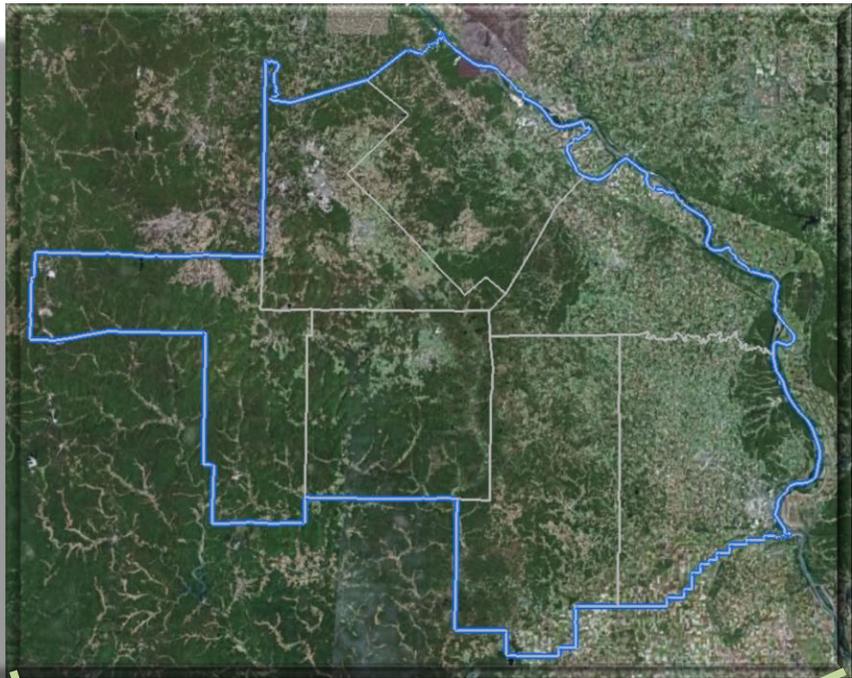


Southeast Missouri



*Clean Air Action Plan
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ABSTRACT:

The Clean Air Action Plan for Southeast Missouri presents historical perspective and voluntary and proactive measures that can be taken to address air quality issues. This effort was initiated when monitors located in the area were found to be out of compliance with new standards for ground-level ozone. The plan presented in the following pages presents a range of actions that can be taken by citizens, businesses and governments to ensure that the air quality in southeast Missouri remains excellent.

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Introduction

The impetus for the preparation of this Clean Air Action Plan (CAAP) was the promulgation, by the U.S. Environmental Protection Agency (EPA), of new 8-hour ozone standards in March, 2008. Under the new standards both of the monitors located within the southeast Missouri region appeared to be out of compliance based on available data. This brought home the idea that air quality was no longer solely an “urban issue.”

The Southeast Missouri Regional Planning Commission (RPC) has been involved in environmental issues for decades. This has included water and wastewater planning, solid waste planning, and a variety of projects to prepare applications for grant funding in support of environmental issues. The most recent involvement by the RPC in air quality issues stems from the beginning of the process employed by the Missouri Department of Natural Resources (MoDNR) in formulating recommendations regarding counties to be designated as nonattainment areas under the new 8-hour ozone standards. In April, 2008, MoDNR announced the process that would be followed in developing those recommendations. Staff from the RPC, along with interested private sector citizens and local elected officials, attended every meeting held by the MoDNR during this process. Indeed, two of the meetings pertaining to the proposed Southeast Missouri Nonattainment Area were hosted by the RPC.

The MoDNR process was completed in January, 2009 when the Missouri Air Conservation Commission (MACC) voted to adopt the staff recommendations presented by MoDNR. Under these recommendations, only two counties within the seven-county RPC service area were included as nonattainment areas. Both Perry and Ste. Genevieve Counties, each with an ozone monitor that initially appeared to have a three-year rolling average reading showing noncompliance, were recommended for designation as nonattainment areas with the recommendation further placing each of these counties in “stand-alone” nonattainment areas.

Following involvement in the nonattainment area designation process, the stakeholders involved, in cooperation with the RPC Board of Directors, decided to move forward and address air quality issues on a local level. In part this decision reflected the new awareness that air quality issues were no longer strictly urban concerns. In addition, the decision is an effort to implement a voluntary and proactive approach to rural air quality matters rather than simply to wait to react to decisions made in remote urban areas.

Under the Clean Air Act, there are six “criteria pollutants.” The theory is, quite simply, that if these pollutants can be kept at acceptable levels, the air quality is also acceptable. These pollutants include:

1. Particulate matter;
2. Ground level ozone;
3. Carbon monoxide;

4. Sulfur oxides;
5. Nitrogen oxides; and,
6. Lead

While the particular focus of this CAAP will be to address ozone and its associated precursors, all criteria pollutants are addressed in the CAAP to some degree. At bottom, although the pollutants are measured separately, emission sources at all levels frequently emit more than one criteria pollutant. Major point sources are already controlled through the permitting process, which process addresses all pollutants.

Urban/Rural Considerations

The seven-county southeast Missouri region is very rural in nature. By way of example, the City of Cape Girardeau had a 2000 population of 35,349 and as of 2008 estimates had only grown to 37,370. The nearby City of Jackson had a 2000



population of 11,947 and as of 2008 estimates had grown to merely 13,744. No other community in the region approaches the size of Cape Girardeau. In the next most populous county, St. Francois, the largest cities of Farmington (2008 population estimate 16,097) and Park Hills (2008 population estimate 8,851) only sum to approximately 25,000 persons. All other areas have a much smaller population.

This rural nature has two extremely important implications for air quality planning. First, in the realm of regulations, many of the approaches that have been effective in reducing pollution in urban areas are simply irrelevant in rural areas.

The current regulatory approach has been developed to address issues where populations are concentrated. A fuel vapor recovery system requirement makes sense in St. Louis or Kansas City where hundreds of service stations serve hundreds of thousands of automobiles through thousands of nozzles. In a county with ten stations and under 100 nozzles, such a system would simply be an economic burden with essentially zero chance of having a measurable impact on air quality.



Beside these questions of effectiveness, there is a political component to the rural nature of the region. Rural areas have a history of working with other rural areas to address mutual problems. Because of the diversity of problems between rural and urban areas, this history of cooperation does not exist with the rural southeast Missouri region and the urban St. Louis metropolitan area.

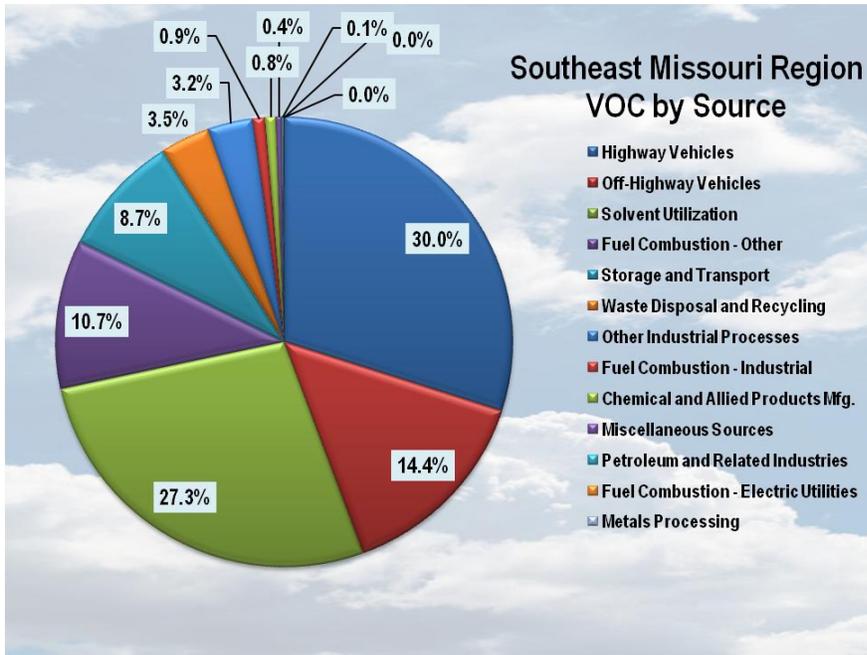
An early draft of the MoDNR recommended nonattainment area designations would have had St. Francois and Ste. Genevieve Counties included in an expanded St. Louis Nonattainment Area. The view of local officials was that this designation would have meant that the concerns of the rural counties would simply have been overwhelmed by the needs of the urban areas. This is not an “us against them” position. Rather, it reflects the reality that when scarce resources are

apportioned, the rational approach is to put those resources where they can do the most benefit. The small rural populations simply do not generate the numbers to compete with more urban areas.

The balance of this CAAP, then, will address things that can be done by rural areas and which can reasonably be expected to have a positive air quality impact. The recommendations and programs that follow are a mix of: voluntary actions; programs involving government funding or subsidies; and, a few direct government programs or projects. For rural areas this mix of approaches, designed to involve citizens along with government and business in a shared effort, provides the greatest likelihood and the goal of cleaner air will be achieved.

Ozone Primer

One of the most important of the criteria pollutants is Ozone. Ozone is the

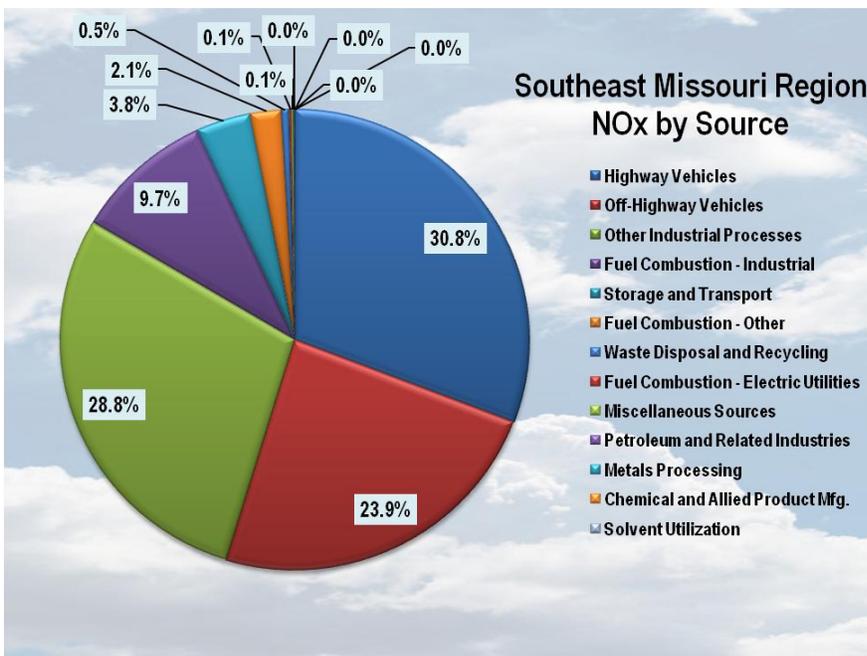


Source: U.S. Environmental Protection Agency

primary component of visible “smog” associated with the “brown air days” that were once common in larger cities. It is important to understand that ozone is not, as a rule, directly produced. Rather, a combination of Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NOx) combine in a warm environment in the presence of sunlight to form Ozone. The VOC and NOx components are known as ozone “precursors.” Many of the programs

and projects discussed below are designed to eliminate or reduce these precursors.

The source of these ozone precursors in many ways drove the development



Source: U.S. Environmental Protection Agency

of this plan. The Environmental Protection Agency estimates that, in general, about half of precursors come from motor vehicles. Specifically, the estimate is that 56% of NOx and 45% of VOCs come from these sources on a national level. As shown in the accompanying charts, this national average information is closely approximated locally. Within the seven-county region 54.7% of VOCs and 44.4% of NOx comes from these

sources. Since these are such significant sources, it quickly became clear that efforts to reduce mobile source emissions would, of necessity, be a central feature to most programs proposed.

Health officials have concluded that ground level ozone in relatively small quantities, measured in terms of parts per billion of the atmosphere, can cause health problems. Most commonly, irritation to eyes and lungs results in watery, burning eyes and a scratchy throat. In extreme cases lung problems can develop

into much more serious bronchitis or trigger asthma attacks in individuals susceptible to that condition. Atmospheric ozone, however, is considered “good ozone.” In the stratosphere, ozone provides a shield from the sun’s ultraviolet radiation. The common way to remember this is in the phrase “Ozone – Good High, Bad Low.”



Source: Centralina Council of Governments

Goal and Objectives

Any action plan contains statements of purpose(s), usually in terms of “goals” and “objectives.” Goals are broad generalized statements defining the overall outcome desired. Objectives are more specific, action-oriented, shorter range proposals with more precise aims. A critical aspect of both goals and objectives is that they be both realistic and attainable. For purposes of this CAAP, two goals and three objectives represent the outcomes to be achieved.

Goal 1:

The primary goal of the Southeast Missouri Regional Planning Commission’s Clean Air Action Plan is to promote programs, projects and policies to ensure that the region’s air quality remains excellent.

Goal 2:

The secondary goal of the Southeast Missouri Regional Planning Commission’s Clean Air Action Plan is to promote such programs as will help ensure that none of the Commission’s member counties are designated as nonattainment areas by the U.S. Environmental Protection Agency under the auspices of the Clean Air Act. Should one or more counties be so designated, the CAAP will promote such programs, projects and policies as are necessary to reduce air pollution in the briefest time possible so as to allow petition to have such counties re-designated as “attainment.”

Objective 1: Promote Voluntary Measures.

This Objective includes education/outreach and direct programs and projects designed to engage citizens in efforts to help improve air quality. As noted in the following sections, these are largely behavior changes and involve no-cost, or in some cases very low-costs to the citizens.

Objective 2: Promote Local Government Measures.

This Objective includes programs, projects and policies that can be undertaken by local governments. These are, as with the voluntary measures above, largely a matter of changing policies and procedures and, in some cases, supporting specific projects or programs. These efforts are generally low- or no-cost.

Objective 3: Promote Private Sector Measures.

This Objective includes programs, projects and policies that can be undertaken by private sector businesses. Since local governments lack authority to directly regulate private sector businesses in most cases, these will be voluntary efforts on the part of business. Often these are no- or low-cost efforts. Since not being designated as a nonattainment area works to businesses advantage by avoiding additional regulation associated with such a designation, this is a case where private sector business decisions coincide with public needs.

Voluntary Measures

Since regulation of significant point sources is outside of the authority of local governments, the focus necessarily shifts to more general area sources and mobile sources. Area sources are those smaller, more generalized sources of air pollutants exemplified by gasoline service stations, for example. Mobile sources, as the name suggests, are primarily vehicles including passenger vehicles and trucks as well as off-road vehicles. Mobile equipment such as construction equipment, mining/forestry equipment and temporary generators are also considered mobile sources. Voluntary measures can be undertaken by individuals, local governments, businesses, or other groups or organizations. A wide range of such measures have the potential of making an impact on air pollution even though each individual activity may seem insignificant.

Education/Outreach

Education efforts should not be limited to the schools. While it is important to reach youngsters during their formative years so that they can develop good habits early, an education/outreach effort toward adults will also be a key component of the overall program. The project to promote student-produced video spots mentioned below under “Education Approaches” obviously involves students along with adults. Public Service Announcements, press releases, use of local access cable stations and a speakers bureau will promote education and outreach in support of this CAAP.

Specific Education Projects

1. “Stop at the click.” This project is designed to promote the habit of filling vehicle fuel tanks “to the click.” In other words, not adding additional fuel after the automatic cutoff on the fuel nozzle has turned off the flow of fuel. “Topping off” the tank presents several problems. Most obviously, one “click” too many can result in a direct fuel spill. Before that, though, internal venting will have been blocked by the extra fuel, making the vapor recovery system less efficient. On older systems with activated charcoal canister systems, the filter media can be contaminated. By simply taking the “stop at the click” approach, all of these problems can be avoided.



2. “Fuel at night.” Closely related to “stop at the click,” fueling at night helps avoid ozone formation. VOCs are released during any fueling operation in some small amounts. In the event of a fuel spill, even more VOCs are released. If fueling is done at night, the VOCs thus

released have sufficient time to disperse before they can combine with NOx in the heat and sunlight of the day.

3. “Yard work in the afternoon or evening.” This project is designed to instill a habit of taking care of yard work using gasoline powered equipment later in the afternoon or in the evening. The afternoon spent “cutting the lawn” is an American tradition. Small engines such as are found on outdoor power equipment lack sophisticated fuel injection systems and computer controls, as well as catalytic converters. The ozone precursor output of these engines is far higher than automobiles or trucks which have those sophisticated fuel management systems. Since NOx, combining with VOCs in the presence of heat and sunlight are a primary source of ground-level ozone, waiting until late in the day to use this equipment removes the heat and sunshine from the equation and helps decrease ozone levels.

4. Battery power for owners of small lots. Several companies now offer battery powered outdoor power equipment that could well replace gasoline powered



weed trimmers, hedge trimmers, blowers and the like. Improvements in battery pack technology have addressed many of the issues of short run time associated with battery powered equipment in the past. The policy of several manufacturers of offering a variety of equipment utilizing the same battery pack means that as the tool selection grows, the supply of batteries and chargers also grows. A workshop with, for example, an 18 volt drill, circular saw,

reciprocating saw, string trimmer and blower would have at least five batteries and chargers, meaning that the equipment could be run effectively indefinitely with only the briefest stops to change batteries. While gasoline powered equipment will still be the logical choice for bigger lots with longer distances involved in getting back to the chargers, battery powered equipment could well be a very serviceable choice for persons with smaller lots.

5. Electric Lawn Mowers. Although battery powered lawn mowers are generally still in the future, the electric power option is viable for smaller lots. The need for extension cords limits the use of electric lawn mowers to relatively small lots, but where they can be used they offer a clean alternative to traditional gasoline powered mowers.

6. Carpool/Trip Planning. Education and outreach to promote carpooling or at least trip planning has the obvious goal of reducing vehicle miles traveled. Carpooling keeps one automobile off of the road for every participant, and its impact is obvious. Less obvious, and more suitable for an educational/outreach program, is the idea of trip planning. Simply planning trips to combine all “chores”

in one planned trip can save vehicle miles. Often those are “in-town” miles which are the most fuel inefficient and most polluting trips.



7. Idle reduction. Extended idling is an air polluter and fuel waster. Even idling as little as 30 seconds is more wasteful than turning off and restarting an automobile. One of the most obvious locations for extended idling is around school as parents wait for their students. An education/outreach program targeted to persuade drivers to turn

off their engines rather than idling for extended periods could achieve changes in these habits. Simple signage indicating “No Idle Zones” would augment this program. This is a particularly important source since automobile air emissions are a primary source of VOCs in rural areas.

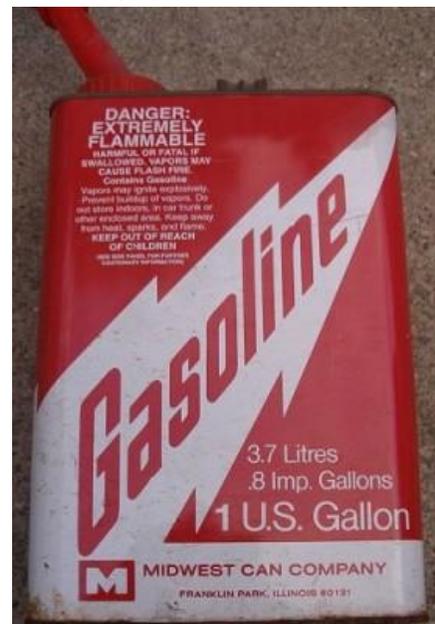
8. Use “chimneys” or electric starters rather than charcoal starter. This might



seem like a trivial item but the half cup of charcoal starter multiplied by a thousand uses quickly adds up to a significant emission. Besides that, those who have made the switch away from charcoal starter fluid say that flavor of prepared foods is improved.

9. Replace worn out or leaking fuel cans. With improvements automobile and truck vapor recovery systems, as well as more efficient fuel

delivery cutoffs and vapor recovery systems being utilized at gasoline filling stations, fueling an automobile or truck has become a relatively clean operation. Combined with stop-at-the-click habits, emissions from fueling approach zero. Although counter intuitive, the “standard” one- or two-gallon gasoline can being used to fuel a lawn mower, lawn tractor, string trimmer, chain saw, blower or other outdoor power equipment can easily result in more emissions than filling an automobile or truck gas tank. Many older gas cans lack any cutoff feature resulting in fuel spills. Loose or leaking caps can cause a steady vapor loss. Small gasoline cans labeled “CARB Compliant” meet standards for the California



Air Resources Board and have both anti-spill and anti-vapor release features.

10. Bicycle for short trips. Bicycling has benefits for the air and for health. As a relatively low-impact exercise, bicycling is generally regarded as one of the most benign exercise regimens available. In addition, in terms of air quality, it is a zero pollution alternative to other transportation modes.

11. Energy conservation efforts. Any energy conservation efforts indirectly help reduce air pollution since the need for large scale Electric Generating Utilities, the main source of many air pollutants, is reduced through these efforts. The entire range of energy conservation is included within this general category. Residential energy audits can be performed and typically can result in a reduction of 10% or more in energy usage for any household. Government is already involved in such efforts through tax incentives for Energy Star™ compliant appliances and similar programs. The government requirement to replace incandescent light bulbs with compact fluorescent bulbs is another example. Citizen awareness is a key to a truly significant energy conservation effort.

Education Approaches

Several approaches lend themselves to the education/outreach program recommended here. A combination of these will be necessary to raise awareness of the issues of air quality. As with advertising, repetition is the key, and addressing the issue through several venues and approaches over a period of time will enhance the prospects for successfully making an impact on this important issue.

1. Public Service Announcements. A series of Public Service Announcements (PSAs) carried on radio and television will be used to promote two things. First, the general awareness of air quality issues as something that is no longer just an urban problem. Second, PSAs in support of specific voluntary measures such as the “Stop at the click program” will promote those efforts. Samples of draft PSAs are included as Appendix 1.

2. Press Releases. A series of Press Releases accomplish virtually the same things. “Background” Press Releases will help promote the general awareness. “Program” Press Releases will help promote specific efforts. Samples of draft press releases are included as Appendix 2.

3. Locally produced “spots.” Many local high schools, and vocational schools, as well as Southeast Missouri State University, Mineral Area College and the Cape Girardeau Career and Technology Center, have production facilities and classes in video production. These classes will be encouraged to produce “spots” in support of these programs. Local air play through Local Access Cable Television or captive broadcast facilities held by Southeast Missouri State University and Mineral Area College will help spread the word. The “local color” of these spots will promote more local interest.

4. Screen “crawls.” The “crawls” across the bottom of the screen on local access channels and, possibly, commercial stations would provide yet more exposure for these important issues. Regular contact through an email “tree” and press releases will encourage the use of this device.

5. Speakers Bureau. Using SEMO RPC staff or volunteers, a “speakers bureau” of persons knowledgeable about air quality issues and the various programs to address the problem will be developed. These speakers would be available to schools as “guest teachers,” community service organizations as “program speakers,” local governments and any other interested groups.

6. Web Sites. Many organizations, educational institutions, local governments, and private sector businesses maintain internet web sites. The inclusion of links to sites identifying and promoting voluntary measures, or even including such a section in those web sites, will be a valuable addition to the education/outreach “toolbox.”

Government Policies/Programs/Ordinances

Direct regulation of air pollutants is largely beyond the scope of local governments. Electric Generating Utilities (EGUs), the largest point source emitters, are specifically governed by Federal and State regulations. The whole range of other regulatory responses to air quality issues, including regulations on automobile body shops, dry cleaners, gasoline service stations, and so on are regulated through the State of Missouri permitting process which, in turn, is governed by a State Implementation Plan (SIP) approved by EPA. There are, however, policy, program, and direct ordinance actions that can be taken.

Each of the recommended policies and programs require formal action on the part of the local government. In order to promote participation and acceptance, the CAAP includes draft resolutions, letters, policy statements and program outlines. All of the well meaning programs and projects will have no impact if they are not adopted and implemented. In order to be effective a variety of implementation strategies will need to be followed. These are also identified and detailed below.

Policies

Policy 1: Fleet “Right Sizing.” Local governments run relatively large fleets. These fleets typically include a mix of passenger automobiles and trucks. Some special purpose vehicles such as fire trucks or police cars would logically be excluded from any “right sizing” policy. A reasonable policy, though, would include a formal position taken by local governments that as each vehicle is scheduled for replacement through the normal cycle an evaluation of its replacement would include consideration of fuel efficiency. The heavy duty, ¾ ton crew cab dual wheel pickup with its large V-8 engine, for example, that serves primarily as the transportation vehicle for the head of the street department might be replaced by a ½ ton pickup with a V-6.

Implementation Plan: A fleet “rightsizing” effort is primarily a matter of establishing the relevant policy. Any capital purchases such as new vehicles would normally be subjected to the budget process. The model “Fleet Purchase Evaluation Policy” included as Appendix 3 provides a formal framework for these budget requests to be evaluated. Ideally the department head of the various departments submitting the request would do a formal evaluation based on this policy. With the rationale identified and explained through this relatively formal process, the final “yes/no” decision will be reasonably straightforward.

Obviously, the applicability of this policy will vary with the size of the local government. A county with a road and bridge fleet of 50 vehicles, for example, will have more opportunities to precisely target and assign vehicles than a smaller system with a fleet of only 20 vehicles. In the smaller fleet it is almost certain that more multiple uses for any single vehicle will likely be required. The goal of this policy would be to achieve what efficiencies can be achieved rather than mandating specific actions. It is a central assumption in this CAAP approach that local governments understand their needs best and will use common sense in approaching solutions that meet the “common sense test.”

Policy 2: Fleet Alternate Fuels. Similarly, local governments could adopt a policy of promoting and adopting the use of alternate fuels as the fleet turns over. Compressed Natural Gas vehicles, for example, offer dramatically improved emission characteristics. This fuel would require some specialized fueling equipment with attendant additional costs, but availability of grant funding to address these start-up costs could make this approach feasible. A policy that new vehicles be “flex fuel-capable,” and able to accept the 85% ethanol that is becoming available would have positive impacts. A policy requiring “hybrid” vehicles where personal transportation is the primary function of the vehicle would also have a positive impact.

Implementation Plan: As with “rightsizing,” an effort to utilize alternate fuel vehicles is primarily a matter of establishing the relevant policy. An evaluation including alternate fuel capability is understood to potentially be in conflict with the desire of local governments to hold down costs through the use of the most fuel efficient vehicles available. Use of “flex fuel,” for example, with 85% ethanol representing significantly lower BTUs (British Thermal Units - the common measure of heat energy available) per gallon will have a correspondingly reduced fuel mileage. The cost of reduced air pollutants must, then, be factored into the purchase decision. By adopting the model “Fleet Purchase Evaluation Policy” included as Appendix 3, local governments agree to include alternate fuels in the evaluation process.

Policy 3: “E-Government.” Simply put, every person who must visit City Hall or the County Courthouse has made a trip to get there, and the vast majority of those trips are by private automobile. The implementation of a policy of “E-Government” could cut down significantly on those trips. Simply posting forms on a local government internet web site and providing for accepting those forms electronically would be a reasonably low cost approach. Such things as building

permit forms lend themselves to this approach. Other “E-Government” ideas will certainly develop as government staff become more familiar and comfortable with the concept and begin using it on a regular basis.

Implementation Plan: The concept of “E-Government” addresses a range of issues ranging from online zoning maps to operating a “paperless” office. For purposes of addressing air pollution issues, the goal would be to reduce the number of trips citizens need to make to City Hall or the County Courthouse to transact normal business. The possible areas for electronic transactions are diverse. A partial listing, by way of example, could include:

- a. Posting Zoning Maps and regulations;
- b. Making/tracking complaints;
- c. Posting permit and license applications;
- d. Posting and accepting proposals and bids; and,
- e. Requesting/receiving public information.

In some cases, this would be simply a matter of convenience to citizens as matters historically handled via the U.S. Mail are made available on an internet web site or link. Payment of taxes or traffic fines, for example, is often done through the mail already. Technically savvy citizens could well prefer paying electronically via the internet. This would be a very low-cost to no-cost policy to implement. Unfortunately, in terms of the CAAP, the impact of this program would be essentially unquantifiable. A model “Electronic Government Initiative Policy” is included as Appendix 4.

Policy 4: Careful Enforcement of Speed Limits. As a rule, fuel mileage increases and emissions decrease as speeds are reduced. The simple expedient of carefully enforcing speed limits, thereby bringing average speeds down, will help reduce emissions put into the air.

Implementation Strategy: This policy has the benefit of being completely “no cost.” It is based on the understanding that as vehicles are driven slower they are more fuel efficient and less polluting. Moreover, this is a safety issue. The CAAP assumption is that careful attention was given prior to speed limits being established, and that public safety was the primary concern in establishing them. Careful enforcement, then, addresses air quality and public safety issues at no cost and should be implemented whether or not air quality issues are being considered. It is important that a policy be written in such a manner as to allow the officer on the scene to evaluate the specific situation and react accordingly. A model “Speed Limit Enforcement Policy” is included as Appendix 5.

Policy 5: Promotion and Support for Recycling. Recycling has a variety of benefits, including benefits to air quality. Local governments can provide support directly through funding and participating in recycling efforts. Reduction in materials going into landfills will have some small impact on the production of methane and other byproducts of decomposition. In addition, recycling and reuse will remove

potential fuel from open trash incineration as is, unfortunately, still not uncommon in rural areas.

Implementation Strategy: The implementation of this policy involves both direct and indirect components. Directly, local governments can simply make it policy to separate and recycle materials that are recyclable. Obviously aluminum and plastic drink containers and paper are candidates for recycling. Indirectly, local government can participate in the Southeast Missouri Solid Waste Management District which has as its primary focus the promotion of recycling efforts. In addition, local governments can support local recycling groups as they are formed. A draft “Recycling Policy” is included as Appendix 6.

Programs

Program 1: Energy Auditing and Efficiency Programs. Local governments operate a variety of buildings. From City Hall or the County Courthouse to the street department garage, all of these buildings require heat, light, and in most cases, air conditioning. The implementation of an energy auditing program would be likely to identify a minimum of 10% potential savings. By way of example, replacement of older fluorescent light fixtures with modern, high efficiency fixtures can achieve this level of savings for the lighting budget. Making an additional capital investment and replacing those fixtures with Light Emitting Diodes (LEDs) could easily result in a savings of 50% on lighting costs.

Implementation Strategy: Implementation of an energy auditing and efficiency program is a two stage process. First, an energy audit is undertaken for each public building. Second, the recommendations of the energy audit are implemented. Typically, unless a building has already undergone this process, potential energy savings of at least 10%, and as much as 50% can be identified. These can include recommendations ranging from no-cost/low-cost options such as adjusting hours of operation or making sure windows open and close properly, to quite expensive activities such as full replacement of obsolete Heating, Ventilation and Air Conditioning (HVAC) systems. A draft “Energy Efficiency in Government Facilities” policy is included as Appendix 7.

Program 2: Gas Can Exchange Program. One source of Ozone precursors, especially VOCs, is leaking gas cans or fuel spills when outdoor power equipment is fueled. Leak-proof and spill-proof cans are available. Local governments, either independently or working through a regional organization such as the Solid Waste Management District, could sponsor a gas can exchange program where old, leaky or inefficient cans can be upgraded. Grant funding through the Solid Waste Management District, MoDNR, or even EPA could defray virtually all of the expenses associated with this program. Preliminary discussions with a major manufacturer of fuel cans has indicated that private sector participation is likely in this effort.

Implementation Strategy: Improvements in gasoline nozzles and vapor recovery systems have made fueling automobiles and trucks a very nearly pollution free endeavor. In an odd twist, the gas cans used to fill outdoor power equipment, and especially older cans, are prone to spills and vapor leaks. Fuel cans identified as “CARB Compliant” meet the standards of the California Air Resources Board for spill and leak resistance. These tend to be relatively costly although the potential certainly exists to obtain a reduced cost or even donated supply to support a gas can exchange program. Such a program will require safeguards to avoid abuse, although with the relatively small numbers involved the likelihood of abuse is relatively small. A draft “Gas Can Exchange Program Guidelines” is presented in Appendix 7.

Program 3: Discount for “Fueling-at-Night” Program. Similarly, local governments could seek grant funding to support a discount when gasoline is sold after dark or some set time such as 6:00 p.m. This has the effect of releasing the normal vapors associated with fueling at a time of day that they will be dispersed before the conditions for creating Ozone develop during the heat of the day. With modern electronic price setting for gasoline fueling stations, this would not be a particular burden for the businesses choosing to participate. In a system similar to sales tax collection and reporting, a 1% fee could be retained by the businesses to cover any costs incurred.

Implementation Strategy: Of all of the suggested programs in this CAAP, the idea of offering a discount for fueling at night would be the most difficult to implement. This would require funding, cooperation with private businesses, careful tracking, and since the numbers would be big enough to attract abuse, some form of eligibility checking. The preliminary estimate is that a discount on the order of 5% would be needed to entice people to change habits of long standing. For a station pumping, for example, 100,000 gallons of gas per month, the calculation would be:

100,000	Gallons per month
<u>X \$2.25</u>	Price/gallon
\$225,000	Spent/month
<u>X .05</u>	5% discount applied
\$11,250	Cost per month per 100,000 gallons pumped “after dark.”

Moreover, some device will have to be developed to limit the City or County’s exposure. Otherwise, this would be an open-ended commitment of funds. Establishing a flat dollar limit would require daily monitoring and notification to the private sector businesses when funds had been expended. While this may well be the most effective program proposed, it will also be the most complicated.

Program 4: “Smart Traffic” Program. In its simplest form, this would involve a program for municipalities to ensure that their traffic control lights are timed to allow through traffic without unnecessary stops. More sophisticated programs supported by complex software can be used to adjust traffic lights to address real time traffic flows. In either case, the point is to prevent unnecessary idling at stop lights. The recent trend to replacing “all-stop intersections” with traffic

“roundabouts,” while primarily done to enhance traffic flows, has the added benefit of avoiding pollution emitting stops.

Implementation Strategy: This program will, in all likelihood, require the services of specialists in this field. Careful analysis of traffic flows and speeds will be necessary, at the least, to allow for proper timing of stop lights. Additional adjustments to the system, accounting for night time lulls and rush hour peaks will also be required to ensure the smoothest possible traffic flow.

Program 5: Fleet Maintenance Program. Governments operating fleets tend to have regular maintenance programs in place. Simply emphasizing the need to keep all vehicles in proper “tune,” and handling such mundane tasks as regular tire air pressure checks can make measurable improvements in fuel efficiency. Formalizing this program will ensure that all possible efficiencies are attained.

Implementation Strategy: A fleet maintenance program is in place and this implementation strategy is to simply emphasize and prioritize it. No additional services should be required. Similarly, no additional staff will be required. This program is a natural target for a “management by walking around” campaign to ensure that maintenance logs are up to date, tire pressures are checked daily, and all of the other features of a formal and ongoing fleet maintenance program are being adhered to.

Program 6: Diesel Emission Reduction Program. Government fleets often have several units with diesel engines. These can include diesel powered trucks, generators, tractor/boom mower units, and the like. For several years Congress has recognized the additional pollution involved in diesel powered equipment. To this end the Diesel Emissions Reduction Act authorized funding for an EPA-operated program to address this issue. Local governments should take advantage of this program to the extent possible.

Implementation Strategy: Local managers will be alerted to the program availability and requested to prepare review information in anticipation of a grant call. When a notice of funding availability is made, application should be made for all relevant emission reduction equipment. This ranges from simple and relatively inexpensive additional exhaust cleaning equipment to full early vehicle replacements.

Ordinances

In some cases, direct action through an ordinance may be required to address air pollution.

1. “Open Burning” Restrictions. Open burning of yard waste and other waste contributes to ozone precursors as well as particulates. Cities and Counties can both pass open burning ordinances under their “health and safety” authority.

2. “Field Burning” Restrictions. In some respects, this would be a special case of the open burning restrictions noted above. Traditional agricultural techniques often involve burning off of “stubble” fields following harvests. Under modern no-till practices, this approach is probably unnecessary and may be counterproductive. Obviously, prior to adopting such restrictions the relevant governments, most likely County Commissions, would consult closely with experts in the field. Missouri Extension Agents and the Farm Bureau, along with local groups and stakeholders would be involved in formulating the policy. It is clear, though, that the practice of burning off fields generate significant clouds of smoke which are loaded with ozone precursors and particulates.

Private Sector Policies/Programs

Private sector businesses share many characteristics with governments. They run vehicle fleets and buildings for example. In detail there are some significant differences though.

Policies

1. Fleet “Right Sizing.” Precisely the same rationale applies to the private sector as to the public sector for this program. Replacement of larger vehicles with smaller ones improves fuel efficiency, air quality, and saves money for the business.

2. Fleet Alternate Fuels. Once again, the same rationale applies to this policy. For the private sector, the use of vehicles such as forklifts inside means that electric or LP or CNG vehicles are common. The use of flex fuel, hybrids, or LP or CNG fueled vehicles would help with air quality issues as well.

3. Preventive Maintenance/Tune-ups. A policy of preventive maintenance and tune-ups simply keeps vehicles and equipment operating efficiently. Properly maintained equipment pollutes less, gets better mileage, and lasts longer.

4. Incentives for employee carpooling. A policy of providing incentives for employee carpooling is an important option for consideration. Such incentives as close in parking for carpool participants or even cash incentives could significantly reduce the number of private automobiles on the road. This policy is particularly important since private businesses, with their clearly defined shift hours, tend to have many automobiles on the road at very identifiable times (classic “rush hours”). In an extreme form of carpooling, private employers can participate with public transportation providers to offer a bus service. This approach has been used by at least two large employers in the area.

5. Adjusting shift hours. The generally accepted standard shift rotation in industries operating on a 24 hour per day basis has been 7:00 a.m. to 3:00 p.m., 3:00 p.m. to 11:00 p.m. and 11:00 p.m. to 7:00 a.m. For offices, the 8:00 a.m. to 5:00 p.m. work day is the standard. These time frames are the direct cause of the rush hours common in many communities. Adjusting the shift times could ease the rush hours and as a result reduce the concentration of air pollutants during specific times of the day.

Programs

Program 1: Utilize Best Available Control Technology (BACT) in Expansions. The private sector, and especially manufacturing concerns, often has to obtain clean air permits when significant expansions are undertaken. The utilization of BACT in these expansions is somewhat more expensive than Reasonably Available Control Technology (RACT). It is, as a rule, significantly less expensive than Lowest Achievable Emission Rate (LAER). By agreeing to utilize BACT,

industry may be able to avoid the additional expenses associated with the “cost is no object” approach of LAER technology.

Program 2: Energy Auditing and Efficiency Programs. Precisely the same rationale applies to the private sector implementing an Energy Audit and Efficiency Program as applies to government. Businesses operate large facilities, and in the case of manufacturing firms, extremely large and open buildings. At least one local industry has already installed automatic lighting in the office areas so that lights automatically turn off when a room is empty for more than 5 minutes and then come on automatically when a room is entered. Replacement of old, relatively inefficient fluorescent lighting ballasts with modern, energy efficient ballasts was also undertaken. Faced with the ever present question of “how does this affect our bottom line,” private sector improvements of this nature serve as a model and are driven by reasonably rapid recovery of investment.

Regional Programs

There are programs that lend themselves to a regional approach. These include:

Ozone Action Day Alerts

Regional Planning Commission staff will monitor the results from the Bonne Terre and Farrar monitors on a regular basis. In addition, they will get on all relevant email lists from the Missouri Department of Natural Resources and the St. Louis Regional Clean Air Partnership. Whenever ozone levels appear to be rising or there is a threat of noncompliance due to weather considerations, an email will be distributed to all media outlets explaining that the threat exists and providing a list of voluntary responses that can help avoid problems.

Speakers Bureau

The logical repository for a speakers bureau on the subject of air quality is the RPC. Staff has developed expertise and will prepare formal presentations. In addition, outside volunteer expertise from the public, private and education sectors will be engaged and included.

Diesel Emissions Reduction Act Program

The Diesel Emissions Reduction Act was passed by the Congress and implemented by EPA. For Fiscal Year 2009-10 the RPC is the administrative entity for this program for the southeast Missouri region. The RPC will continue to offer its services as the administrator and to promote clean diesel efforts in the region.

Timelines for Implementation

The following timeline indicates the general schedule along with major benchmark points for implementation of the CAAP. The timeline is necessarily generalized, and presented in terms of “seasons” rather than specific dates. These are achievable timelines and will be implemented on adoption of this plan.

Winter 2009-10, Spring/Summer 2010: Education/Outreach Initiation.

Possibly the most important component of this entire plan is the involvement of citizens. Only about a quarter of VOCs and about 40% of NO_x can be traced to point sources of emissions. Clearly, then, “area” sources including small businesses and homeowners along with “mobile” sources including both on- and off-road vehicles represent the greatest part of locally generated pollution. To engage the public then, who ultimately are the ones who will control this source, it will be important to initiate the informational/outreach early. This will involve the full range of activities identified earlier. It is important to understand that this is simply the initiation step for the overall informational outreach effort, and the effort itself will be ongoing.

Winter 2009-10: Presentations for Formal Adoption to County Commissions.

County government, with its wide range of responsibilities, tends to operate more buildings and vehicles than municipalities. This is simply a function of more road responsibility and a variety of administrative duties lodged at the county level. Therefore, the initial effort to obtain formal acceptance and adoption of the policies and programs identified earlier will focus on county commissions. All seven county commissions will be visited on at least one regularly scheduled meeting session and the formal policies and implementing resolutions will be presented at that time. Any follow-up meetings necessary will be undertaken with the goal of formal adoption before the 2010 ozone season.

Winter 2009-10, Remainder of 2010: Presentations for Formal Adoption to Municipalities.

Municipal governments tend to have fewer buildings and smaller fleets. Nevertheless, they remain significant both in terms of direct emission reductions and the “example to follow” factor. Following the initial round of presentations to county commissions meetings will be scheduled with municipalities to address the policies and programs identified above. The goal is to have all local governments adopt these policies and programs before the end of 2010.

2010 and Ongoing: Obtain Support and Agreement from Private Industry

The imposition of regulation or requirements on private industry is outside of the authority of local government. Voluntary efforts are not. Beginning with industries that can be identified as the largest sources of emissions from published

EPA and MoDNR sources, industry will be contacted and voluntary agreement to undertake the policies and programs identified earlier will be sought. Since this is not a regulatory function, a simple letter identifying policies and programs that the industry will agree to adopt will be sought. The goal is to identify and obtain such agreement from the 25 top emitters before the end of 2010.

Amendments

In many ways, any plan is always a “work in progress.” This is particularly true of this Clean Air Action Plan where the technology and the understanding of Best Practices is evolving. Since this is such a fluid subject, a formal amendment process is considered necessary.

Amendment Procedure

This Clean Air Action Plan is subject to amendment. Amendment will be by a majority vote of the Southeast Missouri Regional Planning Commission at a regularly scheduled meeting at which a quorum is present. Such amendment will have been placed on the agenda and a copy of the proposed amendment will have been forwarded to the Board of Directors with the regular Meeting Notice Package.

Glossary of Key Terms

Since air quality issues are, by their nature, technical, it is impossible to avoid all technical terms or jargon. Although this CAAP is written as much as possible to be free of such language there are some terms that are unavoidable. This brief “Glossary” is offered to help clear up language and provide sufficient grounding to avoid questions as the plan is reviewed. The authors specifically ask that any terms that remain obscure or undefined be brought to our attention at dgrimes@semorpc.org so that the glossary can be expanded in future editions and revisions.

Area Sources: Area sources are small, dispersed sources of air pollution (less than 10 tons per day of criteria pollutants or 25 tons per day of combined pollutants) that are found commonly throughout the country. “Standard examples” include dry cleaners, gas stations and auto body shops. Area sources account for over half of particulate matter emissions and account for more VOC emissions than either point or mobile sources.

BTU: British Thermal Units (BTUs) are a common measure of energy. Specifically, a BTU is the amount of energy required to raise one pound of water one degree Fahrenheit. For scale, a BTU is approximately the energy contained in a standard wooden kitchen match.

Carbon Monoxide: Carbon Monoxide is a molecule of one Carbon and one Oxygen atom. Carbon Monoxide is colorless and odorless and can be deadly in concentration since it can be picked up by red blood cells in place of oxygen and cause oxygen starvation and ultimately death.

Clean Air Act (CAA): The Clean Air Act, through its several amendments, is the basic authority for the U.S. Environmental Protection Agency to develop, revise, and publish air quality standards and then to impose regulations to achieve those standards.

Criteria Pollutants: Under the CAA, EPA has determined that six basic pollutants can be measured and serve as indicators of overall air quality. The Criteria Pollutants include Particulates, Ground Level Ozone, Carbon Monoxide, Sulfur Oxides, Nitrogen Oxides and Lead.

Lead: Lead is a heavy metal that accumulates in the human body and can lead to many physical and mental problems especially with the young. Lead was a much more generalized problem when Tetra-ethyl Lead was an “anti-knock” additive in automobile gasoline. The problems of lead are now limited to areas in the immediate vicinity of lead mining or processing operations and the lead in paint of old buildings.

Mobile Sources: Mobile sources include on- and off-road vehicles and equipment as well as marine and railroad motive sources. Mobile sources are significant carbon

monoxide (CO) emitters (approximately 75% of all CO emissions) and NO_x, emitting more NO_x than area or point sources.

Nitrogen Oxides: Nitrogen Oxides (NO_x) are molecules consisting of one Nitrogen and one or more Oxygen atoms. They are one of the “precursors” of ozone. NO_x and VOCs, in conditions of heat and sunlight combine to form ground level ozone.

Ozone: Ozone is a molecule comprised of 3 Oxygen atoms. Ozone is an irritant to many tissues and can cause eye and lung irritation in high concentrations. In the stratosphere, miles above the earth’s surface, the “ozone layer” helps shield from ultraviolet radiation. On the surface, though, “ground level ozone” is considered a pollutant.

Particulates: Particulates are extremely small particles that can cause lung problems if inhaled. These particles are smaller than 10 microns. A micron is one one-millionth of a meter (a strand of human hair is approximately 100 microns in diameter and a red blood cell is approximately 7 microns in diameter).

Point Sources: Point sources are specific, identifiable operations that emit at least 10 tons per year of any criteria pollutant or 25 tons per year of a mixture of air pollutants. Examples include major industrial facilities, steel mills, power plants and the like. Point sources are the primary source of sulfur dioxide emissions (almost 90%) and also major sources of NO_x. They are less significant VOC emitters.

Precursors: Ozone is not, as a rule, directly produced by industrial processes. Rather, Nitrogen Oxides (NO_x) and Volatile Organic Compounds (VOCs) are produced. These compounds combine, in warm conditions and sunlight, to form ozone. NO_x and VOCs are, therefore, referred to as ozone “precursors.”

Sulfur Oxides: Sulfur Oxides (SO_x) are molecules of Sulfur and Oxygen. The primary reason it is considered as a criteria pollutant is that as Sulfur Trioxide (SO₃) when combined with water in the atmosphere it forms Sulfuric Acid (H₂SO₄) commonly known as Acid Rain.

Volatile Organic Compounds: Volatile Organic Compounds (VOCs) are a wide variety of “organic” chemicals which, in turn, simply means that they are Carbon based chemicals. The “volatile” part of the term means that they vaporize easily into the atmosphere. VOCs are another ozone precursor which, in combination with NO_x and in warm conditions in the presence of sunlight produce ozone. Virtually all solvents contain VOCs. One example familiar to almost everyone is the odor associated with gasoline. The vaporized VOCs are what is being smelled.

Appendix 1

Sample Public Service Announcement Scripts

30 Second Introductory PSA

Air quality issues are no longer just a city problem. Under the latest recommendations from the Missouri Department of Natural Resources, Perry and Ste. Genevieve Counties would be designated as nonattainment areas. We can help address this problem by doing a few simple things that don't cost us anything.

First, stop at the first click when fueling your car or truck.

Second, do your fueling at night.

Third, do your yard work in the evening (when it's cooler anyway).

Just those three things done by everyone can make a difference.

30-Second First Follow Up PSA

I've been telling you about air quality and asking you to stop at the click, fuel at night, and do your yard work in the evening. Maybe you wonder why.

Ozone, the stuff you see in smog, is made up of air pollutants and forms when these chemicals combine on a warm day in the presence of sunlight. If you stop at the click you release less. If you fuel and do your yard work at night you take the "heat and sunlight" out of the equation. It's really just that simple.

See, it's only magic when you don't know how.

30-Second Follow Up PSA

So you've been doing your part for air quality. Been stopping at the click and fueling at night and even doing your yard work in the evening. Now you're wondering what else you can do.

Lots of things really. Mostly, think about the air and adjust your habits.

Here are three more examples.

Cut down on idling when you're in your car.

Plan to combine trips – in other words – cut down your driving.

Carpool.

See, we're still making an impact and it's not costing anything.

Appendix 2
Sample Press Releases

Introductory Press Release

The Southeast Missouri Regional Planning Commission (SEMO RPC) released the Clean Air Action Plan (CAAP) for Southeast Missouri yesterday. The CAAP provides a series of program and policy recommendations to address air quality issues in a service area including Bollinger, Cape Girardeau, Iron, Madison, Perry, St. Francois and Ste. Genevieve Counties. Citizens are invited to inspect this plan at local County Courthouses, City Halls or on the SEMO RPC web site, www.semorpc.org.

In his cover letter transmitting the CAAP, Chauncy Buchheit, Executive Director of the SEMO RPC, explained the theory on which the plan was based. By taking a “voluntary and proactive” approach the stated purpose of the CAAP was to avoid the imposition of regulations by either the Missouri Department of Natural Resources or the U.S. Environmental Protection Agency. “Our rural areas have a limited number of things they can do,” he said in that letter, “and by putting them into this formal plan adopted by the Board of Directors and by several individual Counties we are demonstrating that we are doing everything that can be done.”

The CAAP is long on recommendations for voluntary, no-cost actions and practically devoid of proposed regulations or formal rules. Educational programs featuring “stop at the click,” “fuel at night,” “yard work at night,” and other voluntary activities are central to the plan. Some policy changes by local governments are also recommended. These include things like “rightsizing” the vehicle fleet, investigating the potential for alternative fuel use, and energy audit and energy efficiency programs for public buildings.

“Our biggest problem,” David Grimes, the lead planner on this project said, “is that we are getting very near to the point where background levels are no longer in compliance with the regulations.” He went on to explain that when the new EPA standards for ozone were announced, only one Missouri monitor was in compliance. “When the only monitor in the state that is not out of compliance is located in the middle of a national forest, you have to wonder about the standard,” he concluded.

Program Press Release

The Southeast Missouri Regional Planning Commission (RPC), in cooperation with the Southeast Missouri Solid Waste Management District (SWMD), Blitz Manufacturing, Lowe's and Orschelin's will be sponsoring a "Gas Can Exchange Program," beginning _____ and running for as long as supplies last. Citizens wanting to participate in this program can take their old gas cans to any Lowe's or Orschelin's store and exchange it for a new Blitz California Air Resources Board certified gas can. For this pilot program, the Lowe's and Orschelin's stores in Cape Girardeau are participating but you do not have to be a citizen of this county to use the program

Appendix 3

Model Fleet Purchase Evaluation Policy

Policy

SOMECOUNTYORSOMECITY

Regarding

Evaluation Prior to Vehicle Purchases

BACKGROUND:

The **City/County** of **_____** is implementing this policy to address several issues. Specifically:

1. The use of smaller vehicles may result in reduced initial purchase costs;
2. The use of smaller vehicles will result in reduced air pollution;
3. The use of alternative fuels will result in reduced air pollution;
4. The use of smaller vehicles will result in reduced operating costs and specifically reduced fuel consumption;
5. The use of alternative fuels will provide a test bed to evaluate these fuels in harsh, real world conditions;
6. The use of alternative fuels will provide citizens with visible proof that such fuels can be used without undue problems; and,
7. The use of smaller vehicles will provide a visible example of careful use of scarce taxpayer dollars.

It is, therefore, the stated policy of the **County Commission/City Council/Board of Aldermen** that each proposed purchase of a new vehicle will be subjected to scrutiny based on the following criteria. Any proposed vehicle purchase presented for budget authority will include an analysis based on these criteria.

CRITERIA:

1. Average or usual anticipated use of the vehicle. Under this criteria, evaluate the normal use of the vehicle. Occasional uses can be handled through vehicle switching or sharing, or rental in extreme cases.
 - a. For example, if the most common use of the vehicle to be purchased involves transportation of a supervisor to inspect work sites, and the occasional use for the vehicle would be to transport heavy equipment to the work sites, the evaluation should be in favor of a smaller vehicle.

- b. If, however, the most common use of the vehicle involves the supervisor transporting equipment as a part of his or her site visits, the evaluation should be in favor of a larger vehicle.
- 2. Life cycle cost. Under this criteria, evaluate the various components of a life cycle cost for proposed vehicles. This would include initial purchase price, anticipated maintenance costs, anticipated fuel costs, and resale costs at a minimum.
 - a. For example, the lower purchase price of a smaller vehicle might be offset by its lower resale cost.
 - b. This evaluation must be made against the average anticipated use identified earlier in the process.
- 3. Fuel choice. Under this criteria, evaluate the availability of various fuel types and their applicability to the average anticipated use identified earlier in the process.
 - a. For example, if the average anticipated use for the vehicle is site visiting within the city limits, specific fuels such as Compressed Natural Gas (CNG), Liquefied Petroleum Gas (LP) or electric vehicles might be reasonable.
 - b. If, however, the most common use of the vehicle involves relatively long trips for staff, then “normal” fuels such as gasoline or “flex fuel” (85% Ethanol) with their wider availability would be the reasonable choice.
- 4. General Considerations.
 - a. EPA mileage rating. The most directly controllable cost is in fuel economy. Other things being equal, the recommendation should favor the more fuel efficient vehicle.
 - b. Where available, other measures of emissions should also be considered. Other things being equal, the recommendation should favor the vehicle with lower emissions.

This Policy Adopted this _____ day of _____, 200_.

Attest:

Appendix 4

"E-Government" Policy

Policy

SOMECOUNTYORSOMECITY

Regarding

Electronic Government Initiatives

BACKGROUND:

The **City/County** of _____ is implementing this policy to address several issues. Specifically:

8. The implementation of electronic government initiatives will result in citizens being required to make fewer trips to **City Hall/County Courthouse**;
9. The implementation of electronic government initiatives will improve efficiency and reduce waste; and,
10. The implementation of electronic government initiatives will make interaction with government more convenient to citizens.

It is, therefore, the stated policy of the **County Commission/City Council/Board of Aldermen** that _____ **City/County** will, to the extent practical, make the normal functions of government available to citizens electronically via the internet. In furtherance of this policy, the following directive is issued:

DIRECTIVE

Each department head is directed to review the functions of their respective department and present to the **County Commission/City Council/Board of Aldermen** a report identifying what areas within their departments might be candidates for being included in an Electronic Government Initiative. These reports will be comprehensive, and will include evaluations of:

1. Functions of the department that might be posted on an internet web site or link;
2. Functions of the department that might be amenable to a “paperless office” approach; and,
3. Functions of the department that are not amenable to being included in an Electronic Government Initiative .

It is specifically noted that the **County Commission/City Council/Board of Aldermen** recognizes that there are areas of government that are not subject to an “Electronic Government” approach. Most obviously, those functions that require identification of the applicant/recipient would still require a face-to-face meeting. In those cases, however, the adoption of sufficient password protection and a Personal Identification Number (PIN) should make additional face-to-face meetings unnecessary.

This Directive issued this _____ day of _____, 200_.

Attest: _____

Appendix 5

Sample Speed Limit Enforcement Policy

Policy

SOMECOUNTYORSOMECITY

Regarding

Speed Limit Enforcement

BACKGROUND:

The **City/County** of _____ is implementing this policy to address several issues. Specifically:

1. Careful enforcement of speed limits will improve safety on streets and highways;
2. Careful enforcement of speed limits will result in reduced air pollutants emitted; and,
3. Careful enforcement of speed limits will deter “scofflaws” and will serve as an example to citizens.

It is, therefore, the stated policy of the **County Commission/City Council/Board of Aldermen** that the **Police/Sherriff** Department will carefully enforce speed limits on streets and highways. In furtherance of this policy, the following directive is issued:

DIRECTIVE

The Police/Sherriff Department is hereby directed to carefully enforce speed limits on streets and highways. Under this directive, individual officers retain the responsibility and authority to evaluate emergency situations and, as needed, to ignore violations of speed limits if the circumstances warrant in his/her professional opinion.

This Directive issued this _____ day of _____, 200_.

Attest: _____

Appendix 6

Sample Recycling Policy

Policy

SOMECOUNTYORSOMECITY

Regarding

Recycling

BACKGROUND:

The **City/County** of _____ is implementing this policy to address several issues. Specifically:

1. Recycling reduces the volume of material going into landfills;
2. Recycling reduces the volume of materials subject to open incineration, and,
3. Recycling efforts promote good environmental stewardship and the **City/County** will serve as an example to citizens.

It is, therefore, the stated policy of the **County Commission/City Council/Board of Aldermen** that the **City/County** will participate in recycling efforts by notifying all employees of this policy. In furtherance of this policy, the following directive is issued:

DIRECTIVE

All **City/County** offices are directed to obtain suitable bins or containers and initiate a program of collecting and separating paper, plastic and aluminum and such other recyclable items as may be identified in the future and cooperating with the **RECYCLING GROUP** in collecting these materials at convenient times.

This Directive issued this _____ day of _____, 200_.

Attest: _____

Appendix 7

Draft Energy Efficiency in Government Facilities Program

Policy

SOMECOUNTYORSOMECITY

Regarding

Energy Efficiency in **CITY/COUNTY** Buildings

BACKGROUND:

The **City/County** of _____ is implementing this policy to address several issues. Specifically:

1. Reduction in energy use in public buildings will save taxpayer dollars;
2. Reduction in energy use in public buildings will help national goals of energy self-sufficiency; and,
3. Reduction in energy use in public buildings will help efforts to reduce air pollution.

It is, therefore, the stated policy of the **County Commission/City Council/Board of Aldermen** that the **City/County** will initiate a policy to promote energy efficiency in all public buildings. To achieve this policy an Energy Audit will be performed on each public building. When the Energy Audit is completed the relevant building manager/department head will prepare a capital improvements program to implement such of the recommendations included in the Energy Audit as are feasible.

This Policy adopted _____ day of _____, 200_.

Attest: _____

Appendix 8

Gas Can Exchange Program Guidelines

Policy

SOMECOUNTYORSOMECITY

Regarding

A Gas Can Exchange Program

BACKGROUND:

The **City/County** of _____ is implementing this policy to address air pollution issues resulting from fuel and vapor escapes from old, damaged, or inefficient small gas cans.

It is, therefore, the stated policy of the **County Commission/City Council/Board of Aldermen** that the _____ City/County will support and sponsor a program to exchange old, damaged and inefficient small gas cans for new, leak and spill resistant gas cans. In furtherance of this program, the following policy is adopted:

POLICY:

The **County Commission/City Council/Board of Aldermen** will seek funding through such sources as seem appropriate (i.e. Southeast Missouri Solid Waste Management District, Missouri Department of Natural Resources, U.S. Environmental Protection Agency or U.S. Department of Housing and Urban Development Community Development Block Grant program) to support a Gas Can Exchange Program.

This Policy effective this _____ day of _____, 200_.

Attest: _____

Gas Can Exchange Program Design and Guidelines

Program Design

This program is designed as a true “public/private” partnership. The anticipated partners in the program include:

1. Manufacturer – Major manufacturers of fuel cans will provide cans at a reduced cost basis. In return all education and outreach materials will prominently feature the manufacturers participating and acknowledge that these are “good corporate citizens.” Any necessary releases will be signed allowing the manufacturer to freely use this program in their advertising and marketing efforts.
2. Retail – Retail outlets are the most reasonable locations for this sort of a program. The approach could be something on the order of “\$10 Trade-In for your old gas can” or a straightforward “Gas Can Exchange.” In either case, the retailer would handle the transaction and then provide a bill to cover all or part of the expenses involved. All efforts would be made to keep paperwork to a minimum, but it would be necessary to have some system in place to track the number of cans exchanged for reporting and billing purposes.
3. Media – Informational/outreach efforts promoting this program would necessarily involve the news media. Public Service Announcements on radio and possibly television, and press releases would be the core of this effort. In all cases, the participation of the manufacturer and retail outlets would be featured prominently.
4. Government – Government funding would be required to purchase the new cans at the reduced cost.

Budget

_____ new gas cans @ \$_____ per can \$_____