Attachment 9
Central Midlands Area

South Carolina

June 16th List of Emission Reduction Strategies Under Consideration

June 2003 Progress Report

June 2003

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Early Action Compact Milestone - June 2003 - Progress Report
Fairfield County

1. Document progress in developing stakeholder process, including, for example, roles and responsibilities of various stakeholder groups, list of stakeholders, brief summary of stakeholder meetings, stakeholder involvement in development of initial list of control measures, etc.

Check all of the following statements that apply to your county.

1.	XX	Attached is a list of the stakeholders. Fairfield County Planning, Building and Zoning Department, Fairfield Planning Commission, Fairfield Public Works
2.	XX	A stakeholder meeting(s) was held on May 22, 2003 .
3.	XX	A stakeholder meeting is planned for June 26, 2003 .
4.		DHEC representatives attended the stakeholder meeting.
5.		DHEC representatives were consulted regarding the stakeholder process.
6.	XX	The stakeholders were consulted regarding the emission reduction strategies under consideration
7.		
8.		

2. Report progress on evaluating and selecting emission reduction measures for the local control strategy.

See June 16, 2003 submittal *List of Emission Reduction Strategies Under Consideration.*

3. Describe public outreach activities (press coverage, public presentations, websites, etc.)

Check all of the following statements that apply to your county.

1.	XX	The media has been invited to attend stakeholder meetings.
2.		A press release regarding the 8-hour ozone standard and/or activities related to the Early Action Compact has been issued.
3.	XX	Meetings in which the 8-hour ozone standard and/or activities related to the Early Action Compact were open to the public (i.e., county council meetings) were held on May 22, 2003 . (May attach copy of agenda and/or minutes if available.)
4.		There has been no press coverage for our activities.
5.		The county EAC website is:
6.		
7.		

4. Provide update on modeling/technical planning activities.

Refer to the June 2003 Progress Report submitted by SCDHEC for statewide activities.

These activities are the responsibility of the state. Refer to the June 2003 Progress Report submitted by the South Carolina Department of Health and Environmental Control, Bureau of Air Quality.

Refer to the June 2003 Progress Report submitted by SCDHEC for statewide activities.

Early Action Compact Milestone - June 16, 2003
List of Emission Reduction Strategies Under Consideration

Fairfield County

Based on stakeholder consultation and taking into consideration resource and political constraints, the following control measures under consideration can be reasonably implemented. It is anticipated these measures under consideration will assist Fairfield County in achieving and/or maintaining the 8-hour ozone standard by 2007.

Measure under Consideration	Description of measure (A more detailed description will be included in the Early Action Plan.)	Estimate of emission reductions (if available)	Proposed date for implementation	Geographic area and/or local government
Air Quality Contact	Ronald Stowers, Fairfield County Director of Planning, Building and Zoning Department is designated as the Air Quality Contact. At a minimum, this contact will be responsible for ozone education/outreach and dissemination of ozone forecast.	Not available	March 2003	County wide
Support state-wide efforts	Fairfield County will support the efforts of SC DHEC regarding state-wide emission reduction strategies.	Not available		County wide
Amendment of the Fairfield County Zoning Ordinance	Amend the Fairfield County Zoning Ordinance, Article IV, Conditional Uses, Section 4-9, Manufacturing Uses to add prescriptive requirements for reducing/or maintaining ozone levels.	Not available	November 2003	Unincorporated area of Fairfield County
Amendment of the Fairfield County Zoning Ordinance	Evaluate the Fairfield County Zoning Ordinance, Article VI, Screening, Landscaping and Common Space Regulations determine adequancy of tree planting/landscaping standards to help promote stragegic tree planting.	Not available	November 2003	Unincorporated area of Fairfield County
Amendment of the Fairfield County Zoning Ordinance	Amend the Fairfield County Zoning Ordinance, Article 3 to promote Planned Development Districts that would encourage land use planning that will help improve air quality.	Not available	November 2003	Unincorporated area of Fairfield County

Refer to the June 2003 Progress Report submitted by SCDHEC for statewide activities.

Awareness	Work with and provide information to the Incorporated areas of Fairfield County on Land Use Planning measures that will help improve air quality.	Not available	June 2003	Incorporated area of Fairfield County
Awareness	Promote ozone education/awareness by distribution of information, including Ozone Alerts to County employees as well as to Town of Ridgeway and Town of Winnsboro.	Not available	Ongoing	Unincorporated and Incorporated areas of Fairfield County
Operation and Maintenance Activities	Work with County Public Works to develop strategies to reduce activities that would effect ozone levels during Ozone Action Days	Not available	Ongoing	Fairfield County

Refer to the June 2003 Progress Report submitted by SCDHEC for statewide activities.

Early Action Compact Milestone – June 2003
Progress Report

LEXINGTON COUNTY

1. The Lexington County Administrator has delegated the responsibilities of this program to the Director of Public Works, John Fechtel. In an effort to coordinate these activities more effectively, the County will hire a coordinator that will share these responsibilities with the EPA/SCDHEC NPDES (National Pollution Discharge Elimination System) Phase II requirements. It is anticipated this position would be filled in July. Although a separate program (Stormwater), a lot of the same stakeholders are involved in both programs and can be discussed at some of the same meetings as different items. Although no meetings have been held yet, June 2003 has been targeted to initiate the meetings.

The following stakeholders have been identified as potential participants:

   a. Commercial and industrial companies.
   b. City, County, and State government – These participants will be identified and notified as to meeting agenda (purpose, meeting time, and place) and will be given an overview of the program. These two groups initially meet separately but will be brought together after strategies and ideas have been identified.

2. Staff has developed several aspects of ozone reduction to be considered by all groups: a. Employee carpooling; b. Citizen carpooling (not only use of existing park and ride facilities but contacting shopping centers and churches for designated park and ride-type facilities; c. Use of various internet websites for availability of these facilities; d. Restrictions of open burning activities; e. Intergovernmental and private company resolutions for ozone reduction; f. Proposed ozone reduction activities year round and especially Ozone Action Days; g. Use and availability of alternate fuels/vehicles; h. Idling reduction or No-Idle policies; i. Community Awareness and Education; j. Review of all energy conservation plans; k. Media coverage.
3. Public Outreach – In July staff will present bimonthly updates to County Council and will begin to present this program to the various municipalities at their regularly scheduled meetings (after budget process). Staff will also begin investigating the various media resources (newspaper, radio, television) available to heighten public education.
4. Coordinate activities with SCHEC on modeling/technical planning activities.

Early Action Compact Milestone – June 16, 2003
List of Emission Reduction Strategies Under Consideration

LEXINGTON COUNTY

Based on stakeholder consultation and taking into consideration resource and political constraints, the following control measures under consideration can be reasonably implemented. It is anticipated these measures under consideration will assist Lexington County in achieving and/or maintaining the 8-hour ozone standard by 2007.

Measure under Consideration	Description of measure (A more detailed description will be included in the Early Action Plan)	Estimate of emission reductions (if available)	Proposed date for Implementation	Geographic area and/or local government
Ozone Action Coordinator	County staff person	N/A	July 2003	County Government
Ozone Action Contacts	Establish industry/local government contact persons	N/A	August 2003	Various companies/ municipalities
Park & Ride Facilities	Staff will be contacting churches, shopping centers, etc. with large parking lots to discuss Park & Ride Program	N/A	Dec. 2003	Various companies, churches, government facilities
Alternate Work Schedule	Discuss with industry, companies, municipalities, county departments	N/A	Dec. 2003	Countywide
Bio-Diesel/Alternate Fuels	Companies, municipalities, county, investigate feasibility of these methods	N/A	March 2004	Countywide
Idle Reduction	Establish County policies to reduce or stop idling time	N/A	July 2003	County government
Landfill Methane Reduction	Analyze methane production and and reduction, recycle efforts	N/A	March 2004	Countywide

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Early Action Compact Milestone - June 2003 - Progress Report
Newberry County

1. Report progress in developing stakeholder process, including, for example, roles and responsibilities of various stakeholder groups, list of stakeholders, brief summary of stakeholder meetings, stakeholder involvement in development of initial list of control measures, etc.

Check all of the following statements that apply to your county.

1.		Attached is a list of the stakeholders.
2.		A stakeholder meeting(s) was held on _____. (May attach copy of minutes, if available.)
3.	x	A stakeholder meeting is planned for June 2003.
4.		DHEC representatives attended the stakeholder meeting.
5.	x	DHEC representatives were consulted regarding the stakeholder process.
6.		The stakeholders were consulted regarding the emission reduction strategies under consideration
7.		
8.		

2. Report progress on evaluating and selecting emission reduction measures for the local control strategy.

See June 16, 2003 submittal *List of Emission Reduction Strategies Under Consideration.*

3. Describe public outreach activities (press coverage, public presentations, websites, etc.)

Check all of the following statements that apply to your county.

1.		The media has been invited to attend stakeholder meetings.
2.		A press release regarding the 8-hour ozone standard and/or activities related to the Early Action Compact has been issued.
3.		Meetings in which the 8-hour ozone standard and/or activities related to the Early Action Compact were open to the public (i.e., county council meetings) were held on _____. (May attach copy of agenda and/or minutes if available.)
4.	X	There has been no press coverage for our activities
5.		The county EAC website is: ____under development
6		
7.		

4. Provide update on modeling/technical planning activities.

These activities are the responsibility of the state. Refer to the June 2003 Progress Report submitted by the South Carolina Department of Health and Environmental Control, Bureau of Air Quality.

Refer to the June 2003 Progress Report submitted by SCDHEC for statewide activities.

Early Action Compact Milestone - June 16, 2003
List of Emission Reduction Strategies Under Consideration

Newberry County

Based on stakeholder consultation and taking into consideration resource and political constraints, the following control measures under consideration can be reasonably implemented. It is anticipated these measures under consideration will assist Newberry County in achieving and/or maintaining the 8-hour ozone standard by 2007.

Measure under Consideration	Description of measure (A more detailed description will be included in the Early Action Plan.)	Estimate of emission reductions (if available)	Proposed date for implementation	Geographic area and/or local government
Air Quality Contact	One person will be identified as the Air Quality Contact. At a minimum, this contact will be responsible for ozone education/outreach and dissemination of ozone forecast.	Not available	March 2003	County wide
Support state-wide efforts	Newberry County will support the efforts of SC DHEC regarding state-wide emission reduction strategies.	Not available		County wide

Refer to the June 2003 Progress Report submitted by SCDHEC for statewide activities.

Early Action Compact Milestone – June 2003
Progress Report

Richland County, South Carolina

1. **Document progress in developing stakeholder process, including, for example, roles and responsibilities of various stakeholder groups, list of stakeholders, brief summary of stakeholder meetings, stakeholder involvement in development of initial list of control measures, etc.**

Over 250 stakeholder letters were mailed out during the final week of April, 2003. This number included 40 permitted industries in Richland County, 35 Richland County Department Directors, Central Midlands Council of Governments representatives, as well as neighborhood organizations and Richland County municipalities. (See attached letter and memo regarding stakeholder meeting.)

An introductory stakeholder meeting comprised of a healthy mix of the aforementioned groups was held on May 21, 2003. During this meeting, a brief overview of the EAP process was presented via a power point presentation by a DHEC (Bureau of Air Quality) representative (Henry Phillips), and discussions were held regarding actions to be taken in the public and private sectors of Richland County. Questions and comments were also taken.

Attendees at the May 21, 2003 meeting are as follows:

Name	Organization
Gerald Shealy	SCDHEC--Central Midlands District Office
Aaron Redmond	Budget and Control Board, GSP
Allen R. Mothershed	Specialty Minerals, Inc. @ IP
Brian Redmond	Alvin S. Glenn Detention Center
Jim Witkowski	International Paper—Eastover
Tom Marino	Richland County Government—Budget & Grants
Michael Criss	Richland County Government-- Planning Department
Evelyn Bush	Private Citizen
Judy Edwards	City of Columbia
Craig Pearson	SCE&G
Michelle Ransom	Central Midlands Council of Governments
Wayne Shuler	Central Midlands Council of Governments
Christy Swofford	Richland County Government—Procurement
Henry Phillips	S.C. DHEC—Bureau of Air Quality
Roxanne Matthews	Richland County Government—Administration

Another stakeholder meeting will be scheduled within the next few weeks. During this next meeting, we will discuss specific actions to be taken within our various organizations, as well as goals and performance measures.

2. **Report progress on evaluating and selecting emission reduction measures for the local control strategy.**

Category: Land-Use

Improvement Action: Promote land-use planning intentionally altering the urban environment to improve air quality. Examples are transit oriented development, infill development, and pedestrian oriented development, concentrated activity centers, strengthening downtowns, balancing location of housing and employment opportunities. Can include policies, programs, or actions such as zoning regulations, design controls, "green development" practices, and incentive programs to encourage smart growth.

Richland County's Efforts

Richland County is in the process of rewriting its outdated Land Development Code. This ongoing process has included input from citizens and staff, and the information contained within this updated code incorporates these ideas within the document. The code contains many positive, proactive land-use planning directives.

It should be noted that the following excerpts are not always listed in their entirety, and that the language contained within may be altered before the final code is published.

Again, this is a DRAFT of the proposed Land Development Code, and should be interpreted as such.

The following excerpts from the draft code illustrate many of the suggested improvement actions.

Chapter 25: Land Development (DRAFT 1/21/03)

This section puts forth the ideas that are prevalent throughout the code; that of zoning regulations, design controls, and "green development" practices, each of which promotes smart growth, and thereby inadvertently improves air quality.

Sec. 26-2. Purpose and scope.

(a) *Purpose.* The regulations contained in this chapter have been adopted in accordance with the comprehensive plan for Richland County, South Carolina and for the general purposes of guiding development in accordance with existing and future needs and promoting the public health, safety, morals, convenience, order, appearance, prosperity and general welfare. Furthermore, this chapter has been adopted with reasonable consideration of the following purposes:

(1) To provide for adequate light, air, and open space;

(2) To prevent the overcrowding of land, to avoid undue concentration of population and to lessen congestion in the streets;

(3) To facilitate the creation of a convenient, attractive and harmonious community;

(4) To protect and preserve scenic, historic, or ecologically sensitive areas;

(5) To regulate the density and distribution of populations and the uses of buildings, structures, and land for trade industry, residence, recreation, agriculture, forestry, conservation, airports and approaches thereto, water supply, sanitation, protection against floods, public activities and other purposes;

(6) To facilitate the adequate provision or availability of transportation, police and fire protection, water, sewage, schools, parks and other recreational facilities, affordable housing, disaster evacuation and other public services and requirements as are set forth in this ordinance;

(7) To secure safety from fire, flood, and other damages;

(8) To encourage the development of an economically sound and stable county;

(9) To assure the timely provision of required streets, utilities and other facilities and service to new land developments;

(10) To assure the adequate provision of safe and convenient traffic access and circulation, both vehicular and pedestrian, in and through new land developments;

(11) To assure the provision of needed public open spaces and building sites in new land developments through the dedication or reservation of land for recreational, educational, transportation and other purposes;

(12) To assure, in general, the wise and timely development of new area, and redevelopment of previously developed areas in harmony with the comprehensive plans of municipalities and counties; and

(13) To further the public welfare in any other regard specified by the Richland County Council.

This section deals with the Town and Country Zoning District. Included are excerpts from this zoning designation that illustrate transit oriented development,

pedestrian oriented development, concentrated activity centers, strengthening downtowns, and balancing location of housing and employment opportunities.

Sec. 26-99. TC Town and Country District.

(a) *Purpose.* The Town and Country District is intended to promote the development of land in a manner consistent with the comprehensive plan for Richland County, in particular the Town and Country Planning Concept promoted therein. It is designed to promote, in various parts of the county, mixed-use development that has a distinct village edge and connection to the landscape along with amenities that promote walkability and ties to transit throughout the community.

(b) Permitted uses, permitted uses with special requirements, and special exceptions.

(1) *General.* Carefully blended land uses form the essence of Town and Country Development. Uses within different land use categories may abut at any point subject to the provisions of this section. All residential, institutional, office and commercial uses are allowed in this district as are all uses permitted in the LI [Light Industrial] district.

Subareas: The TC District shall be divided into the following subareas:

a. *Town center.* Civic, retail, office and multi-family uses. The size of the town center is based on the size of the entire site.

b. *Neighborhoods.* A neighborhood or series of neighborhoods consisting of blended multi-family and single-family uses, small-scale retail and workshop uses and public outdoor gathering places shall be a part of any town and country district. It is the intent of this section that all areas within a town and country neighborhood are within a five-minute walking distance from edge to center (radius of 1320 feet).

c. *Greenways.* Greenway areas that provide a greenway system for the community, open space for community residents and natural areas for stormwater management shall be a part of any town and country development. Greenways may border or traverse the district.

(5) *Landscaping/bufferyard standards:* Landscaping and bufferyards shall be provided in accordance with CITE of this chapter. However, in order to provide a continuous pedestrian transition for residential neighborhoods and commercial areas, retail land use categories shall not be separated from residential land use categories by berms or buffers. Adequate design measures shall be taken to minimize potential use conflicts. Limited fences and walls may be used when other design methods are ineffective.

(7) *Sidewalk and pedestrian amenities:* Sidewalks and other pedestrian amenities shall be provided as required by and pursuant to the standards for pedestrian amenities contained in this chapter.

(9) *Recreation/open space standards:* Open space shall be provided in accordance with the standards for parks and open space in Article VII and as required by the planning commission and county council during the review and approval of the TC District.

Landscaping Standards are also included in the Land Development Code. The following excerpts are from the Landscaping Standards section of the Code. Planted trees reduce the need for air conditioning, reduce the heat island effect in urban areas, and reduce energy usage. Tree ordinances have been drafted to establish minimum tree planting standards for new development, and to promote strategic tree planting, street trees, and parking lot trees. Stringent specifications are laid out in this section, along with repercussions for not abiding by these standards.

Sec. 26-176. Landscaping standards.

(a) *Purpose and applicability.*

(1) *Purpose.* Recognizing that trees and landscaping contribute to the public health, safety and welfare, Richland County has set standards for landscaping throughout the unincorporated areas of the county. Amount the benefits of trees, shrubs and other plants are: improved air quality; beneficial climate modification; reduction of glare, noise, odors and dust; reduction of storm water runoff and flooding; screening of undesirable views; provision of buffers between incompatible land uses; shelter and food for birds and other wildlife; and the aesthetic enjoyment provided by the diversity and dynamism of the planted landscape. All of these benefits contribute to a higher quality of life, enhancing the appeal and economic value of both residential and business properties in the county. It is the intent of the requirements set forth in this section to provide for landscaping along public rights-of –way (street protective yards), between dissimilar uses (buffer transition yards); and in and around parking lots (vehicular surface area landscaping). Screening for loading, trash collection, display and utility areas is required and tree protection standards must be met for all developments to which this section applies. To ensure that the landscaping continues to thrive and enhance the quality of life in Richland County, requirements for maintenance are also included.

(2) *Extent of compliance required.*

(b) *Landscape plan required.* Prior to obtaining a zoning permit or grading permit, an applicant must receive approval of a landscaping plan. A landscape plan is to be submitted with the site plan and shall include all information specified on the application form.

(C) *Planting specifications.*

(1) *Species.* Trees, shrubs, and other vegetative material shall be selected from those listed in the administrative guidelines or shall be approved by the planning department. Plants shall be adapted to the site conditions where they will be planted.

(2) *Trees.*

(a) *Size.* All shade trees planted in accordance with the requirements of this section, unless otherwise listed, shall be a minimum of ten (10) feet in heights, and small-maturing trees a minimum of eight (8) feet in height, when planted. Both shade trees and small-maturing trees must be two (2) inches in caliper (measured one-half food above ground level) when planted.

(b) Multi-trunk trees. All multi-trunk trees must be a "tree form" with a maximum of three (3) to five (5) stems or trunks and a minimum height of eight (8) feet at planting.

(3) *Shrubs.* All shrubs planted to meet the requirements of this section, unless required to be larger, as set forth elsewhere, shall be a minimum of three (3) gallon container size and eighteen (18) inches in height or spread (depending on whether the growth habit is upright or spreading) measured from the top of the root zone.

(4) *Mulch.* All planted materials are to be mulched with an approve material in the amount (depth and area) specified in the administrative guidelines.

(g) *Vehicular surface area landscaping.*

(1) *General.* Vehicular surface areas are required to comply with the following landscape standards. There are two (2) vehicular surface area planting requirements that may apply to a development. One requirement deals with screening and the other deals with interior parking lot plantings.

(2) *Vehicular surface area interior landscaping.*

a. *Placement.* The required interior landscaping planting areas are to be placed in any of the following locations: within or adjacent to the parking lot area as tree islands; at the end(s) of parking bays; inside medians that are five (5) feet or greater in width; as part of a continuous street protective yard or vehicular surface area separation yard.

b. *Plant quantity.* Vehicular surface areas are to be planted with one (1) shade tree for every 6400 square feet of total vehicular surface area. Each planting area shall contain at least one (1) shade tree.

c. *Distance from parking spaces.* No vehicular parking space shall be located farther than forty (40) feet from the tree trunk of a shade tree in a planting area with one (1) tree. Distances between trees and parking spaces separated by intervening building(s) may not be considered in meeting this requirement.

d. *Size of planting area.* Unless otherwise provided, a minimum of two hundred (200) square feet of planting area is required for each tree. Any dimension in any planting shall be a minimum of five (5) feet.

i. *Timber harvesting.* Timber harvesting, whether a commercial silviculture operation or timber clearing on private property must comply with the buffer requirements and other voluntary protective measures knows as "Best Management Practices" and published by the South Carolina Forestry Commission. This shall include an undisturbed buffer along the entire perimeter of the property, including road frontages, except for approved access crossings. Such buffer shall be fifty (50) feet wide or equal to the required setback for the zoning district in which the property is located, whichever is greater.

1. *Protection of existing trees during development.* No grading or other land-disturbing activity can occur on a site with existing trees which are designated to be preserved in order to meet the landscaping requirements until protective barriers are installed by the developer. The diameter of the preserved trees and the location of protective barriers must be shown on the landscape and

grading plans with the dimension between the tree trunk and barrier indicated.

k. *Maintenance.* The owner or lessee of the property where landscaping is required shall be responsible for the maintenance and protection of all plant and screening material. Landscaped areas shall be maintained in good condition. Failure to maintain or replace dead, damaged or diseased material or to repair a broken buffer structure shall constitute a violation of this chapter. Replace plant material must be in compliance with the minimum size, spacing and quantity standards of this chapter.

The Code points out smoke and particulate matter being released into the environment with the following excerpt:

Sec. 26-178. Operation standards.

(b) *Noise.*

Smoke and particulate matter. Any land use or other activity that involves the emission of smoke, particulate matter or other air pollutants shall comply with all applicable standards set forth in state and federal regulations regarding the emission of air pollutants.

The Land Development Code promotes pedestrian-friendly developments, and encourages bicycling and mass transit.

Sec. 26-179. Pedestrian, bicycle and transit amenities.

(a) *Sidewalks and other pedestrian amenities.*

(1) *Rural districts.* Where a subdivision of ten (10) or more units is constructed in a rural district, the developer shall be required to provide sidewalks along one (1) side of all streets within and abutting the development, except controlled access facilities. Sidewalks shall have a minimum width of five (5) feet and be constructed to the specifications of the Public Works Department

(4) *Access to schools, parks and open space areas from residential developments.* In residential developments containing ten or more dwelling units, access ways shall be provided by the developer to public schools, greenways, park and open space areas abutting the residential development and to open space or parks provided as part of a development.

(b) *Bicycle facilities.* Bicycle parking shall be required for all uses requiring over twenty (20) automobile parking spaces. The minimum number of bicycle parking spaces required shall be equal to five (5) percent of the total number of automobile parking spaces on the lot. Bicycle parking facilities shall be standard bicycle racks or other secured lockable facilities.

(c) *Transit facilities.* Any multi-family development or subdivision containing over ten (10) dwelling units and any commercial, industrial or office complex of fifty thousand (50,000) square feet or greater, when located along a transit route, must provide for a transit stop. This transit stop shall include a designed area for the bus to pull off out of the main traffic flow and a sheltered area for transit riders.

Air quality is also enhanced by open spaces provided for in the Code.

Sec. 26-184. Parks and open space.

(a) Purpose *and applicability.*

(1) *Purpose.* The common open space and park standards contained herein are established to provide for the reservation of open space in residential development in Richland County. Preservation of open space and parks in developing areas serves a variety of purposes, including meeting the recreational needs of residents, reducing stormwater runoff, and enhancing air quality.

(c) General parks and open space requirements.

(1) *Minimum amount of park land or open space to be reserved.* There shall be reserved for the use of all residents of a development to which this section applies, park areas and/or open space accounting for ten (10) percent of the total project area.

Category: Awareness

Improvement Action: Join and participate in Clean Cities (Palmetto State Clean Fuels Coalition).

Richland County's Efforts

Richland County has re-established ties with this organization. We will seek forth ways to possibly increase the availability of alternative fuels in our county, to increase the use of those fuels, and to increase public awareness of the benefits of using alternative fuels.

County Staff plants to attend the next Coalition meeting to be held June 4, 2003.

Category: Mobile Sources

Improvement Action: Require replacement of all gasoline golf carts with electric.

Richland County's Efforts
Richland County is researching the possibility of purchasing electric golf carts for our county fleet. We currently have 4 golf carts, all of which use gasoline. Electric carts are lower maintenance and lower costs, and parts are also easier to get, thus providing more of an incentive to purchase electric carts in the future. The recommendation will be made to our Procurement Department that purchasing electric golf carts be pursued in the future.

Category: Mobile Sources

Improvement Action: Assist with establishing alternative fuels for public fleets. Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternate fuels include bio-diesel, electricity, ethanol, liquefied petroleum gas, methanol, and natural gas.

Richland County's Efforts
Richland County has researched alternative fuels and the possibility of purchasing alternative fuel vehicles. Will attend next Clean Cities meeting on June 4, 2003 to learn more about AFV's and their feasibility for Richland County.

Category: Awareness

Improvement Action: Prohibit/limit/ban open burning (all year or May – September or on Ozone Action Days); encourage to mulch clearing debris rather than burning it.

Richland County's Efforts
Richland County's Code of Ordinances speaks to this measure:

CHAPTER 10: FIRE PREVENTION AND PROTECTION

Sec. 10-1. Open burning restricted.

All fires of any kind are prohibited within the right-of-way of any street, road, or highway except as follows:

1. Open fires may be set in performance of an official duty of any public officer when deemed necessary to protect property, life, or the public welfare.

2. Salamanders or other devices may be used for heating by construction or other workers, provided no nuisance is created.

3. Open burning is prohibited within any "residential" zoning district, as defined by sections 26-63 or 26-64 of the Richland County Zoning Ordinance, Chapter 26, except for the following:

    a. The cooking of food, provided no smoke violation or other nuisance is created thereby;

    b. Open burning in undeveloped areas of residential zoning districts for the purpose of land-clearing or right-of-way maintenance subject to the following requirements:

        1. The location of the burning must be on one (1) acre of land or more and must take place no less than two hundred fifty (250) feet from public roadways and from any residential, commercial, or industrial sites not part of property contiguous to the site of the burning;

        2. Wind direction from the site of the burning must be away from any area which includes a public roadway or a residential, commercial or industrial site if the ambient air in such area will be significantly affected by smoke from the burning;

        3. Fires started in violation of this chapter shall be immediately extinguished by the person or persons causing such fire after notice of such violation is issued by the county fire marshal or his designated agent.

4. During a pollution alert declared by duly constituted authority, any and all open burning shall be unlawful.

Category: Awareness

Improvement Action: 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.)

Richland County's Efforts
Richland County staff has composed and distributed a flier that is to be conspicuously displayed in all County departments. This information will also be placed on the County's website. Fliers include educational information regarding ozone awareness, and preventive measures that can be taken by all citizens.

Email alerts to Richland County employees will be sent out on unhealthy air quality days (beginning May 1st, 2003). This information will also be posted on the county's website.

Category: Awareness

Improvement Action: Meet with representatives of other metropolitan areas that have implemented programs to learn from experiences. Determine feasibility of replicating successful programs or components in local areas.

Richland County's Efforts
Spoke to Darlington County representative (Robbin Brock) to discuss steps they have taken in this process that might be profitable for Richland County.

Will meet with municipalities located within the county to discuss possible cooperative efforts regarding ozone.

Will attend June 4, 2003 meeting at Catawba COG regarding Clean Cities.

Category: Awareness

Improvement Action: Use compressed work weeks or flexible work hours, which helps reduce traffic congestion during the peak driving hours by spreading out the number of vehicles on the roadway over a longer period of time.

Richland County's Efforts
Will discuss possible flex time hours with County Administrator and Human Resources. Perhaps have a PILOT program with certain departments to see if this is a recommended option for all departments.

Category: Awareness

Improvement Action: 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.

Richland County's Efforts
Determining the feasibility of posting names and contact information of interested carpoolers by area on employee intranet. Employees can match themselves up with potential pools in their area.

Category: Mobile Sources

Improvement Action: Electrify Truck Stops: Provide the drivers of refrigerated rigs and sleepers with places to plug in and avoid idling engines.

Richland County's Efforts
Have received information regarding electrified truck stops. Will contact truck stop owners to determine feasibility of this initiative.

Category: Awareness

Improvement Action: Local government joins and participates in the SC Early Action Plan for 8-hour ozone.

Richland County's Efforts
Richland County is actively participating in this process.

Category: Political

Improvement Action: Use tax incentives to promote expanded use of low emissions technology, energy efficient technology, etc.

Richland County's Efforts
Richland County will bring this idea forth to the Richland County Economic Development Committee. We are, however, concerned that there would be no way to monitor industries who claim to use low emissions technology.

Category: Conservation

Improvement Action: Develop City and County Energy Plan (Energy Conservation): An energy plan could be developed that directs municipal departments to reduce energy use. This could include retrofitting municipal buildings/city schools and street lights for energy efficient, i.e. "Energy Star" Program, white roofs, etc., promoting transportation alternatives, and encouraging recycling and composting.

Richland County's Efforts
Richland County currently promotes internal recycling in the administration building, as well as other county-owned buildings. Recycling bins are placed throughout the building, ranging from white paper to aluminum cans receptacles.

Will remind employees to turn out lights and turn off computers when not in use.

Category: Awareness

Improvement Action: Assign staff to become air quality contact / expert for jurisdiction.

Richland County's Efforts

Roxanne Matthews, Research Analyst
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(803) 576-2057
P.O. Box 192
Columbia, SC 29202

Category: Mobile Sources

Improvement Action: Encourage 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."

Richland County's Efforts

Richland County will post bus routes on employee intranet, along with carpooling information.

Category: Mobile Sources

Improvement Action: Encourage not overfilling your fuel tank. Stop when the nozzle clicks off.

Richland County's Efforts

Richland County has placed this information on the flier that will be posted throughout county departments.

Category: Awareness

Improvement Action: Restrict mowing days and times all year /during ozone season / ozone action days (focus on public). Promote the use of electric and propane lawn mowers.

Richland County's Efforts

Richland County's Public Works Department will be presented with this idea, and it shall be determined if this is a feasible option.

Category: Land-Use

Improvement Action: Consider tree plangent/landscaping standards: Planted trees reduce the need for air conditioning, reduce the heat island effect in urban areas, and reduce energy usage. Tree ordinances could be drafted to establish minimum tree planting standards for new development; and to promote strategic tree planting, street trees, and parking lot trees.

Richland County's Efforts

Richland County is in the process of rewriting its outdated Land Development Code. This ongoing process has included input from citizens and staff, and the information contained within this updated code incorporates these ideas within the document. The code contains many positive, proactive land-use planning directives.

It should be noted that the following excerpts are not always listed in their entirety, and that the language contained within may be altered before the final code is published.

Again, this is a DRAFT of the proposed Land Development Code, and should be interpreted as such.

The following excerpts from the draft code illustrate many of the suggested improvement actions.

Chapter 25: Land Development (DRAFT 1/21/03)

Landscaping Standards are included in the Land Development Code. The following excerpts are from the Landscaping Standards section of the Code. Planted trees reduce the need for air conditioning, reduce the heat island effect in urban areas, and reduce energy usage. Tree ordinances have been drafted to establish minimum tree planting standards for new development, and to promote strategic tree planting, street trees, and parking lot trees. Stringent specifications are laid out in this section, along with repercussions for not abiding by these standards.

Sec. 26-176. Landscaping standards.

(d) *Purpose and applicability.*

(1) *Purpose.* Recognizing that trees and landscaping contribute to the public health, safety and welfare, Richland County has set standards for landscaping throughout the unincorporated areas of the county. Amount the benefits of trees, shrubs and other plants are: improved air quality; beneficial climate modification; reduction of glare, noise, odors and dust; reduction of storm water runoff and flooding; screening of undesirable views; provision of buffers between incompatible land uses; shelter and food for birds and other wildlife; and the aesthetic enjoyment provided by the diversity and dynamism of the planted landscape. All of these benefits contribute to a higher quality of life, enhancing the appeal and economic value of both residential and business properties in the county. It is the intent of the requirements set forth in this section to provide for landscaping along public rights-of –way (street protective yards), between dissimilar uses (buffer transition yards); and in and around parking lots (vehicular surface area landscaping). Screening for loading, trash collection, display and

utility areas is required and tree protection standards must be met for all developments to which this section applies. To ensure that the landscaping continues to thrive and enhance the quality of life in Richland County, requirements for maintenance are also included.

(2) *Extent of compliance required.*

(b) *Landscape plan required.* Prior to obtaining a zoning permit or grading permit, an applicant must receive approval of a landscaping plan. A landscape plan is to be submitted with the site plan and shall include all information specified on the application form.

(C) *Planting specifications.*

(5) *Species.* Trees, shrubs, and other vegetative material shall be selected from those listed in the administrative guidelines or shall be approved by the planning department. Plants shall be adapted to the site conditions where they will be planted.

(6) *Trees.*

(a) *Size.* All shade trees planted in accordance with the requirements of this section, unless otherwise listed, shall be a minimum of ten (10) feet in heights, and small-maturing trees a minimum of eight (8) feet in height, when planted. Both shade trees and small-maturing trees must be two (2) inches in caliper (measured one-half food above ground level) when planted.

(b) Multi-trunk trees. All multi-trunk trees must be a "tree form" with a maximum of three (3) to five (5) stems or trunks and a minimum height of eight (8) feet at planting.

(7) *Shrubs.* All shrubs planted to meet the requirements of this section, unless required to be larger, as set forth elsewhere, shall be a minimum of three (3) gallon container size and eighteen (18) inches in height or spread (depending on whether the growth habit is upright or spreading) measured from the top of the root zone.

(8) *Mulch.* All planted materials are to be mulched with an approve material in the amount (depth and area) specified in the administrative guidelines.

(h) *Vehicular surface area landscaping.*

(1) *General.* Vehicular surface areas are required to comply with the following landscape standards. There are two (2) vehicular surface area planting requirements that may apply to a development. One requirement deals with screening and the other deals with interior parking lot plantings.

(2) *Vehicular surface area interior landscaping.*

a. *Placement.* The required interior landscaping planting areas are to be placed in any of the following locations: within or adjacent to the parking lot area as tree islands; at the end(s) of parking bays; inside medians that are five (5) feet or greater in width; as part of a continuous street protective yard or vehicular surface area separation yard.

b. *Plant quantity.* Vehicular surface areas are to be planted with one (1) shade tree for every 6400 square feet of total vehicular surface area. Each planting area shall contain at least one (1) shade tree.

c. *Distance from parking spaces.* No vehicular parking space shall be located farther than forty (40) feet from the tree trunk of a shade tree in a planting area with one (1) tree. Distances between trees and parking spaces separated by intervening building(s) may not be considered in meeting this requirement.

d. *Size of planting area.* Unless otherwise provided, a minimum of two hundred (200) square feet of planting area is required for each tree. Any dimension in any planting shall be a minimum of five (5) feet.

i. *Timber harvesting.* Timber harvesting, whether a commercial silviculture operation or timber clearing on private property must comply with the buffer requirements and other voluntary protective measures knows as "Best Management Practices" and published by the South Carolina Forestry Commission. This shall include an undisturbed buffer along the entire perimeter of the property, including road frontages, except for approved access crossings. Such buffer shall be fifty (50) feet wide or equal to the required setback for the zoning district in which the property is located, whichever is greater.

1. *Protection of existing trees during development.* No grading or other land-disturbing activity can occur on a site with existing trees which are designated to be preserved in order to meet the landscaping requirements until protective barriers are installed by the developer. The diameter of the preserved trees and the location of protective barriers must be shown on the landscape and grading plans with the dimension between the tree trunk and barrier indicated.

k. *Maintenance.* The owner or lessee of the property where landscaping is required shall be responsible for the maintenance and protection of all plant and screening material. Landscaped areas shall be maintained in good condition. Failure to maintain or replace dead, damaged or diseased material or to repair a broken buffer structure shall constitute a violation of this chapter. Replace plant material must be in compliance with the minimum size, spacing and quantity standards of this chapter.

3. Describe public outreach activities (press coverage, public presentations, websites, etc.)

A flier (attached) regarding ozone was created and distributed throughout County departments for the employees. This information will also be made available to the public via Richland County's website, located at www.richlandonline.com, in the next few weeks. This website will also contain information regarding the Early Action Plan process, and links to appropriate and corresponding websites.

4. Provide update on modeling/technical planning activities.

Please refer to the June 2003 Progress Report submitted by the South Carolina Department of Health and Environmental Control, Bureau of Air Quality.

Richland County Government

Office of the County Administrator

May 6, 2003

Richland County is participating in South Carolina's Early Action Plan for the 8-Hour Ozone Standard. You are invited to participate in a stakeholder group meeting on Wednesday, May 21st.

On August 23, 2002, the South Carolina Department of Health and Environmental Control (DHEC) published a Notice of Drafting in the *State Register* for the development of an Early Action Plan for implementing measures to attain the 8-hour ozone standard prior to federal requirements. The Notice of Drafting allows stakeholders the opportunity to comment and participate in the development of an Early Action Plan.

The Clean Air Act requires that air quality in every state meet health based National Ambient Air Quality Standards. Using data from DHEC's statewide monitors and recommendations from the respective states, EPA regional officers determine if geographic areas of the state are attainment (meet the standard), or non-attainment (exceed the standard). States with areas that are non-attainment are required to revise their State Implementation Plan (SIP) with necessary control measures to ensure that the standards are attained and maintained by a specified date.

If areas are designated as non-attainment, they will immediately be faced with a more stringent permitting process under non-attainment New Source Review (NSR) and within one year of the designations, areas will have to begin conformity analyses, which ensure that projects utilizing federal funds do not have an adverse impact on an area's air quality. The most common form of conformity analysis is Transportation Conformity, which deals specifically with road projects. In addition to the non-attainment NSR and conformity requirements, states may also have to implement other control strategies to improve air quality.

Areas that are attainment with the 1-hour ozone standard, but may be approaching or exceeding the 8-hour ozone standard, are eligible and encouraged to implement early measures to reduce emissions of ozone-forming air pollutants in advance of federal requirements. Currently, all of South Carolina attains the 1-hour ozone standard; however, some areas of the state may have difficulty complying with the 8-hour ozone

standard. Unfortunately, Richland County is one of those counties that currently exceeds the prescribed standard, and has the potential to become a non-attainment area if preventive measures are not taken.

To that end, a stakeholder group is being formed to address these issues. The stakeholder group will be comprised of business and industry representatives from Richland County, as well as private citizens, municipalities, and County employees.

The meeting will take place Wednesday, May 21st from 2:00 p.m. – 4:00 p.m. in the fourth floor Conference Room in the Richland County Administration Office Building, located at 2020 Hampton Street.

Please feel free to contact me with any questions you may have. I look forward to seeing you there.

Thank you,

Roxanne Matthews
Research Analyst
(803) 576-2057

Richland County Government

Office of the County Administrator

To: Richland County Department Directors

From: Roxanne Matthews, Research Analyst

Date: May 6, 2003

Subject: Early Action Plan for the 8-Hour Ozone Standard

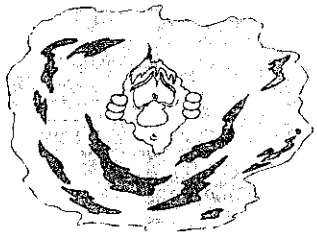
Richland County is actively participating in the Early Action Process for the 8-Hour Ozone Standard. This process involves forming a stakeholder group, coordinating public outreach activities, and reporting progress on emission reduction measures for Richland County.

A stakeholder group meeting will take place on May 21st from 2:00 p.m. – 4:00 p.m. in the Administrator's Conference Room (see attached letter). Please send one representative from your department to this meeting to discuss measures your department could take to further this process for the County.

Also attached is a flier that contains valuable information regarding ozone, and how Richland County employees can help out by performing certain activities in their daily lives. Please post this flier in a conspicuous place within your department.

If you have any questions regarding the Early Action Plan, please feel free to contact Roxanne Matthews at 576-2057, or visit the following internet site: www.scdhec.net/baq/eap.html.

Ozone and Your Health



What is ozone?
Ozone is a gas that occurs both in the Earth's upper atmosphere and at ground level. Ozone can be good or bad, depending on where it's found.

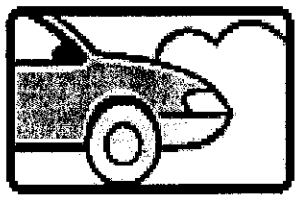
Good ozone shields us from the sun's harmful UV rays, while **Bad ozone** can irritate your respiratory system, reduce lung function, aggravate asthma, and may cause permanent lung damage.

Bad ozone is formed when pollutants emitted by cars, power plants, chemical plants, and other sources react chemically in the presence of sunlight.

Ozone pollution is a concern during the summer months when the weather conditions needed to form ground – level ozone (lots of sun and hot temperatures) normally occur.

What can YOU do to help?

- Combine trips and limit unnecessary ones
- Carpool
- Keep your vehicle properly maintained
- Use gasoline powered lawn equipment after 6:00 p.m.
- Refuel after 6:00 p.m. and don't top-off the tank
- Walk or ride a bike on short trips
- Save electricity
- Avoid driving during peak hours
- Don't drive above the speed limit
- Take the bus



For more information, contact Roxanne Matthews at 576-2057 or via email at roxannematthews@richlandonline.com