2003	N/A	N/A	N/A	See Comment #5
3. Seek low sulfur fuels as early as possible	Continue to coordinate with representatives of colonial and Plantation pipelines, refiners, and State representatives to ensure that the upstate has the opportunity to receive low sulfur fuels at the earliest date as they can be provided.	Committee continues to coordinate with representatives of Colonial and Plantation pipelines, refiners. See Comment #5. During 2005, Colonial Pipeline conducted studies that indicates that S.C., as well as others along the Colonial Pipeline are receiving sulfur levels that should help many of the non-attainment areas. Specifically: M and V are the grades used in South Carolina. The sulfur content averages shown below are by batch not volumetric weighted values. • M Grades: Average 139 High 330 • V Grades: Average 74 High 300. The Environmental Protection Agency's ultra-low sulfur diesel fuel requirements went into effect on June 1, 2006. Ultra-low sulfur diesel fuel will be available at retail stations beginning summer 2006	Completed in 2004 and continuing.	directionally sound	directionally sound	N/A	
4. Design and implement congestion management and Intelligent Transportation System (ITS) measures.	Implement congestion management projects: intersection and signalization improvements to alleviate traffic congestion, therefore, reducing emissions from idling vehicles; Implement Intelligent Traffic Systems such as automated advisory/alert messages to drivers on interstate highways. For example: advise motorist about an accident ahead and the use of alternate routes to avoid congestion, which minimize emissions from idle vehicles. Encourage and support improved traffic operational planning, engineering and maintenance for existing and future transportation infrastructure.	• Cameras and variable message boards have been installed on I-26 in Spartanburg County, I-385 in Greenville County, and along I-85 through Anderson, Greenville and Spartanburg counties. • Spartanburg County is working to implement the design for a complete and coordinated signal system within the City of Spartanburg and its immediate urban environs. This includes utilizing new fiber optic cables, new signal heads, and a new computer system controlled by the city. The cost of this effort is over \$5 million, and when complete will fully coordinate approximately 100 signals. Once this effort is complete, traffic flow within the urban area of Spartanburg County will be much improved, and congestion leading to ozone emissions will, hopefully, be reduced. • The SCDOT is currently doing preliminary engineering on a SPATS-funded project to coordinate traffic signals along the busy SC 9 corridor in Bolling Springs. The design of the system is currently funded in the amount of \$110,000 by the SPATS MPO, and when construction is complete, signals along SC 9 will be completely coordinated and integrated along	Initiated in 2005 and continuing.	directionally sound	directionally sound	N/A	Information about SPATS programs are available at www.spartanburgcounty.org
5. Use of hybrid vehicles	Encourage people, public and private organizations to purchase hybrid vehicles as they replace vehicles/fleet Encourage that 10% of public agencies fleet have hybrid vehicles (use of hybrid vehicles does not require changes in infrastructure for dispensing fuel). Encourage public agencies to require purchasing hybrid electric vehicles (HEVs) through the State vehicle contract.	• There are approximately 70 alternative fuel vehicles operating within federal, state, county and municipal government. Of that amount 16 belong to the county. As directed by the County Administrator all future purchases will be either Hybrids or Alternative Fuel Vehicles, if practicable • Spartanburg County is currently performing a cost-benefit analysis for the purpose of ascertaining whether new vehicle purchases should include hybrids. The county has already begun to implement a program to purchase flexible fuel vehicles for its fleet. • On June 1, 2006 the Governor signed the H*4312(Rat #0371) General Bill. The ratified title is AN ACT TO AMEND THE CODE OF LAWS OF SOUTH CAROLINA, 1976, BY ADDING SECTION 12-6-3377 SO AS TO ALLOW A STATE INCOME TAX CREDIT EQUAL TO TWENTY PERCENT OF CERTAIN NEW HYBRID, FUEL CELL, ALTERNATIVE FUEL, OR LEAN BURN TECHNOLOGY MOTOR VEHICLE CREDITS ALLOWED AGAINST A TAXPAYER'S FEDERAL INCOME TAX LIABILITY.	Completed in 2005 and continuing.	directionally sound	directionally sound	N/A	

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6. Use higher efficiency engines for school buses	Require purchase of high efficiency engines for school buses as they are replaced. In South Carolina, the SC Department of Education is in charge of maintenance of school buses. DHEC is working with SC Department of Education to obtain grants from EPA. Promote an Adopt-A-School-Bus Program. Endorse a statewide recommendation for the State to take the lead	• School Bus Retrofit Project: approximately 20 diesel buses will be retrofitted particulate filters during 2006. (additional reductions of PM are also expected) The school buses may not be retrofitted until 2007 when ultra-low sulfur diesel is more widely available since the retrofitting technology being applied works best with this new fuel type. • The South Carolina Department of Education purchased 61 new buses that should be on the road in late 2005. • The Department of Education has been awarded a Clean School Bus USA Grant for \$499,099 to retrofit some buses in South Carolina with diesel oxidation catalysts and crankcase filters, replace some older buses and conduct a biodiesel pilot and an idle-reduction device pilot. • State education superintendent Inez Tenenbaum signed an order on June 20, 2006 to buy 630 new school buses with roughly \$36 million appropriated by the Legislature. These buses should be on South Carolina roads by the end of the year. These new buses will replace vehicles from 1984 and 1985 which are not fuel efficient and produce higher levels of polluted emissions than more modern vehicles. • The buses from these funding sources will be distributed throughout the state. The South Carolina	Completed in 2006 and continuing.	directionally sound	directionally sound	N/A	Reductinos accounted for under School Bus Retrofit Project
7.a. Develop incentive programs and opportunity for citizens to choose alternative transportation modes. Establish intermodal connections with an emphasis on mass transit	WALKING/BIKING Biking and pedestrian pathways are being added to all new SPATS widening projects. SC 295 Phase 2 will include an offset shared use path along most of the length of the road improvement. In addition, the upcoming widening of SC 9 will include both bike and pedestrian facilities, where appropriate.	• In 2003 the SPATS Policy Committee began including alternative mobility projects in its transportation projects. To encourage walking and biking, all Spartanburg Area Transportation Study (SPATS) projects will, where possible, have dedicated bike lanes and sidewalks offset from the curb by a grass buffer. This will allow pedestrians to feel safer and will better encourage walking. • The SPATS (Spartanburg Area Transportation Study) Metropolitan Planning Organization (MPO) is one of thirteen areas across the nation selected by the National Center for Bicycling and Walking (NCBW) for the 2004-2005 "Walkable Community Workshops" program. • This shared-cost workshop project, pledging staff and financial resources in exchange for technical assistance and training from NCBW, featured workshops in eight different areas* of the SPATS MPO during the week of May 23-27, 2005. Workshops were held in the city of Spartanburg, Boiling Springs, Pacolet, Duncan, Cowpens, Chesnee, and on the Spartanburg eastside. Approximately 170 people participated. SPATS staff continues to be active in ongoing educational efforts aimed at encouraging alternate modes of travel. • Nine "Walkable Community" workshops were held in Spartanburg County during the week of May 23-27, 2005. • The Hub City Connector is a 12-mile path of greenways, bicycle lanes and safe, signed sidewalks. • The Mary Black Foundation has given \$700,000 for a soon-to-be-completed two-mile section of • A Bicycle/Pedestrian Planning Strategies workshop was offered by SPATS via teleconference on	Completed in 2005 and continuing.	directionally sound	directionally sound	N/A	Information about SPATS programs are available at www.spartanburgcounty.org
7.b. Offer free or reduced transportation cost on high ozone days.	MASS TRANSIT: Staff will work with SPARTA to disuss implementing a program to offer free or reduced fares on ozone action days.	A staff person from the South Carolina Department of Transportation (SCDOT) has been designated to receive SCDHEC's Ground-level Ozone Forecast and to distribute it via email to approximately 5,000 staff. SCDOT also plans to utilize the SCDHEC Ozone Forecast Internet link for the forecast on their webpage. SCDOT roadside emergency signs in the Upstate and Midlands will be utilized for Ground-level Ozone Action Alerts. Spartanburg has 7 variable message signs along its interstate system. The SPARTA website includes information on Commuter Choice, a nationwide partnership designed to help employers create customized solutions to their employees' commuting challenges. Commuter Choice can also include communities working with residents, schools working with students, and even developers working with future tenants to provide and promote choices for travelers. http://www.spartabus.com/Commuter%20Choice.htm .	Implementation began in 2005 and is continuing. Completion of this measure dependent upon SPARTA financial status.	directionally sound	directionally sound	N/A	
7.c. Reduce vehicle miles traveled by developing efficient user-friendly transit systems.	Integrate transportation planning with land use planning so public transit can make a comprehensive contribution to economic development and mobility; Remove local barriers to densification in downtowns, infill areas, and transit stations and corridors.	• An executive summary of the Intermodal Element addendum of the 2005-2025 Long-Range Transportation Plan is available at http://www.spartanburgcounty.org/govt/depts/pln/spats/docs/lexcsum.pdf . The Plan includes a Bicycle and Pedestrian Plan as well as an Alternate Mobility Master Plan. • Spartanburg County has no zoning regulations in its non-incorporated areas, so influencing land use decisions is relatively difficult. However, the city of Spartanburg is actively attempting to increase residential development downtown, which would lead to less incoming traffic during the work week. In addition, the Spartanburg County Planning Commission staff is examining its subdivision regulations for the purpose of facilitating easier cross access between neighboring subdivisions.	Implementation began in 2005 and is continuing. Completion of this task dependent upon elected officials' willingness to incorporate more rigid land use regulations.	directionally sound	directionally sound	N/A	Comments #7
8. Review and update air emission inventory for the Upstate	Ensure all industrial sources still operating. Review industrial sources for plant closures. Identify major sources of NOx Map the locations of point sources (10% of point sources cannot be found). Map the specific locations and the area sources where coal is burned.	This was completed and forwarded to SCDHEC on a previous updated progress report. The information allowed DHEC to having more accurate emissions inventory.	Completed. This information was included in the December 10, 2003 Early Action Compact Milestone on pages 20 through 37.	directionally sound	directionally sound	N/A	SCDHEC

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9. Support SCDHEC in evaluating and seeking reductions from major sources based on modeling	Coordinate with Duke Power to determine what NOx reductions are planned for the Lee Steam Plant Coordinate with the Williams Company to determine what NOx reductions are planned for the TRANSCO Pipeline. Support NOx reduction strategies in the State Implementation Plan Develop an Early Reduction Program with incentives for industrial facility (Tier Two Type emissions NOx sources)	See info on Duke Power included in Appendix 16 of EAC SIP (link in Comment #6). → The Williams Company has received DHEC permits to replace outdated "uncontrolled" compressors on the pipeline located in Duncan. Replacement of the compressors will begin in late 2004 and continue until late 2005. This will result in a significant NOx reduction for the upstate. • Transcontinental Gas Pipe Line Corporation (Transco) Station 140, Moore, SC; Operating Permit 2060-0179. Transco has 14 natural gas fired internal combustion (IC) engines that collectively accounted for 3,822 tons of ozone season NOx emissions during 1997. Transco has submitted a construction permit application to put on NOx controls that will result only 1,261 tons of ozone season NOx emissions. The permit was approved on April 27, 2004. • The Williams Company received DHEC permits to replace outdated "uncontrolled" compressors on the pipeline located in Duncan. Replacement of the compressors began in late 2004 and continue until late 2005. This will result in a significant NOx reduction for the Upstate. NOx reduction at the Duke Power Lee Steam Plant • Coal fired Unit #2 is now operating with the new NOx burners and final manufacture set up for a • Coal fired Unit #1 is currently off line. It will be coming back on line in July 2006 with new NOx b • Both units will complete final construction permit testing during June, July and August 2006. Du	Implementation began in 2004 and was completed in 2006.	N/A	40%	N/A	
10. Develop a program to offer to purchase or repair smoking vehicles (known as cash for clunkers).	Use funds generated from a license plate sales, registration fees, or license plate tax program to buy or repair high emitting vehicles from individuals. Purchase such vehicles from non-profit groups such as the Kidney Foundation, Goodwill, Salvation Army when they have been donated as charitable gifts. Consider accelerated vehicle retirement (scrappage) programs to encourage vehicle owners to voluntarily retire their vehicles sooner than they would have	staff from the Air Quality Staff Advisory Committee will meet with Goodwill Industries, Salvation Army and Kidney Foundation representatives to discuss alternatives to re-selling clunker vehicles donated to these organizations.	Completed in 2006. No action taken due to budget constraints.	directionally sound	directionally sound	Use funds from license plate sales	
11. Ban open burning of on-site commercial debris during ozone season (April - October)	Use SCDHEC model to determine the most effective method to ban open burning. Discuss modeling results with all local governments to consider adoption.	DHEC adopted regulations in mid 2004 restricting open burning. See Comment #6. DHEC encourages Anderson, Greenville, and Spartanburg to actively notify all residents that the statewide ban is now in force and violations are punishable by law. At the November 2005 Air Quality Steering Committee meeting, the Committee directed staff to coordinate with local governments to enforce DHEC's burning ban year-round. Staff will schedule meetings with Administration and pertinent departments to discuss this measure, and how Spartanburg County and help to implement it.	Completed on June 25, 2004 with the passage of regulation SC 61-62.2 "Prohibition of Open Burning" and continuing.	directionally sound	directionally sound	N/A	See Comment #6
12. Create incentives for the purchase of high efficiency and low emissions vehicles.	Offer tax credits for vehicles with high efficiency gas consumption or low emissions. Offer tax credits for low mileage vehicles instead of high mileage vehicles	• Developing draft bill to offer reduced tax incentives for those purchasing low emitting vehicles. • A bill titled "An act concerning the promotion of alternative use fuel, and hybrid propulsion system for transportation purposes" was submitted to the SC House of Representatives in January 2005. The bill is now in committee. In summary, the bill provides tax Credit for vehicles using alternative fuel or hybrid propulsion vehicles. The credit is allowed against the tax imposed by for the purchase of vehicles licensed in South Carolina which use, or which are converted within 120 days of purchase to use, clean-burning fuel. Specifically the intent of the bill will apply for income tax years beginning on or after January 1, 2004, but prior to January 1, 2013. The tax credit will be allowed for the purchase of an alternative fuel or hybrid propulsion vehicle, and for a motor vehicle that is converted to use alternative fuel, for the replacement of the power source with a power source that uses alternative fuel • On June 1, 2006 the Governor signed the H*4312(Rat #0371) General Bill. The ratified title is An	Implementation began in 2005 and was completed June 1, 2006.	directionally sound	directionally sound	N/A	See Comment #5
13. Use land-use and transportation planning to improve air quality	Include air quality measures as a part of the land-use and transportation planning process.	Spartanburg County's land use efforts include strategies that are represented in the county's comprehensive plan or unified land management ordinance. Some important strategies include: • Development of a comprehensive urban forestry plan to include local tree ordinances, protection policies of urban open spaces, and landscape ordinances that utilize native plants. • Revisions of the county's subdivision regulations to include conservation provisions to help not only retain natural resources, but add to the value and marketability of rural residential projects. This will also maintain balance between the rural setting and future growth and development. • Amending the county's subdivision regulations to promote cluster housing development in rural areas, thereby minimizing land coverage for residential use. Establishing maximum lot size (recommended ¼ acre) for cluster subdivisions of a certain size, as opposed to minimum lot size, and allocating in perpetuity through lease, trust, common ownership, etc. up to 80 percent of such subdivisions to open, agricultural, or forested use, thus retaining rural, open character. • An executive summary of the Intermodal Element addendum of the 2005-2025 Long-Range Tra	Completed in 2005.	directionally sound	directionally sound	N/A	
****Develop air quality best management practices (BMPs)_ for construction sites	Develop a generic list of BMPs Develop management practices for construction debris. Develop management practices for emissions from construction vehicles. Develop management practices for traffic controls during construction.	• Spartanburg County has no zoning regulations in its non-incorporated areas, so influencing land use decisions is relatively difficult. However, the city of Spartanburg is actively attempting to increase residential development downtown, which would lead to less incoming traffic during the work week. In addition, the Spartanburg County Planning Commission staff is examining its subdivision regulations for the purpose of facilitating easier cross access between neighboring subdivisions. In addition, developers are beginning to see the interest in neo-traditional development, and some new developments are being built that incorporate several of these features.		directionally sound	directionally sound	N/A	See Comment #2
14. Implement a program to encourage use of green power.	Capture emissions from landfills to produce green power, e.g., BMW is utilizing Palmetto Landfill emissions to produce energy for its plant. Implement a Purchase Green Power program when available. Green power is electricity generated by renewable resources like solar, wind, and even decomposing garbage in selected landfills. These resources are replenished naturally and minimize harm to the environment.	BMW, located in Spartanburg County, is using Spartanburg County's Palmetto Landfill's emissions to produce energy for its plant. A Green Power station will be constructed at the Anderson Regional Landfill in 2006. Santee Cooper, through Blue Ridge Electric Cooperative, recently began offering the purchase of Green Power to Anderson, Greenville, Oconee, Pickens and Spartanburg County residents. Residential customers who increased their purchase of Green Power by 2 blocks were offered a free energy analysis between October 1 and December 31, 2005.	Completed in 2005 and continuing.	directionally sound	directionally sound	N/A	

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
15. Promote route efficiency for delivery vehicles, trash collection etc.	Encourage business to consolidate distribution and collection routes to improve efficiency and reduce emissions from their fleets. Maximize route efficiency for public services such as garbage collection, delivery vehicles, and other vehicle trips to reduce fuel usage.	Delivery companies currently use GPS mapping programs to map the most cost effective route to save gasoline.	Completed. No action taken by local government. Private sector fleets already maximizing fleet movement.	directionally sound	directionally sound	N/A	See Comment #5
16. Establish a clean air partnership with business and industry.	Encourage and coordinate alternate work schedules such as staggered work hours for business, industry and local governments. Establish park and ride lots serving perimeter counties along major corridors. Make the public aware of the park-and-ride concept: media could assist in publicizing which programs are available. Encourage carpooling/vanpooling as an option where employees living in the same area agree to ride to work together rather than to drive their individual vehicle to work. Consider parking facility controls that can include employers offering a tax-free transit/vanpool benefits and which limit the amount of parking and encourage carpooling, mass transit, etc. Encourage telecommuting. Adopt a Bus Program. Develop funding to be used for matching grants fund for several EAP strategies. Develop a core competency and assisting the Upstate EAP group in writing grant proposal.	Staffs of Greenville County Planning Commission, Greenville Transit Authority and Greater Greenville Chamber of Commerce have begun joining effort to develop a feasibility study for Park-n-Ride program and/or Ride-Share program for Greenville County. Information will be shared with Anderson and Spartanburg counties. In November 2005, the Air Quality Steering Committee directed staff to begin addressing this strategy before the 2006 ozone season.	Completed in 2004 and continuing.	directionally sound	directionally sound	N/A	
17. Establish an active public awareness campaign.	Develop an editorial board to discuss air quality issues and development of a relationship with media. Use alert messages year round, not only during ozone season; Utilize public service announcement, newspapers, weather channels, and other media outlets to notify citizens of high ozone days; Utilize TV Channels to issue high ozone alerts using the crawl bar at bottom of TV screens. Encourage health organizations to sponsor ozone alerts in media. Enhance ozone awareness (Outreach-communication): assign a local agency to develop and implement a program to educate and motivate individuals to take actions to minimize ozone pollution. Includes a focused distribution of educational materials, dissemination of SCDHEC ground-level ozone forecast, increased media alerts to specific audiences, and includes action oriented components (i.e. ridesharing, telecommuting, etc.). Develop a campaign to encourage things such as refueling vehicles during evenings, not topping off tanks when refueling, using lawnmowers during evenings instead of during high ozone hours, using of electric lawn mowers. Develop a license plate program to generate revenue to implement the public awareness program on tax savings for purchasing high efficiency vehicles.	- Spartanburg County requested an Air Public Service announcement from SCDHEC. - Berry Shoals Elementary School in Spartanburg County requested educational materials and held special science awards in March 2005. - Distributed bookmarks to public at Spartanburg County libraries, and disseminated DHEC-supplied material in information kiosk in main Spartanburg County Administration Building. - Spartanburg County plans to add \$30,000 to fund an Air Quality Coordination Effort (AQCE) in the Public Works Department. This proposal supports the County's efforts to cooperatively work with the State DHEC in the conservation and enhancement of air resources in a manner that promotes quality of life. Funding for the AQCE will permit the County to fully participate in particulate matter compliance efforts including the Early Action Ozone Compliance Compact. This project will be supported with fund balance for FY07, and supported as part of the operating budget in future years.	Completed in 2004 and ongoing.	directionally sound	directionally sound	N/A	
		- Spartanburg received a \$47,650 grant from the state Department of Health and Environmental Control to promote its recycling program. The campaign will use newspaper, radio, internet, cable television, and outdoor advertising to promote recycling. Promotions will point out that all city residents have to do to participate is call for a free bin. - The new Spartanburg County Air Quality Committee met on October 26, 2006. Department of Health and Environmental Control employees were present and have since been given a request for 10 actions/activities that are 'reasonable' for Spartanburg to pursue and will clearly demonstrate a meaningful effort to improve air quality.					
18. Promote research in energy efficiency at local universities, industries, energy companies, federal government, and other institutions that improve air quality.	Establish programs to research energy efficiencies at local universities, e.g., Institute for Energy Studies at Clemson University. Encourage business and industry to utilize the research from these programs to make the best decision concerning the purchase or upgrade of furnaces and boilers.	- Members of the Air Quality Staff Advisory Committee met with staff from the SC Institute for Energy Studies (SCIES) from Clemson University in late summer 2003. As a result, researchers from SCIES made a presentation to the Committee on November 18, 2003. The South Carolina Institute for Energy Studies (SCIES) based at Clemson University is a state-chartered research and development organization established in 1981. Its objectives are to promote energy research and development in and for the state; to transfer energy technology developed by others to South Carolina applications; to contribute to national energy issues in areas of excellence; and to promote statewide energy-education activities. (Source: http://www.clemson.edu/scies/AboutSCIES.htm). Researchers from SCIES became members of the Air Quality Staff Advisory Committee mailing list to transfer knowledge and latest undertakings on these efforts. - Alternative fuels: Clemson University chemical engineering professor Mark C. Thies has received an \$856,000 award from the Department of Energy (DOE) to develop more efficient processes for the centralized production of hydrogen by splitting water. The award was one of only two in the world. - Clemson University is developing the International Center for Automotive Research (Clemson-ICAR).	Completed in 2005.	directionally sound	directionally sound	N/A	

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
19. Use of alternate fuels.	Direct local Planning Commissions to identify areas where alternative fuels will be best suited. Encourage the use of alternate fuels; Assist with establishing alternative fuel infrastructure for private sector clean fuel fleets. Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternate fuels include bio-diesel, electricity, ethanol, hydrogen, liquefied petroleum gas, methanol, and natural gas. Encourage a clean-fuel fleet program for centrally fueled fleets of more than 10 vehicles.	• Alternate Fuel: Clemson University Professor James G. Goodwin, Jr., chair of the Clemson's chemical and biomolecular engineering department, has also received a DOE grant for energy research through DOE's State Technologies Advancement Collaborative. • Goodwin's work focuses on the performance of iron-based bimetallic catalysts that are crucial to synthesis of clean fuels, additives and lubricants derived from coal and biomass gasification. • Clemson will lead a partnership that includes Louisiana State University, the S.C. State Energy Office, the Louisiana State Energy Office, North Carolina's Research Triangle Institute, Rentech and Sud-Chemie Inc. This grant reflects \$875,499 in DOE-STAC funds and \$294,499 in cost sharing by the industrial and governmental participants. • Spartanburg County will begin purchasing alternative fuel vehicles for its fleet as older vehicles are replaced. • There are currently 10 stations that offer Ethanol 85% and 6 stations that offer biodiesel within 25 miles of downtown Spartanburg. Stations can be located using the U.S. Department of Energy Alternative Fuels Data Center Website at http://www.eere.energy.gov/afdc/infrastructure/	Completed in 2005 and continuing.	directionally sound	directionally sound	N/A	
20. Evaluate the use of High Occupancy Vehicle (HOV) lanes using existing lanes.	Evaluate use of HOV on three (3) lane interstate highways; Show the advantages of designating HOVs; Pass laws establishing regulations on HOVs lanes such as the threshold in the number of passengers (perhaps two) in the vehicle using HOVs lanes and time of day for the lane to be designated as HOV (rush hour). Pass laws authorizing issuance of tickets for violations of HOVs lanes regulations, i.e., one-passenger vehicles using HOV lanes on designated hours.	• During its August 5, 2003, the AQ Staff Advisory Committee discussed and evaluated the implementation of this strategy. The Committee concluded that "HOV lanes work best where an interstate or a limited access arterial lead directly to major employment centers, usually within a central business district (CBD). With the exception of I-385 leading to the Greenville CBD, Upstate interstates (especially I-85) generally link the cities of Anderson, Greenville, and Spartanburg via peripheral routes, not conducive to the addition of HOV lanes. In addition, inter-county work trends do not show major volumes that would support car-pooled trips. Making the third lane of I-85 an HOV lane would severely increase congestion, emissions, and future accidents. The addition of new lanes would be cost prohibitive, and would not be allowed to revert to a single occupancy vehicle (SOV) status without reimbursement to the federal government." • In June 2004, Planning Commission staff met with traffic engineers from SCDOT to discuss this strategy. Traffic engineers indicated that because traffic volumes on I-85 exceed 100,000 vehicles per day, the addition of a third lane would be cost prohibitive.	Completed in 2004.	directionally sound	directionally sound	N/A	No further action planned
21. Modify speed limits for optimum fuel efficiency.	Direct SCDHEC and SCDOT to take the lead role. Direct Planning Commissions to assist SCDHEC in modeling.	The SPATS MPO was designated as urban by the US Census following the 2000 census and as a result speed limits on the interstate highways in Spartanburg County have been established at 60 mph.	Completed in 2005.	N/A	N/A	N/A	No further action planned
22. Develop process for evaluating and minimizing impact of major projects such as shopping centers, schools, and subdivisions.	Study impact of post construction traffic flow. Study impact of construction activities.	Traffic impacts are monitored, both during and post construction, but process is not formalized.	Completed in 2005 and continuing.	N/A	N/A	N/A	See Comment #5
23. Community Schools to reduce vehicle miles traveled and encourage biking and walking for students and parents by encouraging smaller community-based schools that are integrated into neighborhoods	Eliminate minimum acreage requirements for school sites. Cap student populations per facilities. Require coordination among school boards and local governments to plan school sites and avoid conflicts with local planning goals. Favor restoration and construction of community-based small schools over new construction of remote mega schools.	• The South Carolina School District Reorganization and Realignment Act of 2006 was introduced in the House on January 24, 2006 and is currently residing in the House Committee on Education and Public works. This bill states that the Education and Oversight Committee shall study and examine the optimum size, including both geographic area and student population. A copy of this bill is available online at http://www.sccstatehouse.net/sess116_2005-2006/bills/4488.htm • Spartanburg County is awaiting the committee's recommendations and the manner in which they may take effect if this bill is enacted.	Completed in 2006 and continuing.	N/A	N/A	N/A	• SECTION 203 SCHOOL SITES 203.1 South Carolina Code Ann. § 59-23-250 (to be codified at Supp. 2003) eliminates minimum acreage requirements for public school sites. However, school districts must receive approval from the South Carolina Department of Education prior to property acquisition or additions on existing properties. 203.2 The State Department of Education encourages districts to consider acreage for school sites as established by the Council of Educational Facility Planners International (CEFPI). - See Comment #5
Comments: 1. December 2004 - SC EAC SIP - activity not quantified for several reasons (first) in accordance with EAC Protocol, after all adopted Federal and State controls were accounted for in the modeling, it was determined that local controls were not necessary to demonstrate attainment of the 8-hour ozone standard. Measures were submitted by the local areas to show their continued support and commitment to the EAC process. (second) this activity is directionally sound and should provide air quality benefits and in some cases measurable results. The progress toward implementing this activity and the benefits derived will be documented as a part of the ongoing reporting requirements. 2. December 2003 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac.html - additional information provided by the county to include "findings", "advantages/disadvantages", "recommendations", "costs", etc.... 3. March 2004 - Local Early Action Plan - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0304.asp 4. June 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0604.asp 5. December 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_1204.asp 6. December 2004 - SC EAC SIP - Including Appendix 8 (Local Early Action Plans and the Air Quality Awareness and Improvement Policy) and Appendix 16 (County Level Emission Reductions and Descriptions for the Ozone EAC Areas) - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 7. April 20, 2005 - Correspondence to Mr. Palmer including clarifying supplemental information to the EAC SIP submittal of December 2004. - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 8. June 2005 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0605.asp							

December 2007 - Early Action Compact Progress Report
Spartanburg County

In an effort to keep your contact information updated we have provided the following information for our county:

	Name	Telephone	E-mail Address
Administrator/Manager	Glenn Breed	(864) 596-2526	gbreed@spartanburgcounty.org
EAC contact	Jim D'Amato	(864) 596-2460	jdamato@spartanburgcounty.org

The following measures were not included in the South Carolina Early Action Compact SIP but are directionally sound and are anticipated to assist the County of Anderson, Greenville, Spartanburg, South Carolina, in achieving and/or maintaining the 8-hour ozone standard by 2007.

Anderson, Greenville, and Spartanburg Resolution

Anderson County, Greenville County, and Spartanburg County each entered into a resolution as a cooperative means of improving air quality to meet applicable state and federal air quality standards. By entering into this resolution, the Counties agreed to the following:

1. Each County will provide individuals to serve on a Steering Committee. The Steering Committee will strive to finalize an Upstate Air Quality Action Plan. The Air Quality Action Plan is intended to be a guide for implementation of proactive measures that will bring the Participating Counties into compliance with the 8-hour ozone standard consistent with DHEC's Early Action Plan. The Steering Committee will consist of no more than 21 voting members (7 from each county). Advisory (non-voting) members may be appointed up to a maximum of seven from each county.
2. Implementation costs of the air Quality Action Plan will be specified and quantified by the Steering Committee including ongoing direct and indirect costs that will be incurred by state and local governments, businesses, and individual taxpayers.
3. The Steering Committee will prepare a report detailing and quantifying the economic impact and costs associated with non-attainment status that have been incurred by the four geographic non-attainment areas most closely located near Anderson, Greenville and Spartanburg.
4. Once an Air Quality Action Plan is developed by the Steering Committee, each of the Participating Counties will consider adoption of the Air Quality Action Plan within the boundaries of the respective participating Counties consistent with the goals of the Early Action Program.

Air Quality Awareness and Improvement Policy

Memorandum has recently been sent to all County department heads as well as elected and appointed officials for the purpose of establishing certain principles that will guide the recurring activities of County government.

Effective immediately, the county will:

1. Encourage that all county employees are notified of upcoming Ozone Action Days.

2. Encourage car-pooling opportunities.
3. Ensure that all County vehicles and equipment are operating according to the manufacturer's specifications.
4. Restrict vehicle idling to no more than 5 minutes. Exceptions include emergency vehicles, traffic/weather conditions, and vehicles being repaired, maintained, or inspected.
5. Restrict mowing and use of gas powered lawn equipment on County property on Ozone Action Days.
6. Restrict all outdoor burning on Ozone Action Days.
7. Energy conservation in all County facilities.
8. Include environmental considerations in purchasing decisions for goods and services. An example of such would be to purchase Energy Star equipment.

Based on stakeholder consultation and taking into consideration resource and political constraints, the following control measures are under consideration pending modeling that demonstrates compliance in 2007 by SCDHEC. It is anticipated these measures under consideration will assist the County of Anderson, Greenville, Spartanburg, South Carolina, in achieving and/or maintaining the 8-hour ozone standard by 2007.

ATTACHMENT 1

To South Carolina Department of Health and Environmental Control
Environmental Protection Administration
From: Spartanburg County, South Carolina
Date June 2007

Reference: Summary of progress in implementing air quality strategies adopted by Spartanburg County and included in our Early Action Compact.

1. Support SCDHEC statewide efforts to reduce ozone levels.**Priority A****Description of Measure**

- Stakeholder group to support and participate in modeling efforts.
- Develop stakeholder group to participate in development of regulations (NO_x - BACT (Best Available Control Technology Economically Achievable), restrict open burning).
- Members of the Upstate Air Quality Staff Advisory Committee participated with DHEC in the development of new regulations aimed at reducing NO_x emissions. As a result, new regulations requiring NO_x- BACT (Best Available Control Technology Economically Achievable) were adopted in mid 2004.

December 2004:

EAC SIP did include Appendix 16 -

- SC61-62.2 "Prohibition of Open Burning" regulation with reductions for 2007 calendar year - reductions expected during the ozone season for residential construction waste. Emissions reduction: VOC: 43.01 tons/season; NO_x: 9.06 tons/season; PM 38.48 tons/yr
- SC61-62.5, Std. 5.2 "Control of Oxides of Nitrogen) reduction amount for both existing and new sources combined across Anderson, Greenville, Spartanburg for 2007 calendar year. Emissions reduction of NO_x: 234.1 tons/yr.
- June 24, 2004 - Participated in Upstate Air Quality Steering Committee meeting held at BMW.
- November 2004 - Upstate Air Quality Staff Advisory committee will be developing a business partnership plan to involve local industries in announcing ozone alerts, participating in ride share programs and adopting the same or similar list of initiatives that Greenville County adopted from the SELC.

June 2006:

- Spartanburg County distributed DHEC supplied material informing residents of air quality problems, and acquainting them with possible solutions presently being discussed by DHEC and by the Upstate Air Quality Committee.

Estimate of Emission Reductions (if available)

Equivalent to removing 359,500 cars from the road or 7190 tons of VOC.

Implementation Date

Completed June 25, 2004.

2. Designate an Ozone Action Coordinator**Priority A****Description of Measure**

- Spartanburg County Council appointed one Ozone Action Coordinator in March of 2003: Jim D'Amato. Jim D'Amato continues to serve as the Ozone Action Coordinator.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed March 2003 and continuing.

3. Seek low sulfur fuels as early as possible.**Priority A****Description of Measure**

The Committee has continued to coordinate with representatives of Colonial and Plantation pipelines, refiners. Based upon an unofficial status report from Kay Clamp with the SC Petroleum Institute ". We are fortunate in the Southeast because we receive much of our supply from the Gulf Coast, and 60% of the nation's refineries are in that area. A simple translation of that fact is that we are not dependant on one or two refineries for our fuel, and reap the benefits of a large number of refineries producing lower sulfur fuels.

December 2004:

- The maximum allowable sulfur level in gasoline for 2004 is 350 ppm with a corporate average of 120 ppm. Plantation Pipeline tests product entering their pipeline from every refinery, every day...their average from this testing has been and is 150 ppm in gasoline. Colonial Pipeline is also testing product from its shippers; the average sulfur levels for gasoline batches entering their pipeline YTD 2004 are 145 ppm for fungible regular gasoline and 62 ppm for fungible premium. Colonial did note that these averages are not volume weighted; they did not, however, think there would much difference if it were volume weighted. They also assumed that the regular and premium are averaged together for compliance.
- Both of the pipelines had the lower sulfur fuel in their facilities by late 2003; the fuel was at terminals serving S.C. by Jan. 2004, and was "on the street" by March 1, 2004".
- Continue to coordinate with representatives of colonial and Plantation pipelines, refiners, and State representatives to ensure that the upstate has the opportunity to receive low sulfur fuels at the earliest date as they can be provided.

December 2005:

- Committee continues to coordinate with representatives of Colonial and Plantation pipelines, refiners. During 2005, Colonial Pipeline conducted studies that indicates that S.C., as well as others along the Colonial Pipeline are receiving sulfur levels that should help many of the non-attainment areas. Specifically: M and V are the grades used in South Carolina. The sulfur content averages shown below are by batch not volumetric weighted values. M Grades: Average 139, High 330. V Grades: Average 74, High 300.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2004 and continuing.

Additional Information

- The Environmental Protection Agency's ultra-low sulfur diesel fuel requirements went into effect on June 1, 2006. Ultra-low sulfur diesel fuel will be available at retail stations beginning summer 2006.

4. Design and implement congestion management and Intelligent Transportation System (ITS) measures.
Priority A

Description of Measure

- Implement congestion management projects: intersection and signalization improvements to alleviate traffic congestion, therefore, reducing emissions from idling vehicles;
- Implement Intelligent Traffic Systems such as automated advisory/alert messages to drivers on interstate highways. For example: advise motorist about an accident ahead and the use of alternate routes to avoid congestion, which minimize emissions from idle vehicles.
- Encourage and support improved traffic operational planning, engineering and maintenance for existing and future transportation infrastructure.

June 2005:

- Cameras and variable message boards have been installed on I-26 in Spartanburg County, I-385 in Greenville County, and along I-85 through Anderson, Greenville and Spartanburg counties.

June 2006:

- Spartanburg County is working to implement the design for a complete and coordinated signal system within the City of Spartanburg and its immediate urban environs. This includes utilizing new fiber optic cables, new signal heads, and a new computer system controlled by the city. The cost of this effort is over \$5 million, and when complete will fully coordinate approximately 100 signals. Once this effort is complete, traffic flow within the urban area of Spartanburg County will be much improved, and congestion leading to ozone emissions will, hopefully, be reduced.
- The SCDOT is currently doing preliminary engineering on a SPATS-funded project to coordinate traffic signals along the busy SC 9 corridor in Boiling Springs. The design of the system is currently funded in the amount of \$110,000 by the SPATS MPO, and when construction is complete, signals along SC 9 will be completely coordinated and integrated along the urban region of the corridor to its tie-in with the city system outline above. As SC 9 is the number one transportation priority and congested road in Spartanburg County, the signalization system will both improve traffic flow, and reduce emissions.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Initiated in 2005 and continuing.

Measure under Consideration

5. Use of hybrid vehicles.

Priority A

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Encourage people, public and private organizations to purchase hybrid vehicles as they replace vehicles/fleet.
- Encourage that 10% of public agencies fleet have hybrid vehicles (use of hybrid vehicles does not require changes in infrastructure for dispensing fuel).
- Encourage public agencies to require purchasing hybrid electric vehicles (HEVs) through the State vehicle contract.

June 2005:

- There are approximately 70 alternative fuel vehicles operating within federal, state, county and municipal government. Of that amount 16 belong to the county. As directed by the County Administrator all future purchases will be either Hybrids or Alternative Fuel Vehicles, if practicable
- Spartanburg County is currently performing a cost-benefit analysis for the purpose of ascertaining whether new vehicle purchases should include hybrids. The county has already begun to implement a program to purchase flexible fuel vehicles for its fleet.

June 2006:

- On June 1, 2006 the Governor signed the H*4312(Rat #0371) General Bill. The ratified title is AN ACT TO AMEND THE CODE OF LAWS OF SOUTH CAROLINA, 1976, BY ADDING SECTION 12-6-3377 SO AS TO ALLOW A STATE INCOME TAX CREDIT EQUAL TO TWENTY PERCENT OF CERTAIN NEW HYBRID, FUEL CELL, ALTERNATIVE FUEL, OR LEAN BURN TECHNOLOGY MOTOR VEHICLE CREDITS ALLOWED AGAINST A TAXPAYER'S FEDERAL INCOME TAX LIABILITY.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005 and continuing.

Measure under Consideration

6. Use higher efficiency engines for school buses.

Priority A

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Require purchase of high efficiency engines for school buses as they are replaced. In South Carolina, the SC Department of Education is in charge of maintenance of school buses. DHEC is working with SC Department of Education to obtain grants from EPA.
- Promote an Adopt-A-School-Bus Program.
- Endorse a statewide recommendation for the State to take the lead.

December 2005:

- School Bus Retrofit Project: approximately 20 diesel buses will be retrofitted particulate filters during 2006. (additional reductions of PM are also expected) The school buses may not be retrofitted until 2007 when ultra-low sulfur diesel is more widely available since the retrofitting technology being applied works best with this new fuel type.
- The South Carolina Department of Education purchased 61 new buses that should be on the road in late 2005.

June 2006:

- The Department of Education has been awarded a Clean School Bus USA Grant for \$499,099 to retrofit some buses in South Carolina with diesel oxidation catalysts and crankcase filters, replace some older buses and conduct a biodiesel pilot and an idle-reduction device pilot.
- State education superintendent Inez Tenenbaum signed an order on June 20, 2006 to buy 630 new school buses with roughly \$36 million appropriated by the Legislature. These buses should be on South Carolina roads by the end of the year. These new buses will replace vehicles from 1984 and 1985 which are not fuel efficient and produce higher levels of polluted emissions than more modern vehicles.
- The buses from these funding sources will be distributed throughout the state. The South Carolina Department of Education (SDE) has agreed to make York County and the five deferred areas the top priority in assigning new and retrofitted buses to service. SDE is also partnering with private companies and local school districts to provide specific funding for school bus retrofits and clean air programs.

Estimate of Emission Reductions (if available)

VOC 340 lbs/year.

CO reductions 2,380 lbs/year

Additional reductions of PM are also expected.

December 2004 EAC SIP - Appendix 16

Implementation Date

Completed in 2006 and continuing.

Measure under Consideration

7a. Develop incentive programs and opportunity for citizens to choose alternative transportation modes.

Establish intermodal connections with an emphasis on mass transit.

Priority A

Description of Measure

WALKING/BIKING:

- Encourage local government to increase pedestrian/bicycle infrastructure spending (the Upstate spends 2¢ per person compared to SC spending 22¢ per person).
- Establish safer bike routes with better signs marking lanes and routes.
- Increase highway funding for bike paths, walking or mass transit including high-speed rail. Support the federal transportation enhancement program.
- Install bike racks on all transit vehicles to encourage intermodal transportation. New buses purchased through the state's bus purchase program will have bike racks.

PARK and RIDE:

- Establish mass transportation between a plant and a park-and-ride site.

CARPOOLING:

- Work with local government to offer incentives for employees to car pool.

MASS TRANSIT:

- Offer a free trolley service running in a loop in downtown areas and nearby restaurants, especially during lunch hours;
- Research past feasibility studies on free downtown shuttles. Potential for sponsorship with local area restaurants and businesses for a lunch time shuttle - could defer the operational costs of the endeavor.
- Support mass transit (transportation choices and alternatives): While the only local mass transit choice that is currently available in some areas is the transit bus, example of future options such as bus rapid transit, commuter passenger service offered by trains on existing rail systems, a diesel multiple unit or "light rail" should be supported.

December 2004:

- In 2003 the SPATS Policy Committee began including alternative mobility projects in its transportation projects. To encourage walking and biking, all Spartanburg Area Transportation Study (SPATS) projects will, where possible, have dedicated bike lanes and sidewalks offset from the curb by a grass buffer. This will allow pedestrians to feel safer and will better encourage walking.

December 2005:

- The SPATS (Spartanburg Area Transportation Study) Metropolitan Planning Organization (MPO) is one of thirteen areas across the nation selected by the National Center for Bicycling and Walking (NCBW) for the 2004-2005 "Walkable Community Workshops" program.
- This shared-cost workshop project, pledging staff and financial resources in exchange for technical assistance and training from NCBW, featured workshops in eight different areas* of the SPATS MPO during the week of May 23-27, 2005. Workshops were held in the city of Spartanburg, Boiling Springs, Pacolet, Duncan, Cowpens, Chesnee, and on the Spartanburg eastside. Approximately 170 people participated. SPATS staff continues to be active in ongoing educational efforts aimed at encouraging alternate modes of travel.

June 2006:

- Nine "Walkable Community" workshops were held in Spartanburg County during the week of May 23-26, 2005. They identified bicycle and pedestrian facility projects (i.e. crosswalks), developed pedestrian and cyclist-friendly policies for their local government (i.e. mixed use development allowed), and chose creative programs to bring awareness to others in the benefits of walking and biking (i.e. bike to shop incentive program). These plans will continue to be an ongoing program of action to change the walking environment in the Spartanburg community, with critical buy-in from local city officials. Information on the workshops can be found at <http://www.spartanburgcounty.org/govt/depts/pln/spats/wcw.htm>
- The Hub City Connector is a 12-mile path of greenways, bicycle lanes and safe, signed sidewalks through the heart of Spartanburg. Visit <http://hubcityconnector.org/> and click on the maps link to see portions of the trail currently open and others that are under construction. Upon completion, it will connect schools with neighborhoods, customers with shops and seniors with health clubs. As our local passage of the Palmetto Trail, the state's Mountains to the Sea Trail, it serves as the spine for Spartanburg's growing network of parks, trails and bike lanes.
- The Mary Black Foundation has given \$700,000 for a soon-to-be-completed two-mile section of the Palmetto trail. The section is part of the Hub City Connector, a 12-mile piece of the Palmetto Trail, which could end up becoming the backbone of the area's trail system.
- A Bicycle/Pedestrian Planning Strategies workshop was offered by SPATS via teleconference on May 4, 2006. More information is available at <http://www.spartanburgcounty.org/govt/depts/pln/spats/docs/BicycleAndPedestrianTraining.pdf>

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005 and continuing.

Measure under Consideration

7b. Offer free or reduced transportation cost on high ozone days. Priority A

- Work with SPARTA to implement a reduced cost structure for high ozone days.

Description of Measure (A more detailed description will be included in the Early Action Plan.)

Implement a coordinated high ozone day alert action plan to include public notification and free or reduced ozone fares from the transportation providers.

June 2005:

A staff person from the South Carolina Department of Transportation (SCDOT) has been designated to receive SCDHEC's Ground-level Ozone Forecast and to distribute it via email to approximately 5,000 staff. SCDOT also plans to utilize the SCDHEC Ozone Forecast Internet link for the forecast on their webpage. SCDOT roadside emergency signs in the Upstate and Midlands will be utilized for Ground-level Ozone Action Alerts. Spartanburg has 7 variable message signs along its interstate system.

June 2006:

- The SPARTA website includes information on Commuter Choice, a nationwide partnership designed to help employers create customized solutions to their employees' commuting challenges. Commuter Choice can also include communities working with residents, schools working with students, and even developers working with future tenants to provide and promote choices for travelers. <http://www.spartabus.com/Commuter%20Choice.htm> .

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Implementation began in 2005 and is continuing. Completion of this measure dependent upon SPARTA financial status.

Measure under Consideration

7c.Reduce vehicle miles traveled by developing efficient user-friendly transit systems. Priority A

- Integrate transportation planning with land use planning so public transit can make a comprehensive contribution to economic development and mobility;
- Remove local barriers to densification in downtowns, infill areas, and transit stations and corridors.

Description of Measure (A more detailed description will be included in the Early Action Plan.)

December 2005:

- An executive summary of the Intermodal Element addendum of the 2005-2025 Long-Range Transportation Plan is available at <http://www.spartanburgcounty.org/govt/depts/pln/spats/docs/excsum.pdf> . The Plan includes a Bicycle and Pedestrian Plan as well as an Alternate Mobility Master Plan.

June 2006:

- Spartanburg County has no zoning regulations in its non-incorporated areas, so influencing land use decisions is relatively difficult. However, the city of Spartanburg is actively attempting to increase residential development downtown, which would lead to less incoming traffic during the work week. In addition, the Spartanburg County Planning Commission staff is examining its subdivision regulations for the purpose of facilitating easier cross access between neighboring subdivisions.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Implementation began in 2005 and is continuing. Completion of this task dependent upon elected officials' willingness to incorporate more rigid land use regulations.

Measure under Consideration

8. Review and update air emission inventory for the Upstate.

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Ensure all industrial sources still operating. Review industrial sources for plant closures.
- Identify major sources of NO_x
- Map the locations of point sources (10% of point sources cannot be found).
- Map the specific locations and the area sources where coal is burned.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed. This information was included in the December 10, 2003 Early Action Compact Milestone on pages 20 through 37.

Measure under Consideration

9. Support SCDHEC in evaluating and seeking reductions from major sources based on modeling. Priority A

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Support NOx reduction strategies in the State Implementation Plan.
- Develop an Early Reduction Program with incentives for industrial facility (Tier Two Type emission NOx sources). This was completed and forwarded to SCDHEC on a previous updated progress report. The information allowed DHEC to having more accurate emissions inventory.
- Coordinate with Duke Power to determine what NOx reductions are planned for the Lee Steam Plant.

June 2004:

- The Williams Company has received DHEC permits to replace outdated “uncontrolled” compressors on the pipeline located in Duncan. Replacement of the compressors will begin in late 2004 and continue until late 2005. This will result in a significant NOx reduction for the upstate.
- Transcontinental Gas Pipe Line Corporation (Ttransco) Station 140, Moore, SC; Operating Permit 2060-0179. Transco has 14 natural gas fired internal combustion (IC) engines that collectively accounted for 3,822 tons of ozone season NOx emissions during 1997. Transco has submitted a construction permit application to put on NOx controls that will result only 1,261 tons of ozone season NOx emissions. The permit was approved on April 27, 2004.

December 2004:

- The Williams Company received DHEC permits to replace outdated “uncontrolled” compressors on the pipeline located in Duncan. Replacement of the compressors began in late 2004 and continue until late 2005. This will result in a significant NOx reduction for the Upstate.

June 2006:

NOx reduction at the Duke Power Lee Steam Plant

- Coal fired Unit #2 is now operating with the new NOx burners and final manufacture set up for acceptance is to be conducted in June 2006. Monitoring data indicates that the burner should at least meet the 0.23 #NOx/MMBTU's. Unit #2 will operate this entire NOx season with the Low NOx burners.
- Coal fired Unit #1 is currently off line. It will be coming back on line in July 2006 with new NOx burners installed. If the results are similar to Unit #2 Duke Power will also operate this unit the entire NOx season at the 0.23 #NOx/MMBTU's rate or lower. This unit will operate approximately 4-6 weeks and final set up will be conducted.
- Both units will complete final construction permit testing during June, July and August 2006. Duke Power has commitment to install the Low NOx burners on the 2 remaining coal fired units at the Lee Steam Plant. Unit #1 burners were installed April-May 2006 and start-up with Low NOx burners was May 19, 2006. Unit #2 burners were installed March-April 06 and start-up with Low NOx burners was April 15, 2006.

Estimate of Emission Reductions (if available)

- 2,000-4,000 tpy NOx from SIP Call
- Potential 500-1000 tpy NOx (Tier Two)

Implementation Date

Implementation began in 2004 and was completed in 2006.

Measure under Consideration

10. Develop a program to offer to purchase or repair smoking vehicles (known as cash for clunkers). Priority A

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Use funds generated from a license plate sales, registration fees, or license plate tax program to buy or repair high emitting vehicles from individuals.
- Purchase such vehicles from non-profit groups such as the Kidney Foundation, Goodwill, and Salvation Army when they have been donated as charitable gifts.
- Consider accelerated vehicle retirement (scrappage) programs to encourage vehicle owners to voluntarily retire their vehicles sooner than they would have otherwise.

2004 and 2005: no local action has taken place on this strategy.

June 2006: staff from the Air Quality Staff Advisory Committee will meet with Goodwill Industries, Salvation Army and Kidney Foundation representatives to discuss alternatives to re-selling clunker vehicles donated to these organizations.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2006. No action taken due to budget constraints.

Measure under Consideration

11. Ban open burning of on-site commercial clearing debris during ozone season (April to October). Priority A

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Use SCDHEC model to determine the most effective method to ban open burning.
- Discuss modeling results with all local governments to consider adoption.
- DHEC adopted regulations in mid 2004 restricting open burning.

December 2005:

- At the November 2005 Air Quality Steering Committee meeting, the Committee directed staff to coordinate with local governments to enforce DHEC's burning ban year-round.

June 2006:

- Spartanburg County will notify all fire departments, all municipal and county codes departments, the Spartanburg Home Builders Association and others about the ban.
- DHEC encourages Anderson, Greenville, and Spartanburg to actively notify all residents that the statewide ban is now in force and violations are punishable by law.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed on June 25, 2004 with the passage of regulation SC 61-62.2 "Prohibition of Open Burning" and continuing.

Measure under Consideration

12. Create incentives for the purchase of high efficiency and low emissions vehicles. Priority A

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Offer tax credits for vehicles with high efficiency gas consumption or low emissions.
- Offer tax credits for low mileage vehicles instead of high mileage vehicles

December 2004:

- Developing draft bill to offer reduced tax incentives for those purchasing low emitting vehicles.

December 2005:

- A bill titled "An act concerning the promotion of alternative use fuel, and hybrid propulsion system for transportation purposes" was submitted to the SC House of Representatives in January 2005. The bill is now in committee. In summary, the bill provides tax Credit for vehicles using alternative fuel or hybrid propulsion vehicles. The credit is allowed against the tax imposed by for the purchase of vehicles licensed in South Carolina which use, or which are converted within 120 days of purchase to use, clean-burning fuel. Specifically the intent of the bill will apply for income tax years beginning on or after January 1, 2004, but prior to January 1, 2013. The tax credit will be allowed for the purchase of an alternative fuel or hybrid propulsion vehicle, and for a motor vehicle that is converted to use alternative fuel, for the replacement of the power source with a power source that uses alternative fuel.

June 2006:

- On June 1, 2006 the Governor signed the H*4312(Rat #0371) General Bill. The ratified title is AN ACT TO AMEND THE CODE OF LAWS OF SOUTH CAROLINA, 1976, BY ADDING SECTION 12-6-3377 SO AS TO ALLOW A STATE INCOME TAX CREDIT EQUAL TO TWENTY PERCENT OF CERTAIN NEW HYBRID, FUEL CELL, ALTERNATIVE FUEL, OR LEAN BURN TECHNOLOGY MOTOR VEHICLE CREDITS ALLOWED AGAINST A TAXPAYER'S FEDERAL INCOME TAX LIABILITY.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Implementation began in 2005 and was completed June 1, 2006.

Measure under Consideration

13. Use land-use and transportation planning to improve air quality.

Priority A

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Include air quality measures as a part of the land-use and transportation planning process.

June 2005:

Spartanburg County's land use efforts include strategies that are represented in the county's comprehensive plan or unified land management ordinance. Some important strategies include:

- Development of a comprehensive urban forestry plan to include local tree ordinances, protection policies of urban open spaces, and landscape ordinances that utilize native plants.
- Revisions of the county's subdivision regulations to include conservation provisions to help not only retain natural resources, but add to the value and marketability of rural residential projects. This will also maintain balance between the rural setting and future growth and development.
- Amending the county's subdivision regulations to promote cluster housing development in rural areas, thereby minimizing land coverage for residential use. Establishing maximum lot size (recommended $\frac{1}{4}$ acre) for cluster subdivisions of a certain size, as opposed to minimum lot size, and allocating in perpetuity through lease, trust, common ownership, etc. up to 80 percent of such subdivisions to open, agricultural, or forested use, thus retaining rural, open character.

December 2005:

- An executive summary of the Intermodal Element addendum of the 2005-2025 Long-Range Transportation Plan is available at <http://www.spartanburgcounty.org/govt/depts/pln/spats/docs/excsum.pdf> . The Plan includes a Bicycle and Pedestrian Plan as well as an Alternate Mobility Master Plan.

June 2006:

- Spartanburg County has no zoning regulations in its non-incorporated areas, so influencing land use decisions is relatively difficult. However, the city of Spartanburg is actively attempting to increase residential development downtown, which would lead to less incoming traffic during the work week. In addition, the Spartanburg County Planning Commission staff is examining its subdivision regulations for the purpose of facilitating easier cross access between neighboring subdivisions. In addition, developers are beginning to see the interest in neo-traditional development, and some new developments are being built that incorporate several of these features.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005.

Measure under Consideration

14. Implement a program to encourage use of green power.

Priority A

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Capture emissions from landfills to produce green power, e.g., BMW is utilizing Palmetto Landfill emissions to produce energy for its plant.
- No local action has taken place on this strategy Implement a Purchase Green Power program when available. Green power is electricity generated by renewable resources like solar, wind, and even decomposing garbage in selected landfills. These resources are replenished naturally and minimize harm to the environment.

2003:

- BMW Manufacturing Corp. and its partners launched a \$12 million methane gas-to-energy project. Methane from the Palmetto Landfill will be used to power four onsite turbines and cogenerate electricity and hot water for the manufacturing plant in Spartanburg.

December 2005:

- In 2005, Blue Ridge Electric Cooperative in Anderson County has begun offering the purchase of "Green Power" to its members. The Green Power is generated by Santee Cooper, who is the source of power for all of the electric cooperatives in South Carolina.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005 and continuing.

Measure under Consideration

15. Promote route efficiency for delivery vehicles, trash collection etc.

Priority A

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Encourage business to consolidate distribution and collection routes to improve efficiency and reduce emissions from their fleets.
- Maximize route efficiency for public services such as garbage collection, delivery vehicles, and other vehicle trips to reduce fuel usage.

June 2006:

- Delivery companies currently use GPS mapping programs to map the most cost effective route to save gasoline.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed. No action taken by local government. Private sector fleets already maximizing fleet movement.

Measure under Consideration

16. Establish a clean air partnership with business and industry.

Priority A

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Encourage and coordinate alternate work schedules such as staggered work hours for business, industry and local governments.
- Establish park and ride lots serving perimeter counties along major corridors.
- Make the public aware of the park-and-ride concept: media could assist in publicizing which programs are available.
- Encourage carpooling/vanpooling as an option where employees living in the same area agree to ride to work together rather than to drive their individual vehicles to work.
- Consider parking facility controls that can include employers offering a tax-free transit/vanpool benefits and which limit the amount of parking and encourage carpooling, mass transit, etc.
- Encourage telecommuting.
- Adopt a Bus Program.
- Develop funding to be used for matching grants fund for several EAP Strategies.

June 2004:

- Staffs of Greenville County Planning Commission, Greenville Transit Authority and Greater Greenville Chamber of Commerce have begun joining effort to develop a feasibility study for Park-n-Ride program and/or Ride-Share program for Greenville County. Information will be shared with Anderson and Spartanburg counties.

December 2005:

- In November 2005, the Air Quality Steering Committee directed staff to begin addressing this strategy before the 2006 ozone season.

Estimate of Emission Reductions (if available)

Significant in the area of grants and local non- local tax funds generation.

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2004 and continuing.

Measure under Consideration

17. Establish an active public awareness campaign.

Priority

A

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Develop an editorial board to discuss air quality issues and development of a relationship with media.
- Use alert messages year round, not only during ozone season; Utilize public service announcement, newspapers, weather channels, and other media outlets to notify citizens of high ozone days.
- Utilize TV Channels to issue high ozone alerts using the crawl bar at bottom of TV screens.
- Encourage health organizations to sponsor ozone alerts in media.
- Enhance ozone awareness (Outreach-communication): assign a local agency to develop and implement a program to educate and motivate individuals to take actions to minimize ozone pollution. Includes a focused distribution of educational materials, dissemination of SCDHEC ground-level ozone forecast, increased media alerts to specific audiences, and includes action oriented components (i.e. ridesharing, telecommuting, etc.).
- Develop a campaign to encourage things such as refueling vehicles during evenings, not topping off tanks when refueling, using lawnmowers during evenings instead of during high ozone hours, using of electric lawn mowers.
- Develop a license plate program to generate revenue to implement the public awareness campaign.
- Develop awareness program on tax savings for purchasing high efficiency vehicles.

December 2004:

- Spartanburg County requested an Air Public Service announcement from SCDHEC.

June 2005:

- Berry Shoals Elementary School in Spartanburg County requested educational materials and held special science awards in March 2005.

June 2006:

- Distributed bookmarks to public at Spartanburg County libraries, and disseminated DHEC-supplied material in information kiosk in main Spartanburg County Administration Building.
- Spartanburg County plans to add \$30,000 to fund an Air Quality Coordination Effort (AQCE) in the Public Works Department. This proposal supports the County's efforts to cooperatively work with the State DHEC in the conservation and enhancement of air resources in a manner that promotes quality of life. Funding for the AQCE will permit the County to fully participate in particulate matter compliance efforts including the Early Action Ozone Compliance Compact. This project will be supported with fund balance for FY07, and supported as part of the operating budget in future years.

December 2006:

- o Spartanburg received a \$47,650 grant from the state Department of Health and Environmental Control to promote its recycling program. The campaign will use newspaper, radio, internet, cable television, and outdoor advertising to promote recycling. Promotions will point out that all city residents have to do to participate is call for a free bin.

- o The new Spartanburg County Air Quality Committee met on October 26, 2006. Department of Health and Environmental Control employees were present and have since been given a request for 10 actions/activities that are 'reasonable' for Spartanburg to pursue and will clearly demonstrate a meaningful effort to improve air quality.

June 2007:

- Spartanburg County formed an Air Quality Committee in October 2006, comprised of local businesses, government, and medical professionals. This group meets monthly, and is working to recognize local contributions to improving air quality, document on-going activities that benefit air quality, and plan and implement air quality initiatives in the County. Spartanburg is also a part of a larger Air Quality committee for the Upstate area.
- Spartanburg requested a presentation by DHEC of up to 10 ideas for improving air quality, and gave specific instructions that the suggestions not be limited by cost or difficulty to implement. That presentation was given in January 2007, and included information on Smart Growth principals and examples, transportation planning, as well as energy efficiency, fuel conservation, and public outreach through awareness campaigns and activities.
- The Spartanburg Air Quality Committee discussed the need to move forward on long term issues like land use and transportation planning now, so as to be ready for the future. Since these issues will involve processes that may take a long time, the committee is also looking at more immediate activities that will make a difference. Among the options being discussed are restricting idling of school buses, using biodiesel and ethanol in the county fleet, reducing energy consumption, as well as notifying City staff of high level ozone days.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2004 and ongoing.

Measure under Consideration

18. Promote research in energy efficiency at local universities, industries, energy companies, federal government, and other institutions that improve air quality.
Priority A

Description of Measure (A more detailed description will be included in the Early Action Plan.)

Establish programs to research energy efficiencies at local universities, e.g., Institute for Energy Studies at Clemson University.

Encourage business and industry to utilize the research from these programs to make the best decision concerning the purchase or upgrade of furnaces and boilers.

June 2004:

- Members of the Air Quality Staff Advisory Committee met with staff from the SC Institute for Energy Studies (SCIES) from Clemson University in late summer 2003. As a result, researchers from SCIES made a presentation to the Committee on November 18, 2003. The South Carolina Institute for Energy Studies (SCIES) based at Clemson University is a state-chartered research and development organization established in 1981. Its objectives are to promote energy research and development in and for the state; to transfer energy technology developed by others to South Carolina applications; to contribute to national energy issues in areas of excellence; and to promote statewide energy-education activities. (Source: <http://www.clemson.edu/scies/AboutSCIES.htm>). Researchers from SCIES became members of the Air Quality Staff Advisory Committee mailing list to transfer knowledge and latest undertakings on these efforts.

December 2005:

- Alternative flues: Clemson University chemical engineering professor Mark C. Thies has received an \$856,000 award from the Department of Energy (DOE) to develop more efficient processes for the centralized production of hydrogen by splitting water. The award was one of only three made nationwide under DOE's Nuclear Hydrogen initiative. In addition to Thies, the project team includes fellow Clemson David Bruce, John O'Connell from the University of Virginia and Max Gorenssek from Savannah River National Lab. The Clemson team will interact not only with U. S. engineers and scientists but also with those in France, Italy, and Japan, all of whom have teams working on related processes.
- Clemson University is developing the International Center for Automotive Research (Clemson-ICAR) in Greenville, SC. The ICAR project will be the premier automotive and motorsports research and educational center in SC. Research will emphasize development of innovative materials and processing technologies, which will enable the development of more efficient, and environment friendly vehicles, as well as electrical power generators.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005.

Measure under Consideration

19. Use of alternate fuels.

Priority B

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Direct local Planning Commissions to identify areas where alternative fuels will be best suited.
- Encourage the use of alternate fuels.
- Assist with establishing alternative fuel infrastructure for private sector clean fuel fleets. Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternate fuels include bio-diesel, electricity, ethanol, hydrogen, liquefied petroleum gas, methanol, and natural gas.
- Encourage a clean-fuel fleet program for centrally fueled fleets of more than 10 vehicles.

December 2005:

- Alternate Fuel: Clemson University Professor James G. Goodwin, Jr., chair of the Clemson's chemical and biomolecular engineering department, has also received a DOE grant for energy research through DOE's State Technologies Advancement Collaborative.
- Goodwin's work focuses on the performance of iron-based bimetallic catalysts that are crucial to synthesis of clean fuels, additives and lubricants derived from coal and biomass gasification.
- Clemson will lead a partnership that includes Louisiana State University, the S.C. State Energy Office, the Louisiana State Energy Office, North Carolina's Research Triangle Institute, Rentech and Sud-Chemie Inc. This grant reflects \$875,499 in DOE-STAC funds and \$294,499 in cost sharing by the industrial and governmental participants.

June 2006:

- Spartanburg County will begin purchasing alternative fuel vehicles for its fleet as older vehicles are replaced.
- There are currently 10 stations that offer Ethanol 85% and 6 stations that offer biodiesel within 25 miles of downtown Spartanburg. Stations can be located using the U.S. Department of Energy Alternative Fuels Data Center Website at <http://www.eere.energy.gov/afdc/infrastructure/locator.html>

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005 and continuing.

Measure under Consideration

20. Evaluate the use of High Occupancy Vehicle (HOV) lanes using existing lanes. Priority B

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Evaluate use of HOV on three (3) lane interstate highways.
- Show the advantages of designating HOVs.
- Pass laws establishing regulations on HOVs lanes such as the threshold in the number of passengers (perhaps two) in the vehicle using HOVs lanes and time of day for the lane to be designated as HOV (rush hour).
- Pass laws authorizing issuance of tickets for violations of HOVs lanes regulations, i.e., one-passenger vehicles using HOV lanes on designated hours.

December 2003:

- During its August 5, 2003, the AQ Staff Advisory Committee discussed and evaluated the implementation of this strategy. The Committee concluded that "HOV lanes work best where an interstate or a limited access arterial lead directly to major employment centers, usually within a central business district (CBD). With the exception of I-385 leading to the Greenville CBD, Upstate interstates (especially I-85) generally link the cities of Anderson, Greenville, and Spartanburg via peripheral routes, not conducive to the addition of HOV lanes. In addition, inter-county work trends do not show major volumes that would support car-pooled trips. Making the third lane of I-85 an HOV lane would severely increase congestion, emissions, and future accidents. The addition of new lanes would be cost prohibitive, and would not be allowed to revert to a single occupancy vehicle (SOV) status without reimbursement to the federal government."

December 2004:

- In June 2004, Planning Commission staff met with traffic engineers from SCDOT to discuss this strategy. Traffic engineers indicated that because traffic volumes on I-85 exceed 100,000 vehicles daily on the three lanes of the interstate, it was recommended that the Upstate consider converting one of the three lanes on I-85 or I-385 to a HOV lane. The offsetting increase in congestion in the two remaining lanes would predictably increase NOx emissions by an amount exceeding the any reductions gained from traffic moving in the HOV lane. HOV lanes work best when they are paralleled by at least 4 or more free flow lanes. No further actions are planned.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2004.

Measure under Consideration

21. Modify speed limits for optimum fuel efficiency.

Priority B

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Direct SCDHEC and SCDOT to take the lead role.
- Direct Planning Commissions to assist SCDHEC in modeling.
- Speed limits on the interstate highways in Spartanburg County have been established at 60 mph because the county is defined as urban by the US Census and the FHWA.

December 2005:

- The SPATS MPO was designated as urban by the US Census following the 2000 census and as a result speed limits on the interstate highways in Spartanburg have been established at 60 mph. According to the Department of Energy, gas mileage decreases rapidly at speeds above 60 mph.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005.

Measure under Consideration

22. Develop process for evaluating and minimizing impact of major projects such as shopping centers, schools, and subdivisions.

Priority B

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Study impact of post construction traffic flow.
- Study impact of construction activities.

June 2006:

Traffic impacts are monitored, both during and post construction, but process is not formalized.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005 and continuing.

Measure under Consideration

23. Community Schools to reduce vehicle miles traveled and encourage biking and walking for students and parents by encouraging smaller community-based schools that are integrated into neighborhoods. Priority B

Description of Measure (A more detailed description will be included in the Early Action Plan.)

- Eliminate minimum acreage requirements for school sites.
- Cap student populations per facilities.
- Require coordination among school boards and local governments to plan school sites and avoid conflicts with local planning goals.
- Favor restoration and construction of community-based small schools over new construction of remote mega schools.

June 2006:

- The South Carolina School District Reorganization and Realignment Act of 2006 was introduced in the House on January 24, 2006 and is currently residing in the House Committee on Education and Public works. This bill states that the Education and Oversight Committee shall study and examine the optimum size, including both geographic area and student population. A copy of this bill is available online at http://www.scstatehouse.net/sess116_2005-2006/bills/4488.htm
- Spartanburg County is awaiting the committee's recommendations and the manner in which they may take effect if this bill is enacted.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2006 and continuing.

Additional Information

- SECTION 203 SCHOOL SITES
203.1 South Carolina Code Ann. § 59-23-250 (to be codified at Supp. 2003) eliminates minimum acreage requirements for public school sites. However, school districts must receive approval from the South Carolina Department of Education prior to property acquisition or additions on existing properties.
203.2 The State Department of Education encourages districts to consider acreage for school sites as established by the Council of Educational Facility Planners International (CEFPI).

Additional Activities taking place in and around Spartanburg County:

24. U.S. Green Building Council South Carolina Chapter

Description of Measure

The newly formed Upstate branch of the U.S. Green Building Council's South Carolina Chapter aims to lead the charge in educating people on green building and sustainable design. The organization's first official meeting, held April 19, 2007, drew nearly 40 participants.

Implementation Date

April 19, 2007

26. Green Building Conference

Description of Measure

Clemson University Emerging Green Builders held the Second Annual GreenExpo and Conference Feb. 27-28 at the Madren Conference Center on campus. The event includee a best-practices workshop, tours of Clemson's LEED-certified facilities and a daylong exposition with product representatives, architects, contractors and service companies from across the Southeast, according to a statement from the university. The GreenExpo, sponsored by Clemson University's Emerging Green Builders and the South Carolina U.S. Green Building Council, featured recent advances in products and practices of commercial and residential Green Building.

Implementation Date

February 27-28, 2007

27. Student Renewable Energy Conference

Description of Measure

The fourth annual Student Renewable Energy Conference conference took place February 16-18, 2007 at Clemson University in Clemson, SC. Students and community members from across the Southeast joined in Clemson, SC February 16-18 to help build the youth movement for clean, just energy here in the Southeast. The SSREC brought together hundreds of students from across the region for a weekend of education, inspiration, trainings, networking, fun and more.

Implementation Date

February 16-18, 2007

28. Bicycle Friendly Community

Description of Measure

Spartanburg is on the cusp of gaining full "Bicycle Friendly Community" status from the League of American Bicyclists. Last year, the community received an honorable mention in its quest for the designation that's only been awarded to 60 communities, of the more than 140 communities that applied nationwide. The honorable mention designation allowed Andy Clarke, executive director of the league, to meet with Spartanburg and the five other communities that received honorable mentions to explore what options they could take to give them a higher designation. Clarke held a workshop in February with about 20 city, county and Department of

Transportation workers and cyclists. Spartanburg should have 25 new bikes racks and more than three new miles of bike lanes in place before the end of summer.

Implementation Date

Through 2007

29. Tree City USA

Description of Measure

Tree City USA encourages municipalities and areas to have strong urban forestry programs. The Tree City USA program is sponsored by The National Arbor Day Foundation in cooperation with the USDA Forest Service and the National Association of State Foresters. Anderson County has been a Tree City for 3 years. Spartanburg has been a Tree City for 25 years. Greenville has been a Tree City for 24 years. Members of the West Greenville Neighborhood Association will be planting trees Friday as part of a revitalization project, said association president Vardrey Fleming. The trees will be planted in a new park, which is located at the corner of Queen and Rochester Streets. Tree expert Jimmy Walters of the S.C. Forestry Commission will teach about the trees and the proper way to plant.

Implementation Date

Through 2007

30. Local 'green' magazine debut

Description of Measure

Root is a "green-friendly" quarterly publication focused on Spartanburg. The premier issue tackles "green" stories such as how to handle the challenges of building an environmentally friendly home as well as highlighting organizations and individuals who have positively effected social change in Spartanburg. The free magazine does not contain any advertisements. Patterson said he and a few friends funded the first publication out of pocket but he hopes to find sponsors, grants or donations to continue the project.

Implementation Date

2007

31. Official opening of the Duncan Park Trail.

Description of Measure

The trail allows bicyclists and pedestrians to connect to the newly built Rail Trail, which is part of the 12-mile Hub City Connector. The Connector is part of the 425-mile S.C. Palmetto Trail. The 10-foot-wide path runs from the Duncan Park Lake Dam to the playground, next to the baseball stadium, and is two-thirds of a mile long. There are four phases for the expansion project, although funding is available only for the first three. The fourth phase, which would cost about \$30,000, would add 588 feet of new trail behind Duncan Park Stadium.

Implementation Date

2007

32. "Energy Partner of the Year" Award

Description of Measure

The U.S. Environmental Protection Agency has named BMW Manufacturing and its partner, Durr Systems., as the Landfill Methane Outreach Program "Energy Partner of the Year." Currently, 63 percent of BMW Manufacturing's energy is provided by the renewable resource, saving the company at least \$1 million a year. It also reduces emissions of carbon dioxide, a greenhouse gas, by about 60,000 tons and provides enough energy to heat 15,000 homes a year.

Implementation Date

2007

33. Spartanburg Recognized as the First City in South Carolina to Receive Bicycle-Friendly Community Recognition

Description of Measure

The City of Spartanburg has been nationally designated as a Bronze Level, Bicycle-Friendly Community from The League of American Bicyclists and proclaimed as the first city in South Carolina to receive such an honor. The City of Spartanburg's Bicycle & Pedestrian Advisory Committee was established in February 2006 under the direction of Mayor Barnet. Its chartered purpose is to promote policies, practices and attitudes to increase safety and accessibility of bicycling and walking for both transportation and recreation throughout the City of Spartanburg.

The Bike Town Initiative was created in 2004 with the goal of earning Spartanburg the designation as a Bicycle Friendly Community by 2007. It is funded by Mary Black Foundation and directed by Partners for Active Living.

The Bicycle-Friendly Community Campaign is an awards program of the League of American Bicyclists that recognizes municipalities that actively support bicycling. On September 29, 2006, the City of Spartanburg was the first in the state to receive Honorable Mention from the Bicycle-Friendly Community Campaign.

Implementation Date

September 25, 2007

34. Wofford Recyclers

Description of Measure

In a program called "Wofford Recyclers," part of the campus' efforts for "going green," bicycles will be used and enjoyed by the campus community – students, faculty and staff. The bicycles will be available as needed in various locations around campus. The Wofford College Campus Union, Campus Safety Officers and Intramurals and Recreation Office have purchased 30 new bicycles for campus use. A blessing of the bikes and first campus ride will take place November 7th.

Implementation Date

November 7, 2007

35. Regional Transportation Plan Presentation

Description of Measure

A small map of highway improvements recommended in the plan is shown below. Proposed mass transit, bicycle, and pedestrian improvement plans will be presented as well. More

information is available by calling Greenville County Planning Department at (864) 467-7270, or visit our website <http://www.greenvilleplanning.com> and pick the "transportation planning" link. A Public Presentation of the Regional Transportation Plan was held Tuesday, August 21. Presentation: 1:00 p.m., Drop-in Open House: 2:00 to 6:00 p.m.

The Greenville-Pickens Area Transportation Study Planning area includes: cities of Easley, Fountain Inn, Greenville, Greer, Liberty, Mauldin, Pickens, Simpsonville, and Travelers Rest; and counties of Anderson, Greenville, Laurens, Pickens, and Spartanburg

Implementation Date

August 21, 2007

36. "Safe Routes to School" grant

Description of Measure

SCDOT approved funding to develop comprehensive bicycle and pedestrian programs as part of the "Safe Routes to School Program." Partnering with SCDOT, local governments, parents, local law enforcement and educators, each school and community will develop a plan that encompasses both infrastructure and non-infrastructure components. One of the purposes outlined in the funding legislation for this program includes facilitating the planning, development, and implementation of projects and activities that will reduce traffic congestions, fuel consumption and air pollution in the vicinity of primary and middle schools.

Selected schools receive up to \$200,00.00. Spartanburg County - Lone Oak Elementary School and Pine Street Elementary School were both awarded the "Safe Routes to School" grant for the 2007 funding cycle.

Implementation Date

2007 funding cycle, Press release September 28, 2007

37. Methane from landfill powers BMW plant

Description of Measure

The BMW plant in Greer is getting more than 60 percent of its energy from the methane gas generated at a nearby Waste Management landfill. The operation, in cooperation with the Texas landfill firm Waste Management, captures the methane gas, which otherwise would escape into the atmosphere, and converts it to energy.

Waste Management, which has gas-to-energy projects in more than 20 states, announced recently that it intends to create about 60 additional renewable energy facilities within five years — including two more in South Carolina. The two new plants will be located at landfills in Dorchester and Jasper counties.

The BMW project and Waste Management's gas-to-energy plant in Kershaw County generate nearly 16 megawatts of electricity, or enough to power at least 15,000 homes for a year.

The methane gas from the Spartanburg County landfill travels nine miles by pipeline to the BMW Manufacturing plant, where it fuels turbines that generate electricity for the facility. About 63 percent of the plant's energy comes from the landfill gas project. The methane used as a fuel saves the company at least \$1 million a year. It also reduces emissions of carbon dioxide, a greenhouse gas, by about 60,000 tons annually.

Implementation Date

September 26, 2007 News Article out of Greenville

38. Upstate stakeholder meeting**Description of Measure**

Met with business leaders and County employees to discuss continuing the effort initiated for Ozone EAC and expanding that to include PM mitigation measures. The leaders of the upstate committee will continue to work on ozone and PM reduction measures.

Implementation Date

September 28, 2007

39. Local Government Partnerships/Outreach Greenville County Council**Description of Measure**

Greenville County Council passed Resolution No. 1272 encouraging EPA to maintain the current NAAQS for ground-level ozone and to continue the early action compact program. The resolution requested EPA to support local governments in their attempt to improve air quality at the local level and also reaffirmed Greenville County Council's commitment to improving air quality in the upstate region. The resolution also encourages the citizens and businesses of Greenville County to act in manner that will preserve and protect the quality of the air in the community. The resolution was submitted to the EPA Docket in response to the proposed 8-hour Ozone standard. Resolution passed and submitted as comments to the proposed 8-hour Ozone Standard.

Implementation Date

October 2, 2007

40. County Council Meeting**Description of Measure**

Improving air quality for Spartanburg residents was a primary focus at the July 16, 2007 county council meeting. The county appointed a resident-driven Air Quality Advisory committee last summer to scope out the issues and create an action plan to clean up Spartanburg air. The committee has worked closely with DHEC to develop a list of air quality improvement suggestions, which includes changes to the county government's activities and operations, policies, regulations and ordinances and educating the community.

Implementation Date

July 16, 2007

41. Coca-Cola Recycling Plant**Description of Measure**

The "bottle-to-bottle" plant -- it recycles collected bottles into new bottles -- will be built in Spartanburg, S.C. Coke's plastic bottles currently contain about 10 percent recycled PET. The company has a goal of 30 percent by 2010 and hopes to eventually approach 100 percent.

Implementation Date

September 2007

Enclosure 4

December 2007

FINAL EAC Progress Report Document Statewide EAC Activities



Enclosure 4
South Carolina's 8-hour Ozone Early Action Compact
Statewide EAC Activities
December 2007

A Notice of Drafting (NOD) was published in the South Carolina *State Register* on August 23, 2002, expressing our desire to pursue an early action plan that provides for ambient air in South Carolina that meets the more restrictive federal standard prior to the deadline(s). The NOD requested those interested in participating in an early action plan for ground-level ozone provide that interest in writing to the Department. Due to the timing of events and the requirements of the State's Administrative Procedures Act, a second drafting notice was published in the *State Register* on April 25, 2003, the purpose of which was to extend the comment period.

The South Carolina Department of Health and Environmental Control (Department) established a large stakeholder group consisting of federal, state and local government officials, environmental groups, citizens groups, business, industry and private citizens. On August 26, 2002, correspondence was issued to the stakeholders seeking active participation in the development of an Early Action Plan (EAP) regarding ground level ozone reduction in South Carolina and providing a list of informational forums scheduled throughout the state. Surveys were a part of the informational forum and included an opportunity for attendees to request active participation in the EAP process. Copies of sign-in sheets, meeting agendas, and survey forms were included as Attachment 4 of the June 2003 Progress Report.

Local stakeholder participation was obtained through the involvement of the county administrators and/or county councils. On November 12, 2002, the South Carolina Association of Counties issued correspondence to each county council chairman and county chief administrative officer stating support of each county's participation in South Carolina's 8-hour Ozone Early Action Compact (EAC). Also on November 12, 2002, the Department issued correspondence to county administrators seeking active stakeholders for participating in the EAC. This correspondence included a working draft copy of the EAC. As a result, Department staff participated in numerous county council meetings and other discussions (telephone and electronic mail) with county officials seeking local participation in the EAP process. On December 12, 2002, Department staff presented at the yearly meeting of county administrators sponsored by the South Carolina Association of Counties. At the request of several counties and the Association of Counties, the Department again issued correspondence to the county's seeking participation.

On December 20, 2002, the Department submitted to EPA the Early Action Compacts received as of that date, signed by the respective local participant and DHEC representative, R. Lewis Shaw, Deputy Commissioner for Environmental Quality Control. On December 27, 2002 and again on December 31, 2002, the Department submitted additional compacts received from local participants. As of December 31,

2002, forty-five of the forty-six counties in South Carolina elected to become active stakeholders in the South Carolina Early Action process.

One condition set by EPA Region 4 for York, Chester, and Lancaster counties participation in the EAC, requires South Carolina continue to actively participate in the Charlotte Region Integrated Air Quality Management Pilot Project. This project has since been renamed “Sustainable Environment for Quality of Life” (SEQL). In addition to the milestones established in the Early Action Compact, South Carolina and North Carolina were required to develop a specific memorandum of understanding (MOU) detailing how this requirement will be met. On March 14, 2003, Mr. R. Lewis Shaw, Deputy Commissioner for Environmental Quality Control at the Department and Mr. William G. Ross, Jr., Secretary for the North Carolina Department of Environmental and Natural Resources signed the MOU, included as Attachment 8 of the June 2003 Progress Report.

The Department continues to be an active partner in the SEQL project. As a part of the SEQL project, the Catawba Council of Government (COG) partnered with the Department and other stakeholder groups to compile sample ordinance language, policies, best management practices (BMPs) and program guidance for the development and implementation of SEQL action items geared to the local governments within the SEQL project area. This information should prove helpful to local governments in their 8-hour ozone early action efforts. In December 2004, a CD with these documents was provided to all participating areas. The information is also available on the Department’s website.

South Carolina was not required to enter into a formal agreement with the state of Georgia in regards to emission reduction strategies for the Upper and Lower Savannah areas. However, representatives from the state of Georgia attended the Lower Savannah Council of Government meeting held on February 6, 2003. Representatives from EPA also attended this meeting. In addition, Department staff attended a meeting held on February 21, 2003, in Augusta, Georgia, with local and state government officials from Georgia and South Carolina and EPA to discuss the impact of the early action process and emission reduction strategies for that area.

In 2006, South Carolina has joined forces with the State of Georgia to address air quality issues in the Augusta-Aiken-Edgefield area. While the area is attaining the 8-hour ozone standard there is much concern over the fine particulate matter standard. A stakeholder group consisting of representatives from the Georgia and South Carolina state environmental agencies as well as the Environmental Protection Agency Region 4 office, local government, industry and concerned citizens is being formed. The focus of this stakeholder group will be emission reduction efforts to address air quality. These efforts should help the area maintain the ozone attainment status as well as address fine particulate matter concerns. For additional information on the stakeholder meetings refer to the Aiken and Edgefield local progress reports.

In February 2007 another stakeholder group was formed in the Town of Irmo located in Lexington County. While Lexington County is currently attaining the 8-hour ozone standard, there is concern over the fine particulate matter standard. The goal of this effort is to involve local stakeholders in reviewing local monitoring data and surrounding activities in an effort to implement strategies to reduce emissions. The stakeholder group includes local industry, local government, and recreation and school officials and was expanded to include neighboring Richland County as well as the Central Midlands Council of Governments (COG). Other counties and local governments within the Central Midlands COG will be invited to participate. For additional information on the stakeholder efforts refer to the Lexington and Richland County local progress reports.

The Department held a public meeting on the Early Action State Implementation Plan (SIP) submittal on August 18, 2004. The meeting was held in Columbia and broadcast around the state at local Department Environmental Quality Control offices to allow participation from all over the state. The Draft Early Action SIP was published in the *State Register* on October 22, 2004, and the public hearing was held on November 22, 2004. As deemed appropriate, based on comments presented during the public comment period, the Department finalized the Early Action SIP and submitted it to EPA on December 29, 2004. A complete copy of the submittal may be found at http://www.scdhec.gov/eqc/baq/html/eap_sip.html.

The modeling analysis completed as a part of the EAC SIP submittal demonstrates that all monitors in South Carolina will be attaining the 8-hour standard without the inclusion of measures beyond the national and regional programs already finalized. The Protocol for Early Action Compacts endorsed by EPA states that “after all Federal and State controls that have been or will be implemented by December 31, 2007, are accounted for in the modeling, the local area will identify additional local controls, as necessary, to demonstrate attainment of the 8-hour ozone standard on or before December 31, 2007.”

While the early action process was developed to provide local areas the option to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated by implementing emission reduction strategies that make sense for their respective area, South Carolina also realized that statewide emission reduction efforts would be necessary to achieve and maintain the 8-hour ozone standard.

Among the key control strategies that were developed as part of the EAC process, were revisions to state wide regulations for the purpose of providing additional reductions in ozone precursors. R.61-62.5 Standard 5.2, Control of Oxides of Nitrogen, and R.61-62.2, Prohibition of Open Burning, were published in the South Carolina *State Register* on June 25, 2004, and became effective upon publication. For more information on these regulations refer to Number 4 – Regulatory Initiatives of the State Activities enclosure.

While information pertaining to the amount of NO_x and VOC reductions that are expected as a result of these regulations is available, it is important to note that modeling indicates that all monitors will be attaining the 8-hour standard by 2007 even without these additional measures. However, the reductions from these regulations are

quantifiable, permanent and will ensure that South Carolina obtains cleaner air sooner and helps ensure continued maintenance of the 8-hour ozone standard in the future.

Another significant control strategy that was developed through this process is the voluntary commitments that the Department has negotiated with several of the state's largest existing industrial sources to reduce and/or limit their NO_x emissions. These negotiations were the direct result of the EAC process as are the NO_x reductions that will result from them. These voluntary commitments are described in more detail in Number 8 – Other Point Source Reductions of the State Activities enclosure.

The Department believes that the sum of all these efforts will have a very real and positive impact on the health and environment of South Carolina. The EAC process has allowed the state of South Carolina to achieve reductions in ozone precursors from a variety of sources that otherwise would not have occurred and this was all done on a timeframe that was sooner than what would be required through the traditional nonattainment designation process. In addition, as a result of the local EAC plans and local efforts, awareness of air quality issues has been raised to a level that would not have been possible without the EAC process. People from around the state, who have never previously had any significant exposure to air quality issues, have participated in the EAC process and helped make decisions about improving air quality. This is perhaps, above all else, the reason why the South Carolina Wildlife Federation chose to honor the "SCDHEC Early Action Compact SIP" with their 2005 South Carolina Wildlife Federation Air Conservation Award, an award that has only been bestowed six times since 1970 (see Appendix 15 of the SC EAC SIP).

Beginning with June 2003 to present, this report represents the eighth bi-annual progress report. In addition, local plans identified the emission reduction measures under consideration by the participating county. The South Carolina EAC SIP was submitted December 2004 and supplemental information to the EAC SIP was submitted on April 20, 2005. Each of these submittals contains information updating local and state measures supporting the EAC process and can be found on the Department's website (<http://www.scdhec.gov/eqc/baq/html/eap.html>).

This document includes highlights of activities in the deferred nonattainment areas as well as statewide activities.

2006 Early Action Compact Summit - Participation in the recent 2006 Early Action Compact (EAC) Summit held in Columbia, South Carolina on August 16-17, 2006 was tremendous. As the first of its kind, it attracted nearly 300 stakeholders from 5 different states including representatives from 24 counties and 7 Councils of Government. Participants included representatives from federal, state and local governments as well as industry representatives, environmental organizations as well as private citizens.

Topics covered included energy conservation, diesel retrofits, land use planning, alternative fuels, commuting options and multi-modal transportation, innovative education and outreach, health impacts/lifestyle and finding the funding. Key speakers

included Bill Wehrum, Acting Assistant Administrator for Air & Radiation, U.S. Environmental Protection Agency, and Mark MacLeod, the Director for Special Projects in Environmental Defense's Climate and Air program working out of the Washington DC office. As has been our experience with the EAC process over the past years, direct involvement by stakeholders is a critical key to overall success with initiatives for improving air quality. The EAC Summit initiative certainly proved this point again. The exchange of ideas, information and interest experienced during the sessions and other opportunities, including breaks and meals was very beneficial.

These benefits will help us all to reach our objective of attainment for the 8 hour ground-level ozone standard in the near future and reinforces a process for addressing other air quality issues. Our over-arching goal of "Cleaner Air Forever" for South Carolina will be achieved through the cooperation and collaboration of the very individuals and organizations that were represented at the EAC Summit.

To expand our outreach to those who did not make it to the EAC Summit we have created a website where electronic copies of the EAC Summit materials can be downloaded. Information on this site includes speaker bios, presentations, additional information, Department staff, registered attendee contact information, list of vendors and contact information, a list of sponsors and event photos.

Emission Reduction Strategies – As a result of the EAC process and the desire to ensure air quality in South Carolina meets the federal standards, the Department has expanded outreach activities to include both ozone and PM_{2.5}. The current focus is to maintain the 8-hour ozone standard through the 2007 Ozone Season, thereby returning the deferred nonattainment areas to attainment and to develop strategies to help reduce emissions that contribute to PM_{2.5} levels. Local governments are being asked to be proactive (stay ahead of the standards); strengthen local measures; and, take action ("Kick things up a Notch"). Myra Reece, Renee Shealy, and John Litton, BAQ Bureau Chief and Assistant Bureau Chiefs, have met with Anderson, Greenville, Spartanburg, Richland and Lexington Counties over the last several months. As a result, work in progress is being recognized. Effort is being made to work with the EAC contacts in all counties to ensure that all activities are being captured for inclusion in future EAC progress reports.

Climate Change Discussions – The Bureau of Air Quality (BAQ) has been engaged in climate change discussions with air agencies in other southeastern states including North Carolina, South Carolina, Georgia, Tennessee and, more recently, Virginia since early 2006. Discussions between the states have focused on climate change activities in the respective states, particularly North Carolina's Legislative Commission and Advisory Committee processes. BAQ has distributed some internal outreach with regard to climate change and is incorporating climate change into outreach materials and presentations. BAQ's Education and Outreach Section has responded to numerous requests from teachers for classroom visits addressing climate change, and has addressed similar requests that have been received from community groups.

State Planning for Greenhouse Gas Mitigation

On February 16, 2007, Governor Sanford issued an Executive Order creating the Climate, Energy and Commerce Advisory Committee (CECAC). Department staff compiled background materials to include studies, current actions, and a draft list of potential participants that will comprise five technical work groups and the decision-making body, the CECAC. The process will follow the Center for Climate Strategies-facilitated study and adoption of carbon reduction policies. It is anticipated to take a year or more to complete. The first CECAC meeting took place May 3, 2007.

To develop a Climate, Energy, and Commerce Action Plan as directed by the Governor's Executive Order, the CECAC is tasked with completion of the following specific planning recommendations:

1. Review and approval of a current and comprehensive inventory and forecast of greenhouse gas (GHG) emissions in South Carolina from 1990 to 2020;
2. Development and recommendation of a comprehensive set of specific policy recommendations and associated analyses to reduce GHG emissions and enhance energy and economic policy in South Carolina by 2020 and beyond;
3. Development and recommendation of a set of recommended statewide GHG reduction goals and targets for implementation of these actions; and
4. Issuance of recommendations in the form of a final report to the Governor by June 2008.

Governor Sanford's CECAC includes:

Sen. John Courson, South Carolina Senate / Chairman
Dana Beach, Executive Director, South Carolina Coastal Conservation League
Crandall Close Bowles, President and CEO, Springs Mills
Jim Byrd, Deputy Director, Market Services Division, South Carolina
Department of Insurance
Lonnie Carter, President and CEO, Santee Cooper
John Clark, Director, South Carolina Energy Office
Barry Falin, Vice President and General Manager of Carolina Operations, Voridian
Bob Fledderman, Manager, Environment and Regulatory Assurance, MeadWestvaco
John Frampton, Director, South Carolina Dept. of Natural Resources
Reggie Gallant, Vice President, Southern Zone, State Farm
Dr. Paul Gayes, Director, Center for Marine and Wetlands Studies, Coastal Carolina
University
Emerson Gower, VP, Southern Region, Progress Energy Carolinas
Rep. Ben Hagood, South Carolina House of Representatives
Ladd Hall, Vice President and General Manager, Nucor Steel
Rep. Bill Herbkersman, South Carolina House of Representatives
Joe James, CEO, Corporation for Economic Opportunity

Bob King, Deputy Commissioner, South Carolina Department of Health and Environmental Control
E. Bruce Morgan, Mayor, City of Union
Dr. Marcus, Newberry Former Dean, MUSC College of Medicine
Mike Olbrich, Plant Manager, BP Chemical
James E. Rogers, Chairman, President and CEO, Duke Energy Corporation
Bob Scott, President, South Carolina Forestry Association
Lanneau Siegling, Past Chairman, Hospitality Association of South Carolina
David Smalls, President, Walterboro-Colleton Chamber of Commerce
Steve Smith, Executive Director, Southern Alliance for Clean Energy
John Tiencken, Former CEO, Santee Cooper
Bill Timmerman, CEO, SCANA
Sen. Danny Verdin, South Carolina Senate
Hugh Weathers, Commissioner, Department of Agriculture
Johnny Williamson, CEO, South Carolina Soya, LLC
Brad Wyche, Executive Director, Upstate Forever

The Climate Registry

South Carolina joined with 31 other states as a founding member of The Climate Registry (TCR). BAQ staff is setting out a strategy for recruiting participation by regulated and non-regulated entities. On August 3, 2007, BAQ gave a presentation on TCR to the state Chamber of Commerce Technical Committee. About 60 business representatives, including manufacturing, electric utilities, attorneys and consultants attended.

The Climate Registry was established by states, tribes and provinces in North America as a mechanism to measure greenhouse gas (GHG) emissions consistently across industry sectors and borders. The Climate Registry encourages voluntary early actions to increase energy efficiency and decrease GHG emissions. The Climate Registry accounting infrastructure supports a wide variety of programs that reduce GHG emissions including voluntary, regulatory and market-based programs.

On October 4, 2007, Joel Levin, California Climate Action Registry's Vice President for Business Development, provided an overview of the Climate Registry. Mr. Levin is the California Climate Action Registry's Vice President for Business Development. He is responsible for educating participants from all economic sections and regions to register and certify their greenhouse gas emissions. Representatives from state and local governments, including Lexington County, as well as business and industry attended the discussion. Eight businesses nationally have signed Statements of Intent to join the registry as of November 14, 2007, none in South Carolina. However, South Carolina has set a goal of having three businesses sign up by January 15, 2008.

Local Government

BAQ is collecting data from the City of Columbia to determine base year emissions inventory. BAQ is also assisting the cities of Greenville and Rock Hill to implement their US Mayors Climate Protection Agreement.

The City of Columbia's Climate Protection Committee is drawing up sustainability protocol for businesses to earn "green" certification. On September 24, 2007, the committee sponsored a successful **Green Business Summit** that focused on waste- and emission-reducing best management practices. The Green Business Summit kicked off the development of a protocol for businesses requiring a step by step implementation of practices. Completion earns the certification decal and public listing. As a follow-up, a "Green Business Boot Camp" was held on November 29, 2007. In this intensive, interactive workshop, Midlands businesses and nonprofit organizations developed Green Business plans that met the membership requirements of the City of Columbia's Green Business Program.

Businesses that develop a Green Business plan and submit it to the City of Columbia's Green Business program are awarded with a "City of Columbia Green Business Member" window decal and recognized by the City as a member of the Green Business Program.

Business Initiatives

The Home Builders Association of Greater Columbia formed the "Green Business Council of Greater Columbia" in August 2007. The Green Business Council of Greater Columbia will work to educate the public and constructions companies about what makes a green home green. The council will offer home builders a process by which they can certify their houses as green.

Energy Efficiency - The South Carolina Summit on Energy Efficiency (EE Summit) was held on April 30, 2007, in Columbia, South Carolina. The EE Summit brought together 175 participants representing a broad range of interests – electric and gas utilities, regulators, legislators, consumer and environmental advocates, industry, universities, schools, and regional transmission organizations. For additional information, see Number 11 – Energy Efficiency of this document.

Ground-level Ozone Awareness Week – The Governor of South Carolina declared April 1-7, 2007 as Ground-level Ozone Awareness Week. This is the eighth consecutive year this declaration has occurred.

Commuting Options – New "Take a Break from the Exhaust" participants for the 2006 Ground-level Ozone Season include:

The County of Lexington
Central Midlands Council of Governments
Winthrop University

York Technical College
Bowater – York County
Citi Group – York County
Springs Industries – York County.

In 2006 the goal for the Department's Bureau of Air Quality (BAQ) was to reduce over 125,000 miles. The BAQ exceeded the goal by almost 25,000 miles. The reductions from the 2006 TABFTE program for participants within the State of South Carolina were:

Miles Reduced:	289,889 miles
VOC's Reduced:	1,076 pounds
NO _x Reduced:	684 pounds

The total reductions from the 2007 Ozone Season TABFTE program for the State of South Carolina only:

146, 991 miles reduced
592 pounds of VOCs reduced
411 pounds of NO_x reduced

Legislation - Members of the Upstate EAC counties (Anderson, Greenville, and Spartanburg) in coordination with the Palmetto State Clean Fuels Coalition and the South Carolina Chapter of the Sierra Club, supported statewide legislation that will provide tax incentives for purchase of alternative fuel and hybrid-propulsion vehicles and help reduce costs and provide tax credits for production and infrastructure for alternative fuels. On June 1, 2006, Governor Sanford signed an act to amend the Code of Laws of South Carolina, 1976, by adding Section 12-6-3377 so as to allow a state income tax credit equal to twenty percent of certain new hybrid, fuel cell, alternative fuel, or lean burn technology motor vehicle credits allowed against a taxpayer's federal income tax liability.

Four bills were introduced into the 2007 South Carolina Legislature. These four bills are collectively known as "Energy Independence for South Carolina's Future." The bills address the dependence of foreign energy, the rising costs of energy on South Carolina, the effects of a building's indoor environment and protecting the environment.

Senate Bills 376 and 362 implement aggressive sustainable construction standards for public buildings and schools, using a high performance rating system known as LEED. The Sustainable Investment Act (Senate Bill 377) creates tax incentives for private developers to use "green" standards in constructing new or renovated commercial buildings. The bill also creates an expedited permitting process for developers employing LEED standards. The fourth bill (Senate Bill 368) requires the state's Fleet Management Program to select hybrid, plug-in hybrid, bio-diesel and Flex-Fuel Vehicles when price, performance and quality are comparable to traditional vehicles. This measure will reduce the state's spending while minimizing the vehicle emissions.

In May 2007, a South Carolina Legislative House Transportation and Roadways Subcommittee amended and approved H. 3780 – “Transportation Performance and Accountability Act of 2007.” This bill provides that the Department of Transportation will implement the Traffic Congestion Reduction Program whose purpose is to minimize traffic congestion along the state’s highways in order to promote economic growth within South Carolina.

Also in May 2007, a South Carolina Legislative House Ways and Means Economic Development, Capitol Improvement, and Other Taxes Subcommittee approved H.3153. This bill establishes the Mass Transit Advisory Council to advise the Deputy Director for Mass Transit for the Department of Transportation on the mass transit needs and the specialized transportation needs of all areas of the State.

A school bus replacement law passed in June 2007 requires the state to provide funding to replace one-fifteenth of the school bus fleet each year. The law also requires the state to use biodiesel in the buses.

Senate Bill S243, The Hydrogen Infrastructure Act, was amended to include the key components of the Energy Freedom and Rural Development Act (H3649). S243 passed the South Carolina Senate and House of Representatives but was vetoed by the Governor; however, the Senate and House of Representatives overrode the Governor’s veto. This bill advances the state’s goal to create a thriving hydrogen and fuel cell cluster in South Carolina’s economy and promotes the use and production of biofuels in South Carolina.

Alternative Fuels Bill (S.243)

On June 19, 2007, the SC House and Senate overruled the governor's veto of the Hydrogen Bill (S.243). The passage of this monumental energy bill will provide millions of dollars starting in 2008 for tax incentives, sales tax rebates, and incentive payments to encourage the development of renewable fuels and alternative energy in South Carolina. Additionally, H.3749 was passed that included a provision to establish a Renewable Energy Grants and Loans program. The following are a list of incentives:

Beginning July 1, 2007:

- The SC Renewable Energy Infrastructure Development Fund includes a grant program providing planning grants to aid in the time and resources required to submit grant proposals and matching grants for research and development and demonstration projects. The program will also include a low-interest revolving loan program designed to assist entities building renewable energy projects;
- The SC Hydrogen Infrastructure Development Fund provides grants to promote the development and deployment of hydrogen production, storage, distribution, and dispensing infrastructure and related products and services;
- The biofuels marketing program will promote public awareness;
- Free ethanol and biodiesel testing for SC producers became available;
- An expansion of the solar system tax credit to include electricity generation;

- An increased tax credit for production of ethanol and biodiesel from alternative feedstocks, such as switchgrass, wood, waste cooking oil, animal fats, and algae;
- The requirement that school buses use B20 where feasible; and
- The requirement that construction of large state-owned buildings be “Green Buildings” and meet certain nationally recognized building standards.

Beginning October 1, 2007:

- Sales tax exemption for equipment operation, production, distribution, manufacture, or research of hydrogen or fuel cells. Also includes building materials and machinery used by a research district.

Beginning January 1, 2008:

- Income tax credit of up to \$2,000 for plug-in hybrid vehicles purchases;
- Tax credits of up to \$100,000 for research and development of renewable fuel feedstocks best suited for South Carolina, such as cellulosic ethanol and algae-based biodiesel;
- Income tax credits for contributions made by a taxpayer to the South Carolina Hydrogen Infrastructure Development Fund;
- Tax credits for the purchase and installation of equipment to produce electricity and gas from biomass resources including wood and wood waste, agricultural and animal waste, sewage, landfill gas, and other organic materials; and
- A requirement that all state-owned diesel pumps provide a minimum of five percent biodiesel.

Beginning July 1, 2008:

- Tax rebates up to \$300 for the purchase or lease of vehicles that are flex-fuel (ethanol), hybrid, electric, or fuel efficient with an EPA city fuel economy of 30 mpg or greater;
- Incentive payments for biomass energy users ranging from one cent per kilowatt-hour or 9 cents per therm.

Beginning July 1, 2009:

- Five cents per gallon incentive payments will be available for retailers selling B20 biodiesel and E85 ethanol.

Outreach Efforts – During the first 6 months of 2006, information was sent to the EAC contacts including:

- Governor’s Proclamation and the Departments news release for Ozone Awareness Week
- Information on national bike month and related activities
- Information of Car Care Awareness Month and related activities
- Information for National Air Quality Awareness Week (May 15 – 19, 2006)
- Earth Day 2006
- EnviroFlash
- 2006 Ground Level Ozone Season (April 1 – October 31)
- Ozone Action Tool – survey to assess and promote measures that reduce ozone.

Information during the last 6 months of 2006 provided to the EAC contacts included:

- Information and news release on the 2006 SC EAC Summit held in Columbia, August 16 and 17, 2006
- Information and press release on open burning alternatives
- Information on an Emissions Reduction Campaign
- Information on the Energy Star Change a Light, Change the World Campaign 2006
- Climate Change 101: Understanding and Responding to Global Climate Change
- Information on the free showing of Kilowatt Ours: A Plan to Re-Energize America – shown in Clemson, Columbia, Florence and Charleston in September 2006
- Information on grant opportunities to include an EPA grant workshop that will be held in January 2007 in Greenville, Columbia and Augusta.

Information during the first 6 months of 2007 provided to the EAC contacts included:

- South Carolina Educational Television Explores South Carolina's Alternative Fuel Options - CNN's John King Hosts "Securing Our Future: From Farm to Fuel" on Friday, April 13, 2007 at 9 p.m.
- Information on April 22nd marking the 37th observance and celebration of Earth Day.
- Information and opportunities for the 2007 Ground-Level Ozone Season was sent to on March 29, 2007. Opportunities included the Mobile Source Outreach Assistance Grant offered by the EPA and the 2007 National Air Quality Awareness Week (April 30-May 4). Information was included on EPA and NOAA's National Weather Service compiling federal, state and local activities for inclusion on their website. The air quality project, "Mow Down Pollution" events, implemented by Richland and Lexington Counties on April 21, 2007, and hosted by York County on April 28, 2007, were included as opportunities. Attached to the e-mail was a copy of Governor Mark Sanford's proclamation for Ground Level Ozone Awareness Week (April 1-7).
- Information on the Ground-level Ozone Season and the new forecast region for SC sent February 27, 2007. Information included an announcement that forecasting for ground-level ozone will begin April 1 this year as a result of the Department observing elevated levels of ground-level ozone during the month of April 2006 and that the Department will be adding a new forecast region. The CATAWBA region will include York, Chester, and Lancaster counties. The Department is adding two counties to the existing PEE DEE forecast region. Marlboro and Dillon counties will join the other counties in the Pee Dee regional forecast in 2007.

Outreach Efforts - Car Care Awareness Month (April 2006) – In recognition of Car Care Awareness Month, the Department and Richland and Lexington counties organized a vehicle maintenance check event in April. The State Museum, Ben Satcher Ford and Pope Davis Tires helped sponsor this free event on April 1, from 10 a.m. until 2 p.m. at the State Museum on Gervais Street. A team of certified technicians made suggestions for improving vehicle safety and gas mileage. The technicians also performed vehicle

checks and raised citizens' awareness about how proper maintenance of a vehicle can help to reduce air pollution and protect the public's health.

The goal of the event, held on April 1, 2006, was to increase the target audience's awareness about the importance of car maintenance in preserving good air quality. To reach this goal, several objectives were set, and our ability to meet those objectives is documented herein. The objectives were: to have 100 cars come through the car check lanes, create a replicable project that can be implemented in other areas across the state, and to educate drivers and volunteers who participated in the event about the importance role vehicle maintenance plays in preserving good air quality. The target audience was drivers local to the downtown Columbia area.

Outreach Efforts – “Mow Down Pollution” Event (April 21, 2007) - Lexington and Richland Counties in conjunction with local non-profit Keep the Midlands Beautiful, and the Department's Bureau of Air Quality (BAQ) planned and implemented the first lawn mower exchange in South Carolina. To encourage Columbia-area residents to do their part to "Spare the Air," the lawn mower exchange was held at the State Museum to Mow Down Pollution! The lawn mower exchange coincided with other activities the museum hosted to celebrate Earth Day. The event collected empty, functional gas powered lawn mowers and offered a discount between 30 percent and 55 percent off MSRP on Neuton cordless electric mowers. To compliment the lawn mower exchange, other partners were invited to exhibit Greenscaping information at the event. These partners helped extend the impact of the exchange by highlighting complimentary lawn and garden practices that help protect air quality.

Outreach Efforts - October 2007 - U.S. Walk to School Day - At 141 plus, South Carolina had more schools participating in this anti-obesity, enviro-friendly campaign than any other state except California.

Outreach Efforts – October 2007 - A push to educate consumers about the benefits and advantages of plug-in hybrid electric vehicles in North and South Carolina was kicked off in Charleston with the launch of the Plug-In Hybrid Coalition of the Carolinas. The Plug-In Hybrid Coalition of the Carolinas debuted at the annual meeting of the Southeastern Governmental Fleet Managers Association. During a session about plug-in hybrids attendees were asked to commit to the Plug-In Carolinas Challenge.

Grant Assistance – January 2007 - South Carolina and Georgia sponsored a timely opportunity, in cooperation with staff from the U.S. Environmental Protection Agency's (EPA) Region 4 Office. In advance of upcoming funding opportunities for various types of projects to address air quality issues through the EPA, a workshop was held for each of three areas of our state to provide information that may help local entities to improve their proposals for applying for these funding grants.

Staff from the Department's Bureau of Air Quality and the Georgia Environmental Protection Division worked with local government contacts in the Greenville, Columbia and Augusta/Aiken areas to host these workshops. The schedule for these workshops was as follows:

- 1) January 16th.....1:00 - 4:00 p.m. for the Augusta/Aiken areas
Location: University Prompt Care Building - Suite 202
3121 Peach Orchard Road; Augusta, GA 30906
- 2) January 17th.....1:00 - 4:00 p.m. for the Central Midlands area
Location: Eau Claire Print Facility
3901 Ensor Avenue; Columbia, SC
- 3) January 18th.....9:00 a.m. - 12:00 p.m. for the Greenville/Spartanburg areas
Location: Greenville County Council Chamber
301 University Ridge; Greenville, SC

The workshop agenda included:

Explaining EPA's competitive grant process, to include

- how to find EPA grant funding opportunities
- how to prepare a strong project proposal
- how to submit your proposal
- how EPA selects projects
- what happens after a project is selected.

The workshop was open to all interested parties. Organizations that are eligible to compete for EPA grant funds, includes state, local and tribal governments, universities and nonprofit organizations.

Mass Transit - The Central Midlands Council of Governments (CMCOG) is taking on a planning study for commuter rail transit services in the Central Midlands region. It will examine three potential commuter lines from Batesburg-Leesville, Camden and Newberry into downtown Columbia. The CMCOG region being studied includes the counties of Richland, Lexington, Newberry and Fairfield. Three public meetings were held during the first 6 months of 2006, to present preliminary planning and receive public feedback. Feedback was also accepted by mail fax, website and email.

Mass Transit - December 2007 - Mass transit is expected in South Carolina's Upstate under a plan by the city of Travelers Rest that would convert the abandoned 10-mile-long, northern segment of the Greenville & Northern Railroad into a "Carolina Swamp Rabbit Tram Trail." The plan is to convert the rail line, which runs from Greenville to Travelers Rest, into a multi-use trail that can be used for recreational and motorized transit. A 7-foot-wide microbus would travel a 10-foot wide asphalt strip constructed over the railroad bed, carrying passengers between downtown Greenville and downtown Travelers Rest. The plan is an intermediate step in response to U.S. Department of Transportation statistics showing that Georgia and South Carolina lead all states in the number of rural residents dependent on passenger rail as their only public transportation. The long-term goal of the plan is to preserve the integrity of the rail corridor for eventual conversion to a commuter rail line, while attempting to have the area's transportation infrastructure keep pace with expanding growth.

School Busses – In the spring of 2006, the S.C. Department of Education announced a \$500,000 Clean School Bus USA grant to help reduce school bus pollution. The state plans to replace a dozen 22 year old school buses, upgrade 132 other buses and convert 1,220 buses to B-20 fuel. Idle reduction devices will be installed on 200 buses.

In 2006, the S.C. Department of Education contracted to purchase 630 - 2006 model buses and 82 - 2007 model buses to replace 25 percent of the 1989 and older buses in the fleet. The Department of Education also ordered two - 2007 model plug-in diesel-electric hybrid buses that will be delivered in April 2007. The Department of Education has agreed to work with the Department to assign these new buses to routes in areas of the state where they will have the most benefit to air quality.

Through funding from a Supplemental Environmental Project, the Department of Education awarded a contract in 2006 for diesel particulate filters to be installed on approximately 100 school buses.

The Department of Education has worked with the State Procurement Office to establish a statewide contract for B20 biodiesel. The biodiesel will be available to purchase at the state contract price for all political subdivisions in the State. The Department of Education plans to convert the entire State fleet of school busses (over 5,700 busses) to B20 in 2007.

A school bus replacement law passed in June 2007 requires the state to provide funding to replace one-fifteenth of the school bus fleet each year. The law also requires the state to use biodiesel in the buses.

School Busses - December 2007 - South Carolina Department of Education - School Bus Initiative

Two plug-in hybrid electric buses with a 2007 emission compliant diesel engine fueled with ultra-low sulfur diesel (soon to be ultra low sulfur 20% biodiesel) were placed into service in South Carolina. One bus was placed in Richland County and the other in York County. A press release was issued on September 27, 2007, and a press conference was held on October 11, 2007.

School Busses - December 2007 Clean School Bus USA Grant - The South Carolina Department of Education submitted a grant proposal for the 2007 U.S. Environmental Protection Agency Clean School Bus USA grant, in conjunction with the Southeast Diesel Collaborative. Initial review indicates with some minor modifications, the proposal will be accepted and the Department of Education will be awarded the grant. The grant will provide 500 school buses with crankcase ventilation filters and anti-idling hardware. The grant will also allow the Department of Education to create a computer program that will use GPS data to identify areas of excessive idling. The Department of Education has also requested additional funding for anti-idling awareness education.

School Busses - December 2007 School Bus Ridership Grant Proposal - Staff in the BAQ's Division of Air Planning Development and Outreach submitted a proposal to

EPA's Mobile Source Outreach Competition Grant for 2007. This proposal is intended to work with an elementary and middle school in local areas (up to 3 areas) of the State to determine mechanisms to increase the utilization of school buses and carpooling to and from school by students. This project will include working with parents, students, faculty, and school administration to encourage better use of school buses for transportation.

Southeast Diesel Collaborative – The Southeast Diesel Collaborative (SEDC) is a new partnership between US EPA Region 4, State and local air quality programs, and other public and private entities and is intended to promote opportunities to reduce diesel emissions. The collaborative is modeled after other regional diesel collaboratives, which have proven beneficial for addressing a significant source of mobile source air pollution. On April 26, 2006, a Memorandum of Understanding (MOU) in support of the Southeast Diesel Collaborative was signed by Mr. William G. Gallardi, Assistant Bureau Chief, BAQ.

Throughout 2006, the SEDC continued to create partnerships and disseminate information for reductions of diesel emissions. The SEDC held a South Carolina stakeholders meeting in August 2006 in Columbia. A SEDC emerging fuels conference was held in Atlanta in December 2006. Through the SEDC the Department has been contacted by equipment vendors to exchange ideas on increasing sales for diesel retrofit devices. The Department is made aware of the products offered and the manufacturers gain insight into what areas of the state the equipment will have the most benefit to air quality.

In March 2007, the SEDC conducted a workshop for identifying available funding sources to implement clean diesel programs. Two Department employees attended the workshop and received the training materials and contacts to pursue funding for diesel emission reduction programs.

In June 2007, the SEDC held its second annual partners meeting in Atlanta, Georgia. The meeting provided an opportunity for the eight Region 4 state environmental commissioners, including South Carolina's, to establish a vision for future diesel emission reduction projects.

December 2007 - BAQ staff continue to participate in routine conference calls with the SEDC partners.

Alternative Fuels - State Ports Authority (SPA) - The Department continues to work with the SPA to reduce diesel emissions. In March 2007, the SPA signed a memorandum of agreement with the Department to partner in reducing port-related diesel emissions. In late September 2007, the SPA switched to cleaner burning, ultra-low sulfur diesel fuel ULSD three years prior to the EPA mandate (2010).

Alternative Fuels - Railroads – Diesel Emissions - The Department has initiated programs to address diesel emissions from railroads in South Carolina. During October

and November 2007, the Department participated in a national and a regional conference to seek reductions in diesel emissions. The Department is working with CSX Railroad to implement some of those strategies in Charleston. In November 2007, the Division of Public Railways (South Carolina Department of Commerce) announced that all locomotives will be using ultra low sulfur diesel (ULSD) fuel five years earlier than the EPA mandate (2012). The Division of Public Railways uses an estimated 26,000 gallons of diesel fuel annually.

Alternative Fuels - October 2007 - Washington Savannah River Co. gave \$175,000 to the Center for Hydrogen Research in Aiken for a hydrogen-fueled truck to demonstrate the viability of the alternative fuel. The center also announced plans for a refueling station to provide hydrogen for the truck and other hydrogen-powered vehicles. The Hydrogen Internal Combustion Engine vehicle, or HICE, is based on a full-size 2007 Chevrolet Silverado 1500 pickup. The truck will be powered solely by hydrogen. Options for the refueling location include either the Savannah River Research Campus or at a site along I-20.

Energy Efficiency - July 2007 – S.C. Hydrogen Infrastructure Development Act
The S.C. Hydrogen Infrastructure Development Act, establishing a \$15 million fund to promote the development of a hydrogen economy was passed by the Legislature. While funding for the Hydrogen Infrastructure Development Act was not included in the state budget, legislators did include other critical funds. Through the University of South Carolina budget, EngenuitySC will get \$100,000 to help with preparations for the National Hydrogen Association meeting to be held in Columbia in the spring of 2009. A National Hydrogen Association forum, “Hydrogen Uses in the Military,” was held in Columbia this October. USC also got \$1 million for continued funding for hydrogen and fuel research. The S.C. Hydrogen and Fuel Cell Alliance got \$367,640 in recurring funding. The Hydrogen Infrastructure Development Act is recognition by the Legislature that nurturing a hydrogen and fuel cell cluster in South Carolina can have tremendous economic impact.

Energy Efficiency - August 2007 – Bi-Lo to promote green grocery bags - Reusable market bags have been around for years however, this is new for Bi-Lo, the Mauldin (Greenville County)-based grocer. Bi-Lo is piloting its green bag effort in about 80 of its more than 220 stores here and in Georgia and Tennessee. The Super Bi-Lo at the Village at Sandhill (Richland County) is participating in the pilot. Bi-Lo sells two versions of the green bags: a woven recycled plastic for 99 cents and a canvas one, priced at \$2.99. Store management at the Columbia Super Bi-Lo said each time shoppers use any reusable bag, they receive a 5-cent per bag credit when they check out each shopping trip. It doesn't seem like much at first - but after 20 uses, a woven plastic bag pays for itself.

Energy Efficiency - October 2007 - Santee Cooper announced they will quadruple to 40 percent by 2020 the amount of electricity made from non-greenhouse gas sources and created a new department to oversee the effort. The state-owned utility serves most of Horry and Georgetown counties either directly or indirectly, with about 2 million

residents statewide receiving power from it. The company also began purchasing excess power from customers who make electricity with solar panels and other generators.

Transportation Conformity – Currently, the only area subject to transportation conformity in South Carolina is the Rock Hill-Fort Mill Area Transportation Study Metropolitan Planning Organization (RFATS MPO) in York County. EPA has promulgated and proposed a number of revisions to the Transportation Conformity Rule since the time that South Carolina's SIP revision incorporating the South Carolina Transportation Conformity MOA was published in the *Federal Register* (69 CFR 4245) on January 29, 2004. On May 2, 2007, EPA published in the *Federal Register* a proposal to amend the transportation conformity rule to make it consistent with the CAA, as amended by SAFETEA-LU. The Department has initiated the process for revising South Carolina's Transportation Conformity SIP to incorporate amendments to the CAA as a result of SAFETEA-LU. Interagency partners have been contacted and will be involved in drafting the necessary revisions. The process will encompass stakeholder meetings, to include involvement of MPOs, government entities, and the general public. The first meeting was held on November 2, 2007. Interagency partners participating, included EPA Region 4, US DOT (FHWA and FTA), SC DOT, DHEC, and several MPOs.

While only one area in South Carolina is subject to transportation conformity, involving all interagency partners provides the opportunity to discuss mobile source issues and concerns with areas that may face the tough challenge of meeting the proposed 8-hour ozone standard. The Department is using this opportunity to encourage continued partnerships focusing on emission reduction strategies.

Community Outreach - The State of South Carolina agreed to conduct the project and submitted a request for funding which was included in their Performance Partnership Grant (PPG). Region 4 approved their request and awarded the funds (\$142,500) in the PPG for the community activities in Greenville. South Carolina has conducted four community meetings (10/27/05, 11/14/05, 12/05/05, and 01/09/06) to establish and start the Greenville project. The next meeting is scheduled for February 13, 2006. There are five communities or neighborhoods involved in the meetings and project (Greater Sullivan Community Neighborhood Association, Sterling Neighborhood Association, West End Neighborhood Association, Haynie-Sirrine Neighborhood Association, and the Green Avenue Area Civic Association). The participants have selected a name for themselves – "Breathing for Life Community Coalition (BfLCC)." There is a good exchange of information and interaction between the participants at the meetings. This is due in large part to the organizational and community relationship skills of the State's staff and the active participation of the residents, community liaisons and pastors in the communities. State staff participating are from Greenville's environmental quality control and health department offices, the Bureau of Air Quality (BAQ) and EQC Administration.

While there is a wide range of possible projects which would include reducing toxic pollutants (e.g., diesel retrofits, indoor air quality projects), household hazardous waste reduction projects, anti-idling campaigns, integrated pest management programs, and or

other projects from which the community can select, they have elected to start by having an essay, logo and drawing competition with the children in the five neighborhoods. The subject of the competition is "Breathing for Life – Your Health and the Environment." In addition to this project, the community would like to hold an "educational forum" (date to be announced). The forum will highlight winners of the environmental essay, logo and drawing contest. It was suggested that a Region 4 representative, possibly Beverly Banister, be present at the forum. She is a champion of the project would be an inspiration to the children who would be participating. The long term purpose of BfLCC is to find funding to implement the selected projects and to establish a permanent, ongoing effort to continue reductions of toxics risks to the community.

The Air Toxics Assessment and Implementation Section of the BAQ is overseeing the performance under the PPG related to the effort for the Greenville Project. When BfLCC determines that they want or need the Region to actively participate, the Section will provide information, technical support, training, and risk analysis as requested. In addition, EPA Region 4 as a primary author of the "How To" manual that walk communities step by step through performing an environmental project, has provide information on the availability of this document so that it can be used when it is determined that the concepts and processes should be applied in this project.

Additional meetings that have been held are February 13, February 27, March 13, March 27, April 24 and May 22 and June 19, 2006. Extra meetings were held in February and March 2006 to plan for the education forum.

An educational forum was held on April 8, 2006. Winners of the essay and drawing contests were announced and presented their prizes. A logo is being developed for the Coalition as a result of the logo drawing contest. In addition, education was provided on asthma, weatherization and air pollution. Guest speakers were Carol Kemker from EPA and Miss Crystal Garrett, Miss Lexington, SC, who gave her testimony on how she has managed living with asthma. A community member gave the history of the BfLCC. A feedback questionnaire was used for evaluation of the event. Comments were very positive and the community would like to have more informative events like this.

Future projects that are being planned are a household hazardous waste collection day in conjunction with a gas can exchange and providing EPA-certified woodstoves in homes that are using old woodstoves. Preliminary discussions have taken place with a school official about implementing school bus anti-idling programs in Greenville schools. Other partners that are helping with these projects are Greenville City and County officials.

Additional BfLCC meetings were held on July 31, August 28 and September 25, 2006. Knowing this project funding would end on September 30, 2006, discussion began at the June meeting on sustainability of the "Breathing for Life Community Coalition." BfLCC members agreed to remain organized and continue working as a group on other projects. Sustainability discussion continued at the July meeting where members discussed concerns they have about their community and what is good about their community. They also discussed what they see as "accomplishments" since the beginning of the project and what would they like to see accomplished. This discussion continued at the

August and September meetings. The local health and environmental offices will continue to facilitate meetings and/or discussion as requested by the BfLCC. The BAQ will continue to provide assistance as needed.

With the goal of reducing air toxics, the BAQ entered into a contract with the City of Greenville to assist with air toxic reduction projects. The following projects were completed:

- August 12, 2006, a Household and Hazardous Waste (HHW) Collection day and gas can exchange were held. The Solid Waste Division and Recycling Coordinator for the City of Greenville were instrumental in organizing this event. This was the first HHW Collection day for the City of Greenville and it was possible through this EPA funding. Ray Gregory from Region 4 EPA attended the event. It was very successful with the following results:
 - o 250 cars came and dropped off items;
 - o Approximately 5,000-6,000 cans containing gasoline, paint, household cleaners, pesticides, etc. were collected. Other items collected were batteries, used tires, propane cylinders, and a container of mercury;
 - o 200 environmentally-free gas cans were distributed; and,
 - o Residents appreciated the effort and hope to have another event.
- City of Greenville staff met with the five neighborhood association presidents to identify homes in their neighborhood that needed their heating source repaired or replaced to a more efficient and less polluting one. Criteria used in identifying the homes were those using wood or coal, low-income elderly and disabled, and those who have medical conditions that warrant a different heating system. As a result, 20 homes were selected to have their heating source repaired or changed out. The City of Greenville contracted with local companies to assist with the work. These homes were also weatherized with storm windows, insulation and weather stripping and smoke and carbon monoxide detectors were installed. The following list provides details of the heating source repairs and/or change outs:
 - o Two homes were heating with wood and had EPA-approved gas packs installed.
 - o Two homes heating with kerosene because the gas furnace was broken had EPA-approved heat pumps installed.
 - o One home was heating with kerosene because the oil furnace was broken and had a new EPA-approved oil furnace installed.
 - o Two homes were heating with a small inefficient gas heater and had EPA-approved Rinnai vented heaters installed.
 - o One home was using several kerosene heaters and had a Rinnai vented heater installed.
 - o Two homes were heating with kerosene because their gas pack was broken and new gas packs were installed.
 - o Five homes were using a gas or oil unit that needed servicing and all were serviced to be more efficient.
 - o Two homes with old gas furnaces that ran a lot and did not heat well had new gas furnaces installed.

- o One home with an old gas unit that was not efficient had a new gas heater installed.
 - o One home had an old woodstove that was changed out to an EPA-certified woodstove.
 - o One home using a gas pack that did not work well and could not be repaired had a new gas pack installed.
- 115 self-venting kerosene cans were ordered and distributed in the five neighborhoods to homes still using kerosene for heat.

In addition to the PPG funding for this community outreach project, Greenville County government applied for a grant and was awarded funding to pilot an anti-idling program in a local school as well as other outreach programs on improving air quality.

Department Activities – The Department continues to leading by example:

- a. BAQ staff for the past few years has adopted a strip of lawn in front of the Sims/Aycock Department Headquarters building and use an electric mower for cutting. Working in coordination with the facilities maintenance staff from the State Budget and Control Board, cutting this area with a gas-powered mower is discontinued during the ground-level ozone forecast season. A fact sheet has been made and often distributed to customers who inquire about our activity. In addition a sign is placed in the area to convey the message of this lawn area being adopted by staff using an electric lawn mower.
- b. BAQ staff worked with the EAC contacts from Lexington County to create a sign that has been placed in front of the main Department Headquarters building to advertise the ground-level ozone forecast. Motorists traveling the busy corridor of Bull Street to I-277 are able to view the forecast sign each week day.
- c. Inter-bureau workgroup on open burning. Staff from the Department's Bureau of Land and Waste Management and Bureau of Air is collaborating on the development of training tools for staff to improve consistency in dealing with open burning issues around the state. This includes interpretation of the current Agency regulations for both bureaus, messages regarding alternatives to open burning and communication/coordination with other agencies that may have some involvement with open burning (e.g., SC Forestry Commission, Fire Marshalls, etc.). Also, another objective of this workgroup is the development of an awareness campaign to convey messages regarding open burning regulations and alternatives for disposal (e.g., recycling, composting, etc.). These messages will be tailored to specific audiences based on waste streams. The Bureau Chiefs for the BLWM and BAQ have been presented this outline and are going to help identify resources for implementing these objectives. Additional information may be found in Number 4 – Regulatory Initiatives of the State Activities enclosure.
- d. Project Discovery - Working with the state Public Education Television (ETV) agency, staff from all EQC bureaus, including the BAQ worked to develop an information segment on various aspects of the environment. BAQ staff, along with region staff developed a script and message related to alternatives to open burning. This series of messages aired on May 5, 2006 and was broadcast to

students in schools statewide over the ETV channel. Here is a part of the message communicated regarding this show:

Project Discovery - A special program to highlight how students can help take better care of our environment will be our May 2006 edition of Project Discovery. Presented from Hilton Head Island as part of the ETV Road Show, Project Discovery host Tabitha Lewis and co-host, Paula Randler of SC DHEC leads students on a behind-the-scenes view of the waste water treatment plant located there to see just how this important life-sustaining resource is cleaned and returned to the environment. In addition, students will learn about the importance of keeping a healthy coastline. Picking up after a day at the beach is more than just a beautification issue and something everyone can do to help. We'll also learn about the importance of recycling and how we can take better care of our air by not burning trash. And, a trip to the landfill is also on tap to see where all that stuff we cannot recycle actually ends up.

Presented in cooperation with the Department, this program is designed for grades 1-8 and our toll-free phone line (1.800.763.ETV1) will be open for calls from students during the program. Join Project Discovery for the last program for this school year and be more prepared to enjoy clean water and air this summer as we pay more attention to how we impact our world around us and how we can help keep it clean for all to enjoy and appreciate both today and in the future. Please alert your teachers to this special program and plan to tape it for your school.

- e. Emissions Reduction Campaign for 2007 - To further encourage the development and promotion of local initiatives, BAQ Outreach staff began researching the possibility of implementing a combined media and community outreach campaign focused on ground-level ozone in May 2006. The objectives were to engage local government in the priority areas (Anderson, Spartanburg, Greenville, Aiken, Richland, Lexington and York Counties) to develop local air quality initiatives with a significant potential to reduce ground-level ozone; to assist the efforts of local government entities who already have such plans in place; to promote ozone awareness and/or related events through television and radio announcements; and to encourage the public, through outreach events as well as media promotions, to voluntarily reduce vehicle emissions throughout the ozone season beginning in 2007.

Prior to the EAC Summit in August 2006, all the South Carolina COG contacts received a message informing them of the campaign and encouraging them, as well as their county and municipal governments, to participate. Activities which followed the EAC Summit included a conference call to discuss strategies and activities and follow-up discussions, via telephone and email, to those who were unable to participate. A sample radio script about proper vehicle maintenance, which the Department would produce internally at little or no cost, was also sent out for feedback from stakeholders interested in holding a car care event.

More recently, a Clean Air Initiative has been implemented at the BAQ level which entails fostering relationships with local governments and working proactively with all regions of the state to improve air quality and to prevent significant deterioration. BAQ staff members have been assigned to specific COG areas for this purpose. As this initiative has gained momentum and staff members are becoming more closely involved with their assigned areas, re-evaluation of the campaign has shown that the Clean Air Initiative has the potential to accomplish virtually all of the same goals as the campaign. As such, the campaign planning is being suspended until further developments under the Clean Air Initiative demonstrate potential for the campaign to enhance the statewide effort now underway.

- f. Bike to Work Events (2007) – May is National Bike Month, and Friday May 18, 2007, was “Bike-to-Work Day.” The Department’s State Nutrition and Physical Activity Consultants, Division of Injury and Violence Prevention, and Bureau of Air Quality encouraged Department staff in Columbia to participate in a “Bike-to-Work Day” ride coordinated by Central Midlands Council of Governments and the City of Columbia, and/or to bike to lunch together. The Columbia/CMCOG ride started at Boyd Plaza in Columbia (NW Corner of Hampton & Main). The ride took about 20 minutes for the average rider. Maps and routes were provided.

Because bicycle commuting helps reduce ground-level ozone pollution, global warming emissions and other pollutants, it is an air quality strategy being pursued around the state. Cycling has the potential to provide significant societal benefits in other aspects of life such as health, resource consumption, and the cost of transportation. Additional information may be found in Number 2 – Commuting Reduction Programs enclosure.

g. **“Safe Routes to School” Grant – 2007 funding cycle**

The South Carolina Department of Transportation (SCDOT) approved funding to develop comprehensive bicycle and pedestrian programs as part of the "Safe Routes to School Program." Partnering with SCDOT, local governments, parents, local law enforcement and educators, each school and community will develop a plan that encompasses both infrastructure and non-infrastructure components. One of the purposes outlined in the funding legislation for this program includes facilitating the planning, development, and implementation of projects and activities that will reduce traffic congestions, fuel consumption and air pollution in the vicinity of primary and middle schools. The schools for the 2007 funding cycle are: College Park Elementary School, Berkeley County; Alston Middle School, Dorchester County; Willow Drive Elementary School, Sumter County; North Vista Elementary School, Florence County; Wren Elementary/Middle School, Anderson County; Lone Oak Elementary School and Pine Street Elementary School, both of Spartanburg County; Rosewood Elementary School, Richland County; College Park Middle School, Berkeley County; Fairfield Middle School, Fairfield County; Stono Park Elementary School and Hunley Park

Elementary School, both of Charleston County. Each of the selected schools will receive up to \$200,000.00.

- h. The **Bull Street Partners Carpool Group** provides employees of the Bull Street area offices of three State Agencies (Department of Health and Environmental Control, Department of Mental Health and Department of Social Services) an opportunity to form carpools, thereby saving money and fuel, reducing pollution and reducing the stress of commuting.

Additional information may be found in Number 2 - Commuting Reduction Programs enclosure.

Press Coverage – Recent coverage includes:

- On March 25, 2005, WIS-TV in Columbia aired a feature story highlighting alternative fueled vehicles. The story specifically covered the actions that the Department and local government were taking to utilize alternative fuels.
- On Friday, April 15, 2005, The State newspaper wrote a story on one TABFTE partner and his decision to give up his car for a bike and public transportation. This generated interest in more bike and pedestrian paths and public transportation in the Columbia area.

Additional listings of press releases may be found in Number 1 – Outreach and Education of the State Activities enclosure.

1. Outreach and Education

Public involvement through education and outreach plays a major part in the success of an early action program whether it is a statewide program or a local program. The Air Education and Outreach Section (AEOS) is responsible for increasing awareness, educating, and encouraging behaviors for improving air quality among various segments of the population in South Carolina. As a result of the early action process, several fact sheets were updated and new fact sheets created. This information is available by contacting the office and is also available on the Department website (www.scdhec.net/baq/eap.html). This information has been provided to local areas to assist in the local education and outreach efforts.

School aged youth have been targeted with programs such as the following:

- Ozone Action Class – An interactive program focusing on how to reduce ground-level ozone forming air pollution through the outreach efforts of local schools; and,
- B2 @ School (Breathe Better Air at School)- a project designed to involve students, their parents, teachers and administrators in assessing idling activity on school grounds, and determining mechanisms for reducing idling by vehicles and/or school buses. Mechanisms include awareness activities, policy support/development and tools such as no-idling signs.

Resource materials in place or that have been developed for public outreach, include the following:

- “Driving Smarter for Tomorrow” brochure
- “Ozone Action Class” brochure
- “Care About Air” coloring book
- “Spare the Air” bookmark
- “Share the Road: Getting around in South Carolina” brochure (08/06)
- “Clean the Air*Save Gas: Turn the Key Be Idle Free!” poster (10/06)
- Facts about ethanol as an alternative fuel (05/07)
- VEHICLE MAINTENANCE AND AIR QUALITY (05/07)

Refer to Enclosure 2-1 for the ethanol facts and vehicle maintenance document.

October 31 - November 2, 2007 - Two AEOS staff members participated in the Annual South Carolina Science Council conference held in Myrtle Beach, South Carolina. Staff presented information to teachers on an air lesson plan that may be utilized in the classroom, as well as staffed an exhibit where materials for use with school-aged youth were available. Information about AEOS programs (e.g., B2-an anti-idling project) was also made available.

The “GreenScene Magazine” published by the Department’s EQC Outreach Committee, provides a one-stop shop of the environmental education programs offered by the Department. The first issue published in the fall of 2002, contained an article entitled “Ozone is Not Just Another Season.” This committee is responsible for numerous

projects that promote environmental education, both internal and external to the Department. One of the projects is a series of monthly environmental e-mails sent to all Department staff. The May 2003 message was "Clean Air Month" and informed staff that Governor Sanford proclaimed May 1-7 as **Ozone Awareness Week**. A copy of the magazine, the message, and the proclamation were included in a previous progress report. Other activities include Earth Today Broadcast, Earth Camp, and, Kids Day events.

New graphics were introduced on the BAQ's web site May 1, 2003. The existing ozone forecast web page was revised to reflect all four forecasted regions in South Carolina and color coded to align with EPA's Air Quality Index. The new graphics makes the Air Quality Index easier to read and understand by the public who use this web site.

Website - One of the first outreach activities of the EAC process included the establishment of a website (www.scdhec.net/baq/eap.html) for stakeholders to obtain updated information regarding the early action process. The website address was given in the initial press release (August 28, 2002) and continues to be included on correspondence and presentations.

Ozone Events – The Department has sponsored Ozone Awareness events to educate areas on the ozone standard, forecasting and measures that can be taken to reduce ground-level ozone. Following, is a schedule and summary of the 2003 Ozone Events:

April 26, 2003 - Central Savannah River Area

"Kids Earth Day" held on Saturday, April 26, 2003, was attended by approximately 1,000 children residing in the Aiken/North Augusta area. The Department's Central Office and District Bureau of Air Quality (BAQ) staff assisted children in playing Air Jeopardy as well as leading them through an educational exhibit on ground-level ozone. Prizes were also distributed.

April 29, 2003 - Pee Dee Area

A community meeting was held at the Pee Dee Regional Council of Governments office in Florence. Various community members and media were invited to attend this meeting for an educational program on ground-level ozone and health implications due to ground-level ozone exposure. This event was well attended and received excellent media coverage.

May 1, 2003 - Central Midlands Area

A partnership with WACH 57 TV was formed with BAQ staff to promote the Bureau's "Ozone Action Class." This is a web-based program encouraging students to find solutions to reduce ground-level ozone pollution. Spears Street Elementary School in Newberry County was the first recognized Ozone Action Class by weatherman Cary Allen and BAQ staff member, Amy Curran. WACH 57 incorporated the day's events, along with promoting Ozone Awareness Week, on their nightly weather segment that evening.

June 28, 2003

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Upstate

The BAQ and Recycling Office of the Bureau of Land and Waste Management partnered with the Upstate Air Quality Advisory Committee (Anderson, Greenville and Spartanburg Counties) to hold a gas can exchange event in this three county region. This was the first of a kind event for South Carolina. As well as new environmentally friendly gas cans, educational materials were distributed. Results of the Gas Can Exchange Event are included with the individual county reports.

Public Presentations - Numerous public presentations by Department staff regarding the 8-hour ozone standard and the early action process have been held. Since the process started there have been over 75 meetings in which Department staff promoted the benefits of the EAC process.

Greenscapes – The Department partnered with the South Carolina State Budget and Control Board's (B&CB) Horticulture services to implement a tree planting and environmental landscape project at the Department's central office and to conduct workshops on environmental benefits of trees for representatives of local and state government agencies. Funding for this effort was through a grant from the Urban and community Forestry Grant Assistance program administered through the South Carolina Forestry Commission and funded by the USDA Forest Service. Planting trees and reducing grass area results in less lawn mowing which helps reduce the emission of NO_x and VOC from gas powered equipment. For example, this project decreased the mowing area by 39 percent (original turf area was 24,816 sq. ft.; new mulch area 9,684 sq. ft., new turf area 15,132 sq. ft.). The time to mow this area has been cut in half, to less than 45 minutes.

To assist in promoting the incorporation of landscape planning to support the health of the environment, each EAC contact was invited to attend a presentation on May 25, 2005, to be provided by David J. Nowak, Ph.D. Dr. Nowak is a Project Leader with the USDA Forest Service, Northeastern Research Station in Syracuse, NY. Dr. Nowak is a principal scientist on the Chicago Urban Forest Climate Project and is a recipient of the American Forests Urban Forest Medal recognizing outstanding national contributions in urban forest research and the Distinguished Science Award of the Northeastern Research Station. His presentation is designed to provide an understanding of urban forests and their benefits and regulatory effects related to air and water quality.

a. Ozone forecast/outreach, education

The Department began forecasting for the 8-hour ozone standard in 1998 for the Upstate and Central Midlands areas of South Carolina. In 1999, the Central Savannah River area was added in the forecast and in 2003 the Pee Dee area was added. The Catawba area, including Chester, Lancaster and York counties is included in North Carolina's forecast through a cooperative partnership. A link for the Catawba forecast is included on the

Department's website. The forecast serves as a public health advisory to protect those persons who are most at risk to the effects of ozone.

Prior to 2006, the Division of Air Planning, Development and Outreach was responsible for disseminating the ozone forecast to interested individuals and groups across the state.

Most counties participating in the EAC have assigned an air quality contact person that receives the daily forecast and is responsible for disseminating the ozone forecasts and related information on Ozone Action Days to stakeholders.

The Department and the SC Department of Transportation (DOT) have an agreement during the ground level ozone season. When an Ozone Awareness Day is forecasted in a particular region, Department staff contact DOT staff to activate the DOT Intelligent Transportation System (ITS) message board in the affected area. The ITS boards alert drivers that an Ozone Awareness Day has been forecasted for the next day and provides drivers with options and suggestion on how to deal with the upcoming Ozone Awareness Day. The Department's website is also included as a part of the message.

In 2004, the Department established a toll free telephone line for persons to call and receive the ground-level ozone forecast for the four areas of the state involved. Listed here is the number of calls for this "Ozone Hotline" for 2004 – 2006.

2004: 45 (only 3 months)

2005: 197

2006: 10 (thru May, 2006)

2006: 187 (June thru September 2006)

The number of contacts for the e-mail distribution for the 2005 ground-level ozone season was over 130 contacts.

Beginning with the 2006 ground-level ozone forecast season, the Department and the Bureau of Air Quality began participation in a new program that will make getting the forecast easier and more reliable. **EnviroFlash** is a program, sponsored by the EPA with State and local air quality agencies. **EnviroFlash** provides important air quality information such as forecasts and action day notifications via email or pager notification. The email includes the same local air quality forecast information which is coordinated through the news media, like television and radio.

EnviroFlash provides instant information that may be customized for individual needs. Subscribers can choose to receive the forecast everyday or only on forecasted Ozone Action Days. Air quality information allows subscribers to adjust lifestyle activities when necessary on unhealthy air quality days.

Participants in the BAQ's forecast system were provided information to an on-line subscription page and requested users to sign up, edit the reported information, or cancel the service. Subscribers are able to choose the type and frequency of service desired.

EnviroFlash will be sent to your email or pager as soon as the ground level forecast is made. Persons are able to select from the Central Midlands, Upstate, Central Savannah River, or Pee Dee area. Subscribers to this free service may also receive the forecast for all four regions. See below for **EnviroFlash** subscriber statistics as of June 2006, for each zone. This information is split into categories, whereby "Green" level subscribers receive forecasts every day, "Yellow" level subscribers receive forecasts for "Yellow" forecasts and higher, etc.

Midlands - 81 subscribers

"Green" Level Subscribers: 12
"Yellow" Level Subscribers: 16
"Orange" Level Subscribers: 53

Upstate - 81 subscribers

"Green" Level Subscribers: 16
"Yellow" Level Subscribers: 11
"Orange" Level Subscribers: 51
"Red" Level Subscribers: 2
"Maroon" Level Subscribers: 1

CSRA - 19 subscribers

"Green" Level Subscribers: 5
"Yellow" Level Subscribers: 2
"Orange" Level Subscribers: 12

Pee Dee - 12 subscribers

"Green" Level Subscribers: 5
"Yellow" Level Subscribers: 0
"Orange" Level Subscribers: 7

The total number of subscribers, 193, may reflect more than just individuals receiving the forecast. Some subscribers may forward the email **EnviroFlash** delivers, to other employees at a worksite. The forecast may be utilized by local meteorologists to share with their TV audiences.

Subscribers for the 2006 Ground-level Ozone season through EnviroFlash (December 2006):

Midlands - 90 subscribers

"Green" Level Subscribers: 13
"Yellow" Level Subscribers: 18
"Orange" Level Subscribers: 58
"Red" Level Subscribers: 1

Upstate - 84 subscribers

"Green" Level Subscribers: 17

"Yellow" Level Subscribers: 10
"Orange" Level Subscribers: 53
"Red" Level Subscribers: 3
"Maroon" Level Subscribers: 1

CSRA - 25 subscribers

"Green" Level Subscribers: 6
"Yellow" Level Subscribers: 3
"Orange" Level Subscribers: 16

Pee Dee - 13 subscribers

"Green" Level Subscribers: 5
"Yellow" Level Subscribers: 0
"Orange" Level Subscribers: 8

2007 Ozone Awareness Proclamation

For the eighth year in a row, the governor of South Carolina has signed a proclamation regarding ground-level ozone awareness week. In 2007, Governor Sanford signed a proclamation declaring April 1-7, as "Ozone Awareness Week." A news release was developed to help announce this proclamation and was distributed electronically to all EAC contacts for their use locally. A copy of the 2007 proclamation is located at: <http://www.scdhec.gov/eqc/baq/pubs/OzoneAwarenessWeek.pdf>.

2006 Ozone Awareness Proclamation

For the seventh year in a row, the governor of South Carolina has signed a proclamation regarding ground-level ozone awareness week. This year, Governor Sanford signed a proclamation declaring May 1-7, 2006, as "Ozone Awareness Week." A news release was developed to help announce this proclamation and was distributed electronically to all EAC contacts for their use locally. A copy of this year's proclamation is located at: <http://www.scdhec.gov/eqc/baq/pubs/OzoneAwarenessWeek.pdf>.

b. Developed Outreach Projects / Provided Outreach Materials

While the Department has not had the resources to track the education and outreach activities performed by non-Agency personnel in the recent past (i.e., no baseline data) to make comparisons, the EAC process has improved information regarding such activities. Because of the reporting requirements involved with the local participants towards meeting the EAC milestones, there have been numerous updates concerning outreach activities that have been initiated in the local areas. Material resources such as posters, brochures and radio and television Public Service Announcements (PSAs) developed by the Department have been requested for use by these local contacts.

- Gas Can Exchange - Using the BAQ's protocol developed for Gas Can Exchange events, Anderson County organized and planned its own gas can exchange (09/01/2005) with some limited assistance from BAQ staff. 200 new, environment

friendly gas cans were distributed and 79 used gas cans collected. Results from Gas Can Exchange events held in other counties include:

- Georgetown – 334 pounds VOC reductions
- Greenville – 711 pounds VOC reductions
- Greenwood – 334 pounds VOC reductions
- Lexington – 348 pounds VOC reductions
- Richland – 475 pounds VOC reductions

- Car Care Awareness (April 2006) - The BAQ has drafted a protocol for hosting a Car Care Awareness Project. The draft protocol outlines planning activities associated with this inaugural Car Care Awareness Project and will be shared with the EAC contacts for information and planning consideration.
- BAQ - Education and Outreach – School related activities

March 15, 2007 – At a Department Environmental Quality Control (EQC) Region VI meeting, staff discussed the needs of the region for EAC efforts. Two areas of focus were identified: 1) Anti-idling in the schools (using b2 to kick it off), and 2) Reduce opening burning. Help enforcing the regulations (staff numbers are limited) is needed. Discussion also included the possibility of using the local fire department to help with open burning enforcement actions.

March 21, 2007 – Staff met with Gilbert Middle School (an EIC school) and presented to them the “Air Quality” kiosk panels to be displayed at their outdoor learning center area. Staff worked with several groups at the learning center focusing on the importance of air quality and the state of South Carolina’s air quality.

April 21, 2007 – Earth Day at the State Museum. Staff provided a booth that focused on the importance of using native plants for air quality. A local “Master Gardener” assisted with the booth to learn the importance of using native plants providing her with information to share with clients and colleagues.

April 28, 2007 – Earth Day Birthday at the Museum of York County - Staff assisted with a lawn mower exchange and provided a booth with various publications for the participants including information on energy conservation, native gardening, ozone, driving smarter and other environmental interests.

May 10, 2007 - “Air Quality and Trees” presentation - Staff presented to the Northeast Beautification committee about the importance of trees and using native plants and shrubs. The committee has several projects going on in the Northeast area of Columbia, all of which focus on planning greenways, tree planting, and beautification areas. Several BAQ staff is on the “Trees for Two Notch” sub-committee.

May 23 – 25, 2007 – South Carolina Public Health Association (SCPHA) conference - Staff conducted provided presentations on the b2 program and EPA’s “Tool for Schools”

air quality program. A booth that included several publications on air quality issues (ambient and indoor) focusing on the health effects of poor air quality was provided.

June 6, 2007 - Fountain Inn Elementary School meeting - The school has been working for several weeks with county and city planners to implement b2. The school has taken the program beyond its anti-idling focus. The school has plans to plant shade trees, build benches, landscape needed areas, and re-route bus/carpool traffic.

June 6, 2007 - Conference call with Richland and Lexington counties - The two counties are applying for the "Barrett Lawrimore Memorial Regional Cooperation Award" using the lawn mower exchange that took place at the SC State Museum April 21, 2007. BAQ staff will be providing information.

June 7, 2007 - EQC Education and Outreach committee meeting - The decision was made to move forward with the proposal to award the Duke Energy funds to Greenville County to expand the b2 efforts to other local schools and to help Anderson County with their open burning campaign.

Staff has been involved for the past 3 years with Gilbert Middle School. Several outdoor workshops with the students on air quality have been conducted.

Staff has taught the 7th grade at Northside Middle School the science curriculum incorporating the health and environmental issues of air quality.

Crossroads Middle School, Rosewood Elementary School in Rock Hill and Fountain Inn Elementary School have implemented a no idling policy.

Greenville County was the recipient of a 2006 EPA grant to raise public awareness about air quality, and implement an anti-idling campaign in one county school. The anti-idling campaign is called B2-Breathe Better, and the idea is to spread the program through out the county-wide school district.

December 1, 2006 - Buck Station meeting/Duke Energy, Salisbury, NC - This was the second meeting with Duke Energy to discuss the Lee Station site for the outdoor education center in Anderson County. We visited this well used/established site to get an idea of where the project could be heading. Present at this meeting was a representative from Clemson University for a program called South Carolina Maps and Aerial Photographic Systems (SC MAPS), and a representative from the State Department of Education (Ed Falco). The site will initially be open to all middle school students from Anderson school districts.

November 1-3, 2006 - SC² Convention, Myrtle Beach, SC - Staff provided a booth for educators at the conference as well as a presentation on Breathe Better Air at School (B²@ school) during one of the break out sessions (about 25 attended the session). There were at least 200 educators from all over the state at the conference. Over 60 pledges for the EPA program "Change a Light" Campaign were collected.

November 14, 2006 - Project consult/presentation on Global Climate Change, Rosewood Elementary Rock Hill, SC - Staff presented to an audience of 102 5th grade students facts about global climate change, discussed impacts, contributions, and solutions for the school to present in a project locally, state wide, and globally.

October 3, 2006 - B2@ school district meeting, Chapin Middle School - Staff met with the approximately 45 science teachers from Lexington School District 5 to present the B²@ school program.

October 5 and 19, 2006 – Using the Environment as the Integrating Context for Learning (EIC) Workshop, Gilbert, SC - Staff worked with the students from Gilbert Middle school that are participating in the EIC model. Field studies and investigations on air and water quality in the school's nearby wetland area were conducted. The total number of students in the model for this year is approximately 140.

October 10, 2006 - Lee Station meeting/Duke Energy, Anderson, SC - Staff met with Duke Energy to discuss the plans for the outdoor education center at Lee Station in Anderson County. Palmetto Middle School (an EIC school) will serve as the “host” school for the project. The center will initially be open to all middle school students from Anderson school districts.

August 29, 2006 - EAC Greenville meeting Greenville, SC - Staff met with Sandra Yudice and John Owings from Greenville County as well as several school district personnel to discuss implementation of an anti-idling campaign in the schools using B²@ school as a model. The initial focus will be the middle schools, approximately 18 in the Greenville area.

July 27-28, 2006 - EIC teacher training, Kelly Mill Middle School, Columbia, SC - This two day teacher workshop focused on project ideas for the EIC schools in order to expand existing projects. Staff offered advice on how to keep the projects on track with the EIC model. Teachers that were new to the EIC program attended the workshop which included Gilbert Middle School in Lexington 1 and Kelly Mill Middle School in Richland 2.

June 21, 2006 - Take Action Today, Columbia, SC - This summer workshop provided information, demonstrated lesson plans/ideas, and provided several field trips for educators. All participants received an “Action for a Cleaner Tomorrow” CD to use in their classroom. The workshop is open to all educators in the state. There were 142 teachers attending this workshop.

June 22, 2006 - Museum of York County summer camp, Rock Hill, SC - The one day class focusing on ground-level ozone. There were approximately 16 students in the class that day ranging from third to fifth grade.

May 5, 2006 - Project Discovery, Hilton Head, South Carolina – In collaboration with the South Carolina Educational Television (SCETV) several segments were taped on environmental issues pertaining to the Beaufort area. The segments included a live broadcast where callers could call in with questions on the issues. The BAQ segment focused on open burning. The SCETV viewing area includes the entire state.

April 19, 2006 - York County - Rosewood Elementary - worked with an Environmental Club on understanding and investigating environmental issues.

July 18, 2005 - Bethel Christian Camp - Gaston, SC. Guest speaker/presentation at the camp for "Environmental Day"

March 24, 2006 - Satchel Ford Elementary School - Presentation for Science Day

March 2006 - Central Carolina Technical College (Sumter County), Education and Outreach Support, Environmental Symposium

March 2006 - Keep Beaufort County Beaufort, Local Schools (Beaufort County), Education and Outreach Support, Earth Day Events

March 2006 - Southeast Elementary (Richland County), Presentation for Career Day, Education and Outreach Support

March 2006 - Hampton Conservation District (Hampton County), Education and Outreach Support – Environmental Activity Books, Local Schools

Congaree-Wood Elementary (Lexington County) Education and Outreach Support – Earth Day Activities

Mauldin Middle School (Greenville County) Education and Outreach Support – Earth Day Activities

May 7, 2005 - Earth Fair Irmo, (Saluda Shoals, Lexington County), exhibit for state wide Earth Fair

December 2004 – Present - air pollution reduction program at Crossroads Middle School (Lexington County), Education and Outreach support, environmental school project for SCDHEC pilot program

February 2005 - Pine Grove Elem. School (Richland County), presentation for Science Day

April 15, 2005 - Forest Heights Elem. School (Richland County), presentation for Science Day

October 2004 – March 2005 Sanders Middle School (Richland County), Education and Outreach support

Provide approximately 100 "Driving Smarter" brochures every other month to be placed at the Richland County Administration building.

March 2005 - Berry Shoals Elem. School, (Spartanburg County), educational materials, Special science awards

April 30, 2005 - Museum of York County (York County), exhibit, Earth Day Birthday

2002-present, focus on air pollution reduction strategies - Rawlinson Road Middle School (York County), education and outreach support, environmental school project through the South Carolina Department of Education

- **EAC Ozone Action Needs Assessment Tool** - A survey tool for the 2006 Ozone Season was developed and sent to EAC contacts to: 1) assess their current initiatives, 2) determine their needs for education/information resources and activities and 3) identify how BAQ staff could best support their efforts. Contact was made by BAQ staff with all responders via email and/or telephone for follow-through. A copy of this tool is available.

c. *Breathe Better @ School Program*

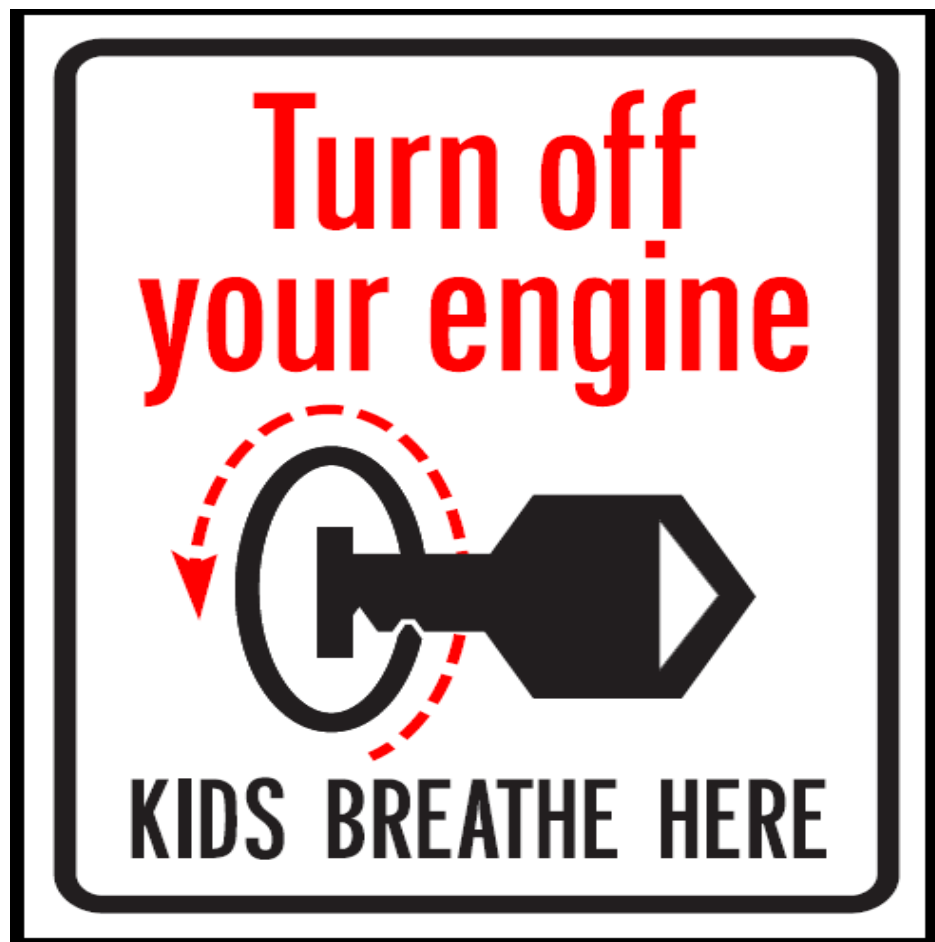
The *B²@ school* (Breathe Better Air at School) program's main focus is reducing air pollution around school campuses so everyone can breathe better. Solutions to reduce air pollution are made possible through the efforts of students, faculty, staff, community and local agencies. The *B²@ school* has many accomplishments to be proud of its first year in existence, the first, receiving the EPA Children's Environmental Health Recognition Award for 2006! Research shows that children, especially those with respiratory conditions, are more sensitive to air pollution. A key component of the *B²@ school* program is policy change within the school. A good example of this is a local school's new policy included in the student/ parent handbook that reads, "We request/advise that any individual in a vehicle that is waiting on a student or adult please turn their car off if weather is permitting. We hope to reduce respiratory problems for our students, staff and improve the air quality in our environment." The school has "No Idling" signs around the campus which were purchased as a result of winning a \$750.00 "**Champions of the Environment**" award. The number of visits to the office for asthma incidences has decreased since the implementation of the "No Idling" policy, and the *B²@ school* coordinator was inducted into the "GreenSteps" Hall of Fame for her commitment to environmental education.

Another accomplishment of the *B²@ school* program is that it is a component of an EPA Clean School Bus grant awarding the state \$500,000 targeted for reducing air pollution through anti-idling programs, retrofitting old school buses and building new ones. As the

B²@ school program expands, the goal is to continue reducing air pollution around school campuses and improving children's health in South Carolina. Information is available at <http://greenstepschools.com/page1.html>

Future plans include working with the Lexington County EAC contact to implement the *B²@ school* program at three Lexington County middle schools. The plans include providing "No Idling signs for those three middle schools as well.

June 2007 – The following sign is utilized at participating schools implementing anti-idling measures.



December 2007- To enable better access, a website for this project has been developed and is located at the following link:

<http://www.scdhec.gov/environment/baq/docs/edu/B2/b2originalprotocol.pdf>

d. South Carolina Educators trained with Action for a Cleaner Tomorrow

In FY05, 28 educators were trained on the Department's environmental curriculum, Action for a Cleaner Tomorrow. There have been 26 trainings with 724 teachers trained from July 2005 through June 2006.

e. Car Care Awareness Month Projects

April 2007

Suddeth Automotive in Richland County offered Free National Car Care Month Inspections. The inspections were offered on Monday thru Friday between 9 AM and 4:30 PM during the entire month of April. In addition, Suddeth Automotive offered a Free Women's Car Care Seminar on Saturday April 28. Door prizes, drawings and refreshments were offered. The Department supplied "Driving Smarter For Tomorrow" brochures which included tips to save money, improve vehicle reliability, reduce air pollution, and maximize fuel economy.

April 2006

In recognition of Car Care Awareness Month, the Department and Richland and Lexington counties organized a vehicle maintenance check event in April. The State Museum, Ben Satcher Ford and Pope Davis Tires helped sponsor this free event on April 1, from 10 a.m. until 2 p.m. at the State Museum on Gervais Street. A team of certified technicians made suggestions for improving vehicle safety and gas mileage. The technicians also performed vehicle checks and raised citizens' awareness about how proper maintenance of a vehicle can help to reduce air pollution and protect the public's health.

The goal of the event, held on April 1, 2006, was to increase the target audience's awareness about the importance of car maintenance in preserving good air quality. To reach this goal, several objectives were set, and our ability to meet those objectives is documented herein. The objectives were: to have 100 cars come through the car check lanes, create a replicable project that can be implemented in other areas across the state, and to educate drivers and volunteers who participated in the event about the importance role vehicle maintenance plays in preserving good air quality. The target audience was drivers local to the downtown Columbia area.

This event was on a large scale, and approximately 60 cars were assessed during the four-hour event. At least 2 more technicians would have been needed to have reached the first objective. This is based on the average time per car was approximately 15 minutes, from the time the pre-survey was taken to the time the post-survey was collected and information was provided to the participant.

To help promote this event, a news release was issued by *The State* on April 1, 2006, titled – DHEC helps drivers focus on car care with expert advice.

Statistical information for this project:**Tire issues:**

- **5 vehicles**, or 8 percent, had at least one tire with low tread. Most states recommend tire tread to be 3/32 inches or higher.
- Since each vehicle varies on tire pressure, stats on how many vehicles had low tire pressure are not available. Over half of the vehicles at the event needed tire pressure adjustments in at least one tire or more.

The level of:

- CO₂ (standard is: 14-16 percent) 0 vehicles, or 0 percent, exceeded the standard
- HC (standard is: 100) 10 vehicles, or 17 percent, exceeded the standard
- CO (standard is: 1.0 percent) 7 vehicles, or 12 percent, exceeded the standard
- O₂ (standard is: 1.0 percent) 13 vehicles, or 22 percent, exceeded the standard

OBD light on: 6 vehicles, or 10 percent, exceeded the standard

Air Filter: Air filters in 15 vehicles, or 25 percent, needed attention

The BAQ has drafted a protocol for hosting a Car Care Awareness Project. The draft protocol outlines planning activities associated with this inaugural Car Care Awareness Project and will be shared with the EAC contacts for information and planning consideration.

f. Earth Week

2007 - Governor Sanford signed a proclamation declaring April 22-28, 2007 as “Earth Week” in support of the efforts described above. A copy of this proclamation is located at: <http://www.scdhec.gov/eqc/baq/pubs/earthweek.pdf>.

The Department, with the help of volunteer staff, celebrated Earth Day 2007 throughout the state. During the month of April and the first part of May, staff participated in many community Earth Day events including grade schools, colleges, churches, hospitals, historic parks and private industry (BMW). Staff presented on topics such as air sampling, criteria pollutants, ozone formation, open burning, electric lawn mowers, hybrid electric vehicles, and greenscaping. Distributed information discussed particulate pollution and health, automobile emissions, spill-proof gas cans, the benefits of urban trees, and energy conservation. School aged children were enthused to receive promotional items such as environmental activity booklets, recycled pencils, and several themed posters included ways to help reduce air pollution.

Many adults were also excited about their newfound environmental concepts such as the use of native plants, compact florescent light bulbs, alternate fuels and the display of hybrid vehicles at events around the state. Many onlookers stated that they planned or hoped to make a hybrid car their next vehicle of purchase. Information that was collected through an evaluation tool is still being collated and will be available.

Earth Day Activities – 2007

Activities included:

Air sampling and monitoring presentation at Coker College
Lawn Mower Exchange at the S.C. State Museum
First Annual Kids Earth Day in Camden
Gas Can Exchange in Greenville
N. Augusta Kids Day in Aiken County
Earth Day at Park Circle in Charleston
Saluda Shoals Park Earth Fair

Over ten-thousand (10,000) environmental materials were distributed which included:

"Particulate Matter and Your Health" brochures
"Ozone and Your Health" brochures
"Drive Smarter" brochures
"Don't Spill When You Fill" brochures
"Good Up High, Bad Near By" ozone posters
"Air is Everywhere" posters
"Champions of the Environment" pencils
B2 @ School postcards
BLWM Recycling Posters
Spare the Air coloring books
Air Pollutants bookmarks
EPA 'No Idling Campaign" VHS video
"Earth Today" VHS video
Energy Conservation pamphlets
Hybrid Vehicles and Auto Emissions fact sheets
Fish's Wish Books
BOW pencils
BOW bookmarks
Petwaste magnets

Earth Day Website Resources were also identified and provided at this web address:

<http://www.scdhec.gov/environment/earthtoday/schools.htm>

2006 - Governor Sanford signed a proclamation declaring April 16-22, 2006 as "Earth Week" in support of the efforts described above. A copy of this proclamation is located at: <http://www.scdhec.gov/eqc/baq/pubs/earthweek.pdf>

Earth Day 2006 included DHEC celebrating **Earth Day** with participating schools all around the state with help from volunteer staff. Throughout the month of April staff visited with registered schools and watched DHEC's Emmy-award winning *Earth Today*

video with students. Following the video, staff held question and answer sessions, lead environmental projects, and distributed promotional items such as wildflower seed packets, activity booklets, recycled pencils and posters.

With an initial target goal to reach 6,000 students, volunteers extended outreach to over 11,000 general audience members in twenty (20) of the forty-six (46) counties. In addition, The *Earth Today* video was among the top 100 videos, among 3,406, requested from SCETV's Streamline Program for the month of April.

Staff found students enthused about the video and eager to participate in the follow-up questions. Several schools have already expressed the desire to participate in next year's Earth Day events while the Department anticipates hearing of the environmental efforts initiated by participating school in the coming months.

Many adults were also excited about their newfound environmental concepts such as alternate fuels and the display of hybrid vehicles at events around the state. Many onlookers stated that they planned or hoped to make a hybrid car their next vehicle of purchase. Information that was collected through an evaluation tool is still being collated at this time, but will be available.

Earth Day Activities - Friday, April 21, 2006

The Department set a goal for 2006 to send employees into more than 200 classrooms across the state to help raise environmental awareness among our students. Employees viewed the Department's three year running, Emmy-winning video *Earth Today* with students and answering questions afterward. The Agency's Earth Day materials were available for staff visiting with classrooms.

Via the S.C. Dept of Education, Science teachers and Media Specialist around the state were invited to register and participate. The Department's website included Earth Day plans and information for teachers to register: <http://www.scdhec.gov/earthtoday/>.

Additional information on the agency's plans for Earth Day and Education and Outreach services was available during the following briefings scheduled for March at the Department's Central Office in Columbia on the following dates:

Friday, March 3, 2006 - 10 a.m.

Friday, March 10, 2006 - 10 a.m.

Friday, March 17, 2006 - 2 p.m.

Friday, March 24, 2006 - 10 a.m.

Friday, March 31, 2006 - 10 a.m.

The following are Earth Day 2006 participants in which Education and Outreach Support was provided:

McLees Elem	Anderson
Starr Elem	Anderson
Wren Elem	Anderson
Grove Elem	Greenville
Armstrong Elem	Greenville
Liberty Elem	Pickens
Greenview Elem	Greenville
Calvary Christian Central	Greenville
Lone Oak Elem School	Spartanburg
Cannons Elem	Spartanburg
Inman Elem	Spartanburg
DR Hill Middle	Spartanburg
West View Elem	Spartanburg
USCS Upstate	Spartanburg
Great Falls Middle	Chester
Rosewood Elem	York
Andrew Jackson Middle School	Lancaster
Jefferson Elem	York
Gold Hill Elem	York
Indian Land Elem/Middle School	Lancaster
Chester Park Elem School of Arts	Chester
Cotton Belt Elem	York
A R Rucker Middle	Lancaster
Chester Park Elem School of Arts	Chester
Heath Springs Elem	
Bethel Hanberry Elem	Richland
Lexington Elem	Lexington
Plainview Elem	Chesterfield
Schofield Middle	Aiken
Paul Knox Middle	Aiken
Warrenville Elem	Aiken
N. Augusta Earth Day	Aiken
Aiken's Earth Day	Aiken

Carolina Forest Middle	Horry
Jasper County High	Jasper
Cottageville Elem	Colleton
Rosewood Elem	Richland
North Springs Elem	Richland
H.B. Rhame Elem	Richland
Forest Lake Elem	Richland
North Springs Elem	Richland
Montessori School of Camden	Kershaw
Forest Heights Elem	Richland
White Knoll Middle	Lexington
Rice Creek Elem	Richland
Lake Murray Elem	Lexington
Congaree-Wood Elem	
Sandhills Intermediate	Lexington
Lake Murray Elem	Lexington
Bethel Academy	Richland
St. Peter Academy	Richland
Earth Fare Earth Day	Richland

g. Small, Gas-powered Engine Exchange Project

- Staff is currently meeting with EAC contacts in Greenville, Richland and Lexington counties to discuss the development of a small gas engine exchange project. Specifically, the project is targeting the exchange of gas-powered lawn mowers for electric mowers. A copy of the logic model for planning this event is available. Also available is a draft needs assessment tool to assist the planners in gathering information to help identify support/barriers to supporting this project. It is tentatively planned to be utilized with a sample of the target audience prior to finalizing planning for implementation of this project.

December 2007 - Richland and Lexington Counties and BAQ staff are planning a lawnmower exchange event to be held in 2008. A planning meeting was held on September 11, 2007. The target date for the event is the Spring of 2008.

November 2007 - The Education and Outreach section of the Department's BAQ will be coordinating a "Mow Down Pollution"- Lawn Mower Exchange event and promoting energy efficiency activities, particularly related to use of computer equipment, with local government in the Duke Energy service area in South Carolina. These activities will present opportunities to raise awareness of air quality issues in the Upstate of South Carolina and reduce emissions of air pollution. The funds (\$6500.00) will be used for but not limited to: advertising and promotion, creating brochures and other written materials,

providing promotional items and subsidizing the cost of the electric lawn equipment. This project will be completed by December 31, 2008.

June 2007 – “Mow Down Pollution” Event (April 21, 2007) - Lexington and Richland Counties in conjunction with local non-profit Keep the Midlands Beautiful, and the Department’s Bureau of Air Quality (BAQ) planned and implemented the first lawn mower exchange in South Carolina. To encourage Columbia-area residents to do their part to "Spare the Air," the lawn mower exchange was held at the State Museum to Mow Down Pollution! The lawn mower exchange coincided with other activities the museum hosted to celebrate Earth Day. The event collected empty, functional gas powered lawn mowers and offered a discount between 30 percent and 55 percent off MSRP on Neuton cordless electric mowers. To compliment the lawn mower exchange, other partners were invited to exhibit Greenscaping information at the event. These partners helped extend the impact of the exchange by highlighting complimentary lawn and garden practices that help protect air quality. The Columbia event collected 155 gas-powered mowers as trade-in. These mowers were recycled by Lexington County and thereby removed from operation. Our estimated emission reductions are 6.8665 tons VOC per year and 14.1205 tons CO per year (based on EPA emissions for 2 cycle gas mowers). Refer to Attachment 2-2 for the DRAFT “Mow Down Pollution” report and the participant survey.

- December 2006 - EAC contacts in Richland and Lexington Counties are continuing to plan for a small gas-powered lawn equipment exchange. A survey tool has been developed and is being utilized at various events held in these two counties to gauge citizen interest for such an event. The notes from the most recent meeting of the planning committee for this project are available. Here is the memorandum language being utilized with the survey tool:

“The following message is brought to you by a partnership of Lexington County, Richland County, Keep the Midlands Beautiful, and SC DHEC.

As part of South Carolina's 2007 Emissions Reduction Campaign, you have been selected to participate in a voluntary survey to help us improve our community's Air Quality. The link below will take you to a survey that will ask you questions about your lawnmower use. We will use your answers to help us plan a **"Trade It In For Cleaner Air"** lawn mower exchange, currently scheduled for March/April 2007 for Lexington and Richland Counties.

The **"Trade It In For Cleaner Air"** Event will offer participants a great discount on a new electric lawn mower when they bring in their old gas-powered mower to be recycled. *A trade-in will not be required.*

Operating a lawn mower releases chemicals that create Ground Level Ozone, a federally regulated criteria air pollutant. This is especially true of old lawn mowers, and includes leaf blowers, weed trimmers, chainsaws, and other gas-powered lawn equipment. By

participating in the event, residents will be able to get a great deal on a new electric mower, AND promote good Air Quality *at the same time!*

For more information about the "**Trade It In For Cleaner Air**" Event, please call 803-898-2233. For more information about South Carolina's 2007 Emissions Reduction Campaign, please call... More information about Ground Level Ozone, including it's impact on your health, please visit www.scdhec.gov".

Press Coverage

Over the last several years, numerous press releases, news publications and television reports have been done on the early action process. Additional articles for specific areas may be found in the local progress reports submitted by the participating areas.

2007

Upstate residents cautioned about ozone conditions (September 5, 2007)
<http://www.scdhec.gov/administration/news/2007/nr20070905-01.htm>

Upstate residents cautioned about ozone conditions (August 3, 2007)
<http://www.scdhec.gov/administration/news/2007/nr20070803-02.htm>

Upstate residents cautioned about ozone conditions (August 15, 2007)
<http://www.scdhec.gov/administration/news/2007/nr20070815-01.htm>

Residents cautioned about ozone conditions (June 21, 2007)
<http://www.scdhec.gov/administration/news/2007/nr20070621-03.htm>

Climate Registry established (May 2007)
<http://www.scdhec.gov/administration/news/2007/nr20070509-01.htm>

Upstate residents cautioned about ozone conditions (May 2007)
<http://www.scdhec.gov/administration/news/2007/nr20070501-02.htm>

Lawn mower exchange program announced (April 2007)
<http://www.scdhec.gov/administration/news/2007/nr20070409-02.htm>

Fountain Inn Elementary School group named Champions of the Environment (April 2007)—Part of B2@School Effort
<http://www.scdhec.gov/administration/news/2007/nr20070402-01.htm>

Ground-level Ozone forecasts begin with new date and new areas (March 2007)
<http://www.scdhec.gov/administration/news/2007/nr20070326-01.htm>

2006

Alternatives to Open Burning (November 2006)

<http://www.scdhec.gov/administration/news/2006/nr20061108-03.htm>

Citizens Encouraged to Reduce Open Burning (October 2006)

<http://www.scdhec.gov/administration/news/2006/nr20061009-02.htm>

Ground-Level Ozone Alert (August 2006)

<http://www.scdhec.gov/administration/news/2006/nr20060802-01.htm>

Ground-Level Ozone Alert (August 2006)

<http://www.scdhec.gov/administration/news/2006/nr20060801-01.htm>

SmartRide (July 2006)

<http://www.scdhec.gov/administration/news/2006/nr20060731-01.htm>

Ground-Level Ozone Alert (July 2006)

<http://www.scdhec.gov/administration/news/2006/nr20060720-03.htm>

EAC Summit (July 2006)

<http://www.scdhec.gov/administration/news/2006/nr20060720-02.htm>

Ground-Level Ozone Alert (July 2006)

<http://www.scdhec.gov/administration/news/2006/nr20060719-02.htm>

Ground-Level Ozone Alert (June 2006)

<http://www.scdhec.gov/administration/news/2006/nr20060718-01.htm>

Ground-Level Ozone Alert (June 2006)

<http://www.scdhec.gov/administration/news/2006/nr20060621-01.htm>

Ground-Level Ozone Awareness Week/Proclamation (April 2006)

<http://www.scdhec.net/administration/news/2006/nr20060428-01.htm>

Earth Day (April 2006)

<http://www.scdhec.net/administration/news/2006/nr20060420-01.htm>

Car Care Event (March 2006)

<http://www.scdhec.net/administration/news/2006/nr20060320-04.htm>

Open Burning (November 2005)

http://www.scdhec.net/administration/news_archive/releases/2005/200511/nr11BurningGreenville05.htm

Open Burning (October 2005)

http://www.scdhec.net/administration/news_archive/releases/2005/200510/nr10OpenBurning05.htm

Ozone Warning (July 2005)

http://www.scdhec.net/administration/news_archive/releases/2005/200507/nr07OzoneMidlands05.htm

Ozone Warning (July 2005)

http://www.scdhec.net/administration/news_archive/releases/2005/200507/nr07OzoneUpstate05.htm

Ozone Warning (June 2005)

http://www.scdhec.net/administration/news_archive/releases/2005/200506/nr06OzoneAlert6-23-05.htm

SmartRide/Free Ride-OAC (June 2005)

http://www.scdhec.net/administration/news_archive/releases/2005/200506/nr06FreeRide05.htm

SmartRide (June 2005)

http://www.scdhec.net/administration/news_archive/releases/2005/200506/nr06SmartRide05.htm

Ozone Forecasting (April 2004)

http://www.scdhec.net/administration/news_archive/releases/2004/200404/nr04OzoneSeason04.htm

Gas Can Exchange (June 2004)

http://www.scdhec.net/administration/news_archive/releases/pdf_files/2004GasCanExchange.jpg

Gas Can Exchange (June 2004)

http://www.scdhec.net/administration/news_archive/releases/2004/200406/nr06GreenwoodCans04.htm

Non-Road Diesel Rule (May 2004)

http://www.scdhec.net/administration/news_archive/releases/2004/200405/nr05DieselRule04.htm

Ozone Alert (May 2004)

http://www.scdhec.net/administration/news_archive/releases/2004/200405/nr05-06Ozone%20alert04.htm

Ozone Hotline (July 2004)

http://www.scdhec.net/administration/news_archive/releases/2004/200407/nr07OzoneHotline04.htm

Cutting Diesel Emissions (July 2004)

http://www.scdhec.net/administration/news_archive/releases/2004/200407/nr07DieselEmissions04.htm

New OB Regulations (July 2004)

http://www.scdhec.net/administration/news_archive/releases/2004/200407/nr07BurningRules04.htm

Truck Stop Electrification (October 2004)

http://www.scdhec.net/administration/news_archive/releases/2004/200410/nr10MAELECTRIC04.htm

Gas Can Exchange (October 2004)

http://www.scdhec.net/administration/news_archive/releases/2004/200410/nr10MidlandsCans04.htm

GreenScapes Project (November 2004)

http://www.scdhec.net/administration/news_archive/releases/2004/200411/nr11GreenScapes04.htm

August 28, 2002 – DHEC press release – “Planning for Cleaner Air Sooner”

September 3, 2002 – Bureau of National Affairs Daily Environment out of Atlanta announced South Carolina’s decision to take advantage of EPA’s offer to implement early measures to meet the 8-hour ozone standard.

September 5, 2002 – Greenville News – “Upstate will meet new clean air standards before deadline, DHEC says”

Fall 2002 – The Palmetto Planner – A Publication of the South Carolina Chapter of the American Planning Association – included article titled “The Bureau of Air Quality’s Early Action Plan for the 8-Hour Ozone Standard.

September 25, 2002 – DHEC press release – “Meeting on air quality plan set for Oct. 1”

October 1, 2002 – The State – “Groups oppose state’s ozone plan”

October 4 – Greenville News – “Early air effort could keep EPA at bay”

October 4 – Spartanburg Herald-Journal - “DHEC outlines clean-air proposal; State health officials on Thursday explained to an Upstate audience a proposal they say is a common-sense approach to cleaning up South Carolina’s air sooner.”

October 8, 2002 – Morning News – “Pee Dee air quality not up to par of EPA”

October 17, 2002 – Charleston Post and Courier – “State asked to get a jump on tougher ozone standards” – Article summarizing public meeting held in Charleston by DHEC.

November 14, 2002 – Anderson Independent-Mail – “Government agrees to ozone deadline”

November 22, 2002 – Spartanburg Herald-Journal – “Air quality resolution wins support”

November 27, 2002 – Clean Air Today – “SC Officials Discuss Air Quality Plans at Summit”

December 2002 – Spartanburg Herald Journal – “Council votes to join 3-county compact to improve air quality”

December 2002 – Augusta Chronicle – “City considers air-quality plan”

January 2003 – The Charlotte Observer – “York County is trying to get jump on upcoming new standards”

January 30, 2003 – Darlington News and Press – “Ozone problem threatens local economy, DHEC reps, local industry meet to help county avert federal penalties”

February 21, 2003 – DHEC press release – “Ozone early action update meeting Feb. 26”

February 27, 2003 – Anderson Independent Mail – “State wants ideas to clean the air”

February 27, 2003 – The State – “S.C. making plans to clean up its air”

April 28, 2003 – DHEC press release – “Ozone forecasting begins in Pee Dee”

April 28, 2003 – Morning News – “Pee Dee counties added to ozone program”

April 29, 2003 – The Post and Courier – “4 counties to be added to S.C.’s ozone forecast”

April 30, 2003 – Morning News – “Greater ozone awareness brought to Pee Dee”

May 13, 2003 – Anderson Independent Mail – “Group creates plan to reduce Upstate Ozone”

May 15, 2003 – DHEC press release – “Meeting set to discuss air quality proposal”

June 9, 2003 – Anderson Independent Mail – “State warns of sun’s rays and ozone today”

June 9, 2003 – DHEC press release – “Legislators support air quality early action plans”

June 11, 2003 – DHEC press release – “Gas can trade will help air quality” (also includes Public Service Announcements)

2. Commuting Reduction Programs

a. Take A Break From The Exhaust (TABFTE)

The “Take a Break from the Exhaust” (TABFTE) project developed by the Department, is an interactive alternative commute program in which employees are asked to take voluntary actions to help reduce emissions from mobile sources, such as cars and trucks to help improve air quality. Some examples of these actions include: carpooling to work, staying in for lunch, working an alternate work schedule, telecommuting, using mass transit, bicycling or walking to work. The TABFTE project was awarded the *Governor’s 2003 Pollution Prevention Award for State Agencies*. The project’s software tracking tool was important in supporting the Bureau of Air Quality’s (BAQ) application to participate in the U.S. Environmental Protection Agency and U.S. Department of Transportation’s *Best Workplace for Commuters* voluntary program, which as of 2005 the BAQ holds the only designation in South Carolina.

Prior to 2004, the Department focused on behavior changes including, carpooling, riding a bicycle to work and staying in for lunch. In 2004, the Department began estimating emission reductions.

Reductions for 2004 Ozone Season:

BAQ reduced just over 100,000 miles in 2004

598 pounds of VOCs reduced

393 pounds of NO_x reduced

5,494 pounds CO reduced

The utilization of the TABFTE grew in 2005, with the Bureau of Water (BOW), Bureau of Land & Waste Management (BLWM), the SC State Energy Office (SCEO) and the Wisconsin Department of Natural Resources using this program. The BAQ also partnered with the SC Department of Transportation and the SCEO to promote rider ship on the SmartRide alternative transportation project during Ground-level Ozone Season.

On Friday, April 15, 2005, *The State* newspaper wrote a story on one TABFTE partner and his decision to give up his car for a bike and public transportation. This generated interest in more bike and pedestrian paths and public transportation in the Columbia area.

In 2005 the goal for BAQ was to reduce over 100,000 miles. Staff within the BAQ surpassed this goal by almost 40,000 miles! Another goal was to have the TABFTE program reduce 150,000 miles overall. Results program wide showed that the goal was almost DOUBLED!

2005 TABFTE participants included:

Bureau of Air Quality

Bureau of Water

Bureau of Land and Waste Management

South Carolina Energy Office

Wisconsin Department of Natural Resources

Total Reductions for 2005 Ozone Season for South Carolina only:

286,889 miles reduced

1,076 pounds of VOC's reduced

684 pounds of NO_x reduced

Individual reductions for 2005 Ozone Season:

Bureau of Air Quality, SCDHEC: In 2005, BAQ had 111 participants and reduced 139,264 miles during the season. This season the BAQ has reduced 248,700 grams (**548 pounds**) of VOC's and 172,786 grams (**318 pounds**) of NO_x.

Bureau of Water (BOW), SCDHEC: 2005 was BOW's first year of participation. In 2005, BOW had 98 participants and reduced 100,881 miles during the season. This season, BOW reduced 178,948 grams (**395 pounds**) of VOC's and 124,127 grams (**274 pounds**) of NO_x.

Bureau of Land and Waste Management, SCDHEC: BLWM expressed an interest in TABFTE about half way through the season. Even though BLWM plans to participate in full in 2006, the thirty-two participants reduced over 25,852 miles. This season, BLWM reduced 46,086 grams (**102 pounds**) of VOC's and 31,650 grams (**70 pounds**) of NO_x.

South Carolina Energy Office: SCEO provided the grant that enabled TABFTE to come into existence back in 2000. This year, SCEO decided to participate in TABFTE after we made a presentation to their group in February. Even though they are a small group, SCEO reduced 7,892 miles this year. This season, SCEO reduced 14,172 grams (**31 pounds**) of VOC's and 9,798 grams (**22 pounds**) of NO_x.

Wisconsin Department of Natural Resources (WDNR): While attending a National Air Quality Conference in San Francisco, staff spoke with a few people about TABFTE. WDNR expressed an interest, and since TABFTE is a web-based program, we added them to our list of users. In 2005 the twenty participants reduced over 15,513 miles and had a reduction of 18,304 grams (**40 pounds**) of VOC's and 15,266 grams (**34 pounds**) of NO_x.

2006 TABFTE participants:

Bureau of Air Quality

Bureau of Water

Bureau of Land and Waste Management

South Carolina Energy Office

Wisconsin Department of Natural Resources

Lexington County Government

Central Midlands Council of Governments

Winthrop University - York County

York Technical College

Bowater - York County
 Citi Group - York County
 Springs Industries - York County

Results for the 2006 Ground-Level Ozone Season will be provided with the December 2006 Progress Report. As of the date of this submittal, 7 participants have joined the program for the 2006 ground-level ozone season bringing the total number of TABFTE participants to 12.

The following table is an updated list of all participants for the 2006 TABFTE project. It should be noted that participation for TABFTE in 2006 was mixed. Some of the groups that participated in the past did not have as high a turnout as before, while groups added for 2006 may not have had a very high participation rate the first season. As noted in the table below, a number of local governments were added during the 2006 season. The Department hopes to encourage more local governments to participate during the 2007 ground-level ozone season, with an emphasis on counties in nonattainment deferred areas of the state.

Entity Name	City	State	AQI Region
Bowater	Catawba	SC	NA
Bureau of Air Quality	Columbia	SC	Midlands
Bureau of Land and Waste Management	Columbia	SC	Midlands
Bureau of Water	Columbia	SC	Midlands
Central Midlands Council of Governments	Columbia	SC	Midlands
Citigroup	Ft. Mill	SC	NA
Clean Air Works	Charlotte	NC	NA
Florence County	Florence	SC	Pee Dee
County of Lexington	Lexington	SC	Midlands
Jefferson County Department of Health	Birmingham	AL	NA
Kentucky Division for Air Quality	Frankfort	KY	NA
Madison Environmental Group, Inc.	Madison	WI	NA
South Carolina Energy Office	Columbia	SC	Midlands
Springs Industries	Fort Mill	SC	NA
Wisconsin DNR	Milwaukee	WI	NA
Winthrop University	Rock Hill	SC	NA
York Technical College	Rock Hill	SC	NA

The Department as a whole posted impressive numbers but involvement in BOW and BLWM was off for 2006. One of the goals for 2007 is to establish a permanent contact in each of those areas to help encourage participation. This was discussed at the Environmental Quality Control (EQC) Outreach meeting on November 8, 2006. In 2006,

the Department reduced almost 150,000 miles traveled, over 590 pounds of VOC's and over 400 pounds of NO_x.

Total Reductions for 2006 Ozone Season for South Carolina only:

162,000 miles reduced
609 pounds of VOC's reduced
387 pounds of NO_x reduced

A number of companies in the upstate were added during the 2006 season as well. While their reductions were not as impressive due to their limited involvement for the season, it is expected that they will contribute more in the 2007 season. Hopefully with the "Clean Air Forever" effort underway the TABFTE project will add many more companies prior to the 2007 ground-level ozone season.

Results for the 2007 ground-level ozone season will be provided in December 2007.

TABFTE has expanded from January 2007 to May 31, 2007. Florence County has expressed an interest in participating and has been set up on the program. Columbia: The Central Midlands Council of Governments (CMCOG) has also been signed up and is participating in the program. The TABFTE program has also been presented during these COG meetings to other State and Local agencies within the area. Plans are to have at least five more meetings with the CMCOG to promote TABFTE. Aiken: TABFTE was presented to stakeholders on two separate occasions in the Aiken area. Although no groups have formally signed up yet, there was interest expressed in the program and follow-up will be conducted to encourage more participation.

December 2007: The four major participants for the TABFTE program in SC for 2007 were: BAQ, BLWM, CMCOG, and the SCEO. The County of Lexington and the City of Columbia are planning on adopting the program for 2008. The BAQ also plans to focus on other state agencies, counties, and major companies prior to the 2008 season.

Total Reductions for 2007 Ozone Season for South Carolina only:

146,991 miles reduced
592 pounds of VOCs reduced
411 pounds of NO_x reduced

Outside of South Carolina, we had two major locations that participated. One was the Mid-America Regional Council in Kansas, Missouri which included a number of companies. The other was the Wisconsin Department of Natural Resources. **Total Reductions for 2007 Ozone Season for these two locations only:**

547,587 miles reduced
2,107 pounds of VOCs reduced
1,455 pounds of NO_x reduced

TABFTE Reductions for 2007			
	Miles	VOC (grams)	NO_x (grams)
Within South Carolina			
Bureau of Air Quality	140,326	255,904	178,004
Bureau of Land and Waste Management	12	525	356
Central Midlands Council of Governments	5,082	9,123	6,305
SC Energy Office	1,571	2,731	1,890
Outside of South Carolina			
Mid America Regional Council	525,810	923,358	637,835
Wisconsin Dept of Natural Resources	21,777	32,560	22,178

b. SmartRide Program

In October 2003, the South Carolina Department of Transportation (SCDOT) conducted the SmartRide Research Project. For four weeks, the SCDOT provided commuter focused transit service and gathered information regarding the use of alternative forms of transportation. The project was a temporary mass transit service that focused on the needs, concerns and preferences of working commuters. Between October 6th and October 31st, 2003, the SmartRide Research Project served an average of 68 riders daily and provided a total of 2,730 passenger trips to and from work. The Smart Ride Research Project represents a strategy that can potentially improve traffic congestion and air quality conditions in South Carolina. The effective utilization of an expanded network of commuter-focused transit operations could result in the reduction of vehicle miles traveled each year.

As a result of the SmartRide Research Project, in June 2004, "SMARTRIDE" returned to the Central Midlands area and continues today. Santee Wateree Regional Transportation Authority began commuter service originating from Camden to the Columbia area and the Central Midlands Regional Transportation Authority began commuter service from the City of Newberry with stops in Little Mountain and Chapin and then on to Columbia. The development of similar "SMARTRIDE" projects in other areas of the State is anticipated.

During the 2005 Ozone Season, to promote SmartRide and to encourage reductions of ozone precursors, free rides were offered for those days designated as Ozone Action Days. The BAQ helped promote this effort by providing posters and public service announcements. In addition, the BAQ provided \$500.00 to help off-set the cost. During the 2006 Ozone Season, free rides on Ozone Action Days will again be offered.

SmartRide Statistics for 2005:**Passenger Boardings:**

Total Newberry – Columbia:

January - November 2005

4,932 boardings

Increase of 200 percent starting with 338 in January and 659 in November

Total Camden – Columbia:

July1 - October 30, 2005

4,770 boardings

The number of boarding approximately doubled per month from July 2004 to June 2005.

Emissions Reductions (Lexington, Newberry, Kershaw, and Richland):

207 pounds NO_x

153 pounds VOC

3,166 pounds CO

SmartRide Statistics for June 2006:**Passenger Boardings:**

Total Camden – Columbia:

November 2005 – May 2006

7,514 boardings

Emissions Reductions (Kershaw and Richland):

684 pounds NO_x

943 pounds VOC

SmartRide Statistics for December 2006:**Passenger Boardings:**

Total Camden – Columbia:

November 2005 – November 2006

14,301 boardings

Emissions Reductions (Kershaw and Richland):

1,368 pounds NO_x

2,152 pounds VOC

Passenger Boardings:

Total Newberry – Columbia:

November 2005 – October 2006

6,408 boardings

Emissions Reductions (Newberry and Richland):

613 pounds NO_x

964 pounds VOC

Again for the 2006 Ozone Season, to promote SmartRide and to encourage reductions of ozone precursors, free rides were offered for those days designated as Ozone Action Days.

During the 2007 Ozone Season, to promote SmartRide and to encourage reductions of ozone precursors, free rides will be again be offered for those days designated as Ozone Action Days. BAQ staff met on June 12, 2007, with the new SCDOT project coordinator. Discussions included issuing a press release; updating the SmartRide website; increasing ridership; and, possible expansions.

December 2007 – BAQ staff plan on meeting with the SmartRide project coordinator later this year or early 2008 to assist with the development of expanding routes to other areas in the Midlands.

SmartRide Statistics for December 2007:

Passenger Boardings:

Total Camden – Columbia:

November 2006 – October 2007

12,332 boardings

Emissions Reductions (Kershaw and Richland):

1,642 pounds NO_x

2,269 pounds VOC

Passenger Boardings:

Total Newberry – Columbia:

November 2006 – October 2007

11,709 boardings

Emissions Reductions (Newberry and Richland):

1,584 pounds NO_x

995 pounds VOC

c. SIGIS carpool matching program

The Department initiated a web-based, map based carpooling program in December 2005. The Shared and Integrated Geographic Information System (SIGIS) program facilitates ridesharing opportunities throughout the state by allowing interested employees to map their commute trip information and view the trips entered by other employees. The program is available to 4,987 Department employees in eight environmental quality control offices, eight regional public health offices, four Ocean and Coastal Resources Management Offices, and eight office locations in Columbia. At this time there are approximately forty-five participants. The program has undergone some

recent refinements. A second agency-wide email notification about the program was sent out on June 27, 2006 from Earl Hunter, Commissioner of the Department.

As of December 2006 the total number of participants in the SIGIS program is 54. A total of 34 employees added their names to the list this year.

As of June 2007 the total number of participants in the SIGIS program is 64. Nine new employees have added their names to the list so far this year.

d. Best Workplace for Commuters

The Bureau of Air Quality was designated as a "Best Workplace for Commuters" on February 3, 2005. Currently, the BAQ holds the only designation in South Carolina. However, BAQ continues to promote this program to EAC areas and to other program areas within the Department.

As of December 2006, the BAQ continues to maintain the "Best Workplaces for Commuters" (BWC) status, based on records from the TABFTE project. BAQ staff continues to promote BWC to local stakeholders as a part of our general outreach campaign. A recent presentation to Lexington County included information on BWC. An insert to be included in the EPA "Best Workplaces for Commuters" brochure has been developed. This insert is more closely tailored to target South Carolina business professionals, local governments, and other organizations. Initial feedback has been positive however there are a number of organizations that are still unaware of the benefits possible by participating in this program. A goal for 2007 is to continue to promote this opportunity to other programs within the Department as well as any other organization looking for a voluntary measure proven to benefit employees and air quality alike.

June 2007 – EPA will no longer fund the BWC program. The Department will continue to promote best workplace practices to other programs within the Department as well as other organizations seeking voluntary measures proven to benefit employees and air quality.

December 2007 - EPA has since announced that the Center for Urban Transportation Research (CUTR) at the University of South Florida will assume responsibility for management of the program when the EPA relinquished it on October 1st. The Department continues to meet the minimum requirements.

e. Audio-conferencing

The Department offers employees 3 audio-conferencing choices based on the number of participants (up to 6, up to 30, or up to 144 lines). Department employees as well as other state agency employees were faced with travel restrictions in the late summer

months of 2005. Employees were notified via e-mail of the audio-conferencing capability.

The Department continued to offer audio-conferencing capabilities for 2006 and 2007.

f. Duke Energy

Duke Energy is sponsoring a pilot program to subsidize public transportation costs for Charlotte-area employees. The pilot program, September 1 through December 31, 2006 will provide subsidies and incentives around bus transit, carpools and vanpools for full-time and part-time employees, including the Catawba Nuclear Station located in York, South Carolina. Company executives recognize that environmental stewardship is a shared responsibility and that along with the company investment in emission controls at power plants, transit subsidy is also an important piece of the effort to reduce ozone-related emissions.

Duke Energy has also provided funding in the amount of \$5,000 to the County of Greenville, with the Department's BAQ as the administrator of this grant to implement activities to address air quality. The timeframe for this grant is March 1, 2007 to December 31, 2007. A copy of the grant agreement and authorization by the County of Greenville is attached in Enclosure 2-3.

g. Bike to Work Events - 2007

May is National Bike Month, and Friday May 18, 2007 was "Bike-to-Work Day." The Department's State Nutrition and Physical Activity Consultants, Division of Injury and Violence Prevention, and Bureau of Air Quality encouraged Department staff in Columbia to participate in a "Bike-to-Work Day" ride coordinated by Central Midlands Council of Governments and the City of Columbia, and/or to bike to lunch together. The Columbia/CMCOG ride started at Boyd Plaza in Columbia (NW Corner of Hampton & Main). The ride took about 20 minutes for the average rider. Maps and routes were provided.

Because bicycle commuting helps reduce ground-level ozone pollution, global warming emissions and other pollutants, it is an air quality strategy being pursued around the state. Cycling has the potential to provide significant societal benefits in other aspects of life such as health, resource consumption, and the cost of transportation.

Bike to Work Week biking events were held this year in Greenville, Columbia, Spartanburg and Rock Hill, and an awareness event was held in Summerville. The Department shared information about Bike to Work Day with all EAC contacts. The cities of Spartanburg and Columbia are working towards "Bicycle-Friendly Community" designations.

Eight people from the Department participated in the Bike to Work Day ride around the statehouse coordinated by the City of Columbia and the Central Midlands Council of

Governments. They included Brandy Armstrong, Leslie Coolidge, Jay Daniels, Shawn Gerald, Michael Juras, Heinz Kaiser, Maeve Mason, and Paul Wojoski. The Department contingent made a substantial contribution to the ride. A group of ten biked to lunch at the Taste of China, including Brandy, Leslie, Shawn, Heinz, Michael, Paul, as well as Brian and Lynn Barnes, Debra Briggs-Monroe, and BAQ Chief Myra Reece! Amy Curran and Marian Nanney walked to join the group, to make a party of twelve.

A new commuter bike was on loan for the day, and was used for both the morning ride (by Maeve) and the lunch trip (by Myra). Amy Curran, Dianne Minasian and Marian Nanney rode the bike around Sims/Aycock campus in the afternoon.

h. Bike Commuting for Air Quality

Spartanburg has received a bronze level Bicycle Friendly Community designation in September 2007. Charleston, Greenville, Rock Hill and Columbia are also working towards designation. Columbia is holding twice-a-month meetings and a monthly lunchtime ride.

i. Bull Street Partners Carpool Group (Organized late summer 2007)

The Bull Street Partners Carpool Group provides employees of the Bull Street area offices of three State agencies (Department of Health and Environmental Control, Department of Mental Health and Department of Social Services) an opportunity to form carpools, thereby saving money and fuel, reducing pollution and reducing the stress of commuting.

The Department's Bureau of Air Quality sent an electronic mail message to contacts in the three state agencies located at the corner of Bull and Harden Streets. The e-mail encourages people interested in regular carpooling, occasional carpooling, or people who are willing to provide a ride home to sign up. The emails have very gone out to two of the three agencies, the third agency e-mail will be sent out shortly. Seven people have signed up to date, and feedback from the agencies about the program has been very positive. 'Goody Bags' of air quality promotional materials are being provided to people from the Department's sister agencies who sign up.

j. September 2007 - "Safe Routes to School" Program is 100 percent Federally Funded

The South Carolina Department of Transportation Commission approved funding for 12 schools to develop comprehensive bicycle and pedestrian programs as part of the newly established "Safe Routes to School Program." Selected schools and their respective communities will soon begin the planning phase of the Safe Routes to School funding process. By partnering with SCDOT, local governments, parents, local law enforcement and educators, each school and community will develop a plan that encompasses both infrastructure and non-infrastructure components. Projects and programs will begin in early 2008. In addition to encouraging children to walk and bicycle to school and to

make walking and bicycling safer, the Safe Routes to School Program recognizes this effort as an activity that will reduce traffic congestion, fuel consumption and air pollution.

3. Ground Level Ozone Awareness Week Proclaimed

2005

Governor Mark Sanford proclaimed **March 28 – April 1, 2005** as Ozone Awareness Week in South Carolina. The EAC areas used the proclamation to launch their 2005 Ozone Awareness efforts. Some of these efforts included:

- *The State* newspaper (which is widely circulated in Richland and Lexington Counties) ran an article recognizing Richland County staff's effort to promote Ground-level Ozone Awareness Week, their work to provide alternative fuel for county flex-fuel vehicles and the link of their county web page for the SCDHEC ozone forecast.
- Richland County staff sent out a press release (03/25/05) to promote Ground-level Ozone Awareness Week and provided additional information on their web page: www.rcgov.us. An email was sent (03/29/05) to almost 900 county employees promoting the week.
- Lexington County EAC contact distributed (03/23/05) Ground-level Ozone Awareness information in paychecks to 1,300 employees.
- Anderson County staff sent out a news release (03/28/05) on Ground-level Ozone Awareness Week and promoted the week on a local radio station, WRIX 103.1FM. An article on Ground-level Ozone was also placed on their county web page: www.andersoncountysc.org.
- SCDHEC staff provided interviews on Ground-level Ozone Awareness Week to two radio stations: News Talk for Charleston 1250AM (03/29/05) and Columbia WVOC 560AM (03/30/05).
- SCDHEC staff provided an interview for WIS-TV in Columbia for Ground-level Ozone Awareness Week. Information may be found at this link: <http://www.wistv.com/Global/story.asp?S=3132984&nav=0RaMXyjF>.
- The Charleston County Administrator sent an email (03/28/05) to county employees regarding Ground-level Ozone Awareness Week and staff set up a display in their Public Services Building to provide more information.
- Laurens County EAC contact distributed (03/22/05) news release to two local newspapers, and included tips on cleaner air and the Governor's proclamation for Ground-level Ozone Awareness Week. A similar package of information was distributed to 300 county employees.
- The York County EAC contact worked with the York County Council to declare March 28-April 1, Ground-level Ozone Awareness Week. Ground-level Ozone Awareness bookmarks were mailed, along with the county council agenda, to 300 citizens.

The following includes materials that were requested by the EAC areas:

County/COG	Item	Number
Chester	Spare the Air – paycheck inclusions	250
Cherokee	Ozone and Your Health	50
Greenville	Ozone and Your Health	200
	Learn Before You Burn	200
	Coloring Books – Spare the Air	100
	Pencils	150
	PDF of Display	1
	Air PSA	1
Charleston	Learn Before You Burn	200
Georgetown	Air is Everywhere Posters	5
Lexington	Air PSA	6
Anderson	Air PSA	1
Spartanburg	Air PSA	1
Appalachian COG	Air PSA	1
Richland	Air PSA	1
Central Midlands COG	Air PSA	1
York	Air PSA	1
Catawba	Air PSA	1
Abbeville	Air PSA	1
Abbeville	Ozone and Your Health (for Paycheck)	200
Allendale	Ozone and Your Health	200
York	Learn Before You Burn	500
	Gas Can Exchange Brochures	100
Aiken	Ozone and Your Health	100
	Coloring Books – Spare the Air	450
	CO2 Brochures 150	150
	Driving Smarter 450	450
	Learn Before You Burn 150	150
	Learn Before You Burn Spanish	100
	Pencils	1 Box (500)
Pickens	Notepads	25
	Pencils	25
	Air Fresheners	25
	Ozone Posters	25
	Care About Air coloring books	25

All counties received:

- Coloring Book
- Bookmarks (*It All Adds Up To Cleaner Air*)
- Posters (*Ozone, Air is Everywhere, Good Up High*)
- Ozone and Your Health* Brochure and Electronic Version
- Instructions to link to the SCDHEC Bureau of Air Quality website
- Note Pad
- Pencil
- Information on EPA website
- Draft Press Release
- Electronic Version of Proclamation
- 25 Things To Improve Air Quality* flyer and Electronic Version

Department contributions:

- Letters and 2,000 posters to doctors' offices statewide regarding ozone
- Distributing 5,000 flyers in paychecks
- Press releases
- E-mail about Ozone and Proclamation sent to Air Program staff

2006

Governor Mark Sanford proclaimed **May 1 – May 7, 2006** as Ozone Awareness Week in South Carolina. This was the seventh consecutive year for this proclamation. A news release was issued by the Department on April 28, 2006.

An **Ozone Action Needs Assessment Tool** (Tool) was sent to all of the EAC contacts. The Tool was developed to assist local areas in promoting awareness of the 2006 8-hour Ozone Season and the Early Action Compact (EAC) process. Local areas were encouraged to promote and implement measures that will reduce ozone precursors within their county. The Tool offered suggestions for strategies that will increase awareness and thereby create a positive impact on public health and the environment. Local areas were asked to review the list of activities/strategies and indicate if they have already implemented; will implement in 2006; request additional information/assistance; or are not interested. The Tool was returned by nineteen EAC contacts. Staff within the division contacted those counties that returned the Tool and are providing additional information and assistance.

An example of a request from an EAC regarding this follow-up:

Spartanburg County requested a number of outreach materials and was provided:

- 150 Clean Air Kid Bookmarks
- 10 Ozone Action Class Brochures
- 10 DHEC Environmental Outreach Booklets
- 100 Drive Smarter for tomorrow
- 10 Good Up High, Bad Nearby Posters (Small)
- 10 Good Up High, Bad Nearby Posters (Large)

2007

Governor Mark Sanford proclaimed **April 1 – April 7, 2007** as Ozone Awareness Week in South Carolina. This was the seventh consecutive year for this proclamation.

A news release was issued by the Department on March 26, 2007. The Department's BAQ has over the past two years observed elevated levels of ground-level ozone during the month of April. In 2007, management made the decision to begin forecasting for ground-level ozone a month earlier than in previous years to alert South Carolinians in the event elevated levels occur early. The forecast area was expanded this year to include a new region and the addition of two counties to an existing forecast region. Added is the Catawba region which includes York, Chester and Lancaster counties. Marlboro and Dillon counties have been added to the Pee Dee regional forecast.

4. Regulatory Initiatives

In early 2003, the Department began meeting with industry representatives, environmentalists, local governments, and other interested parties to develop state-wide regulations for the purpose of getting additional Oxides of Nitrogen (NO_x) and Volatile Organic Compounds (VOC) reductions to assist us with the EACs. NO_x reductions were focused on during these meetings because modeling indicates that, with respect to ozone formation, NO_x is the critical pollutant. Furthermore, sensitivity analysis has demonstrated that VOC reductions have very little impact on ozone in South Carolina. The EAC process resulted in the promulgation of one new statewide regulation to control NO_x from stationary sources. In addition, the existing open burning regulation was revised to add more stringent restrictions. Upon publication in the June 25, 2004 issue of the *State Register*, the EAC regulations became effective. (It is important to note that local officials and industrial leaders supported the Department's promulgation of the Control of NO_x Regulation and the amendments to the open burning regulation.)

Regulation 61-62.5, Standard 5.2, Control of Oxides of Nitrogen

The Control of Oxides of Nitrogen NO_x Regulation (R.61-62.5, Standard 5.2), while not needed to demonstrate attainment, will help ensure the areas attain and maintain the 8-hour ozone standard. The Control of NO_x Regulation requires Best Available Control Technology (BACT)-level controls on all stationary sources that emit or have the potential to emit NO_x. Many of these sources would not otherwise be required to control their NO_x emissions. For example, under the Clean Air Act requirements, the preconstruction review program referred to as New Source Review (NSR) only applies to larger sources (generally those with potential emissions greater than 100 tons per year or more). For sources with emissions below these levels, there are generally no controls for NO_x required.

This newly-developed regulation is applied statewide to new and existing stationary sources of NO_x emissions. Larger sources that have undergone a BACT review for NO_x are exempt from the regulation; however, larger sources that have taken limits to opt out of a Prevention of Significant Deterioration (PSD) review will still be required to comply with this regulation, which covers sources ranging from boilers and turbines to fluidized bed combustors and lime kilns. For existing sources, the regulation only applies when an applicable unit undergoes a burner replacement, at which time the burner must be replaced with a low burner or equivalent technology capable of achieving a 30% reduction from uncontrolled levels.

Appendix 13 of the December 2004 EAC SIP submittal provides estimated NO_x reductions that are expected as a result of the implementation of this new regulation. These estimates have also been included in Appendix 16 of the December 2004 EAC SIP as part of the county-level emission reductions for the EAC areas. The tables are divided into three groups (two of the tables provide expected NO_x from regulation 61-62.5, Standard 5.2; the third table provides reductions expected from the revisions to the open

burning regulation). The first table in Appendix 13 of the December 2004 EAC SIP provides estimates based on the percent reduction to be achieved for new sources. The reductions for new sources vary greatly depending on the source type. For instance, new combined-cycle natural gas turbines of less than 50 megawatts capacity must have controls installed that will achieve the equivalent of a 94% reduction from uncontrolled levels. The control requirements will help ensure that the growth of NO_x emissions is controlled. The second table in Appendix 13 of the December 2004 EAC SIP pertains to estimated reductions from existing sources. As this regulation will be triggered upon the replacement of burners at existing sources, it may take a number of years for these reductions to be realized. However, these estimates, based on the number of applicable sources in the inventory, indicate that when fully implemented, the regulation has the potential to reduce NO_x emissions by 2,913.51 tons per year. It is important to note that these reductions were not used to support the modeling demonstration. Even without these additional control measures, which will apply statewide rather than just in select areas, modeling analysis indicates that all monitors will be attaining the standard by 2007. However, the reductions from these regulations are quantifiable, permanent, and will ensure that South Carolina gets cleaner air sooner.

Regulation 61-62.2, Prohibition of Open Burning

The most significant revisions to this regulation are as follows: deleting the exception for the burning of household trash, revising the exception for the burning of construction waste, and revising the exception for fires set for the purpose of firefighter training. The burning of household trash presents health and environmental concerns for many communities. The smoke generated from these activities is a nuisance to some and a health threat to others with asthma or other respiratory problems. Furthermore, the Department spends a lot of staff time and resources responding to complaints related to these activities. Regulation 61-62.2 had previously prohibited the burning of household waste except where other disposal options were not available. This activity is now clearly prohibited, which should provide the clarity necessary to help us enforce this restriction.

With respect to the exception for the burning of construction waste, the Department has revised this provision to allow only residential construction waste to be burned. Residential construction waste can only be burned outside of the ozone season (which runs April 1 through October 30), between the hours of 9:00 a.m. and 3:00 p.m., and must be conducted at least five hundred feet from any occupied structure. Furthermore, only certain “clean” wastes are allowed to be burned. (“Clean” wastes would be residential construction waste free of heavy oils, wood treatment products, asphaltic materials, natural or synthetic rubber, or any other trade wastes which would produce smoke in excess of forty percent capacity.) Again, the Department believes that the burning of construction waste presents health and environmental concerns for many; prohibiting a significant portion of this waste from being burned will alleviate some of these concerns and provide additional NO_x reductions.

Finally, the exception for the purpose of firefighter training has been revised to ensure that minimum health, environmental and safety concerns are addressed. Prior Department

approval is required in order to obtain the exemption as a permanently established training site. Fires set for the purpose of fire-fighter training at non-permanent locations must receive Department approval prior to the initiation of any burning activity.

Based on the Department's 1999 emissions inventory, residential burning of household waste generates 2,379 tons of NO_x and 11,896 tons of VOCs in the state annually. Such emissions reductions can be realized with the Department's implementation of the ban on burning of household waste. Emissions inventory data also indicate that an annual reduction of 147 tons of NO_x and 625 tons of PM would be realized under the revisions to the residential construction waste burning provision (see Appendix 13 of the December 2004 EAC SIP for further information). Although information on the reduction of NO_x and VOCs resulting from the ban on burning commercial construction waste is not available, it is presumed that substantial reductions of those pollutants will occur with the implementation of this prohibition. Additionally, Appendix 16 of the December 2004 EAC SIP includes county-level emission reductions and descriptions for the EAC areas.

On April 14, 2005, the Department issued a news release reminding citizens in SC of the revised regulations. Additional news releases were sent out during the fall of 2005 to encourage citizens to use alternatives for disposing of yard trash.

On October 9, 2006, the Department issued a news release encouraging citizens to reduce open burning of yard debris. Additional news releases during the fall of 2006 included October 15, 2006, "Open burning poses threats" in the Anderson County – Independent Mail; October 2006 and "Alternatives to burning waste urged" in the Greenville News. Lexington County officials are working with stakeholders to reduce open burning within the County. On October 25, 2006, The State published an article on officials considering restricting fires in subdivisions and construction sites. For additional information regarding the discussions in Lexington County see Enclosure 3 – Local EAC Activities.

A workgroup was established in 2005 that includes staff representation from the Department's Bureau of Land and Waste Management (BLWM) and the Bureau of Air Quality (BAQ). The intent of this workgroup has been to develop a tool for staff, especially regional inspectors, to more clearly outline the regulations the two Bureaus have related to Open Burning regulations. This is an effort to enable staff to more effectively use these regulations in the response to complaints on open burning. Accompanying the work of this group will be training of staff in the use of this new tool and the development of an outreach plan to increase awareness of the public regarding open burning, and alternatives to this action. A plan (DRAFT Open Burning Campaign Logic Model; June 2006) is attached. Workgroup meeting notes are available. The resource tool mentioned above has been developed and is awaiting management approval as of December 1, 2006.

On April, 26, 2007, the Waste Disposal Matrix Document tool described above was approved for use internally with staff in the BLWM and BAQ. A meeting of the inter-bureau workgroup is scheduled for June 28, 2007 to discuss the development of a training plan to use this tool with the appropriate staff.

On September 28, 2007, the managers of the education and outreach sections for the BLWM and for the BAQ met with staff from the Agency Media Services to discuss the development of a statewide Open Burning information campaign. This campaign is tentatively set to begin in the Spring of 2008 and will include TV and radio PSAs, and print materials targeting various key audiences with messages on options to open burning materials.

Draft June 6, 2006

- a. Create a Program Logic Model
 - i. Identify the impacts (outcomes) of the project on the intended audience and/or issue. Start with the broadest, or long-term outcome, then add the steps (mid- and short-term outcomes) needed to get there.
 - ii. List the activities and outputs needed to achieve the outcomes.
 - iii. List the resources needed and/or available.
 - iv. Read the model left-to-right as a series of “If...then...” statements.
 - v. Restate the outcomes as SMART objectives.
 1. Specific
 2. Measurable
 3. Audience-directed
 4. Ambitious
 5. Realistic
 6. Time-bound

Impacts:

1. Public Awareness
 - a. Gain knowledge about the pollution caused by open burning various materials
 - b. Positive experience
 - i. Positively affect attitude toward DHEC, counties, partners
 - ii. Realize there is something each person or contractor can contribute to the pollution solution
 - iii. Positive feeling about alternatives to open burning waste products from various sources
 - c. Behavior Change
 - i. Recycling materials where possible
 - ii. Reducing the amount of materials burned
 - iii. Transporting materials to appropriate landfill
 - d. Spreading the word
 - i. Participants will spread the word about the event to their families, friends, business associates
 1. It must be well organized
2. Short Term Outcomes
 - a. Positive reaction
 - b. Increased awareness of open burning as source of air pollution
 - c. Increased awareness of options
3. Mid term Outcomes
 - a. Use of recycling alternatives (curb side, drop-off stations)
 - b. Spread the word
4. Long term outcomes

- a. User begins to realize impact of daily activities on environment
 - b. Word spreads and project grows, impact more people
 - i. Message about air quality spreads with project, begins to take hold in people's minds, making it easier to reach them with future projects
 - c. Reduction in open burning complaints to regional staff
5. Resources
- a. DHEC staff
 - b. Early Action Compact Partners (local government)
 - c. Art Studio/BLWM-Office of Recycling/Air Education & Outreach Section
 - i. Development of brochures (including Spanish versions); Also utilize existing materials where appropriate.
 - ii. PSA (both TV and Radio) development; General message: "Open burning is bad for your health, the environment and it is illegal in many instances. Reduce, Re-use, And Recycle. Specific messages may be developed dependent upon resources.
 - d. Development of a web-page specific to open burning issues that is linked by both BLWM and BAQ.
 - e. Partners- Forestry Commission, Fire Stations, Fire Marshall
 - f. Partner contacts
 - g. Knowledge of other states who have done this project before
6. Activities
- a. Gather information from other states for prototype
 - b. Identify and Inform partners
 - c. Identify locations for possible press conference(s) - major urban areas?
 - d. Identify funding (PPA)
 - e. Utilize access to teachers to utilize lessons to share with students regarding open burning messages.
 - f. Document project
 - g. Meet with team to organize details
 - h. Advertise messages via TV/Radio; conferences/meetings
 - i. Host press conference(s)- Release PSAs and informational materials
 - j. Document and publicize results
7. Impacts
- a. If we can properly reach the various segment audiences, and we may be able to affect the issue of open burning.
 - b. If we garner the involvement and leadership of the EACs, we can build and strengthen our relationship and our joint commitment to improving air quality.
 - c. If we can find funding, we can more broadly disseminate our message(s) to the appropriate audiences.
8. Objectives
- a. Utilize TV PSAs in the Upstate, Central Midlands, York County and Central Savannah River Area, and Coast areas.
 - b. Ensure significant involvement from local government leadership, especially EAC partners.

- c. Begin campaign in mid-March 2007.
- 9. Planning
 - a. Identify primary target audiences
 - b. Identify partners to help with planning and execution
 - c. Identify evaluation methods
 - d. Identify sponsors to help with funding
 - e. Identify appropriate message(s) for audiences
 - f. Secure funding
 - g. Develop necessary media tools
 - h. Advertise
 - i. Report planning and progress
 - j. Identify weak spots
 - k. Address weak spots
 - l. Host news conference event(s)
 - m. Analyze results
 - n. Final report
 - o. Meet to discuss outcome and follow-up work

5. Assist local areas in determining emission reductions

South Carolina has been and will continue to work with EPA to assist local areas in determining the emission reduction strategies that will assist the area in achieving emission reductions needed for maintaining the 8-hour ozone standard within their respective area. The emission reduction strategies submitted by the local areas contain both quantifiable and directionally sound measures, it should be noted that none of them were included in the attainment demonstration model for 2007.

The EAC process encourages state and local areas to design control strategies that best fit their specific needs. As part of this process the Department began meeting in 2002 with local governments, industry representatives, environmental groups, and other state and federal agencies in an effort to develop state and local control strategies to reduce ozone precursors as part of the commitments under the compacts. The Department tackled these requirements from many different perspectives. The Department met with the local EAC areas to consult with them and provide them with assistance on developing the local plans. The Department formed stakeholder groups and conducted meetings in an effort to develop statewide regulations to achieve additional reductions in ozone precursors to support the EAC process.

This effort continues and as a result of the 2006 SC Early Action Compact Summit has expanded. Bureau of Air Quality (BAQ) staff have been assigned to work with local government officials based on the State Council of Governments (COG) structure. This is a recent shift in our strategy for outreach to local and state government. BAQ staff will work with local contacts, assess their planning and determine how the BAQ may offer assistance. Recent examples of this type of work has been the “Motor Vehicle Maintenance Project,” expansion of the “Take a Break for the Exhaust Project,” and the potential expansion for the “Breathe Better Air at School Project.”

6. Clean Air Initiatives for Government Entities

Bureau of Air Quality (BAQ) staff were charged with the task of developing, implementing and marketing a plan for reducing precursors to ground-level ozone emissions by state government that supports the Early Action State Implementation Plan initiative. Bureau staff solicited participation from other state government agencies to include the transportation sector and property maintenance agencies. Also included were local Council of Governments and the Palmetto State Clean Fuels Coalition. A major accomplishment of the group is the passing of a Concurrent Resolution by the South Carolina State Legislature on May 14, 2003. This resolution supports the activities of the Department's establishment and implementation of the state's early action approach for complying with the 8-hour ozone standard and provides for the establishment of an intergovernmental workgroup for the purpose of promoting behaviors and policies to reduce air pollution throughout the state of South Carolina.

In 2005, three policies (telecommuting, alternate work schedules and variable work hours) in the Department's Administrative Policy Manual were updated to encourage these activities to help protect ambient air quality.

Other accomplishments through April 2005 included the following:

- Richland County requested air quality articles for use in their staff newsletter and information regarding the EPA *Energy Star* Power Management program to share with county administration.
- A staff person from the South Carolina Department of Transportation (SCDOT) was designated to receive the Department's Ground-level Ozone Forecast and to distribute it via e-mail to approximately 5,000 staff. SCDOT utilizes the Department's Ozone Forecast Internet link for the forecast on their web page. SCDOT roadside emergency signs in the Upstate and Midlands will be utilized for Ground-level Ozone Action Alerts. The number of signs by county (April 2005) is: Anderson (1), Greenville (5), Spartanburg (7), Oconee (1), Richland (5), Lexington (2), and Orangeburg (10).
- The South Carolina State Energy Office implemented "Take a Break from the Exhaust" in their office during the 2005 Ozone Season.

The utilization of the TABFTE grew in 2005, with the Bureau of Water, Land & Waste Management and the SC State Energy Office using this program. (Detailed information on the TABFTE program may be found under Commuting Reduction Options (2.a.) of this report.) The BAQ also partnered with the SCDOT and the Energy Office to promote ridership on the SmartRide Alternative Transportation project during Ground-level Ozone Season.

In 2006, the utilization of the TABFTE continued to increase. New partners included Bowater, CitiGroup, Springs Industries, Winthrop University and York Technical College all located within York County. In addition, Lexington County Government and the Central Midlands Council of Governments offered the program to employees. (Detailed information on the TABFTE program may be found under Commuting Reduction Options (2.a.) of this report.) Partnerships with the SCDOT and the Energy

Office to promote ridership on the SmartRide Alternative Transportation project continued for 2006. SCDOT includes messages on the Intelligent Transportation System (ITS) Boards around the State encouraging citizens to car-pool on Ozone Action Days.

Work with both state and local governments to develop activities in support of “Cleaner Air Sooner” is on-going, although not in the formal workgroup called CAIGE. BAQ staff has determined that outreach activities need to be developed on a local and individual need basis. Thus, at this time staff has been assigned to work with local government officials based on the State Council of Governments (COG) structure.

This is a recent shift in our strategy for outreach to local and state government. BAQ staff will work with local contacts, assess their planning and determine how the BAQ may offer assistance in terms of resources and project development. Recent examples of this type of work has been the “Motor Vehicle Maintenance Project,” expansion of the “Take a Break for the Exhaust Project,” and the potential expansion for the “Breathe Better Air at School Project.”

BAQ staff offer consultation services for exploring, developing, implementing and evaluating these types of projects based on local and state agency interests and initiative. This approach, rather than a formal, central based workgroup, offers more flexibility and support to these entities based on individual organizational need and plans.

7. Smart Highways

The Smart Highways effort through the EAC process addresses transportation planning and any impact transportation might have on air quality. This approach is not a requirement of the EAC and is not being done in any other EAC area in the country. It is an example of the commitment by air quality and transportation agencies at the local, state, and federal level. In the event that deferral of the effective date of the nonattainment designation is withdrawn, these areas will be fully prepared to address the full regulatory requirements of Transportation Conformity. In addition, South Carolina already has in place the necessary consultation procedures to address traditional transportation conformity requirements for all pollutants in any nonattainment area. Again, this initiative is something no other state has accomplished.

The parties involved in the interagency meetings developed a Smart Highways checklist to be used in transportation planning. This checklist is intended solely as an informational guideline to be used in reviewing Long Range Transportation Plans and Transportation Improvement Programs for adequacy of their documentation and will be used during long range transportation plan updates as required by 23 CFR 450.322. A copy of the Smart Highways Checklist is attached in Appendix 12 of the December 2004 EAC SIP. Air quality and transportation officials engaged in these interagency meetings include the Metropolitan Planning Organizations (MPOs) from the deferred nonattainment EAC areas (Anderson Area Transportation Study (ANATS), Greenville-Pickens Area Transportation Study (GPATS), Spartanburg Area Transportation Study (SPATS) and the Columbia Area Transportation Study (COATS)), the South Carolina Department of Transportation, Federal Highway Administration South Carolina Division, EPA Region 4, Federal Transit Administration, and the South Carolina Department of Health and Environmental Control.

As a result of this effort, each of the four Metropolitan Planning Organizations (MPOs) in deferred nonattainment areas (Greenville, Anderson, Spartanburg, Richland and Lexington counties) demonstrated that their respective long-range transportation plan eliminates or reduces violations of the national ambient air quality standards (NAAQS).

Copies of the four MPO reports may be found at:

http://www.scdhec.gov/eqc/baq/html/eap_Smart_Highways.html.

The documentation in the reports was the subject of interagency consultation. Interagency consultation began in January 2003, and continued through completion of the emissions analysis with regular meetings to discuss and agree upon schedules, model parameters, latest planning assumptions, horizon years, exempt projects, and regionally significant projects. In addition, each of the MPOs provided public review of this report in accordance with the respective MPOs public involvement policy. A key element of the public involvement process is a public review of transportation planning documents including the Long-Range Transportation Plan.

Using 2002 as the base year, the following table shows that the emissions expected from implementing the proposed MPO long-range transportation plan(s) are less than emissions from either the baseline case or the no-build case for 2007. Further emission reductions are forecasted for the longer term. The specific numbers can be found in each MPOs report.

	ANATS		GPATS		SPATS		COATS	
	NO _x	VOC	NO _x	VOC	NO _x	VOC	NO _x	VOC
2002	7.703	4.354	30.213	19.276	17.96	10.58	45.295	27.135
2007	5.507	2.94	21.58	13.648	11.86	6.83	32.017	18.962
Reduction tpd	2.196	1.414	8.633	5.628	6.1	3.75	13.278	8.173
Reduction tpy	801.54	516.11	3151.045	2054.22	2226.5	1368.75	4846.47	2983.145

tpd = tons per day

tpy = tons per year

EAC Reinforcement of Planning Initiatives at the Local Level

The EAC process has allowed contact with counties at a critical time in their comprehensive planning process. Many are in the midst of updating their 5 and 10-year plans. The dates for completing these do not coincide with EAC dates but improving air quality does not have a “sunset” provision. Many counties have already begun or completed changes to their land use plans that reduce sprawl and traffic congestion.

Anderson County

Highlights of the Anderson County Land Use and Development Standards include items that develop standards with respect to landscaping and open space, promote public health and safety through the reduction of noise pollution, storm water runoff and air pollution. Also included are development standards with “Greenways” defined which link residential areas with other open space areas. These greenways may contain bicycle paths, footpaths, and bridle paths. Additionally, intensity standards (designed principally to regulate land use in accordance with the design function and carrying capacity of the road on which it is located) are being developed.

Greenville County

Smart Growth America has said about the City of Greenville, “The city has the right idea about how communities should be designed.” It has chosen Greenville as one of four cities and counties nationwide to work with to turn smart growth ideas into better development for Greenville. Efforts include spreading the kind of development happening downtown to its more suburban edges including more sidewalks, buildings closer to the street, smaller parking lots and more landscaping.

Greenville County’s Comprehensive Plan encourages the development of industrial parks so aesthetics, design, screening and land use impacts can be better managed. Plans are being worked on to revise the county Zoning Ordinance to create new residential zoning classifications that permit design innovations such as open space, varying setbacks,

cluster development, varying lot sizes, and mixed uses with extensive landscaping. Through incentives, it would also encourage developers to build in the urban area of the county. Transit goals in the Comprehensive Plan encourage residents to use alternative modes of transportation for travel.

Greenville County Planning Commission, on behalf of the City of Mauldin and the City of Simpsonville, retained Day Wilburn Associates to prepare a Transit Development Plan for the Mauldin-Simpsonville Urbanized Area. Information regarding the results of this study can be found in the Greenville County portion of this document.

Spartanburg County

Spartanburg County's land use efforts include strategies that are represented in the county's comprehensive plan or unified land management ordinance. Some important strategies include:

- Development of a comprehensive urban forestry plan to include local tree ordinances, protection policies of urban open spaces, and landscape ordinances that utilize native plants.
- Revisions of the county's subdivision regulations to include conservation provisions to help not only retain natural resources, but add to the value and marketability of rural residential projects. This will also maintain balance between the rural setting and future growth and development.
- Amending the county's subdivision regulations to promote cluster housing development in rural areas, thereby minimizing land coverage for residential use. Establishing maximum lot size (recommended 1/4 acre) for cluster subdivisions of a certain size, as opposed to minimum lot size, and allocating in perpetuity through lease, trust, common ownership, etc. up to 80 percent of such subdivisions to open, agricultural, or forested use, thus retaining rural, open character.

To address transit needs Spartanburg County is working to provide convenient, coordinated, accessible and affordable transit service under the administration of a single transit agency, controlled by a Joint Transit Commission appointed by city and county government. This includes interfacing the transit system with other transportation modes including highways, airports, rail, intercity bus, school buses, and bikeway/trail systems. Components of this approach include developing alternative funding sources to promote public transit as a low cost alternative to the automobile and as a means of lessening traffic congestion.

To promote bicycle and pedestrian facilities, a governmental committee composed of local officials whose mission is to promote alternative transportation systems in the county has been created. The committee is also responsible for the procurement of funding for the implementation of such facilities. Securing a public and private partnership to oversee the implementation of proposed improvements and promote the use of alternative transportation through educational, promotional and incentive programs is also being addressed.

Lexington County

On January 22, 2005, Lexington County Council received statewide recognition from the *South Carolina Wildlife Federation* for its landscape ordinance. The Federation's Forestry award was in recognition of leadership and vision through comprehensive urban forestry programs recently implemented. Due to the variety of issues involved in a project of this magnitude, the county sought input from experts in landscaping and urban forestry as well as the public in developing the Ordinance. While the County's Ordinance is directed primarily at commercial development, it actually focuses on six different categories. The most important aspect of the *Lexington County Landscape Ordinance* is that its format enables it to be duplicated in any community regardless of location, political environment, or intensity of development. Air quality benefits of this ordinance are that it will help reduce emissions because of reduced use of gas powered yard equipment and the use of canopy trees in parking lots to cut down on evaporative emissions.

Components of the Lexington County Comprehensive Plan encourage the development of traffic-intensive commercial, industrial and higher density residential land uses near existing major roads, railroads and interstate highways. It discourages low-density residential development near existing major roads and interstate highways and encourages development patterns such that future growth can be effectively served by public transportation. It also provides for safe transportation facilities for bike and pedestrian usage and promotes the compatibility of different land uses as an alternative to completely segregating residential, commercial, industrial, agricultural and other uses from one another. Another effort includes working within the Central Midlands Council of Governments to ensure that the Columbia Area Transportation Plan (COATS) assists in the reversal of the "sprawl" development pattern.

Per an October 5, 2006 article in *The State* newspaper, Lexington Town Council approved spending \$14,000 to install equipment to synchronize traffic flow in the downtown Lexington area. The equipment will monitor traffic at 20 intersections and allow state traffic officials to adjust the length of lights to improve traffic movement on the roads. This is one of several changes implemented to reduce traffic congestion.

Richland County

Effective July 1, 2005, Richland County began using a vastly updated Land Development Code (LDC) to address a number of issues that citizens have brought to the attention of the county over the years such as transportation, community appearance, conservation, water quality and affordable housing. The central reason for drafting the updated LDC was to revise the county's land development regulations as needed to make certain they accomplish the goals and objectives of the comprehensive plan.

Among its many purposes, the LDC specifies planning requirements that seek to "lessen congestion in the roads." For the first time, site plans for major land development must include a traffic management plan: "An evaluation of the effect of traffic generated by a development on the operation and safety of the adjacent public roads. Such analysis shall include an identification of traffic impact mitigation measures needed to improve the

safety, operation, and flow of vehicular and pedestrian movement into and out of the development.”

Richland County Council sponsored a neighborhood meeting on April 16, 2005, to share information on planning, design, and development of livable communities. Dr.

Chuck Bohl, an internationally recognized expert on this topic is scheduled to speak.

Richland County has also contracted with the Palmetto Conservation Foundation (PCF) to address how land use, transportation, parks, and trails can be incorporated into a greenway network that builds on the Three Rivers Greenway and Palmetto Trail and promote integrating physical activity into daily routines. The primary activities of focus are bicycle/pedestrian transportation, safe routes to school, and community planning. In combination with Bicycle/Pedestrian planning now underway at the Columbia Metropolitan Planning Organization, car commuters will have additional commuter options. PCF has already participated in a successful active living campaign in Spartanburg, South Carolina, which brings, in part, an air quality benefit that Columbia and Richland County want to emulate.

As part of its temporary funding solution to the Central Midlands Regional Transit Authority (CMRTA) crisis, Richland County Council established a Transportation Study Commission to study public transit, road improvements, and walking and bicycle trails. The 33 member commission is expected to release a final report in Spring 2008, as well as a recommendation for funding high-priority transportation projects. The commission will study transportation issues that are regional in nature. As a result, members will be made up of appointments from Richland and Lexington County Councils, the City Councils in Columbia, Cayce, and West Columbia.

On December 6, 2006, Councilwomen Val Hutchinson and Joyce Dickerson held an informational meeting with residents and leaders from the rapidly growing Northeast area of Richland County. The meeting included a presentation by Norm Whitaker, head of the Central Midlands Council of Governments, regarding the transportation priorities and funding mechanisms for roads in the Northeast. Mr. Whitaker explained the correlation between congestion, growth, and air quality in the Northeast, and informed attendees that that ozone monitor located at Sandhill has the potential to draw the entire two-county region into non-compliance. The committee resolved to meet on a quarterly basis in an effort to centralize the often fractured discussion of transportation needs on this rapidly growing area of the county. Councilwomen Dickerson and Hutchinson also received suggestions from the group as to how Council can better plan for transportation needs in the Northeast, including accelerating an update of the county’s comprehensive plan, as well as a comprehensive countywide transportation plan.

Richland County's Transportation Study Commission will be hosting a series of public meetings to receive input from the citizens on ways that the county can improve all modes of transportation. A copy of the meeting announcement may be found in Enclosure 2-4. Each meeting will have three breakout sessions: Roads, Transit, and Greenways/Pedestrian/Bike Paths.

While this commission will be looking at ways to improve the transportation network, it will also be looking at the impact of transportation on the air quality attainment status. The meetings were open to anyone who lives, works, or visits Richland County.

October 2007 - Berkeley, Charleston and Dorchester counties

Region 4 EPA and the Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) provided a series of training workshops on how each of us can work with our elected officials and communities to coordinate on Smart Growth Strategies. The strategies included promoting better land use and transportation as well as improved bicycle and pedestrian facilities. EPA supports this strategic training as a way of reducing energy costs and protecting air and water quality.

8. Other Point Source Reductions

As noted in the June 2003 EAC Progress Report, Bureau of Air Quality staff met with individual industry representatives in an effort to negotiate emission reductions. The intent was to focus on several large NO_x emitters, particularly those with few existing NO_x controls that are impacting potential nonattainment areas, to negotiate reductions through the permitting process or consent agreement. This was done in lieu of developing statewide regulations on existing industrial sources. Meetings with various industries were held on May 1, 2003, June 2, 2003, and June 11, 2003.

Appendix 10 of the December 2004 EAC SIP included copies of the agreements with these facilities. As part of the EAC process, several of the largest existing industrial sources in the Upstate and Midlands areas of South Carolina have voluntarily committed to reduce and/or limit their NO_x emissions. These negotiations were the direct result of the EAC process as are the NO_x reductions that will result from them. SCE& G - Wateree in Richland County installed Selective Catalytic Reduction (SCR) on two coal-fired boilers to comply with the NO_x SIP Call and has agreed to take permit limits on these units as their commitment to the EAC process. International Paper in Richland County agreed to take an annual allowable NO_x emission reduction of 1000 tons, facility wide.

In addition, Duke Power in Anderson County has committed to install and operate low NO_x combustion controls on two coal-fired boiler units (controls were installed in 2001 on the other boiler at the facility) and to limit the NO_x emissions from these units to an emission rate of 0.27lbs/MMBtu. This is a \$7 million investment by Duke Power that will result in approximately 850 tons of NO_x reduced annually. As part of this process, Transcontinental Gas Pipeline Corporation (Transco), which operates the internal combustion engines at Station 140 in Spartanburg County, began early implementation of the NO_x emission reductions required by Phase II of EPA's NO_x SIP Call regulation. In accordance with the federal requirements, Phase II is required to be fully implemented by 2007. As part of the EAC process, Transco performed engine overhauls and engine combustion modifications on 13 engines during the 2005 calendar year so that these NO_x emission reductions were captured well ahead of the federal timeline. The goal is to have all NO_x reductions quantified and certified before the end of the 2006 calendar year, allowing Transco to take credit for NO_x reductions prior to the start of the 2007 Ozone Season. August 2006 testing reports of the 13 units at Transco revealed emissions were significantly below the control period emissions limit established in the facility's permit. The South Carolina Electric and Gas installed NO_x reducing technology on some of its coal-fired boilers at the Canadys, McMeekin, and Urquhart plants. All units have NO_x continuous emission monitors in place. These actions are permanent and quantifiable and were not required by any federal or state regulation. These actions were taken to demonstrate the facility's commitment to the EAC process.

9. Palmetto State Clean Fuels Coalition Initiatives

The Palmetto State Clean Fuels Coalition (PSCFC) is part of the Clean Cities program and is one of 88 designated coalitions in the United States. The Department of Energy approved the application for PSCFC's designation in 2003, recognizing the commitment of the stakeholders to building an alternative fuels market in South Carolina. <http://www.palmettocleanfuels.org>

Prior to receiving the official designation, stakeholders were involved in a number of alternative fuel activities. On October 17, 2001 – a station supplying ethanol and biodiesel opened in the Aiken area. The station is privately owned and sells fuels to both the government and the public and was the first of its kind in the United States. In conjunction with the opening, on October 18, 2001 – Governor Hodges signed an Executive Order supporting the use of alternative fuels and requiring state agencies, when feasible to utilize alternative fuels when operating alternative fuel vehicles.

On April 2, 2002, the Department held a ceremony to officially announce the availability of E85 at the 2600 Bull Street location in Columbia. The fueling site consists of a 10,000 gallon E85 tank. The Department spent \$105,000 for modifications to existing tanks and was the first state agency to offer E85 in Columbia to county, federal and state governments.

There are currently 33 publicly accessible E85 refueling infrastructure stations in the Columbia, Greenville, and Aiken areas. Two more stations will come on-line in 2006 in the Rock Hill/Fort Mill area. During 2005, South Carolina opened more publicly accessible E85 refueling sites than the State of Iowa.

A recent survey (2005) identified a total of 1,232 alternative fuel vehicles actually operating on alternative fuel in the nine-county PSCFC service area. Of these vehicles, 691 (56.1%) were E-85 flex fuel, 461 (37.4%) were operating on B20 biodiesel, 42 (3.4%) were operating on propane, 20 (1.62%) operating on compressed natural gas, and 18 (1.5%) are electric vehicles. Many of these vehicles are owned by PSCFC stakeholders.

Survey respondents indicated that they planned to buy and operate more AFVs in the next five years. Taken together, these stakeholders will add 2,005 operational AFVs to the road through 2008. This represents an annual increase of approximately 21.5% or roughly 401 vehicles annually.

The 2006 calendar-year survey should be available for the June 2007 EAC Progress Report.

June 2007

The 2006 calendar-year survey is available through the PSCFC website. The survey revealed an overall increase in the number of alternative fueled vehicles. This in part is

due to expanding the participation in the survey as well as additional fleets, including industry and government, turning to alternative fueled vehicles.

The 2006 survey identified a total of 6,916 alternative fuel vehicles actually operating on alternative fuel in the nine-county PSCFC service area. Of these vehicles, 3,754 were E-85 flex fuel, 2,709 were operating on B20 biodiesel, 356 were operating on propane, 72 operating on compressed natural gas, and 25 electric vehicles.

Other activities involving the PSCFC include:

Columbia CNG Initiative - In 2000, the PSCFC worked closely with the Central Midlands Regional Transit Authority (RTA) Board of Directors as they made decisions regarding the fate of Columbia's bus fleet. The Board decided to purchase 7 new compressed natural gas (CNG) transit buses when they replaced SCE&G's aging bus fleet. These buses were delivered in December 2002 and are running successfully on CNG. They are expected to reduce nitrogen dioxide and hydrocarbon emissions by 6,296 pounds per year over a ten-year period, which will result in a cleaner downtown area.

Because of the RTA's commitment to alternative fuels, the Energy Office worked with others to expand the capacity of Columbia's only CNG refueling station. This station is located on the corner of Flora Street and Assembly Street, right across from the Capital City Bombers baseball stadium. This station refuels not only the buses, but also federal, state and local government fleets. It is also open to the public, and accepts both Visa and Master Card.

Ethanol Refueling Infrastructure - In April 2005, six fueling stations in the Columbia and Greenville areas kicked off their sale of ethanol (E85) with E85 for \$.85 events. E85 is the term for motor fuel blends of 85 percent ethanol and 15 percent gasoline and is an alternative fuel as defined by the U.S. Department of Energy. Besides its superior performance characteristics (octane=105), ethanol burns cleaner than gasoline, and it is a completely renewable, domestic, environmentally friendly fuel that enhances the nation's economy and energy independence.

PSCFC and Stakeholders Receive Funding for Two Special Project Proposals in 2005:

1. **York Technical College: Ethanol Refueling Infrastructure:** The SCEO received \$25,191 in federal funds with a cost share of \$18,500 for a total project cost of \$43,691 to establish an ethanol (E-85) fueling station in Rock Hill, S.C. to support the use of E-85 in the existing and future fleets of the City of Rock Hill, York County Natural Gas, the City of Clover, Palmetto Clean Fuels Coalition and York Technical College. The E-85 fueling station will be located at the main Rock Hill maintenance facility and will consist of a 12,000 gallon below ground tank converted from an existing unleaded fuel tank. The refueling station will support 59 ethanol flex fuel vehicles currently using gasoline in the fleets of Rock Hill, Palmetto Clean Fuels Coalition, York County Natural Gas Authority, the City of Clover and York Technical College.

2. PSCFC - Clean Cities Coalition Support - Palmetto State Clean Fuels Coalition: The SCEO received \$20,000 in federal funds with a cost share of \$27,822 for a total project cost of \$47,822 for a coordinator support grant for the Palmetto State Clean Fuels Coalition (PSCFC). The purpose of this project is to ensure continued coordination and staffing of the PSCFC by the Catawba Regional Council of Governments. Funding will ensure continued momentum in the nine-county PSCFC region for projects, marketing, and increased use of alternative fuel and alternative fuel vehicles. Funding will enable promotion and building of infrastructure to support increasing use of alternative fuels by state and local government in the PSCFC region.

Biofuels Showcase - The Palmetto State Clean Fuels Coalition (PSCFC) hosted a Biofuels Showcase on November 18, 2005. This event showcased ethanol and biodiesel and featured a Ride and Drive event where participants had a chance to drive the alternative fueled vehicles on display. Over the last decade, Clean Cities Coalitions have reported activities that have displaced more than a billion gallons of petroleum in transportation. By implementing projects that make use of alternative fuels, hybrid vehicles, truck idle reduction, fuel blends, and fuel economy improvement, Coalitions have helped build local and regional markets for non-petroleum solutions to our energy challenges. On October 14, 2005, the PSCFC hosted a variety of celebratory events in Rock Hill, Aiken, Columbia and Greenville.

Billion Gallon Celebration - Over the last decade, Clean Cities Coalitions have reported activities that have displaced more than a billion gallons of petroleum in transportation. By implementing projects that make use of alternative fuels, hybrid vehicles, truck idle reduction, fuel blends, and fuel economy improvements, Coalitions have helped build local and regional markets for non-petroleum solutions to our energy challenges. On October 14, 2005, the Palmetto State Clean Fuels Coalition hosted a variety of celebratory events in Rock Hill, Aiken, Columbia and Greenville.

Southeastern Alternative Fuels Task Force Workshop

Department staff along with Palmetto Cities Clean Fuel Coalition coordinator, Wendy Bell and South Carolina Energy Office, Chantal Fryer participated in and helped to support the planning and implementation of this workshop held in Tennessee, June 6-7, 2005. Website for the SEATF is: <http://www.sealtfuels.org/>. Evaluation results for this workshop are available.

As of the December 2005 Progress Report, there were 23 public E85 refueling sites in South Carolina with 4 additional stations planned with the next 6 months. In addition to the E-85 refueling sties located at the Department's Bull Street office in Columbia, there were 5 other refueling sites that are not open to the public (2 in Aiken County at the Savannah River Site; 1 in Berkeley County at Santee Cooper; and 2 in Horry County). In 2006, the University of South Carolina and the City of Rock Hill each have plans to install an E85 refueling site; bringing the total number of non-public refueling sites to 8

during 2006. In addition to E85, there were 3 biodiesel public sites in South Carolina. B2 at Spinx and 2 United Energy Sites.

As of June 2006, there were 34 public E85 refueling sites in South Carolina. In addition, there are 14 public biodiesel (B20) refueling sites in South Carolina.

As of December 2006, there were 40 public E85 and 42 public B20 refueling sites in South Carolina. Two sites, one of which will be located in the City of Rock Hill (York County) will be opening soon. Under a recent grant award, PSCFC received funding for 2 additional E85 sites and a B20 site in the Rock Hill area.

The 2006 calendar-year survey should be available for the June 2007 EAC Progress Report. The survey will include information such as the City of Rock Hill converting their entire diesel fleet, on-road and off-road to B20; the City of Union and Union County both are now using B20; and, Fort Jackson is using E85 in non-tactical vehicles.

On August 15, 2006, Bell Exxon in Union opened E85 and B20 dispensers that will service the City of Union and Union County AFVs. Southeast Biodiesel hosted a grand opening for their Charleston facility on October 27, 2006. Production at this facility is expected to begin in January 2007.

A grand opening was held on December 6, 2006 for Carolina Soya located in the City of Estill, Hampton County. The facility is expected to be operational in March 2007 and will produce up to 30 million gallons of soybean-based biodiesel fuel per year.

PSCFC provided a moderator/speaker for the 2006 SC EAC Summit held in Columbia on August 16 and 17. A presentation on alternative fuels by the PSCFC was also given at the Southeast Governmental Fleet Managers Association meeting in October 2006.

December 2007 – There are currently 49 public E85 and 49 public B20 refueling sites in South Carolina. PSCFC is in the process of funding 7 more sites. An additional 12 E85 sites will be installed over the next 6-8 months.

September 19, 2007 – South Carolina Biodiesel Fuel Quality Symposium

The South Carolina Biodiesel Fuel Quality Symposium took an in-depth look at the latest regulatory, environmental, and technical developments impacting the fastest-growing renewable fuel industry in South Carolina. The event's technical program provided participants with a basic understanding of how biodiesel is produced, fuel management, fuel quality, component compatibility, regulatory issues, and incentives. Speakers include recognized experts in their respective fields including industry professionals, regulators, local and state officials, fleet managers, retailers, distributors, and producers.

Legislation - Members of the Upstate EAC counties (Anderson, Greenville, and Spartanburg) in coordination with the Palmetto State Clean Fuels Coalition and the South Carolina Chapter of the Sierra Club, supported statewide legislation that will provide tax incentives for purchase of alternative fuel and hybrid-propulsion vehicles and help reduce

costs and provide tax credits for production and infrastructure for alternative fuels. On June 1, 2006, Governor Sanford signed an act to amend the Code of Laws of South Carolina, 1976, by adding Section 12-6-3377 so as to allow a state income tax credit equal to twenty percent of certain new hybrid, fuel cell, alternative fuel, or lean burn technology motor vehicle credits allowed against a taxpayer's federal income tax liability.

October 10, 2006 - National AFV Day Odyssey: Showcasing Cleaner More Energy-Efficient Choices in Transportation - hosted by York Technical College. This public event enables Americans to learn about the benefits of alternative fuel and hybrid electric cars, vans, trucks, and buses. The event was an opportunity for the public to get close-up look at a number of alternative fuel and hybrid electric vehicles—including vehicles from Honda, Ford and Toyota—and to meet experts who can answer questions about the future of transportation. Workshops were conducted throughout the day on AFV and hybrid electric vehicles to include what makes hybrids different, how they came about, and how they operate. Participants will also be able to view natural gas, bio-diesel and electric fueled vehicles from the City of Rock Hill and a hybrid lineman's truck from Duke Energy. National AFV Day Odyssey is coordinated by the National Alternative Fuels Training Consortium, headquartered at West Virginia University, and includes a group of 27 higher-education institutions dedicated to educating technicians and the public about clean, cost-effective vehicles. York Technical College's partners include the South Carolina Energy Office, South Carolina Department of Health and Environmental Control, Palmetto Clean Fuels Coalition, Centralina Clean Fuels Coalition, the City of Rock Hill and Duke Energy.

These combined efforts continue to exhibit the State's dedication to renewable energy.

10. Tree City USA

Tree City USA encourages municipalities and areas to have strong urban forestry programs. In the fall of 2005, the Bureau of Air Quality sent an electronic mail message to all 45 EAC areas in South Carolina asking the counties to encourage municipalities within their county to help participate in this program that can benefit air quality.

As of June 2006, there were 39 designated areas in South Carolina, an additional 2 from the December 2005 Progress Report.

The Tree City USA program is sponsored by The National Arbor Day Foundation in cooperation with the USDA Forest Service and the National Association of State Foresters. According to the National Arbor Day Foundation website ([http://www.arborday.org/programs/treecities.cfm?chosenstate=South Carolina](http://www.arborday.org/programs/treecities.cfm?chosenstate=South%20Carolina)) as of December 2006 there are 40 designated areas in South Carolina.

As of June 2007, there are still 40 designated areas in South Carolina.

As of December 2007, there are 39 designated areas in South Carolina.

11. Energy Efficiency

a. ENERGY STAR

Energy Benchmarking/Portfolio Manager Report January 2005-September 2005

The Department received \$5,000 in additional Section 105 grant monies to promote the ENERGY STAR Energy Benchmarking program in our area. Below is a summary of the Bureau of Air Quality's (BAQ) efforts in promoting this program through September of 2005.

Efforts were made on two fronts to promote Energy Star. The first effort was to install Energy Star with the BAQ and then expand the program throughout the rest of the Department. Starting in October of 2006, BAQ began tracking energy consumption for the Bull Street office building, which is also home to the Bureau of Water, some Health Services offices and the Department's administration. This information will be used as a baseline to show progress in reducing energy consumption. Research has been done into energy conserving upgrades already completed. BAQ is developing a comprehensive energy efficiency program for the Bull Street building that will include identifying best practices for staff and tracking of energy use.

The second front was to involve other state agencies and local governments through outreach efforts to try to get them to utilize Energy Star. To assist with those efforts, BAQ registered as an Energy Star Driver in February 2007. Since September 2006, information about the benefits of energy conservation, including Energy Star, have been included in presentations to Spartanburg County, Greenville County, the City of Greenville, Oconee County, Lexington County, as well as various other stakeholder groups participating in Greenville County's public awareness campaign. To assist with these efforts, BAQ has developed an educational postcard that recipients can use to register for the "Change a Lightbulb" Pledge. These postcards and other informational brochures are distributed at all of the Department's public events.

South Carolina Department of Health and Environmental Control

The BAQ already had 80% of its computers installed with monitor power management enabled. However, all of the monitors had longer shutdown times than the Energy Star default of 10 minutes. Therefore, the BAQ saved five minutes on 25% of the monitors, 15 minutes on 45% of the monitors, and over 20 minutes on 30% of the monitors that had power management engaged.

The numbers calculated from EPA's calculator program are below:

RESULTS--Savings Per Year

Energy	
Current Use	25,216 kWh
Future Use	18,127 kWh
Savings	7,089 kWh
Dollars	
Current Cost	\$2,169
Future Cost	\$1,559
Savings	\$610
Percent	
Savings	28%

Since the BAQ's successful installation of Energy Star, other Bureau's within the Department are now starting the process of installing Energy Star. Once the Information Technology (IT) staff has completed the necessary installation on the respective servers, the Bureau of Water and the Bureau of Land and Waste Management will be joining the Energy Star team. With the addition of these two Bureaus, the number of computer monitors will increase from around 150 to over 500.

Other State Agencies and Local Governments

During the reporting period BAQ staff met with staff at other state agencies to provide them information about Energy Star. Staff met with the South Carolina Energy Office, the South Carolina Department of Transportation, and the South Carolina Department of Education. At least one Agency (South Carolina Energy Office) has expressed an interest in implementing Energy Star and BAQ staff will be working with them to do so.

As part of the EAC process Energy Star is being used as an example of how local governments can save money, and also help reduce air pollution. Staff have provided flyers and used PowerPoint presentation to demonstrate local government contacts the benefits of Energy Star and how to implement the program.

Department staff created and distributed Energy Star pledge postcards at the South Carolina Science Council Conference in November 2006. Participants returned 54 pledge cards, with pledges to replace over 200 incandescent bulbs with compact fluorescents. The cards were also distributed to 5th graders at Rosewood Elementary School.

Recent Activities and Future Plans

BAQ staff plan to finish installing Energy Star at the Bureau of Water and the Bureau of Land and Waste Management. We also plan on expanding Energy Star to the rest of the Department. Along with the installation to the South Carolina Energy Office, staff plans to revisit the Energy Star issue with the South Carolina Department of Transportation and the South Carolina Department of Education in hopes of convincing them to install Energy Star.

We will also continue using outreach materials and presentations to inform counties and local governments about the advantages of Energy Star and assist them with implementing the program.

Over the past 6 months (June – December 2006) the BAQ has continued to work with local and state contacts to promote EPA “Energy Star” products. Recently, in addition to promoting and encouraging the use of computer monitor power saving software, staff is responding to requests for assistance to draft responses to grants. A recent request from a partner in a state Council of Government (COG) area prompted BAQ to develop the following proposal. While this proposal may or may not be introduced by this COG, the information will be made available by BAQ staff to other contacts interested in pursuing energy efficiency reduction strategies. Also developed and available is the project design and evaluation along with the project logic model.

Energy Star Upgrade Proposal - October 2006:

We propose to upgrade local facilities in the area to demonstrate the ease and effectiveness with which energy reductions can be made. At the core of our proposal are the ideas suggested by the national Energy Star Campaign. We propose the following upgrades to participating facilities:

- Upgrade incandescent light bulbs with CFL light bulbs
 - At a cost of \$10 per unit
 - With an energy savings of 66% per bulb
- Upgrade any existing T 12 fluorescent light fixtures with T8 ballasts and bulbs
 - At an average cost of \$25 per unit
 - With an energy savings of about 30% per fixture
- Upgrade computer system with automatic sleep modes
 - At no cost
 - With an energy savings of about \$10-\$50/computer annually

In addition, we propose to investigate and report where additional savings could be realized. In particular, we plan to look at exit sign efficiency and upgrade costs, overhead diffuser and reflector efficiency and upgrade costs, automatic shut-off savings and installation costs, as well as other items such as interior paint color and occupant behavior patterns.

Every participating facility will first be analyzed to determine baseline energy consumption. Gains in energy efficiency as a result of the upgrades will be measured against this baseline. Upgrades should be extensive enough to demonstrate a real energy savings, while leaving room for improvement should the facility take the initiative to complete the upgrades and invest in further improvements as suggested in the report. The analysis conducted to establish the energy consumption baseline for the facility will also be useful in encouraging that facility to sign-up as an Energy Star Partner.

Energy Conservation and Air Quality Awareness shall be promoted through informational presentations, brochures, and displays at the participating facility throughout the upgrade process. In this way, we hope to impact employee energy conservation behaviors at home, as well as at the workplace. Sponsor and partner logos will be displayed along with or on these informational fliers, kiosks, and presentations.

Finally, the improvements, suggestions for additional upgrades, energy savings, and emission reductions will all be documented in the project report. The report findings shall be made known to the participating management and employees, and shall be used to promote similar campaigns in other areas across the state. Bulbs containing mercury that are replaced as a part of the upgrade will be recycled and/or disposed of properly, and mercury awareness will be a sub-set of the awareness campaign.

Change a Light and Change the World with Energy Star

The BAQ also promoted the **Change a Light and Change the World with Energy Star** in October 2006 to staff within the Department via email. The informational message utilized (listed below) was also shared with EAC contacts statewide. Staff also developed a pledge card and utilized a small inventory of CFLs during a conference with school science teachers (South Carolina Science Council) in October. For this conference, 60 teachers returned the pledge card to take the action of changing a light bulb to a CFL to help reduce Global Climate Change, and 45 signed to buy recycled products and support recycling efforts.

Informational Message:

ENERGY STAR Change a Light, Change the World Campaign 2006

Need a Bright Idea? Here's One:

There is a National effort underway to Change a Light and Change the World with Energy Star, beginning on October 4, 2006 with the National Change a Light Day.

At the campaign's heart, the ENERGY STAR Change a Light pledge is a simple, but vital method of forming a community of inspired individuals across the nation, committing to help reduce the risks of global climate change and to save energy. The pledge asks the individual to change a light in his or her home to an energy-efficient (ENERGY STAR qualified) one.

It couldn't be easier to participate at www.naco.org/changealight. Employees are even then offered a \$1.50 off coupon to purchase their light bulb from Office Depot if they so choose! Just indicate the county in which you live, along with the other information requested in the pledge. You will then be directed to the coupon site for the light bulb.

The goal is to encourage at least 500,000 people nationwide to take the ENERGY STAR Change a Light Pledge over the course of the campaign year.

This is an effort to help save energy, money, and reduce greenhouse emissions. Citizens across our nation are being encouraged to pledge to change one light at home to an energy-efficient model.

You typically spend more to light your home than you do to operate your refrigerator all year long. If you're still using traditional incandescent bulbs and inefficient fixtures, a lot of energy and money is being wasted. As we all are aware, pollution, albeit controlled, is an environmental side effect of energy generation. Reducing energy generation needs through conservation measures, thereby, minimizes emission levels of pollutants.

Please do your part to "Help Spare the Air!"

December 2007 – The Department made a commitment to do our part to save energy, improve air quality and reduce greenhouse gas emissions. By joining the national ENERGY STAR Change a Light, Change the World Campaign as a pledge driver, the Department set a goal to encourage 500 employees to commit online to replace at least one inefficient incandescent light bulb at home with a highly efficient ENERGY STAR labeled option such as a compact fluorescent light bulb (CFL). As of November 30, 2007, the Department exceeded the goal of 500 pledges. Department employees made 751 pledges to replace incandescent light bulbs with a more energy efficient option such as a CFL. This is over 150 percent of our goal. The 751 participants pledged to replace 6,396 incandescent light bulbs which will save more than 1,803,672 kWh of energy and 2,615,964 pounds of greenhouse gas emissions.

b. South Carolina Energy Office

2007

South Carolina Summit on Energy Efficiency

The South Carolina Summit on Energy Efficiency (EE Summit) was held on April 30, 2007 in Columbia, South Carolina. The EE Summit brought together 175 participants representing a broad range of interests – electric and gas utilities, regulators, legislators, consumer and environmental advocates, industry, universities, schools, and regional transmission organizations. A complete list of the attendees is available. The goals of the EE Summit were:

- To use the National Action Plan for Energy Efficiency as a springboard for discussion and action in South Carolina;
- To learn about and discuss the benefits of energy efficiency to South Carolina, including utilities, consumers (residential, commercial, and industrial), the state economy, and the environment;
- To share information on the key challenges to increased energy efficiency and consumer awareness in South Carolina; and
- To jointly discuss proposed initiatives that can begin to address challenges of increased energy efficiency and consumer awareness.

Over the course of the day three panels of stakeholders and experts addressed:

(1) Why energy efficiency makes economic and environmental sense for South Carolina;

(2) Challenges to increased energy efficiency and consumer awareness in South Carolina; and,

(3) A roundtable discussion of opportunities to address challenges and take energy efficiency to the next level in South Carolina.

For a summary of the speaker remarks and discussion following each of the panels as well as the full agenda a PowerPoint slides is available through the South Carolina Energy Office at <http://www.energy.sc.gov/news.aspx>.

2006

The South Carolina Energy Office (SCEO) released an Annual Report for 2006. Some items addressed in the report include:

1. The SCEO promotes energy efficiency in government agencies and public schools by encouraging the adoption of programs and procedures designed to capture and measure energy use, analyze key energy data for the development and implementation of energy saving measures, and incorporate these improvements into a master energy plan. In addition, the SCEO provides energy audits or assessments, special grants, or low interest loans to encourage installation of energy efficient equipment or systems improvements in public facilities.

2. The SCEO promotes the use of renewable energies and sustainable development practices throughout the state to offset and replace traditional methods of energy generation and consumption and to mitigate environmental degradation and the loss of economic investment. Renewable technologies such as solar, biomass, wind, hydrogen, and geothermal energy sources can help South Carolina depend less and spend less on imported energy while improving the state's environment. A description of projects such as landfill gas to energy, solar technology, biomass renewable energy, green power and hydrogen may be found at the SCEO website: <http://www.energy.sc.gov/index.aspx>

3. Transportation – This section discusses the SCEO role in Palmetto State Clean Fuels Coalition; Alternative Fuel Refueling Infrastructure; Alternative Fuel Vehicles; Take a

Break from the Exhaust; and Truckstop Electrification. The Palmetto State Clean Fuels Coalition (PSCFC) is a SCEO-sponsored group of public and private stakeholders. The PSCFC and its stakeholders continued to improve access to alternative fuels for the public by installing alternative fuels infrastructure and educating public and private sector fleet managers, the general public, fueling station owners, and government entities. In FY06 the SCEO partnered with the PSCFC for a DOE grant of \$20,000 to promote and encourage growth of alternative fuel infrastructure.

4. Public Information - This section discusses the ways in which the SCEO reaches a variety of audiences in the state.

5. EarthCraft Houses - The SCEO continued its partnerships with the Home Builders Association of Greenville, Charleston Trident Home Builders Association, and Southface Energy Institute to pilot the EarthCraft House program for the Greenville and Charleston areas. In FY06 the partnership built 18 EarthCraft Houses and trained over 100 builders and other building industry professionals. Three leading builders in the low country have made a commitment to build 80 percent of their homes to EarthCraft House standards, and a leading Upstate builder has committed to building 100 percent of his houses to EarthCraft standards. One EarthCraft builder training was conducted this year for Crescent Resources, LLC, a low country development at Palmetto Bluffs, a large upscale residential project between Charleston and Savannah. The success of the EarthCraft House program in Charleston and Greenville has led to participation by developers and builders in Hilton Head, Bluffton, and other parts of the state.

6. Landfill Gas to Energy Projects - Landfill Gas to Energy Projects - Since 1999, the SCEO has partnered with the US EPA Landfill Methane Outreach Program (LMOP) to evaluate, reclaim and use landfill gas for energy in the state. Strong efforts on Landfill Gas to Energy (LFGTE) projects have resulted in significant energy and environmental benefits for South Carolina.

Santee Cooper has installed generating stations at Horry County Landfill near Conway which produce 3.3 megawatts (MW) of power and are expected to increase to 9 MW. A second facility located at Allied Waste's Lee County Landfill generates 5.4 MW of electricity and is expected to increase to 21 MW. In FY06, an energy project at Screaming Eagle Landfill in Richland County was completed. It is generating 5.5 MW of green power and is expected to increase to 11 MW. An energy facility at Anderson Regional Landfill will be completed in early FY07, generating 5.5 MW, eventually increasing to 13 MW. These facilities bring Santee Cooper's green power generation to a current total of 19.7 MW and a projected total of 54 MW. Three upcoming projects, including the Richland Northeast Landfill, Oak Ridge Landfill in Dorchester County, and the Hickory Hill Landfill in Jasper County, will bring the projected total to 71 MW by 2012.

The largest LFGTE project to date, the Palmetto Landfill in Spartanburg County produces the equivalent of 10 MW of electricity and will soon upgrade to 12 MW. The landfill gas produced at this site is sent to BMW's automotive manufacturing facility near Greer. The methane powers four turbines. BMW plans to retrofit the system in FY07 to supply 40 percent of the plant's electrical needs and 100 percent of thermal needs. BMW will be the

first automotive manufacturing plant in the country to utilize landfill gas for its paint shop. The gas will fuel 23 oven burners and provide indirect heat for the area. This will greatly reduce the factory's reliance on natural gas and reduce carbon dioxide emissions by 17,000 tons per year. Another South Carolina factory, JW Aluminum, announced plans in FY06 to build a smelting plant at the Berkeley County Landfill and derive most of its energy from landfill gas at the site. According to the US EPA, this \$5 million project will be the first of its kind in the country.

At the end of the 2006 legislative session, the South Carolina General Assembly passed S.1245, which included a provision providing tax credits for manufacturers to use landfill gas. Beginning in FY07, a manufacturing facility can get 25 percent of the landfill gas energy equipment costs in a business income tax credit.

2005

The SC Energy Office released an Annual Report for 2005. Four items addressed in the report include:

1. The SC Energy Office promotes energy efficiency in government agencies and public schools by encouraging them to measure their energy use, analyze their building envelopes and mechanical systems, incorporate energy improvements into their master plans, and implement energy-saving measures. The SC Energy Office also provides grants and loans to encourage installation of energy efficient equipment and capital improvements in state agencies.
2. The SC Energy Office promotes the use of renewable energies and sustainable development practices throughout the state to offset and replace traditional methods of energy generation and consumption and to mitigate environmental degradation and the loss of economic investment. Renewable technologies such as solar, biomass, wind, hydrogen, and geothermal energy sources can help South Carolina depend less and spend less on imported energy while improving the state's environment. A description of projects such as landfill gas to energy, solar technology, biomass renewable energy, green power and hydrogen is included.
3. Transportation – This section discusses the SC Energy Office role in Palmetto State Clean Fuels Coalition; Alternative Fuel Refueling Infrastructure; Alternative Fuel Vehicles; Take a Break from the Exhaust; and Truckstop Electrification.
4. Public Information – This section discusses the ways in which the SC Energy Office reaches a variety of audiences in the state.

c. Energy Wise

Pilot program sponsored by the Office of Economic Opportunity (OEO) on behalf of the South Carolina Governor's Office. Energy Wise is an adult energy education initiative coupled with low-cost energy efficiency measures and agency staff training. All program participants received energy education from a local community action agency as well as a

kit of energy efficiency measures to install in their homes. Data was collected and analyzed to determine energy and cost savings generated by participants and the program. www.state.sc.us/energy/PDFs/AR_V_3.doc

d. Michelin Energy Reductions in Spartanburg, SC

Michelin Spartanburg Manufacturing in Spartanburg, SC plans to reduce water usage by four million gallons and its energy use by more than 40,000MM Btu's.

e. Duke Energy Efficiency Program

Duke Energy Corporation asked the North Carolina Utilities Commission (NCUC) to consider new energy efficiency programs that would help the Charlotte-based utility continue to meet rising consumer demand for electricity. In what Duke Energy calls its "save-a-watt" model, the company would replace existing energy efficiency programs with new ones and shut down older coal plants. Duke Energy can reduce demand by 666 megawatts during the summer under its existing programs in North Carolina and South Carolina, according to the company. The new program proposes to reduce demand by up to 1,700 megawatts after four years, a key metric in meeting the company's expected customer demand growth. Under Duke Energy's proposal, customers would pay for the programs with an energy efficiency "rider" that would be included in their power bill and adjusted annually. The company asked the commission for a first year rider of \$0.001129 per kilowatt-hour for residential customers and \$0.000940 for nonresidential customers.

Duke Energy Carolinas has had an ongoing dialogue on the save-a-watt plan with customers, environmentalists, the NCUC Public Staff and other stakeholders in a collaborative group since last August. These conversations and feedback received played a key role in the development of the program.

The following are the save-a-watt energy efficiency programs Duke Energy Carolinas is proposing:

Residential Assessments – to help residential customers identify opportunities to use energy more efficiently through a mail-in analysis, on-line analysis and on-site energy audit. Participating customers will receive either an energy efficiency kit or compact fluorescent light bulbs at the time of the audit to begin their energy savings immediately.

Non-Residential Energy Assessments – to help commercial and industrial customers identify opportunities to use energy more efficiently through an on-line analysis, telephone interviews and on-site energy audits.

Smart Saver® – to provide residential customers with incentive payments to install more energy-efficient equipment, such as compact fluorescent light bulbs and high-efficiency air conditioners and heat pumps. The commercial and industrial customer program will

provide incentives to install high-efficiency lighting, heating, ventilation, and air conditioning equipment, motors and pumps.

Low Income Service – to assist low income residential customers with energy efficiency measures using kits or assistance in purchasing equipment and weatherizing homes.

Power Manager – to enable residential customers to receive a monthly credit from July to October in exchange for allowing Duke Energy to cycle their central air conditioning in times of peak power demand.

PowerShare® – to enable commercial and industrial customers to receive a credit on their bills in exchange for reducing their electric use in times of peak power demand.

Residential Bill Check Pilot – to evaluate the use of new technology to provide customers with a monthly report analyzing their energy use and comparing it to weather patterns and other issues that relate to energy use. The pilot will initially test new technologies in up to 200 homes in the Charlotte area.

Efficiency Savings Plan Pilot – to evaluate allowing residential, commercial and industrial customers to install energy efficiency products with no up-front payment, allowing customers to save money by reducing their energy use. Customer would pay for these products through an added charge to their power bill.

Advanced Power Manager Pilot – to evaluate new technologies and advanced metering to study the feasibility of an energy management system that enables customers to participate in energy efficiency without disrupting their lifestyle or normal business practices.

f. Computer Energy Use Audit - 2007

In an effort to improve energy efficiency in its own facilities, the Department performed an internal computer energy use audit. The study tracked computer energy use over a number of computer use test cases. It was determined that there was significant opportunity to decrease energy use, reduce emissions and save money through better computer power management. As a result, employee education is taking place and new policy is being considered.

g. Town Hall Meeting - Conservation on Energy - June 27, 2007

Hosted by Conoco Phillips and the University of SC, invited panelists represented organizations active in renewable energy and energy efficiency, business and industry, the environment and conservation. John Litton with the BAQ was a panelist.

h. Green Power Solar Schools Program – August 2007

Aiken Electric Cooperative and Santee Cooper announced the formation of the Green Power Solar Schools program in the cooperative territory, and that New Ellenton Middle School has been selected as the Green Power Solar Schools program participant.

The initiative is designed to encourage interest in the environment and demonstrate the feasibility and limitations of renewable power generation. Each school will receive a 2 kilowatt solar power system, which will provide a teaching, research and hands-on demonstration opportunity for students. A focus of the project is the use of a new renewable energy curriculum endorsed by the South Carolina Department of Education.

The program continues the Electric Cooperatives of South Carolina's and Santee Cooper's efforts to promote renewable energy, and fulfill Santee Cooper's commitment to reinvest Green Power funds back into renewable resources across South Carolina.

i. Want Discounts on Energy Efficient Light Bulbs? (September 2007)

Progress Energy is offering discounts on compact fluorescent light bulbs at 11 Home Depot stores in North and South Carolina. The energy efficient bulbs will be available with the 1 dollar discount from October first to December 30th. The companies say they plan to sell up to 200,000 of the 40, 60 and 100-watt bulbs. Progress Energy is trying to gauge consumer acceptance and awareness of the fluorescent bulbs. If the program is successful at the North and South Carolina stores, it could expand.

j. Palmetto Clean Energy – September 2007

SCANA Corp., Duke Energy Corp. and Progress Energy Inc. will start selling "green power" to their South Carolina customers early next year through a nonprofit group established by the state. The three utilities will market the renewable energy to the 1.3 million homes and businesses that they serve in the state, while the newly formed organization, dubbed Palmetto Clean Energy, or PaCE, will buy the power from small Southeastern companies that generate electricity with wind turbines, solar panels and landfill gas.

k. Waste Management - September 2007

In September, Waste Management, Inc. announced a major national initiative to expand the number of landfill gas to energy (LFGTE) facilities. The program will result in the creation of an additional 60 renewable energy facilities across the country -- including the potential of two additional facilities in South Carolina -- over the next five years.

Waste Management currently operates LFGTE facilities at Elgin and Wellford. The two LFGTE plants generate nearly 16 MW of electricity -- enough to power 15,000 homes per year. The company also has two other landfills in St. George and Ridgeland, which could host a LFGTE facility. As part of the national initiative, WM will generate more than 700 megawatts of clean renewable energy -- enough to power 700,000 homes or replace over eight million barrels of oil per year.

l. South Carolina Electric Cooperatives Invest in Conservation and Renewable Energy – October 2007

South Carolina's 20 electric cooperatives plan to invest up to \$10 million per year towards renewable energy and energy efficiency measures. The investment includes a three-pronged approach to improving the environment and saving energy. The following three measures represent the beginning of this process.

- Encouraging homegrown renewable energy (a pilot program for net metering.)
- Producing efficiencies to save energy and money (a program to place energy efficient compact fluorescent lights (CFLs) in the home of every cooperative member in the state, approximately seven million bulbs within 10 years).
- Investing resources in clean energy research (a partnership with the University of South Carolina to develop technology that reduces carbon dioxide and other emissions from coal-fired power plants).

m. Alternative Energy Tax Credits – November 2007

This year, South Carolina began offering a number of new tax credits for people and businesses investing in alternative energy. A state tax credit that took effect in 2007 covers 25 percent of the cost of solar equipment for hot water, heating, cooling, or generating electricity, as an income tax credit worth up to \$3,500 or half an individual's tax liability. The credit can be carried over for up to 10 years. For new homes, according to the U.S. Department of Energy, solar water heating systems can save money immediately, when the monthly energy savings are compared to the amount a system adds to the cost of a 30-year mortgage.

December 2007

South Carolina State Measures					
A. Control Measure/Activity	B. Control Measure/Activity Description	C. Current Status	D. Date Occurred	G. Pollutants	H. Additional Information
1. Outreach and Education					
a. Ozone forecast/outreach,education	To make South Carolinians aware of daily air quality forecasts for ozone season to alert sensitive groups and increase awareness to motivate more people towards lifestyle changes, especially on ozone action days.	Beginning with the 2006 ground-level ozone forecast season, the Department and the BAQ began participation with EnviroFlash, sponsored by the EPA with State and local air quality agencies. EnviroFlash provides important air quality information such as forecasts and action day notifications via email or pager notification. The email includes the same local air quality forecast information which is coordinated through the news media, like television and radio. Enviroflash is being promoted in our priority areas and staff are working on an Enviroflash "icon link" to be added to partners' websites to facilitate access to the forecast.	July 2004		
		Forecasting for ground-level ozone began April 1, 2007 as a result of the Department observing elevated levels of ground-level ozone during the month of April. The Department added a new forecast region. The CATAWBA region now includes York, Chester, and Lancaster counties. And, the Department is added two counties to the existing PEE DEE forecast region. Marlboro and Dillon counties joined the other counties in the Pee Dee regional forecast in 2007. In 2007, the BAQ partnered with the BLWM (each providing \$35,000) to fund \$70,000 worth of airtime for two 15 second PSAs, one dealing with Ozone Awareness and the other recycling yard debris.	February 2007		
b. Developed Outreach Projects / Provided Outreach Materials	Gas Can Exchange	Anderson County organized and planned its own gas can exchange (09/10/2005) with some limited assistance from SCDHEC/BAQ staff. 200 new, environment friendly gas cans were distributed, and 79 used gas cans collected.	9/10/2005		
	New materials developed	Facts about ethanol as an alternative fuel (05/07) VEHICLE MAINTENANCE AND AIR QUALITY (05/07) The Benefits of Using Alternate Modes of Transportation Refer to Enclosure 2 of the June 2007 EAC Progress Report for South Carolina	5/1/2007 06/07		
	BAQ - Education and Outreach – School related activities	BAQ staff participated in a number of meetings and provided trainings at various meetings and schools.	2006		

December 2007

South Carolina State Measures					
A. Control Measure/Activity	B. Control Measure/Activity Description	C. Current Status	D. Date Occurred	G. Pollutants	H. Additional Information
c. Breathe Better Program	Program started focusing on seeking reductions in air pollution around schools. The program has been expanded to include business, industry and other places where idling may occur.	Working with a middle school in the Midlands area of Columbia, SCDHEC/BAQ staff helped initiate education materials to support no idling for school buses and car pool drivers. The school developed and implemented a no-idling policy for the grounds. This school was recognized by the Agency's "Champions of the Environment" program. Information is available at http://greenstepschools.com/page1.html To enable better access, a website for this project has been developed and is located at the following link: http://www.scdhec.gov/environment/baq/docs/edu/B2/b2originalprotocol.pdf	2005 December 2007		
		June 6, 2007 - Fountain Inn Elementary School The school has been working for several weeks with county and city planners to implement b2. The school has taken the program beyond its anti-idling focus. The school has plans to plant shade trees, build benches, landscape needed areas, and re-route bus/carpool traffic. Crossroads Middle School, Rosewood Elementary School in Rock Hill and Fountain Inn Elementary School have implemented a no idling policy. Greenville County was the recipient of a 2006 EPA grant to raise public awareness about air quality, and implement an anti-idling campaign in one county school. The anti-idling campaign is called B2-Breathe Better, and the idea is to spread the program through out the county-wide school district. July 2007 - Two "Turn off your engine" signs were placed in the SCDHEC visitor parking lot to encourage anti-idling. A copy of the sign was submitted in the June 2006 EAC Progress Report.	2007		

December 2007

South Carolina State Measures					
A. Control Measure/Activity	B. Control Measure/Activity Description	C. Current Status	D. Date Occurred	G. Pollutants	H. Additional Information
d. Other School and Community Related Activities	BAQ - Education and Outreach – Staff provide education and outreach support to schools and community organizations.	March 21, 2007 – Gilbert Middle School - staff presented the “Air Quality” kiosk panels for display at their outdoor learning center area. Staff worked with several groups at the learning center focusing on the importance of air quality and the state of South Carolina’s air quality. May 10, 2007 - “Air Quality and Trees” presentation - Staff presented to the Northeast Beautification committee about the importance of trees and using native plants and shrubs. The committee has several projects going on in the Northeast area of Columbia, all of which focus on planning greenways, tree planting, and beautification areas. Several BAQ staff is on the “Trees for Two Notch” sub-committee. May 23 – 25, 2007 – South Carolina Public Health Association (SCPHA) conference - Staff conducted provided presentations on the b2 program and EPA’s “Tool for Schools” air quality program. A booth that included several publications on air quality issues (ambient and indoor) focusing on the health effects of poor air quality was provided. Staff has taught the 7th grade at Northside Middle School the science curriculum. Staff has been involved for the past 3 years with Gilbert Middle School. S			
e. SC Educators trained with Action for a Cleaner Tomorrow	Environmental Education training for teachers	FY 05 saw 28 educators trained From July 2005 through June 2006 - there have been 26 trainings with 724 teachers trained.	yearly training opportunities		
f. Car Care Awareness Month Project	Increase the target audience’s awareness about the importance of car maintenance in preserving good air quality	The Department and Richland and Lexington counties organized a vehicle maintenance check event in April. The State Museum, Ben Satcher Ford and Pope Davis Tires helped sponsor this free event on April 1, from 10 a.m. until 2 p.m. at the State Museum on Gervais Street. A team of certified technicians made suggestions for improving vehicle safety and gas mileage.	2006		
	Increase the target audience’s awareness about the importance of car maintenance in preserving good air quality	Suddeth Automotive, Richland County offered Free National Car Care Month Inspections on Monday thru Friday between 9 AM and 4:30 PM during the month of April; also offered was a Free Women's Care Care Seminar on Saturday April 28th. The Department supplied “Driving Smarter For Tomorrow” brochures which included tips to save money, improve vehicle reliability, reduce air pollution, and maximize fuel economy.	April 2007		

December 2007

South Carolina State Measures					
A. Control Measure/Activity	B. Control Measure/Activity Description	C. Current Status	D. Date Occurred	G. Pollutants	H. Additional Information
g. 2006 SC EAC Summit	2006 Early Action Compact (EAC) Summit held in Columbia, SC on August 16-17, 2006 *Attracted nearly 300 stakeholders from 5 different states including representatives from 24 counties and 7 Councils of Government *Participants included representatives from federal, state and local governments as well as industry representatives, environmental organizations as well as private citizens	Topics included energy conservation, diesel retrofits, land use planning, alternative fuels, commuting options and multi-modal transportation, innovative education and outreach, health impacts/lifestyle and finding the funding. Key speakers - Bill Wehrum, Acting Assistant Administrator for Air & Radiation, U.S. EPA, Mark MacLeod, Director for Special Projects in Environmental Defense's Climate and Air program of the Washington DC office.	August 2006		
h. Earth Week 2007 Activities	2007 - Governor Sanford signed a proclamation declaring April 22-28, 2007 as "Earth Week" The Department, with the help of volunteer staff, celebrated Earth Day 2007 throughout the state. During the month of April and the first part of May, staff participated in many community Earth Day events including grade schools, colleges, churches, hospitals, historic parks and private industry (BMW). Over ten-thousand (10,000) environmental materials were distributed.	Staff presented on topics such as air sampling, criteria pollutants, ozone formation, open burning, electric lawn mowers, hybrid electric vehicles, and greenscaping. Distributed information discussed particulate pollution and health, automobile emissions, spill-proof gas cans, the benefits of urban trees, and energy conservation. School aged children were enthused to receive promotional items such as environmental activity booklets, recycled pencils, and several themed posters included ways to help reduce air pollution. 2007 Activities included: Air sampling and monitoring presentation at Coker College Lawn Mower Exchange at the S.C. State Museum First Annual Kids Earth Day in Camden Gas Can Exchange in Greenville N. Augusta Kids Day in Aiken County Earth Day at Park Circle in Charleston Saluda Shoals Park Earth Fair	April 2004 and continues		A copy of this proclamation is located at: http://www.scdhec.gov/eqc/baq/pubs/earthweek.pdf .
i. Small, Gas-powered Engine Exchange Project	Project targeting the exchange of gas-powered lawn mowers for electric mowers.	EAC contacts in Richland and Lexington Counties are continuing to plan for a small gas-powered lawn equipment exchange. A survey tool has been developed and is being utilized at various events held in these two counties to gauge citizen interest for such an event.	2006		

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	"Mow Down Pollution" Event (April 21, 2007) - Lexington and Richland Counties; Keep the Midlands Beautiful, and the BAQ planned and implemented the first lawn mower exchange in SC. To encourage Columbia area residents to do their part to "Spare the Air," the lawn mower exchange was held at the State Museum to Mow Down Pollution! Estimated emission reductions are 6.8665 tons VOC per year and 14.1205 tons CO per year (based on EPA emissions for 2 cycle gas mowers). A DRAFT "Mow Down Pollution" report and the participant survey was included with the June 2007 EAC Progress Report.	The event collected empty, functional gas powered lawn mowers and offered a discount between 30 percent and 55 percent off MSRP on Neuton cordless electric mowers. To complement the lawn mower exchange, other partners were invited to exhibit Greenscaping information at the event. These partners helped extend the impact of the exchange by highlighting complimentary lawn and garden practices that help protect air quality. The Columbia event collected 155 gas-powered mowers as trade-in. These mowers were recycled by Lexington County and thereby removed from operation. Since most of the mowers appeared to be two stroke engines, our estimated emission reductions are 6.8665 tons VOC per year and 14.1205 tons CO per year.	2007		
	Lawnmower Exchange Event - 2008 Richland and Lexington Counties and DHEC-BAQ are planning a lawnmower exchange event to be held in 2008.	A planning meeting was held on September 11, 2007. The target date for the event is the Spring of 2008.	2007		
	"Mow Down Pollution"- Lawn Mower Exchange event to be held prior to Dec. 31, 2008 with local government in the Duke Energy service area.	The Education and Outreach Section of the BAQ will be coordinating a "Mow Down Pollution"- Lawn Mower Exchange event and promoting energy efficiency activities, particularly related to use of computer equipment, with local government in the Duke Energy service area in South Carolina. These activities will present opportunities to raise awareness of air quality issues in the Upstate of South Carolina and reduce emissions of air pollution. The funds (\$6500.00) will be used for but not limited to: advertising and promotion, creating brochures and other written materials, providing promotional items and subsidizing the cost of the electric lawn equipment. This project will be completed by December 31, 2008.	November 2007		
j. Grant Assistance	Grant Workshop sponsored by South Carolina and Georgia, in cooperation with staff from the EPA Region 4. January 16 - Augusta/Aiken area January 17 - Central Midlands area January 18 - Greenville/Spartanburg areas	In advance of upcoming funding opportunities for various types of projects to address air quality issues through the EPA, a workshop was held for each of three areas of SC to provide information that may help local entities to improve their proposals for applying for these funding grants.	January 2007		
k. U.S. Walk to School Day	At 141 plus, South Carolina had more schools participating in this anti-obesity, enviro-friendly campaign than any other state except California.		October 2007		

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2. Commuting Reduction Programs		(			
a. Take A Break From The Exhaust (TABFTE)	Computer based Commuter program that encourages reductions by using a point system 2005 Ozone Season Reductions: 286,889 miles reduced 1,076 pounds of VOC's reduced 684 pounds of Nox reduced 2006 Ozone Season Reductions: 162,000 miles reduced 609 pounds of VOC's reduced 387 pounds of NOx reduced 2007 Ozone Season Reductions: 146, 991 miles reduced 592 pounds of VOCs reduced 411 pounds of NOX reduced	2006 Participants Bureau of Air Quality (BAQ) Bureau of Water Bureau of Land and Waste Management (BLWM) South Carolina Energy Office (SCEO) Wisconsin Department of Natural Resources Lexington County Government Central Midlands Council of Governments (CMCOG) Winthrop University - York County York Technical College Bowater - York County Citi Group - York County Springs Industries - York County The four major participants for the TABFTE program in SC for 2007 were: BAQ, BLWM, CMCOG, and the SCEO.	Yearly April - September		www.scdhec.gov/takeabreak/login.asp Total of 286,889 miles reduced
	TABFTE update	Florence County has expressed an interest in participating and has been set up on the program. Columbia: The Central Midlands Council of Governments (CMCOG) has also been signed up and is participating in the program. Staff has presented this program to two other groups of stakeholders and the SC DOT to encourage implementation at other agencies. The Mid-America Regional Council (Kansas City, MO) has implemented this program with their staff.	2007		

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b. SmartRide Program	SC DOT sponsored program giving commuters mass transit service to/from Columbia area. During the 2005 Ozone Season, to promote SmartRide and to encourage reductions of ozone precursors, free rides were offered for those days designated as Ozone Action Days. The BAQ helped promote this effort by providing posters and public service announcements. In addition, the BAQ provided \$500.00 to help off-set the cost. During the 2006 Ozone Season, free rides on Ozone Action Days will again be offered.	Passenger Boardings: Total Camden – Columbia: November 2005 – May 2006 7,514 boardings Emissions Reductions (Kershaw, and Richland): 684 pounds NOx 943 pounds VOC During the 2006 Ozone Season, free rides on Ozone Action Days will again be offered. December 2006: Passenger Boardings: Total Camden – Columbia (1): November 2005 – November 2006 14,301 boardings Passenger Boardings: Total Newberry – Columbia (2): November 2005 – October 2006 6,408 boardings	2004		
	SmartRide update	During the 2007 Ozone Season, to promote SmartRide and to encourage reductions of ozone precursors, free rides will be again be offered for those days designated as Ozone Action Days. BAQ staff met on June 12, 2007, with the new SCDOT project coordinator. Discussions included issuing a press release; updating the SmartRide website; increasing ridership; and, possible expansions. The BAQ has committed to provide \$500.00 during the 2007 Ozone Season, along with a matching amount from the SC Energy Office, to provide free rides on Ozone Action Days. SmartRide Statistics for December 2007: Passenger Boardings: Total Camden – Columbia: November 2006 – October 2007 12,332 boardings Passenger Boardings: Total Newberry – Columbia: November 2006 – October 2007 11,709 boardings	2007	2007 Reductions (Kershaw and Richland): 1,642 pounds NOx 2,269 pounds VOC 2007 Reductions (Newberry and Richland): 1,584 pounds NOx 995 pounds VOC	

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c. SIGIS carpool matching	The Department initiated a web-based, map based carpooling program in December 2005. The program facilitates ridesharing opportunities throughout the state by allowing interested employees to map their commute trip information and view the trips entered by other employees.	The program has undergone some recent refinements and a second agency-wide email notification about the program was sent on June 27, 2006. December 2006 total number of participants - 54 total of 34 employees added their names to the list June 2007 total number of participants - 64	December 19, 2005		The program is available to 4,987 Department employees in eight environmental quality control offices, eight regional public health offices, four Ocean and Coastal Resources Management Offices, and eight office locations in Columbia. At this time there are approximately forty-five participants.
d. Best Workplace for Commuters	Bureau of Air Quality designated as a "Best Workplace for Commuters" February 3, 2005. SCDHEC - Bureau of Air Quality currently holds the only designation in South Carolina	Completed Bureau continues to promote this program to EAC areas and within the Department. December 2006 -BAQ continues to maintain the "Best Workplaces for Commuters" (BWC) status June 2007 – EPA will no longer fund the BWC program. October 2007 - EPA has since announced that the Center for Urban Transportation Research (CUTR) at the University of South Florida assumed responsibility for management of the program when the EPA relinquished it on October 1st. The Department continues to meet the minimum requirements.	February 3, 2005 December 2007 - The Department continues to meet the basic program requirements.		The Department will continue to promote best workplace practices to other programs within the Department as well as other organizations seeking voluntary measures proven to benefit employees and air quality.
e. Audioconferencing	Opportunity to hold meetings through audioconferencing or teleconferencing. SCDHEC offers employees 3 choices based on the number of participants (up to 6, up to 30, or up to 144 lines)	SCDHEC employees as well as other state agency employees were faced with travel restrictions in the late summer months of 2005. Employees were notified via e-mail of the audioconferencing capability.	employees notified in 2005		
f. Bike to Work Events (2007)	May is National Bike Month, and Friday May 18, 2007 was "Bike-to-Work Day."	The Department's State Nutrition and Physical Activity Consultants, Division of Injury and Violence Prevention, and Bureau of Air Quality encouraged Department staff in Columbia to participate in a "Bike-to-Work Day" ride coordinated by Central Midlands Council of Governments and the City of Columbia, and/or to bike to lunch together.	May 1, 2007		

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A. Control Measure/Activity	B. Control Measure/Activity Description	C. Current Status	D. Date Occurred	G. Pollutants	H. Additional Information
g. Safe Routes to School Program	The South Carolina Department of Transportation (SCDOT) approved funding to develop comprehensive bicycle and pedestrian programs as part of the "Safe Routes to School Program."	Partnering with SCDOT, local governments, parents, local law enforcement and educators, each school and community will develop a plan that encompasses both infrastructure and non-infrastructure components. One of the purposes outlined in the funding legislation for this program includes facilitating the planning, development, and implementation of projects and activities that will reduce traffic congestions, fuel consumption and air pollution in the vicinity of primary and middle schools.	2007 funding cycle		The schools for the 2007 funding cycle are: College Park Elementary School, Berkeley County; Alston Middle School, Dorchester County; Willow Drive Elementary School, Sumter County; North Vista Elementary School, Florence County; Wren Elementary/Middle School, Anderson County; Lone Oak Elementary School and Pine Street Elementary School, both of Spartanburg County; Rosewood Elementary School, Richland County; College Park Middle School, Berkeley County; Fairfield Middle School, Fairfield County; Stono Park Elementary School and Hunley Park Elementary School, both of Charleston County. Each of the selected schools will receive up to \$200,000.00.
h. Bull Street Partners Carpool Group	Bull Street Partners Carpool Group provides employees of the Bull Street area offices of three State agencies (Department of Health and Environmental Control, Department of Mental Health and Department of Social Services) an opportunity to form carpools, thereby saving money and fuel, reducing pollution and reducing the stress of commuting.	The Department's Bureau of Air Quality sent an electronic mail message to contacts in the three state agencies located at the corner of Bull and Harden Streets. The e-mail encourages people interested in regular carpooling, occasional carpooling, or people who are willing to provide a ride home to sign up. The emails have very gone out to two of the three agencies, the third agency email will be sent out shortly. Seven people have signed up to date, and feedback from the agencies about the program has been very positive. 'Goody Bags' of air quality promotional materials are being provided to people from the Department's sister agencies who sign up.	Began late summer 2007, and is on-going	All Pollutants*	Richland and Lexington as well as other counties within South Carolina
i. Bike Commuting for Air Quality	Spartanburg has received a bronze level Bicycle Friendly Community designation in September 2007. Charleston, Greenville, Rock Hill and Columbia are also working towards designation. Columbia is holding twice-a-month meetings and a monthly lunchtime ride.		September 2007		

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3. Ground Level Ozone Awareness Week Proclaimed	To increase awareness of ozone pollution on the lifestyle changes needed to see more reductions in ozone pollution levels	For the eighth year in a row, the governor of South Carolina has signed a proclamation regarding ground-level ozone awareness week. In 2007, Governor Sanford signed a proclamation declaring April 1-7, as "Ozone Awareness Week." A news release was developed to help announce this proclamation and was distributed electronically to all EAC contacts for their use locally.	2000 and continues yearly		
4. Regulatory Initiatives					
a. Open Burning-ban household trash burning	Reduce pollution from unnecessary burning	April 14, 2005, DHEC issued a news release reminding citizens in SC of the revised regulations. The revision to the regulation was made in 2004 as a part of the EAC process to improve air quality. Additional news releases were sent out during the Fall to encourage citizens to use alternatives for disposing of yard trash. October 9, 2006, DHEC issued a news release encouraging citizens to reduce open burning of yard debris. Subsequent releases were included in Anderson and Greenville county local papers. 2007 - The BAQ has committed funding of ~\$600.00 to the Anderson County partners to support a billboard campaign to encourage citizens to call prior to burning materials outdoors.	2005		See the December 2005 EAC Progress Report Document for detailed information.
b. SC NOx Control Reg - new sources	Reduce new sources of Oxides of Nitrogen, a precursor to Ozone pollution	on-going	2005		See the December 2005 EAC Progress Report Document for detailed information.

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5. Assist local areas in determining emission reductions	The Department supports local solutions to local problems. December 2006 - Effort continues and has been expanded as a result of the 2006 SC Early Action Compact Summit. BAQ staff will work with local government officials based on the SC COGs. Staff will assess the local planning activities and offer assistance as needed. 2007 - Department staff continue working with counties and COGs to develop partnerships implementing emission reduction strategies.	SC will continue to work with EPA to assist local areas in determining the emission reduction strategies that will assist the area in achieving emission reductions needed for maintaining the 8-hour ozone standard within their respective area. Dec. 2006 - Examples of this type of work has been the "Motor Vehicle Maintenance Project," expansion of the "Take a Break for the Exhaust Project," and the potential expansion for the "Breathe Better Air at School Project."	2003		
6. Clean Air Initiatives for Gov Entities	Provide forum for Government Entities to meet and seek reductions in air pollution.	The utilization of the TABFTE continued to grow in 2006, with Winthrop University (York County), Central Midlands Council of Governments and York Technical College, Lexington County, Bowater, CitiGroup and Springs Industries. The SCDHEC/BAQ continues the partnership with the SCDOT and the Energy Office to promote ridership on the SmartRide Alternative Transportation project during Ground-level Ozone Season. The BAQ has committed to provide \$500.00 during the 2007 Ozone Season, along with a matching amount from the SC Energy Office, to provide free rides on Ozone Action Days.	2003		
7. Smart Highways and Transportation Issues	Provide improvement in air quality by means of transportation planning	A checklist was developed to be used in transportation planning. The checklist will serve as an informational guideline to be used in reviewing Long Range Transportation Plans and Transportation Improvement Programs for adequacy of their documentation and will be used during long range transportation plan updates as required by 23 CFR 450.322.	2005		Reductions reflect difference between 2007 and 2002 for deferred nonattainment areas. A copy of the Smart Highways Checklist is attached in Appendix 12 of the December 2004 EAC SIP.
	Partnership with SC Department of Transportation	BAQ staff met with SCDOT to discuss air quality issues and concerns including PM and ground-level ozone. Discussion included partnerships with both agencies especially due to the potential impact on transportation and air quality from the PM standard and the upcoming release of the proposed ozone standard.	March 6, 2007		

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	Partnership with SC Metropolitan Planning Organizations and Council of Governments	Statewide MPO/COG meeting held in Clemson. Panel discussion with BAQ, FHWA and RFATS representatives discussed Transportation Conformity triggers, requirements, status, experiences in RFATS. Also discussed were the new PM standards as well as the expected release of the proposed ozone standard.	May 20-22, 2007		
	Transportation Conformity SIP revision including Memorandum of Agreement (MOA)	A meeting is planned for November 2, 2007 in Columbia of the transportation conformity interagency partners, including EPA Region 4, US DOT (FHWA and FTA) , SC DOT, DHEC, MPO's. Transportation conformity ensures transportation planning considers air quality goals.	Began late summer 2007; a schedule for completion is being developed.		
	Transportation Conformity SIP revision including MOA UPDATE	Stakeholders met on November 2, 2007 to discuss proposed changes to South Carolina's current MOA for Transportation conformity. Stakeholders participating included SCDOT, FHWA Divison Office, EPA Region 4, Central Midlands COG/MPO, Rock Hill-Fort Mill MPO, Aiken-Augusta MPO, Greenville-Pickens MPO and the Department. Stakeholders will provide additional comments to the Department for incorporation into the revised MOA.	November 2, 2007		
	Southern Transportation and Air Quality Summit	SCDHEC - BAQ participated in a three day planning meeting to discuss the regional effects of transportation planning on air quality in the southeast.	August 28-30, 2007		
8. Land Use Planning and Smart Growth Initiatives	The EPA and the BCDCOG are providing a series of training workshops on how each of us can work with our elected officials and communities to coordinate on Smart Growth Strategies such as promoting better land use and transportation including improved bicycle and pedestrian facilities. EPA supports this strategic training as a way of reducing energy costs and protecting air and water quality. We will be happy to meet with any group but have meetings set up in Charleston and Dorchester Counties as noted on the attached flyer. Meeting dates in Berkeley County are pending.	SCDHEC - BAQ provided this information to EAC contacts including other contacts from county and municipal governments in South Carolina.	October 2007 workshops began in Berkeley and Charleston counties		
9. Other Point Source Reductions					

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a. NOx reduction-large facilities	Reduce Oxides of Nitrogen As a part of their commitment to the EAC process, four facilities are voluntarily revising their permits to incorporate the following requirements as federally enforceable permit limits. These actions are permanent and quantifiable and would not have occurred had it not been for the EAC process. (See Executive Summary, Section D.4. and Appendix 10 of the December 2004 EAC SIP.)	1. Transco Pipeline - (Spartanburg County) - IC Engine Facility will begin early implementation, fully implemented by December 2005, of NOx emission reductions required by the Phase II of NOx SIP Call.	April 2005		
		2. International Paper - Eastover (Richland County) agreed to take a 1,000-tpy reduction in its permit limit.	April 2005		
		3. Duke Power - Lee Steam Station (Anderson County) – will install and operate advanced low NOx combustion controls on the smaller two coal-fired boilers (Units 1 and 2). The NOx limits on these units will be incorporated in the Title V permits and incorporated into the SIP. This is a \$7 million investment that will limit NOx emissions to a rate of 0.27lbs/MMBtu.	April 2005		
		4. SCE&G Wateree - (Richland County) agreed to take Title V permit limits on coil fired boilers subject to the NOx Call Requirements.	April 2005		
10. Palmetto State Clean Fuels Coalition Initiatives					
a. Biofuels Showcase	The Palmetto State Clean Fuels Coalition hosted a Biofuels Showcase on Friday, November 18, 2005. This event showcased ethanol and biodiesel. Invited speakers were from the National Ethanol Vehicle Coalition, National Biodiesel Board, and Georgia Power. The event also featured a Ride and Drive Event where participants had a chance to drive the alternative fuel vehicles (AFV's) on display.	Biofuels Showcase was held on November 18, 2005.	Nov. 18, 2005		www.palmettocleanfuels.org/
b. Billion Gallon Celebration	Over the last decade, Clean Cities Coalitions have reported activities that have displaced more than a billion gallons of petroleum in transportation. By implementing projects that make use of alternative fuels, hybrid vehicles, truck idle reduction, fuel blends, and fuel economy improvements, Coalitions have helped build local and regional markets for non-petroleum solutions to our energy challenges.	On October 14, 2005, the Palmetto State Clean Fuels Coalition hosted a variety of celebratory events in Rock Hill, Aiken, Columbia and Greenville.	Oct. 14, 2005		www.palmettocleanfuels.org/

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c. Ethanol Refueling Infrastructure	There are currently 20 publicly accessible E85 refueling infrastructure stations in the Columbia, Greenville, and Aiken areas	- Currently 33 public E85 refueling sites in SC - In addition to E85, There are currently 14 biodiesel public sites in SC. December 2006 - 40 public E85 and 42 public B20 refueling sites in SC. Two sites, one York Co. will be opening soon. Recent funding for 2 additional E85 sites and a B20 site in the Rock Hill area. June 2007 - 42 public E85 and 45 public biodiesel refueling sites in SC. December 2007 - 49 public E85 and 49 public B20 refueling sites in SC. PSCFC is in the process of funding 7 more sites. An additional 12 E85 sites will be installed over the next 6-8 months.	October 1, 2001		www.palmettocleanfuels.org/
National AFV Day Odyssey: Showcasing Cleaner More Energy-Efficient Choices in Transportation	Public event enables Americans to learn about the benefits of alternative fuel and hybrid electric cars, vans, trucks, and buses.	October 10, 2006 - hosted by York Technical College.	October 10, 2006		
Southeastern Alternative Fuels Task Force-Workshop	BAQ and Wendy Bell/Chantal Fryer participated in and helped to support the planning and implementation of this workshop held in Tennessee, June 6-7, 2005.	Website for the SEAFTF is: http://www.sealtfuels.org/ . Evaluation results for this workshop is available.	June 6-7, 2005		
11. Tree City USA	Tree City USA encourages municipalities and areas to have strong urban forestry programs. BAQ sent an email to all 45 EAC areas in SC asking the counties to encourage municipalities within their county to help participate in this program that can benefit air quality.	June 2006 - Currently there are 39 designated areas in SC - this is an increase of 2 from the December 2005 Progress Report December 2006 - 40 designated areas in SC June 2007 - 40 designated areas November 2007 - 39 designated areas	2005		www.arboday.org/programs/treecity/map.cfm

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12. Homegrown Products campaign	The state Department of Agriculture has launched a new campaign to promote homegrown products. The program will start with fruits, vegetables and ornamental plants, then phase in manufactured foods, then row crops like corn and soy beans, and finally livestock. Growers will use a "Certified SC Grown" logo on their packaging and stickers will identify fruits and other products.	The state's retail grocers, as well as roadside markets and farmers markets, have agreed to participate. The "Certified SC Grown" logo on packaging should be in supermarkets soon.	2007		http://www.certifiedscgown.com/
13. Energy Efficiency					
a. Energy Star's Computer Power Management Software	SCDHEC BAQ experienced an estimated 28% energy savings in 2005 using the computer monitor power management software.	Completed. BAQ Information Technology staff have completed the necessary installation on the respective servers, and the Bureau of Water and Bureau of Land & Waste Management will be participating. This will increase the number of monitors from 150 to over 500.	January 2005 - September 2005		2005-During the reporting period, SCDHEC/BAQ staff met with other state agencies to provide information about Energy Star. These agencies include the SC Energy Office, SC Department of Transportation, and the SC Department of Education. Staff also provided flyers and PowerPoint presentations to EAC counties to demonstrate the benefits of Energy Star to local governments. Future plans include installing Energy Star in other areas of SCDHEC and encourage other state agencies to install Energy Star. Outreach materials and presentations will continue to be made available.

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A. Control Measure/Activity	B. Control Measure/Activity Description	C. Current Status	D. Date Occurred	G. Pollutants	H. Additional Information
b. Energy Star's Change a Light Bulb, Change the World Campaign	SCDHEC BAQ promoted the Energy Star change a Light Bulb, Change the World campaign in the community. SCDHEC made a commitment to energy efficiency and air quality by joining the national ENERGY STAR Change a Light, Change the World Campaign as a pledge driver.	Oct 2006 - BAQ promoted Change a Light and Change the World with Energy Star to DHEC staff via email. Staff promoted the campaign to the external community as well. Nov. 2006 - DHEC staff created and distributed Energy Star pledge postcards at the SC Science Council Conference. 54 pledge cards were returned to replace over 200 incandescent bulbs with compact fluorescents; cards were also distributed to 5th graders at Rosewood Elementary School Feb. 2007 - The BAQ hopes to involve other state agencies and local governments through outreach efforts to get them to utilize Energy Star. To assist with these efforts, BAQ registered as an Energy Star Driver October 2007 - SC DHEC has made a commitment to do our part to save energy, improve air quality and reduce greenhouse gas emissions. We have joined the national ENERGY STAR Change a Light, Change the World Campaign as a pledge driver and have set a goal to encourage 500 of our employees to commit online to replace at least one inefficient incandescent light bulb at home with a highly efficient ENERGY STAR labeled option such as a compact fluorescent light bulb (CFL). By reaching	2006 November 2006 February 2007 October 2007		
	Update Continued:	November 2007 – SC DHEC is proud to report that they have exceeded their goal of 500 pledges in EPA's ENERGY STAR Change a Light, Change the World Campaign. At the time of this reporting, SC DHEC employees have made 751 pledges to replace incandescent light bulbs with a more energy efficient option such as a CFL. This is over 150% of our goal. The 751 participants pledged to replace 6,396 incandescent light bulbs which will save more than 1,803,672 kWh of energy and 2,615,964 pounds of greenhouse gas emissions.	November 2007		

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c. SCDHEC implements energy efficiency programs	SCDHEC BAQ implemented an energy efficiency program at its own office building.	October of 2006 - BAQ began tracking energy consumption for the Bull Street office building. This information will be used as a baseline to show progress in reducing energy consumption. Research has been done into energy conserving upgrades already completed. BAQ is developing a comprehensive energy efficiency program for the Bull Street building that will include identifying best practices for staff and tracking of energy use. June of 2007 - BAQ consulted with the SC Energy Office to identify building updates and best practices for the Bull Street Building. The consultation included an energy use audit to review consumption history. Also, a building walk-through was performed by an energy auditor to identify potential energy savings.	October 2006 - Present		
	SCDHEC performed computer Energy Use Audit	In an effort to improve energy efficiency in its own facilities, SC DHEC performed an internal computer energy use audit. The study tracked computer energy use over a number of computer use test cases. It was determined that there was significant opportunity to decrease energy use, reduce emissions and save money through better computer power management. As a result, employee education is taking place and new policy is being considered.	August 2007		
d. SC Energy Office	The SC Energy Office released an Annual Report for 2005. Four items addressed in the report include: 1. The SC Energy Office promotes energy efficiency in government agencies and public schools 2. The SC Energy Office promotes the use of renewable energies and sustainable development practices throughout the state 3. Transportation – This section discusses the SC Energy Office role in Palmetto State Clean Fuels Coalition; Alternative Fuel Refueling Infrastructure; Alternative Fuel Vehicles; Take a Break from the Exhaust; and Truckstop Electrification. 4. Public Information – This section discusses the ways in which the SC Energy Office reaches a variety of audiences in the state.		2005		For additional information.... www.state.sc.us/energy/

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e. Energy Wise	Pilot program sponsored by the Office of Economic Opportunity (OEO) on behalf of the South Carolina Governor's Office. Energy Wise is an adult energy education initiative coupled with low-cost energy efficiency measures and agency staff training. All program participants received energy education from a local community action agency as well as a kit of energy efficiency measures to install in their homes. Data was collected and analyzed to determine energy and cost savings generated by participants and the program as a whole. www.state.sc.us/energy/PDFs/AR_V_3.doc		2005		For additional information....www.state.sc.us/energy/
f. Michelin Energy Reductions in Spartanburg, SC	Michelin Spartanburg Manufacturing in Spartanburg, SC plans to reduce water usage by four million gallons and its energy use by more than 40,000MM Btu's.		2005		
g. Energy Efficiency Summit	South Carolina Summit on Energy Efficiency	The South Carolina Summit on Energy Efficiency (EE Summit) was held on April 30, 2007 in Columbia, South Carolina.	2007		
h. Training Opportunities	Web training sponsored by EPA Energy Star Challenge for local governments	Notification was provided to all EAC contacts regarding the web training opportunity. BAQ training staff are offering this training to BAQ staff as well.	July 12, 2007		
i. Local Meetings	Town Hall Meeting - Conservation on Energy	Hosted by Conoco Phillips and the University of SC. Invited panelists represented organizations active in renewable energy and energy efficiency, business and industry, the environment and conservation. John Litton with the BAQ was a panelist.	June 27, 2007		
j. S.C. Hydrogen Infrastructure Development Act	The act to establish a \$15 million fund to promote the development of a hydrogen economy was passed by the South Carolina Legislature.	While funding for the Hydrogen Infrastructure Development Act was not included in the state budget, legislators did include other critical funds. Through the University of South Carolina budget, EngenuitySC will get \$100,000 to help with preparations for the National Hydrogen Association meeting to be held in Columbia in the spring of 2009. A National Hydrogen Association forum, "Hydrogen Uses in the Military," was held in Columbia this October. USC also got \$1 million for continued funding for hydrogen and fuel research. The S.C. Hydrogen and Fuel Cell Alliance got \$367,640 in recurring funding. The Hydrogen Infrastructure Development Act is recognition by the Legislature that nurturing a hydrogen and fuel cell cluster in South Carolina can have tremendous economic impact.	July 2007		

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k. Bi-Lo to promote green grocery bags -	Bi-Lo is piloting its green bag effort in about 80 of its more than 220 stores here and in Georgia and Tennessee.	The Super Bi-Lo at the Village at Sandhill (Richland County) is participating in the pilot. Bi-Lo sells two versions of the green bags: a woven recycled plastic for 99 cents and a canvas one, priced at \$2.99. Store management at the Columbia Super Bi-Lo said each time shoppers use any reusable bag, they receive a 5-cent per bag credit when they check out each shopping trip. It doesn't seem like much at first - but after 20 uses, a woven plastic bag pays for itself.	August 2007		
l. Santee Cooper efforts	Santee Cooper announced they will quadruple to 40 percent by 2020 the amount of electricity made from non-greenhouse gas sources and created a new department to oversee the effort.	The state-owned utility serves most of Horry and Georgetown counties either directly or indirectly, with about 2 million residents statewide receiving power from it. The company also began purchasing excess power from customers who make electricity with solar panels and other generators.	October 2007		
m. Aiken Electric Cooperative and Santee Cooper announce Green Power Solar Schools program New Ellenton Middle School selected	Aiken Electric Cooperative and Santee Cooper announced the formation of the Green Power Solar Schools program in the cooperative territory, and that New Ellenton Middle School has been selected as the Green Power Solar Schools program participant. The initiative is designed to encourage interest in the environment and demonstrate the feasibility and limitations of renewable power generation. Each school will receive a 2 kilowatt solar power system, which will provide a teaching, research and hands-on demonstration opportunity for students. A focus of the project is the use of a new renewable energy curriculum endorsed by the South Carolina Department of Education. The program continues the Electric Cooperatives of South Carolina's and Santee Cooper's efforts to promote renewable energy, and fulfill Santee Cooper's commitment to reinvest Green Power funds back into renewable resources across South Carolina.	Four additional schools, served by Palmetto Electric Cooperative, Berkeley Electric Cooperative, Blue Ridge Electric Cooperative and Laurens Electric Cooperative will also begin the solar schools program the next calendar year.	August 1, 2007	All Pollutants*	

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n. Want Discounts on Energy Efficient Light Bulbs?	Progress Energy is offering discounts on compact fluorescent light bulbs at 11 Home Depot stores in North and South Carolina. The energy efficient bulbs will be available with the 1 dollar discount from October first to December 30th. The companies say they plan to sell up to 200,000 of the 40, 60 and 100-watt bulbs. Progress Energy is trying to gauge consumer acceptance and awareness of the fluorescent bulbs. If the program is successful at the North and South Carolina stores, it could expand. The North Carolina Utilities Commission approved the program this week. It will cost about \$350,000	This information was provided to all EAC contacts requesting they forward/share the information to all stakeholders.	September 20, 2007		
o. Palmetto Clean Energy	SCANA Corp., Duke Energy Corp. and Progress Energy Inc. will start selling "green power" to their South Carolina customers early next year through a nonprofit group established by the state.	The three utilities will market the renewable energy to the 1.3 million homes and businesses that they serve in the state, while the newly formed organization, dubbed Palmetto Clean Energy, or PaCE, will buy the power from small Southeastern companies that generate electricity with wind turbines, solar panels and landfill gas.	September 2007		
p. Waste Management - Landfill Gas to Energy	Waste Management, Inc. announced a major national initiative to expand the number of landfill gas to energy (LFGTE) facilities. The program will result in the creation of an additional 60 renewable energy facilities across the country -- including the potential of two additional facilities in South Carolina -- over the next five years.		September 2007		Waste Management currently operates LFGTE facilities at Elgin and Wellford. The two LFGTE plants generate nearly 16 MW of electricity -- enough to power 15,000 homes per year. The company also has two other landfills in St. George and Ridgeland, which could host a LFGTE facility. As part of the national initiative, WM will generate more than 700 megawatts of clean renewable energy -- enough to power 700,000 homes or replace over eight million barrels of oil per year.
q. South Carolina Electric Cooperatives Invest in Conservation and Renewable Energy	South Carolina's 20 electric cooperatives plan to invest up to \$10 million per year towards renewable energy and energy efficiency measures.	The investment includes a three-pronged approach to improving the environment and saving energy. The following three measures represent the beginning of this process. -Encouraging homegrown renewable energy (a pilot program for net metering.) -Producing efficiencies to save energy and money (a program to place energy efficient compact fluorescent lights (CFLs) in the home of every cooperative member in the state, approximately seven million bulbs within 10 years). -Investing resources in clean energy research (a partnership with the University of South Carolina to develop technology that reduces carbon dioxide and other emissions from coal-fired power plants).	October 2007		

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r. Alternative Energy Tax Credits	South Carolina began offering a number of new tax credits for people and businesses investing in alternative energy.	A state tax credit that took effect in 2007 covers 25 percent of the cost of solar equipment for hot water, heating, cooling, or generating electricity, as an income tax credit worth up to \$3,500 or half an individual's tax liability. The credit can be carried over for up to 10 years. For new homes, according to the U.S. Department of Energy, solar water heating systems can save money immediately, when the monthly energy savings are compared to the amount a system adds to the cost of a 30-year mortgage.	November 2007		
14. School Buses					
a. Santee Cooper SEP	Provide installation and maintenance for approximately 157 diesel particulate filters for school buses in the non-attainment and deferred counties	Requests for proposals have been submitted but uncertainty of availability of ULSD will delay the project until June 2007. The funding allowed for 105 installations that have been completed to date.	2006 October 2007		
b. Weyerheuser and Duke Energy Project	Provide installation and maintenance for approximately 10 diesel oxidation catalysts and crankcase filtration systems for school buses in Marlboro and Oconee counties.	Application and implementation is delayed until January 2006 pending announcements of the CSBUSA grant recipients.	2006		
c. Clean School Bus USA Grant 2006	The Department of Education has been awarded a Clean School Bus USA Grant for \$499,099 to retrofit some buses in South Carolina with diesel oxidation catalysts and crankcase filters, replace some older buses and conduct a biodiesel pilot and an idle-reduction device pilot. State education superintendent Inez Tenenbaum signed an order on June 20, 2006 to buy 630 new school buses with roughly \$36 million appropriated by the Legislature. These buses should be on South Carolina roads by the end of the year. These new buses will replace vehicles from 1984 and 1985 which are not fuel efficient and produce higher levels of polluted emissions than more modern vehicles. The benefits from these funding sources will be distributed throughout the state.		June 2006		
d. State Owned School Buses	Legislation	A school bus replacement law June 2007 requires the state to provide funding to replace one fifteenth of the school bus fleet each year. The law also requires the state to use biodiesel in the buses.	June 2007		

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e. South Carolina Department of Education - School Bus Initiative	Two plug-in hybrid electric buses with a 2007 emission compliant diesel engine fueled with ultra-low sulfur diesel (soon to be ultra low sulfur 20% biodiesel) were purchased. One bus will be placed in Richland County and another in York County	Draft press release September 27, 2007 Press conference held on October 11, 2007	October 11, 2007 Dated to be placed into service	All Pollutants*	
f. Clean School Bus USA Grant 2007	The South Carolina Department of Education submitted a grant proposal for the 2007 U.S. Environmental Protection Agency Clean School Bus USA grant, in conjunction with the Southeast Diesel Collaborative. Initial review indicates with some minor modifications, the proposal will be accepted and the Department of Education will be awarded the grant.	The grant will provide 500 school buses with crankcase ventilation filters and anti-idling hardware. The grant will also allow the Department of Education to create a computer program that will use GPS data to identify areas of excessive idling. The Department of Education has also requested additional funding for anti-idling awareness education.	2007		
g. Ridership Grant Proposal 2007	Staff in the BAQ's DAPDO (SCDHEC) submitted a proposal to EPA's Mobile Source Outreach Competition Grant for 2007.	This proposal is intended to work with an elementary and middle school in local areas (up to 3 areas) of the State to determine mechanisms to increase the utilization of school buses and carpooling to and from school by students. This project will include working with parents, students, faculty and school administration to encourage better use of school buses for transportation.	Proposal submitted		
15. Southeast Diesel Collaborative (SEDC)					
Southeast Diesel Collaborative (SEDC)	Partnership between US EPA Region 4, State and local air quality programs, and other public and private entities intended to promote opportunities to reduce diesel emissions.	SCDHEC - BAQ signed a MOU in support of the Southeast Diesel Collaborative (April 26, 2006) *Created partnerships and disseminated information for reductions of diesel emissions. *South Carolina stakeholders meeting in August 2006 in Columbia. *Emerging fuels conference was held in Atlanta in December 2006.	2006		

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		March 2007 - workshop for identifying available funding sources to implement clean diesel programs. Two DHEC employees attended the workshop and received the training materials and contacts to pursue funding for diesel emission reduction programs. June 2007 - second annual partners meeting in Atlanta, Georgia. The meeting provided an opportunity for the eight Region 4 state environmental commissioners, including South Carolina's, to establish a vision for future diesel emission reduction projects. December 2007 - BAQ staff continue to participate in routine conference calls with the SEDC partners.	2007		
16. Climate Change Discussions					
Climate, Energy and Commerce Advisory Committee (CECAC)	Governor Sanford issued an Executive Order creating the CECAC.	Department staff compiled background materials to include studies, current actions, and a draft list of potential participants that will comprise five technical work groups and the decision-making body, the CECAC. The process will follow the Center for Climate Strategies-facilitated study and adoption of carbon reduction policies. It is anticipated to take a year or more to complete. The first CECAC meeting took place May 3, 2007. Staff is working with stakeholders across the state in shaping GHG-reduction policies as part of the Governor's Climate Environment & Commerce Advisory Committee.	February 16, 2007		

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	The Climate Registry (TCR)	South Carolina joined with 31 other states as a founding member of The Climate Registry (TCR). BAQ staff is setting out a strategy for recruiting participation by regulated and non-regulated entities. On August 3, 2007, BAQ will give a presentation on TCR to the state Chamber of Commerce Technical Committee. BAQ is collecting data from the City of Columbia to determine base year emissions inventory. BAQ is also assisting the cities of Greenville and Rock Hill to implement their US Mayors Climate Protection Agreement. Staff is beginning an outreach campaign to enlist regulated and non-regulated entities for participation in The Climate Registry. Eight business nationally have signed Statements of Intent to join the registry as of November 15, 2007, none are in South Carolina. South Carolina has set a goal of having three businesses sign up before January 15, 2008.	2007		
Founding member and supporter of the Climate Registry	The Climate Registry, established by states, tribes and provinces in North America as a mechanism to measure greenhouse gas (GHG) emissions consistently across industry sectors and borders. The Climate Registry encourages voluntary early actions to increase energy efficiency and decrease GHG emissions. The Climate Registry accounting infrastructure supports a wide variety of programs that reduce GHG emissions including voluntary, regulatory and market-based programs.	A meeting was held on October 4, 2007. Joel Levin provided an overview of the The Climate Registry. Mr. Levin is the California Climate Action Registry's Vice President for Business Development. He is responsible for educating participants from all economic sections and regions to register and certify their greenhouse gas emissions. Representatives from state and local governments, including Lexington County, as well as business and industry attended the discussion.	October 4, 2007		
17. Open Burning Activities					

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Established workgroup	A workgroup was established in 2005 that includes staff representation from the Department's Bureau of Land and Waste Management (BLWM) and the Bureau of Air Quality (BAQ) to develop a tool for staff, especially regional inspectors, to more clearly outline the regulations the two Bureaus have related to Open Burning regulations.	On April, 26, 2007, the Waste Disposal Matrix Document tool described above was approved for use internally with staff in the BLWM and BAQ. A meeting of the inter-bureau workgroup is scheduled for June 28, 2007 to discuss the development of a training plan to use this tool with the appropriate staff. On September 28, 2007, the managers of the education and outreach sections for the BLWM and for the BAQ, met with staff from the Agency Media Services to discuss the development of a statewide Open Burning information campaign. This campaign is tentatively set to begin in the Spring of 2008 and will include TV and radio PSAs, and print materials targeting various key audiences with messages on options to open burning materials.	2005 on-going activities		
18. Railroads - Diesel Emissions					
Education/Outreach Conferences	Reduction in Diesel Emissions from Railroads	Railroads - Diesel emissions - The Department has initiated programs to address diesel emissions from railroads in South Carolina. During October and November 2007, the Department participated in a national and a regional conference to seek reductions in diesel emissions. The Department is working with CSX Railroad to implement some of those strategies in Charleston.	October and November 2007		
SC Department of Commerce Division of Public Railways	Ultra Low Sulfur Diesel (ULSD)	In November 2007, the Division of Public Railways (South Carolina Department of Commerce) announced that all locomotives will be using ultra low sulfur diesel (ULSD) fuel five years earlier than the EPA mandate (2012). The Division of Public Railways uses an estimated 26,000 gallons of diesel fuel annually.	November 2007		
19. State Ports Authority					

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South Carolina State Ports Authority	Ultra Low Sulfur Diesel (ULSD)	In March 2007, the SPA signed a memorandum of agreement with the Department to partner in reducing port-related diesel emissions. The Department is working with the State Ports Authority (SPA) to reduce diesel emissions. In September 2007, the SPA switched its off-road diesel equipment to ULSD three years prior to the EPA mandate (2010).	March 2007 Fall 2007		
20. Mass Transit					
"Carolina Swamp Rabbit Tram Trail."	The plan is to convert an abandoned 10-mile-long rail line, from Greenville to Travelers Rest, into a multi-use trail for recreational and motorized transit.	A 7-foot-wide microbus would travel a 10-foot wide asphalt strip constructed over the railroad bed, carrying passengers between downtown Greenville and downtown Travelers Rest. The plan is an intermediate step in response to U.S. Department of Transportation statistics showing that Georgia and South Carolina lead all states in the number of rural residents dependent on passenger rail as their only public transportation. The long-term goal of the plan is to preserve the integrity of the rail corridor for eventual conversion to a commuter rail line, while attempting to have the area's transportation infrastructure keep pace with expanding growth.	December 2007		
21. Alternative Fuels					
South Carolina Biodiesel Fuel Quality Symposium	The South Carolina Biodiesel Fuel Quality Symposium took an in-depth look at the latest regulatory, environmental, and technical developments impacting the fastest-growing renewable fuel industry in South Carolina.	The event's technical program provided participants with a basic understanding of how biodiesel is produced, fuel management, fuel quality, component compatibility, regulatory issues, and incentives. Speakers include recognized experts in their respective fields including industry professionals, regulators, local and state officials, fleet managers, retailers, distributors, and producers.	September 19, 2007		

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Hydrogen-fueled truck	Washington Savannah River Co. gave \$175,000 to the Center for Hydrogen Research in Aiken for a hydrogen-fueled truck	The hydrogen-fueled truck will demonstrate the viability of the alternative fuel. The center also announced plans for a refueling station to provide hydrogen for the truck and other hydrogen-powered vehicles. The Hydrogen Internal Combustion Engine vehicle, or HICE, is based on a full-size 2007 Chevrolet Silverado 1500 pickup. The truck will be powered solely by hydrogen. Options for the refueling location include either the Savannah River Research Campus or at a site along I-20.	October 2007		