LOCAL PLAN FOR THE CHATTANOOGA AREA EARLY ACTION COMPACT

Submitted by the Chattanooga-Hamilton County

Air Pollution Control Bureau

December 21, 2004

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Section 1. Introduction

This local plan is submitted on behalf of the Chattanooga Area Early Action Compact as its December 31, 2004 milestone. The local plan includes all adopted control measures and a demonstration that the area will attain the 8-hour ozone standard by December 31, 2007. The Chattanooga Area Early Action Compact includes five counties – Hamilton, Marion and Meigs in Tennessee and Catoosa and Walker in Georgia.

The plan contains three federally enforceable control measures:

- Seasonal Open Burning Ban;
- Stage I Vapor Recovery; and
- Automobile and Light Truck Inspection and Maintenance Program.

The seasonal open burning ban applies to Hamilton County, Tennessee and Walker and Catoosa Counties in Georgia. Stage I Vapor Recovery applies to Hamilton County, Catoosa County and Walker County. Vehicle Inspection and Maintenance applies to Hamilton County.

The plan contains the following voluntary measures:

- Spare the Air Program (Action Day Program);
- Municipal Buses Increased Ridership;
- Intelligent Transportation Systems;
- HELP Trucks;
- Diesel Retrofits;
- Bike Trails and Bike Racks at Word Sites;
- Pedestrian Greenways;
- Accelerated Replacement of On-Road Vehicles;
- Bio-diesel and Alternative Fuel Vehicles;
- Low-Sulfur Fuel in City and County Fleets; and
- Accelerated Replacement of On- and Off-Road DieselVehicles; and
- Reduce Vehicle Miles Traveled

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The Spare the Air Program has been included in the attainment demonstration modeling.

The other voluntary measures were not included in the modeling because of difficulty in quantification.

Section 2. Federally Enforceable Adopted Control Measures

This section lists emissions reductions measures taken as part of the Chattanooga Area Early Action Compact. These measures, adopted locally, and where stated by the States of Tennessee and Georgia, are being submitted as federally-enforceable State Implementation Plan (SIP) revisions.

Vehicle Inspection and Maintenance (I & M)

The I & M Program will be implemented on or before April 1, 2005. The Tennessee Air Pollution Control Board adopted a rule in July, 2004 requiring vehicle inspection and maintenance in Hamilton County. This rule became state-effective on December 8, 2004. The rule requires emissions testing for gasoline and diesel vehicles with a gross vehicle weight of 10,500 pounds and under. Testing will consist of a basic tailpipe emissions test for vehicles model years 1975 through 1995. Model years 1996 and newer will be required to pass On-Board Diagnostic II (OBD-II) testing. Construction of four testing stations in Hamilton County is currently underway. These stations, with an annual capacity of nearly 900,000 vehicles, are scheduled to be open on or before April 1, 2005. The program will be enforced through the State of Tennessee's Department of Safety Vehicle Registration Program. Vehicles subject to emissions testing must pass the emissions test prior to obtaining annual vehicle registration beginning April 1, 2005.

The quantification of emissions reductions from Inspection and Maintenance as shown in Table 1 were developed as follows: The latest five years of Highway Performance Monitoring System (HPMS) data was plotted and projected to 2007. The projected VMT was input into Mobile 6.2 which was run both with and without I & M. The difference in emissions from the two runs

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represents the reductions received from implementation of the I & M program and are provided in Table 1.

Table 1

EMISSIONS REDUCTIONS FOR INSPECTION AND MAINTENANCE IN TONS PER DAY

NOx	VOC	CO
1.190	2.110	26.82

Stage I Vapor Recovery

Rules requiring Stage I Vapor Recovery controls have been adopted in Hamilton County, Tennessee and in all ten municipalities within Hamilton County, except for the City of Lakesite which has approved the rule on first reading. The expected effective date for that municipality is February 1, 2005. Stage I Vapor Recovery rules have also been adopted for Catoosa and Walker Counties in Georgia. The effective dates in the various jurisdictions are listed in the following Table 2.

Table 2
STAGE I VAPOR RECOVERY RULES

Jurisdiction	Reference	Effective Date	
Hamilton County, Tennessee	Res. 304-40	March 17, 2004	
Chattanooga	Ord. 11539	March 30, 2004	
Collegedale	Ord. No. 604	December 21, 2004	
East Ridge	Ord. No. 777	December 9, 2004	
Lakesite	1 st Reading 11/16/04 2 nd & 3 rd Readings 1/18/05	February 1, 2005	
Lookout Mountain	Final Reading 12/13/04	December 13, 2004	
Red Bank	Ord. 04-898	December 21, 2004	
Ridgeside	Ord. Adopted 12/7/04	December 21, 2004	
Signal Mountain	Ord. No. 2004-7	December 16, 2004	
Soddy-Daisy	Ord. 2004/2005 #15	December 2, 2004	

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Table 2
STAGE I VAPOR RECOVERY RULES

Jurisdiction	Reference	Effective Date	
Walden	Ord. 2004-240	December 29, 2004	
Catoosa County, Georgia	Georgia Rule	Pending approval by Secretary of State	
Walker County, Georgia	Georgia Rule	Pending approval by Secretary of State	

In Hamilton County, gasoline stations will be inspected routinely by the Chattanooga-Hamilton County Air Pollution Control Bureau beginning March 1, 2005. Each station subject to the rule must apply for and be granted a permit from the Bureau.

The vapor displacement from gasoline sales was calculated using EPA AP-42 methodology. The emissions reductions from the Stage I Vapor Recovery are shown in Table 3 below.

Table 3

EMISSIONS REDUCTIONS FOR STAGE I VAPOR RECOVERY IN TONS PER DAY

Jurisdiction	NOx	VOC	СО
Hamilton County		2.150	
Catoosa County*		.330	
Walker County*		.220	

^{*}Controls in Catoosa and Walker Counties have been adopted by the State of Georgia.

Seasonal Open Burning Ban

Regulations banning open burning during the primary ozone season (May 1 – September 30) have been adopted in Hamilton County, Tennessee and in all ten municipalities within Hamilton County, except for the City of Lakesite which has approved the rule on first reading. The expected effective date for that municipality is February 1, 2005. The State of Georgia has also adopted a seasonal open burning ban for Catoosa and Walker Counties for the same time periods. During the

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months May through September no burning permits will be issued by the Bureau. The seasonal open burning ban will be enforced in the same manner open burning prohibitions have been enforced the past thirty-five years – through patrol, complaint investigation, and the media. Open burning enforcement historically has constituted the majority of Hamilton County's enforcement cases. The effective dates of the seasonal open burning ban regulation by jurisdiction are listed in the following Table 4.

Table 4
SEASONAL OPEN BURNING BAN

Jurisdiction	Reference	Effective Date
Hamilton County, Tennessee	Res.1104-27	November 17, 2004
Chattanooga	Ord. 11650	December 7, 2004
Collegedale	Ord. No. 604	December 21, 2004
East Ridge	Ord. No. 777	December 9, 2004
Lakesite	1 st Reading 11/16/04 2 nd & 3 rd Readings 1/18/05	February 1, 2005
Lookout Mountain	Ord. Adopted 12/13/04	December 13, 2004
Red Bank	Ord. 4-898	December 21, 2004
Ridgeside	Ord. Adopted 12/7/04	December 21, 2004
Signal Mountain	Ord. No. 2004-7	December 16, 2004
Soddy-Daisy	Ord. 2004/2005 #15	December 2, 2004
Walden	Ord. 2204-240	December 29, 2004
Catoosa County, Georgia	Georgia Rule	
Walker County, Georgia	Georgia Rule	

The emissions reductions for the seasonal open burning ban, shown in Table 5, were calculated by using the Emissions Inventory Improvement Guidance and the First Order Fire Effects Model to determine the emissions based upon the number of permits in effect in July 2004 and an

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estimate of materials burned based upon the Bureau's primary investigator who has experience and knowledge in this field. Population was then used as a surrogate to distribute estimated reductions for the other counties. This approach likely results in an overly-conservative computation since Walker County, Georgia, has more burning permits issued than any other county in Georgia and a relatively low population. The total emissions reductions as calculated are shown in Table 5.

Table 5

EMISSIONS REDUCTIONS FOR SEASONAL OPEN BURNING BAN IN TONS PER DAY

Jurisdiction	NOX	VOC	СО	
Hamilton County	0.580	1.620	15.92	
Catoosa County	0.410	1.29	4.99	
Walker County	0.050	0.240	0.608	

Table 6, on the following page, is a summary of all emissions reductions from both federally enforceable and voluntary measures which were included in the attainment demonstration modeling.

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Table 6 SUMMARY OF EMISSIONS REDUCTIONS TOTALS FOR HAMILTON, MEIGS AND MARION COUNTIES IN TONS PER DAY

			IVIA				
	Stage 1 Vapor Recovery				Enforcement Mechanism		
	NOx	voc	СО	Date Effective			
		2.150		See Table 2	Permitting Policy		
	Stage 1	Vapor Reco	overy will be				
	Seasonal Open Burning Ban						
	NOx	VOC	СО	Date Effective			
	.580	1.620	15.92	See Table 4	Permitting Policy		
ton	Seasona	l Open Burr	ning Ban will				
Hamilton		In	spection and	Maintenance			
_	NOx	VOC	СО	Date Effective			
	1.190	2.110	26.82	See Table 1	State-Mandated Vehicle Registration Program		
	Inspection and Maintenance will be implemented by April 1, 2005.						
	Spare the Air Program						
	NOx	VOC	СО	Date Effective			
	0.110	0.140	1.56	May 1, 2004	Voluntary		
	Spare the Air Program						
Marion	NOx	VOC	СО	Date Effective			
Mar	0.02	0.03	0.35	May 1, 2004	Voluntary		
	Spare the Air Program						
Meigs	NOx	voc	СО	Date Effective	Voluntary		
2			0.40	May 1, 2004	,		
	<u> </u>	1	1		1		

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Section 3. Voluntary Control Measures Adopted

Spare the Air Program

The Chattanooga Area Early Action Compact's Ozone Action Day Program is referred to as "Spare the Air". This voluntary program actually effects both ozone and fine particulates (PM _{2.5}). Spare the Air days are called on days when the air quality is forecast to be in or worse than the "Unhealthy for Sensitive Groups" (USG) category as determined by the EPA Air Quality Index. The intent is to alert area residents the day before a forecast USG day so that actions are taken to reduce emissions. This requires air quality to be forecast at least one day in advance. In the case of weekends and holidays a two- or three-day forecast will be issued.

Forecasting for the Chattanooga Area EAC is performed by meteorologists with the State of Tennessee Air Pollution Control Division (TAPCD). A two-day forecast is prepared Mondays thru Thursdays and a three-day forecast is prepared on Fridays to cover weekends. Longer forecasts are made to cover long weekends. The forecast is distributed via e-mail by approximately 2:00 p.m. Central time. The forecast includes PM2.5 throughout the year and ozone from March 1 through October 31.

The forecast is subsequently made available through EPA, State and local websites, local news and weather media, and by recorded telephone message. The websites and recorded telephone message give the air quality forecast, define the appropriate sensitive groups, provide cautionary statements and list health effects.

The Chattanooga-Hamilton County Air Pollution Control Bureau has begun its Spare the Air program which covers Hamilton, Meigs and Marion counties, Tennessee and Catoosa and Walker counties, Georgia. The program began on May 1, 2004. The public is notified through e-mails to

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employers before the end of the work day, through drive-time radio weather and traffic reports, by TV news and weather programs and in morning print news media. This notification includes the AQI health-based activity advisories and has messages encouraging people to avoid or postpone activities that generate air pollution until the air quality improves. Examples of actions individuals and companies are asked to take include:

- Combine errands
- Keep engines properly tuned
- Keep tires properly inflated
- Refuel after 5 p.m.
- Walk
- Take public transportation
- Vanpool
- Carpool
- Turn off lights
- Turn thermostats up 2-4 degrees in summer and down 2-4 degrees in winter
- Keep blinds drawn to block out the sun
- Postpone mowing and landscaping

On Spare the Air days employers are asked to:

- Encourage employees to telecommute
- Offer incentives to employees who carpool

All of these actions are voluntary and are only as effective as participation in the program. Therefore, the emissions reductions estimated and actually obtained are difficult to quantify. The methodology chosen to estimate the emissions reductions was supplied by the University of Tennessee, Knoxville. The estimated reductions are based on a 1.0% reduction in the highway vehicle emissions from MOBILE6 in the Chattanooga Area EAC counties. See Table 7 for the estimated emissions reductions based on this program.

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Table 7
EMISSIONS REDUCTIONS FOR SPARE THE AIR PROGRAM IN TONS PER DAY

Jurisdiction	NOx	VOC	CO
Hamilton County	0.110	0.140	1.56
Marion County	0.02	0.03	0.35
Meigs County			0.40

The Chattanooga Area EAC recognizes that by using the reductions from the Spare the Air Program in the modeling, it is required to quantify the reductions. To do so, a baseline survey will be conducted in the first quarter of 2005 and thereafter on the evening of each Spare the Air day.

These surveys will poll citizens of the EAC area to determine (1) if they are aware of the program and (2) if they changed their behavior as a result. The survey will be conducted by an outside, independent consultant under a professional services contract. The Bureau will oversee the surveys and report the information to the State of Tennessee and U.S. EPA as part of its quantification process.

The following voluntary measures are submitted for consideration but were not included in the model.

Municipal Buses - Increased Ridership

The Chattanooga Area Regional Transit Authority (CARTA) has increased bus ridership more than 10% from 1998-2003. They project greater increases as Chattanooga expands opportunities for downtown living, which will lead to fewer vehicle miles traveled.

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Intelligent Transportation System

The Tennessee Department of Transportation will begin installation of an Intelligent

Transportation System (ITS) early in 2005. This system will be called SmartWay and will include

64 traffic cameras along 55 miles of area roads, including parts of Interstates 24 and 75, US

Highway 27 and state Highway 153. In addition to the cameras, traffic sensors and computers will

be used to monitor traffic problems. The information derived from the system will let motorists

know more about traffic problems and help emergency workers respond more quickly to wrecks.

This should decrease mobile source emissions due to less idling on the roads as a result of traffic back-ups.

HELP Trucks

The Tennessee Department of Transportation operates HELP Trucks on Tennessee's most heavily traveled highways, including those in Chattanooga. This program began in Chattanooga in June 2000 for the purpose of reducing traffic congestion, improving safety and assisting motorists in distress. Like the ITS, the HELP trucks decrease mobile source emissions by keeping traffic flowing. This is accomplished through traffic control, highway incident management, and minimizing the time broken-down vehicles remain on the roadside.

Diesel Retrofits

On May 16, 2004, the Chattanooga-Hamilton County Air Pollution Control Bureau and First Student, Inc. received a \$100,000 grant from U.S. EPA to implement a school bus diesel retrofits program. Over the next two years the program will equip approximately 120 school buses with diesel oxidation catalysts. Diesel oxidation catalysts (DOCs), similar to catalytic converters on cars, will be installed on the buses in this project. DOCs have been verified by EPA to reduce emissions from diesel combustion by the following amounts: particulate matter – 20%, carbon

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monoxide – 40%, hydrocarbons – 50%. Efforts are also ongoing to pursue additional retrofit opportunities.

Bike Trails and Bike Racks at Work Sites

The Chattanooga Area has a Bicycle Task Force that actively promotes bicycling. The group meets monthly and hosts regular educational events such as Bike to Work days which the Chattanooga Mayor participates in.. The Task Force has worked closely with the MPO to create the Chattanooga Urban Area Bicycle Facilities Master Plan, which is part of the Planning Association's transportation plan, TransPlan 25.

The Chattanooga area currently has nearly 200 miles of bike paths and bike lanes. The local Bicycle Facility Master Plan provides for another 382 miles of bike paths and bike lanes in the next 20 years.

The BicycleTask Force has worked with downtown employers to ensure that bike racks are installed for employees. Bike racks have also been installed on the Chattanooga Regional Transportation Agency Buses. Two thousand two hundred and thirty-two (2,232) bicycles were transported on these bicycle racks in 2004.

Chattanooga has been designated a "Bicycle Friendly City" by the League of American Bicyclists.

The addition of bike trails and bike racks on buses leads to fewer vehicle miles traveled and decreased emissions as citizens of the Chattanooga Area EAC ride their bicycles instead of driving their cars.

Pedestrian Greenways

The Chattanooga Area has an extensive network totaling more than 10 miles of pedestrian greenways. The Trust for Public Land is presently working on a 5-year greenway expansion plan.

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This effort started in April of 2004 and is to be completed by March 31, 2009. This will add 38.5 miles of greenway. The additional greenway will provide increased opportunities for pedestrian activity. Greenways promote a healthy lifestyle by infusing the metropolitan downtown with attractive green pathways which draw pedestrian traffic. More pedestrian traffic leads to fewer vehicle miles traveled and a greater quality of life. Though the effect is not accurately quantifiable, the availability of greenways has the potential for reducing trips.

Accelerated Replacement of On-Road Vehicles

Out of 85 municipal buses owned by the Chattanooga Area Regional Transportation

Authority (CARTA), 12 are fully electric and 6 are hybrid. In 1995, the first electric buses were

placed in service in Chattanooga. Only 10 older diesel buses remain and CARTA will replace these

with newer more efficient buses in the next 18-24 months.

Bio-diesel and Alternative Fuel Vehicles

The Midnight Oil filling service station located on Bonny Oaks Drive in Chattanooga began selling bio-diesel (B-20 with a low-NOx additive) on December 8, 2004.

The Chattanooga City Fleet includes five hybrid Toyotas and one natural gas pick-up. In addition, the Chattanooga-Hamilton County Air Pollution Control Bureau has purchased two hybrid Toyotas for use in its fleet.

Low-Sulfur Fuel in City and County Fleets

Both the City Chattanooga and Hamilton County purchase only low-sulfur diesel for use in their fleets, thus reducing emissions.

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Accelerated Replacement of On- and Off-Road Diesel Vehicles

The City of Chattanooga purchased 18 new diesels in 2004. Eleven additional diesels are planned for purchase in 2005.

Section 4. Conclusion

The Chattanooga Area EAC counties and stakeholders are pleased that the area has demonstrated attainment with the 8-hour ozone standard by December 31, 2007. With the submission of the State Implementation Plan and supporting documentation, we are requesting that the U.S. Environmental Protection Agency defer the effective date of the 8-hour ozone non-attainment designation for the Chattanooga Area EAC counties until December 31, 2007. As evidenced by the work already done, and the future projects shown here, we are committed to remaining in the EAC program. The components of this local portion of the State Implementation Plan will be combined with the control measures from the State of Tennessee which is submitting the State Implementation Plan on behalf of Hamilton and Meigs Counties, Tennessee.

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Regulatory Revisions for Chattanooga-Hamilton County Early Action Compact 2004

Location		1 st Reading 2 nd Reading		Effective Date			
Chattanooga	Open burning	November 16, 2004 Approved	Burning: 2 nd & 3 rd November	Stage I: March 30, 2004	Burning: December 07,	Stage I: March 30, 2004	
3	Stage I	March 23, 2004	23, 2004		2004		
Collegedale		November 15, 2004 Approved	December 06, 2004		December 21, 20	December 21, 2004	
East Ridge		November 11, 2004 Approved	December 09, 2004		December 09, 2004		
	Open Burning	November 17, 2004 Approved	Not applicable		November 17, 20	004	
Hamilton County	Stage I	March 17, 2004	Not Applicable		March 17, 2004		
Lakesite		November 16, 2004 Approved	January 18, 2005		February 1, 2005		
Lookout Mountain		November 09, 2004 Approved	December 13, 2004		December 13, 2004		
Red Bank		November 23, 2004	November 30, 2004		November 30, 2004		
Ridgeside		See Note Below					
Signal Mountain		November 13, 2004 Approved	December 16, 2004		December 16, 2004		
Soddy-Daisy		November 18 Approved	December 02, 2004		December 02, 2004		
Walden		November 11, 2004 Approved	December 12, 2004		December 29, 2004		

Note: Ridgeside has no set town meeting until next year. This municipality has no gas stations and is strictly single family residential. Both ordinances will be adopted here but it will be early next year. Only one burn permit was issued in Ridgeside in 2004. Population of Ridgeside according to the 2000 census is 389.

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Rule 6. Prohibition of Open Burning.

Rule 6.1. No person shall cause, suffer, allow or permit open burning except as provided in Rule 6.3, 6.4, and 6.5. No person shall cause, suffer, allow or permit controlled burning except as provided in Rule 6.6. No person shall fail or refuse to take all reasonable and necessary steps and precautions to prevent open or controlled burning upon any premises owned, occupied or under the control of such person. No person shall fail or refuse to take all reasonable and necessary steps and precautions to extinguish or otherwise terminate and abate any open or controlled burning which has originated through any cause whatsoever upon any premises owned, occupied or under the control of such person or upon premises upon which such person is carrying out any operation or activity.

Rule 6.2. No person shall conduct a salvage operation by open burning.

Rule 6.3. Open Burning. Open burning of vegetation and raw, untreated, non-manufactured wood materials, thoroughly dried to facilitate efficient combustion while minimizing smoke caused by naturally occurring moisture contained in vegetative materials ("clean wood materials") may be permitted only in the months of October, November, December, January, February, March and April, provided that the following conditions are met:

- (1) An application shall be submitted to the director stating the reason why there is no other method of disposal, the amount of material to be burned, and the location of material to be burned;
- (2) A non-refundable application fee of fifty dollars (\$50.00) shall be included with the application, which fee shall be collected by the Bureau and remitted to the fiscal agent of the Board;
- (3) No burning shall occur until such inspection of the material as may be required by the Bureau is conducted, a permit has been issued and the permit has been received by the applicant;
- (4) The size of the piles of material to be burned shall not exceed 12' by 12';
- (5) Burning shall be conducted only on days of low air pollution potential as determined by the Bureau;
- Only clean fuel not containing garbage, rubber, tires, plastics, roofing materials, tar paper or other refuse shall be allowed for the startup of fires;
- (7) Burning will only be allowed during the following hours on days approved under (5) above. The burning shall be completed by, and extinguished by, the end of the time period set forth below:

October 1 through November 15 9 a.m. - 4 p.m.

November 16 through December 31 9 a.m. - 3:30 p.m.

January 1 through February 15 9 a.m. - 4 p.m.

February 16 through April 3 9 a.m. - 5 p.m.

April 4 through April 30 9 a.m. - 6 p.m.

- (8) The burning must be attended at all times;
- (9) The permit may be revoked or suspended at any time at the site where there is a violation of the permit or of this Rule, with the right to a hearing before the Director or the Air Pollution Control Board;
- (10) The permit must be kept at or near the burn site and be readily available for inspection;
- (11) The permit is not valid until signed by the applicant signifying that the permit conditions have been read and understood;
- (12) Contact the local fire agency before burning;
- (13) Any permit issued will remain valid until the expiration date of the permit, unless revoked or suspended.
- (14) Burning is allowed only at the location set forth in the application.
- **Rule 6.4**. Open Burning Exemptions. Open burning shall be allowed without compliance with Rule 6.3 only in the following specifically listed instances:
- (1) Fires used only for cooking of food or for ceremonial or recreational purposes, including barbecues and outdoor fireplaces, but only if such fires are fueled for that particular purpose;
- (2) Fires set by or at the direction of responsible fire control agencies for the prevention, elimination or reduction of the spread of existing fires;
- (3) Safety flares and smokeless flares; except those for the combustion of waste gases. Flares for the combustion of waste gases shall comply with the permitting provisions of section 4-8 of this chapter;
- Open burning used solely for the purpose of warming persons who are in the outof-doors performing work and conducting lawful activities, provided such fires use only clean, raw, untreated, non-manufactured wood, not containing garbage, rubber, plastics, roofing materials, tar paper, cardboard, paperboard or other refuse;
- (5) Operation of devices using open flames such as tar kettles, blow torches, cutting

torches, portable heaters and other flame-producing equipment.

- **Rule 6.5**. Open Burning Exceptions. Open burning may be allowed without a permit in the following instances provided a written statement, such as is required in Rule 6.3(1), is filed with the director and written approval is given by the director:
- (1) Fires set for the training and instruction of public or private fire fighting personnel, including those in civil defense;
- (2) Carrying out recognized Best Management Practices for Agriculture necessary for production of crops;
- (3) The director may allow open burning prohibited during the months of May, June, July, August and September upon a determination that such open burning is necessary to protect public health, safety or welfare of the people, or there are no alternatives, e.g. disposal of vegetative debris from storm damage. The Director shall be in writing.
- Rule 6.6. Controlled Burning. Clearing and burning of vegetation at a site of two acres or more within a one-year period, burning for silvicultural purposes, and burning of clean wood material require controlled burning and compliance with the following enumerated conditions. Controlled burning of vegetation and clean wood material may be permitted by the director only in the months of October, November, December, January, February, March and April and requires an air curtain destructor and pit. Burning for silvicultural purposes requires special equipment.
- (1) Controlled burning (other than burning for silvicultural purposes) requires the continuous use of a pit and an effective air curtain destructor to maintain the necessary air velocity to minimize to the absolute extent practical any emission of fly ash and/or smoke;
- (2) To obtain a controlled burning permit, a signed application shall be submitted to the director including the following:
 - a. Complete plans and details of the method and equipment to be used for the control of such burning must be approved by the director before the permit shall issue;
 - b. The names of those in charge of the equipment and those in charge of the site and how they may be contacted must be furnished;
- (3) A fee of four hundred dollars (\$400.00) shall be included with the application, which fee shall be collected by the Bureau and remitted to the fiscal agent of the Board;
- (4) Written approval is received from the director in the form of a controlled burning

permit with conditions;

- (5) The pit shall be cleaned of ash on a daily basis;
- (6) Brush in the pit shall not be piled above the pit surface;
- (7) The persons in charge of the equipment shall notify the fire department serving the area in which the burning occurs at the beginning of each day's burn and the completion of each day's burn;
- (8) The person in charge of the equipment must have an operating telephone at the site at all times during operation of the equipment;
- (9) There shall be enough fuel at the site to maintain operation of the air curtain destructor without interruption;
- (10) Any modification to the pit design or location must be approved by the director prior to the modification;
- (11) The permit may be revoked or suspended at any time at the site where there is a violation of the permit or of this Rule, with the right to a hearing before the Director or the Air Pollution Control Board;
- (12) Burning will only be allowed during the following hours on days of low air pollution potential as determined by the Bureau, and completed by, and extinguished by, the end of the time period set forth below:

October 1 through November 15 9 a.m. - 4 p.m.

November 16 through December 31 9 a.m. - 3:30 p.m.

January 1 through February 15 9 a.m. - 4 p.m.

February 16 through April 3 9 a.m. - 5 p.m.

April 4 through April 30 9 a.m. - 6 p.m.

- (13) The burning must be attended at all times;
- (14) The permit must be kept at or near the burn site and be readily available for inspection;
- (15) The permit is not valid until signed by the applicant signifying that the permit conditions have been read and understood:
- (16) Any permit issued will remain valid until the expiration date of the permit, unless revoked or suspended.
- (17) Applicant shall review the permit conditions with all parties that will be involved with the controlled burning process.

Section 2 That Section 8-741 be and hereby is amended by adding the following new Section 8-741, Rule 25.10 to read as follows:

Rule 25.10. Gasoline dispensing facilities – stage I vapor recovery.

- (1) For the purpose of this rule, the following definitions apply:
 - a. *Coaxial system* means the delivery of the product to the stationary storage tank and the recovery of vapors from the stationary storage tanks occurs through a single coaxial fill tube, which is a tube within a tube. Product is delivered through the inner tube, and vapor is recovered through the annular space between the walls of the inner tube and outer tube.
 - b. *Delivery vessel* means tank trucks or trailers equipped with a storage tank and used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities.
 - c. *Dual point system* means the delivery of the product to the stationary storage tank and the recovery of vapors from the stationary storage tank occurs through two separate openings in the storage tank and two separate hoses between the tank truck and the stationary storage tank.
 - d. Gasoline means any petroleum distillate having a Reid vapor pressure of 4.0 psia or greater.
 - e. Gasoline dispensing facility means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.
 - f. Gasoline service station means any gasoline dispensing facility where gasoline is sold to the motoring public from stationary storage tanks.
 - g. *Line* means any pipe suitable for transferring gasoline.
 - h. *Operator* means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.
 - i. Owner means any person who has legal or equitable title to the gasoline storage tank at a facility.
 - j. Poppeted vapor recovery adaptor means a vapor recovery adaptor that automatically and immediately closes itself when the vapor return line is disconnected and maintains a tight seal when the vapor return line is not connected.

- k. Stationary storage tank means a gasoline storage container that is a permanent fixture.
- 1. Submerged fill pipe means any fill pipe with a discharge opening which is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid, or which is entirely submerged when the level of the liquid is:
 - 1. Six inches above the bottom of the tank if the tank does not have a vapor recovery adaptor; or
 - 2. Twelve inches above the bottom of the tank if the tank has a vapor recovery adaptor.

If the opening of the submerged fill pipe is cut at a slant, the distance is measured from the top of the slanted cut to the bottom of the tank.

- m. *Throughput* means the amount of gasoline dispensed at a facility.
- (2) Applicability. This rule applies to all gasoline dispensing facilities and gasoline service stations and to delivery vessels delivering gasoline to a gasoline dispensing facility or gasoline service station; and this rule applies to all persons owning, occupying, operating or using a gasoline distribution facility or gasoline service station.
- (3) Exemptions. This rule does not apply to:
 - a. Transfers made to storage tanks at gasoline dispensing facilities or gasoline service stations equipped with floating roofs or their equivalent;
 - b. Stationary tanks with a capacity of not more than 2,000 gallons which were in place before July 1, 1979, if the tanks are equipped with a permanent or portable submerged fill pipe;
 - c. Stationary storage tanks with a capacity of not more than 550 gallons which were installed after June 30, 1979, if the tanks are equipped with a permanent or portable submerged fill pipe;
 - d. Stationary storage tanks at a gasoline dispensing facility or gasoline service station where the combined annual throughput of gasoline at the facility or station does not exceed 50,000 gallons, if the tanks are equipped with a permanent submerged fill pipe; and
 - e. Any tanks used exclusively to test fuel dispensing meters.
- (4) No person may cause, suffer, allow or permit the transfer of gasoline from any

delivery vessel into any stationary storage tank unless they comply with the following:

- a. The stationary storage tank is equipped with a submerged fill pipe and the vapors displaced from the tank during filling are controlled by a vapor control system as described in Paragraph (8) of this rule;
- b. The vapor control system is in good working order and is connected and operating with a vapor tight connection;
- The vapor control system is properly maintained and any damaged or malfunctioning components or elements of design have been repaired, replaced or modified;
- d. Gauges, meters, or other specified testing devices are maintained in proper working order;
- e. All loading lines and vapor lines of delivery vessels and vapor collection systems are equipped with fittings which are leak tight and vapor tight; and
- f. All hatches on the delivery vessel are kept closed and securely fastened.
- (5) The following records shall be maintained for not less than two years and the same shall be made available for inspection and copy by representative or designees of the Bureau:
 - a. The scheduled date for maintenance or the date that a malfunction was detected;
 - b. The date the maintenance was performed or the malfunction corrected; and
 - c. The date the component or element of design of the control system was repaired, replaced, or modified.
- (6) The premises of any gasoline dispensing facility or gasoline service station shall be available for inspection by representatives or designees of the Bureau at any time the facility or station is in operation.
- (7) The process of transfer of gasoline from any delivery vessel into any stationary storage tank shall be subject to observation and inspection or investigation by representatives or designees of the Bureau.
- (8) The vapor control system required by Paragraph (4) of this rule shall include one or more of the following:

- a. A vapor-tight line from the stationary storage tank to the delivery vessel and:
 - 1. For a coaxial vapor recovery system, either a poppeted or unpoppeted vapor recovery adaptor; or
 - 2. For a dual point vapor recovery system, a poppeted vapor recovery adaptor; or
- b. A refrigeration-condensation system or equivalent designed to recover at least 90 percent by weight of the organic compounds in the displaced vapor.
- (9) If an unpoppeted vapor recovery adaptor is used pursuant to Part (8)a.1. of this rule, the tank liquid fill connection shall remain covered either with a vapor-tight cap or a vapor return line except when the vapor return line is being connected or disconnected.
- (10) If an unpoppeted vapor recovery adaptor is used pursuant to Part (8)a.1. of this rule, the unpoppeted vapor recovery adaptor shall be replaced with a poppeted vapor recovery adaptor when the tank is replaced or upgraded.
- (11) Where vapor lines from the storage tanks are manifold, poppeted vapor recovery adapters shall be used. No more than one tank is to be loaded at a time if the manifold vapor lines have a nominal pipe size of less than 3 inches. If the manifold vapor lines have a nominal pipe size of 3 inches or larger, then two tanks at a time may be loaded.
- (12) Vent lines on stationary storage tanks shall have pressure release valves or restrictors.
- (13) The vapor-laden delivery vessel:
 - a. Shall be designed and maintained to be vapor-tight during loading and unloading operations and during transport with the exception of normal pressure/vacuum venting as required by regulations of the Department of Transportation; and
 - b. If it is refilled in Hamilton County, Tennessee, shall be refilled only at:
 - 1. Bulk gasoline plants complying with Rule 25.8 of this section; or
 - 2. Bulk gasoline terminals complying with Rule 25.9 of this section.
- (14) It shall be the responsibility of owners, occupiers and operators of gasoline

dispensing facilities and gasoline service stations to assure compliance with this rule and to disallow the transfer from any delivery vessel that does not comply with those requirements of this rule applicable to delivery vessels. It shall be the responsibility of owners, operators and drivers of delivery vessels to assure compliance with this rule and to refuse to transfer from any delivery vessel that does not comply with those requirements of this rule applicable to delivery vessels.

Section 3. Severability.

If any section, part of a section, sentence, clause or phrase of this ordinance is for any reason declared to be unconstitutional or otherwise invalid by any court of competent jurisdiction, such decision shall not affect the validity of any other portion of this ordinance, and only such invalid portion shall be elided from this ordinance.

Section 4.

BE IT FURTHER ORDAINED that this ordinance shall take effect from and after its passage, the welfare of the city requiring it.

Meigs County

A new ambulance, school bus, and off road tractors have been purchased for the county. These are equipped with the most recent lower emission standards.

Educational programs are planned for the upcoming school year in the Meigs County School System involving the impact of motor vehicles on the environment.

Meigs County stands ready in full support of Air Quality Action Day. Letters have been sent to government officials to implement more stringent regulations.

Information provided by:

Ken Jones Meigs County Mayor Decatur, Tennessee