



Missouri
Department of
Natural Resources

COMMENTS AND RESPONSES ON
PROPOSED 2008 8-HOUR OZONE BOUNDARY
DESIGNATION RECOMMENDATION
AND
TECHNICAL SUPPORT DOCUMENT FOR THE DETERMINATION OF
BOUNDARIES IN MISSOURI FOR THE 2008 8-HOUR OZONE
NATIONAL AMBIENT AIR QUALITY STANDARD
AND
RECOMMENDATION FOR ADOPTION

On December 4, 2008, the Missouri Air Conservation Commission held a public hearing concerning a proposed recommendation to the U.S. Environmental Protection Agency (EPA) regarding the 8-Hour Ozone boundary designation recommendation for Missouri under the 2008 8-Hour Ozone National Ambient Air Quality Standard. The following is a summary of comments received and the Missouri Department of Natural Resources' corresponding responses. Any changes to the proposed designations and related documents are identified in the responses to the comments.

The Missouri Department of Natural Resources' Air Pollution Control Program recommends the commission adopt the plan action as amended. If the commission adopts this recommendation, it will be the department's intention to submit this recommendation to the U.S. Environmental Protection Agency.

SUMMARY OF COMMENTS: The Missouri Department of Natural Resources' Air Pollution Control Program received comments from thirty-six (36) sources: the U.S. Environmental Protection Agency (EPA); Regulatory Environmental Group for Missouri (REGFORM); Clinton County Commission; Johnson County, Kansas Environmental Department; Mid-America Regional Council (MARC); Boonslick Regional Planning Commission (BRPC); Farmington Chamber of Commerce; City of Farmington; Farmington Industrial Development Authority; the Presiding Commissioner of Cape Girardeau County; the Presiding Commissioner of Ste. Genevieve County; URS Corporation; Southeast Missouri Regional Planning and Economic Development Commission (SEMORPC); the Representative for Missouri's 8th District; the Representative for Missouri's 3rd District; the State Representative for Missouri's 104th District; Mississippi Lime Company; American Bottom Conservatory; Illinois Sierra Club; Respiratory Health Association of Metropolitan Chicago; Missouri Coalition for the Environment; City of St. Louis Air Pollution Control; The Bank of Missouri – Cape Girardeau; Mid-South Steel Products, Inc.; Cape Girardeau Area MAGNET; BioKyowa, Inc.; Cape Girardeau Area Chamber of Commerce; Jackson, MO Chamber of Commerce; the Mayor of Jackson, MO; Concerned

Citizens for Economic Growth Coalition; Procter and Gamble Manufacturing Company; Malcolm Pirnie Incorporated; and four private citizens.

COMMENT #1: The EPA commented that it appreciated the work the department had done to involve the public in the ozone nonattainment boundary process. It noted that Missouri has one of the best programs for listening to the public concerns and ensuring that the public input is respected and evaluated. EPA also stressed that their primary goal is to maintain public health. EPA also discussed the process that will follow the department's submittal of the ozone boundary recommendations in March 2009. After this, EPA will review the recommendation, then propose draft boundary recommendations back to the state in the fall of 2009. EPA noted that this will give the state one more opportunity for input on the standard.

RESPONSE: The department appreciates the acknowledgement from EPA for the boundary designation process. Although it required more staff and was time intensive, providing affected parties with the opportunity to take part in the process was very important in order to allow for better understanding of the designation requirements under the Clean Air Act. It is also anticipated that this open process will assist in future collaborations between the state and local agencies to decrease ozone levels and improve air quality throughout the state. No changes were made to the ozone boundary recommendations as a result of this comment.

COMMENT #2: REGFORM first noted that the air quality in Missouri, and across the nation, has been improving through the years. REGFORM also applauded the department's efforts for an open process that allowed for local stakeholder input. REGFORM also noted that the process was not one required by EPA, and was chosen by the department to involve as many affected parties as possible. It was also noted that designations have significant impact on an area that falls into nonattainment, and it was suggested that the commission consider all of the implications of a nonattainment designation, as well as their discretion while considering the proposed ozone boundaries to be submitted to EPA.

RESPONSE: The department acknowledges the appreciation of the effort to involve the stakeholders affected by the potential new ozone areas. No changes were made to the ozone boundary recommendations as a result of this comment.

COMMENT #3: The Clinton County Commission commented that although they acknowledge that their county will be designated nonattainment as part of the Kansas City Ozone Nonattainment Area under the new ozone standard, they feel they are unable to do anything to affect this designation. Rather, that the primary cause of their designation is coming from counties other than their own. They also request advice on how to improve the quality of life in their county.

RESPONSE: The department is aware of Clinton County's situation as a downwind county that is being negatively impacted by upwind counties' emissions. However, the Clean Air Act, requires states to designate a county as "nonattainment" if there is an ozone monitor violating the ozone standard within the county. This is the case for Clinton County. In addition, ozone exceedances at the Trimble monitor frequently occur as the result of emissions originating in the Kansas City metropolitan complex, and is the reason for the recommendation to include Clinton County in the Kansas City Ozone Nonattainment Area. Therefore, no changes were made to the ozone boundary recommendations as a result of this comment.

COMMENT #4: The Johnson County, Kansas Environmental Department and MARC both voiced their strong support of the department's ozone nonattainment boundary recommendation for the new Kansas City Ozone Nonattainment Area as proposed under the new 2008 8-hour ozone standard. Both organizations specifically support the inclusion of two new counties in the Missouri portion of the bi-state proposed Kansas City ozone nonattainment area: Cass and Clinton counties. The organizations commented on the growth of the region as well as the apparent need for additional controls to reduce the formation of ozone in the Kansas City region. RESPONSE: The department appreciates the support of the stakeholders in the affected counties after the stakeholder process has been completed, and looks forward to working with these organizations as the process continues through the steps necessary to achieve attainment for the Kansas City area. No changes were made to the ozone boundary recommendations as a result of these comments.

COMMENT #5: The BRPC submitted comments regarding their contention that two of the counties making up their regional planning area should not be considered for inclusion in the St. Louis Ozone Nonattainment Area. Their support for this recommendation included the lack of connectivity with the current St. Louis Ozone Nonattainment Area, as well as their comparatively low population density and urbanization. The BRPC did acknowledge that the monitor in Foley, Lincoln County, Missouri violated the ozone standard, but all information regarding ozone levels at the monitor were mainly impacted by the current nonattainment area. Therefore, the monitor's high readings were not likely impacted by the emission sources in Lincoln or Warren counties.

RESPONSE: Although Warren and Lincoln counties do not contribute to the elevated ozone concentrations recorded at any other ozone monitors in the nonattainment area, the Clean Air Act requires that any county with a violating monitor within its boundaries must be designated nonattainment. Therefore, the proposed St. Louis Ozone Nonattainment Area boundary includes Lincoln County for nonattainment designation. The inclusion of Lincoln County in the St. Louis nonattainment area is based on the fact that the monitored exceedances at the Foley monitor are largely influenced by emissions in the existing 8-hour St. Louis Nonattainment Area. No changes were made to the ozone boundary recommendations as a result of these comments.

COMMENT #6: Farmington Chamber of Commerce; City of Farmington; Farmington Industrial Development Authority; the Presiding Commissioner of Cape Girardeau County; the Presiding Commissioner of Ste. Genevieve County; and the Representative for Missouri's 8th District all commented that they strongly disagreed with the proposed classification of nonattainment for St. Francois County. All organizations cited the position paper prepared by the Southeast Missouri Regional Planning and Economic Development Commission in consultation with URS Corporation. Specifically, the organizations referenced the discussions in the position paper that there is no ozone monitor in the county to determine ozone levels and that there is no evidence that emission sources within the county significantly contribute to high ozone levels experienced by other ozone monitors in the region. The organizations associated with the city of Farmington also pointed out that no public hearing had been scheduled in St. Francois County. They also commented that no economic impact information if an area becomes a nonattainment area had ever been provided to them.

RESPONSE AND EXPLANATION OF CHANGE: The department made every effort to contact those counties, businesses, and other local stakeholders that were determined to be

affected by the new ozone standard. Informational meetings were held in each region of the state, including St. Louis and Perryville/Cape Girardeau. In addition, at the request of the Farmington Chamber of Commerce, a special information session was held in their city on November 20th to discuss the new ozone standard and the process required under the Clean Air Act. As stressed in previous discussions, the Clean Air Act does not allow for any considerations of economic impact on counties being considered for nonattainment designation for a criteria pollutant such as ozone. However, it has been determined that St. Francois County will be removed from the list of counties recommended for nonattainment designation under the 2008 8-hour ozone standard that will be submitted to EPA. Specifically, St. Francois County was not determined to have an impact on the Bonne Terre monitor site in Ste. Genevieve County or any of the other sites in the St. Louis area. Also, the Bonne Terre site was determined not to be representative of ozone concentrations in St. Francois County. As a result of these comments, the ozone boundary recommendation documents have been changed to reflect the removal of St. Francois County from the St. Louis Ozone Nonattainment Area.

COMMENT #7: Two private citizens commented that they were opposed to including St. Francois County in the St. Louis Ozone Nonattainment Designation.

RESPONSE: As a result of comment #6, the ozone boundary recommendation documents have been changed to reflect the removal of St. Francois County from the St. Louis Ozone Nonattainment Area. Therefore, no additional changes have been made to the ozone boundary recommendations as a result of these comments.

COMMENT #8: The SEMORPC and the URS Corporation, in consultation with the SEMORPC, provided substantial comments on the proposed designations of Ste. Genevieve, St. Francois, Perry, and Cape Girardeau counties as nonattainment under the 2008 8-hour ozone standard.

RESPONSE AND EXPLANATION OF CHANGE: The Ste. Genevieve and St. Francois County comments mainly discussed: (1) removing Ste. Genevieve County from the St. Louis ozone nonattainment area and (2) asking for a designation of attainment for St. Francois County. The Ste. Genevieve comments focused on the rural nature of Ste. Genevieve County, the existing political jurisdictions in the area, and the comparatively small emissions reductions that would be realized from existing St. Louis controls being imposed in this county. Based on these and other comments, the department conducted another set of meteorological analysis to determine the impact of St. Louis and other emission sources on the Bonne Terre monitor. The primary finding was that there are two predominant upwind areas for impacts on the monitor: north and east. This finding illustrated the impact of the Ste. Genevieve sources on the Bonne Terre monitor. Further, since the non-utility point source emissions in Ste. Genevieve County contribute over 85 percent of the total NO_x emissions and are primarily from three industrial facilities, the control evaluation for these sources will be identical for any nonattainment designation. In addition, Ste. Genevieve County is not closely connected to the St. Louis area and is very rural in nature. Therefore, the department has determined that a distinct Ste. Genevieve nonattainment area is the appropriate designation.

St. Francois County was included based on the finding that the Bonne Terre monitor was representative of the air quality in St. Francois County. Since there is no guidance on the representativeness of monitors located in one county for another county's air quality, the

department has found that the most appropriate designation for St. Francois County is unclassifiable for the 2008 ozone standard.

The recommended nonattainment designation for Cape Girardeau County was questioned in the position paper provided by the SEMORPC. Specifically, they mention that Cape Girardeau is not a metropolitan statistical area (MSA), the existing point sources are already controlled, and relatively low emission totals, along with some discussion of meteorological analysis. The department appreciates the effort expended by the SEMORPC to comment on the recommended designation. From these comments, the department conducted a policy-driven evaluation to better understand the potential outcomes of a nonattainment designation in Cape Girardeau. First of all, the existing requirements for metropolitan scale ozone nonattainment areas were not envisioned for rural areas like Cape Girardeau and Perry Counties. Some of these requirements do not make sense for these new nonattainment areas and these implementation issues must be addressed to provide a rational outcome for these areas impacted primarily by ozone and precursor transport with some local source ozone impact. The department has repeatedly expressed concerns to EPA regarding the unknown implementation requirements for rural areas in violation of or contributing to violations of the 2008 standard. The department has also asked that EPA provide additional national or regional controls to help address the elevated ozone and precursor transport to these more rural areas. As the standard is lowered, more areas will be required to implement measures that may not have a sizable impact on ozone, but will have a sizable impact on business and the overall economy of these smaller communities. Therefore, as a result of these comments and corresponding analysis, the ozone boundary recommendations have been changed to reflect the removal of Cape Girardeau County from the Southeast Missouri Ozone Nonattainment Area.

COMMENT #9: The Presiding Commissioner of Ste. Genevieve County; the Representative for Missouri's 8th District; the Representative for Missouri's 3rd District; the State Representative for Missouri's 104th District; Mississippi Lime Company; and the Presiding Commissioner of Cape Girardeau County all provided comments concerning their strong disagreement with the proposed placement of Ste. Genevieve County into the St. Louis Ozone Nonattainment Area. Although comments acknowledged that the ozone monitor in Ste. Genevieve County violates the 2008 ozone standard, they pointed out that the county was very different from those already included in the St. Louis Ozone Nonattainment Area. Alternatives proposed by those who commented were to establish Ste. Genevieve County as its own ozone nonattainment area, or to include it into a nonattainment area with the other Southeast Missouri counties proposed for nonattainment – Perry and Cape Girardeau. Reasons suggested for placing Ste. Genevieve into its own nonattainment area or including it in a nonattainment area with Perry and Cape Girardeau counties include its relatively rural nature, its current involvement in a large number of planning activities with the Southeast region, and its lack of connectivity with the St. Louis area. Local stakeholders voiced their concern that choices made to reduce emissions for the St. Louis area may not be appropriate for Ste. Genevieve County, and that Ste. Genevieve's needs and concerns would not be considered in the planning processes for the St. Louis Area.

RESPONSE AND EXPLANATION OF CHANGE: As discussed in comment #8, based on further review of the overall characteristics of Ste. Genevieve County compared to the other counties in the St. Louis Ozone Nonattainment Area, comments made on the proposed recommendation to include the county in the St. Louis Ozone Nonattainment Area, as well as the

county's overall rural nature and its unique circumstances, it has been determined that recommending Ste. Genevieve County as its own ozone nonattainment area is the most reasonable course of action. Also, the NO_x emission controls already in place at the large point sources in Ste. Genevieve County lead to the conclusion that some of those sources would not have additional controls available to reduce ozone concentrations in downwind St. Louis. Further, a nonattainment designation will require the development of a State Implementation Plan that will address control for Ste. Genevieve County impacts. Therefore, as discussed in comment #8, Ste. Genevieve County will be listed as its own nonattainment area in the list of counties recommended for nonattainment designation under the 2008 8-hour ozone standard that will be submitted to EPA. As a result of these and the above comments, the ozone boundary recommendations have been changed to reflect a new Ste. Genevieve Ozone Nonattainment Area.

COMMENT #10: Two private citizens commented that the department should reconsider the inclusion of Ste. Genevieve County with the St. Louis Ozone Nonattainment Area.

RESPONSE: As a result of comment #9, the ozone boundary designation recommendation documents have been changed to reflect a new Ste. Genevieve Ozone Nonattainment Area. No changes were made to the ozone boundary recommendations as a result of these comments.

COMMENT #11: American Bottom Conservatory, Illinois Sierra Club, Respiratory Health Association of Metropolitan Chicago, Missouri Coalition for the Environment, and City of St. Louis Air Pollution Control all voiced their strong support for the inclusion of Ste. Genevieve County as part of the St. Louis Ozone Nonattainment Area. The organizations specifically cited the high NO_x emissions for the county and its location upwind of the St. Louis metropolitan area. They noted that the county's location results in the emissions from Ste. Genevieve County having a greater impact on the metropolitan area than other county's emissions. The City of St. Louis Air Pollution Control Program also voiced their appreciation that the process used to develop the proposed nonattainment area was open, transparent, and technically sound.

RESPONSE: As a result of comment #8, Ste. Genevieve County will be proposed as its own ozone nonattainment area. This will provide the county the flexibility to address its ozone issues independently of other nearby areas that have very different population, emission source, and urbanization characteristics. Proposing the county as its own nonattainment area will still address the concerns voiced by these organizations, as it will still require the development of a state plan to address the emissions sources in the county, and the air quality impacts associated with these emissions.

COMMENT #12: The Bank of Missouri – Cape Girardeau; Mid-South Steel Products, Inc.; Cape Girardeau Area MAGNET; BioKyowa, Inc.; Cape Girardeau Area Chamber of Commerce; the Presiding Commissioner of Cape Girardeau County; Jackson, MO Chamber of Commerce; the Mayor of Jackson, MO; the Representative for Missouri's 8th District; the State Representative for Missouri's 104th District; and the Presiding Commissioner of Ste. Genevieve County all commented that they did not support the inclusion of Cape Girardeau County in an ozone nonattainment area. Some of the rationale for requesting that the county not be included in a nonattainment area included: the ozone monitor in Farrar, Perry County being close to the standard, the current level of control on emission sources in the county, the economic impact of a nonattainment designation, lack of guidance from EPA for the ozone boundary

recommendations, the Cape Girardeau area not meeting the definition of a metropolitan area, rural county emissions levels that include a large percentage of emissions from vegetative sources, and long range transport of ozone.

RESPONSE: Many of these comments have already been addressed in Response to #8. Some new issues/comments specific to these comments are presented here.

Based on the three most recent years of ozone monitoring data (2006-2008), the monitor in Farrar, Perry County violates the 2008 8-hour ozone standard. The 2008 ozone season recorded ozone levels much lower than those normally experienced in Southeast Missouri. However; these low levels did not reduce the three year average at the monitor to a value below the current standard.

In evaluating the ozone levels at a monitor, as well as the emission levels from particular counties, biogenic (vegetative) sources are considered, and only man-made emission sources are considered in determining if a county does have a significant impact on a violating monitor. Also, vegetation does not produce ozone. Rather, it produces one of the two compounds that combine to form ozone. If the second component, which is primarily created by human action, was not already present, vegetative sources would have no impact on ozone levels. The lowering of the ozone standard has increased interest in the topic of long range ozone transport. As mentioned previously, the department has continued to provide comments to EPA regarding the needs for additional comprehensive, regional and nationwide emission control strategies such as the Clean Air Interstate Rule and nationwide emissions controls for consumer products.

The department is also very concerned with the economic impact of nonattainment designation on smaller communities. While the primary mission of the air program is to ensure the citizens of Missouri breathe clean air, the secondary mission is to provide for maximum employment and full industrial development of the state. The designation of nonattainment areas for ozone under the current implementation paradigm could provide substantial economic hardship for communities without a corresponding benefit to air quality. This is due to the transported nature of ozone and the impacts from other states or more distant sources within Missouri on these rural monitoring sites. As a result of these comments, and those in comment #8, the Southwest Ozone Nonattainment Area has been changed to reflect the removal of Cape Girardeau County.

COMMENT #13: The Concerned Citizens for Economic Growth Coalition, Procter and Gamble Manufacturing Company, and Malcolm Pirnie Incorporated in consultation with Concerned Citizens for Economic Growth Coalition has provided substantial comments on the proposed designation of Cape Girardeau County as nonattainment under the 2008 8-hour ozone standard.

RESPONSE: Some of the rationale to designate Cape Girardeau as attainment provided in these comments included a strong regional ozone influence (not local) on the Farrar monitor in Perry County, no local ozone monitoring data, existing sources are already controlled, difficulty in attracting new businesses and expanding operations at existing facilities. While the department does not concur with many of the technical findings in these comments, the overall decision for inclusion of Cape Girardeau County in the Southeast Missouri Nonattainment Area is based on both the technical information and the policy issues associated with this designation. The department's concerns regarding the nonattainment designation of small communities that impact downwind violations, like Cape Girardeau, and the implementation of existing control

regimens in those communities support a designation of unclassifiable for Cape Girardeau County. As a result of these comments, and similar ones made in comments #8 and #12, the Southwest Ozone Nonattainment Area has been changed to reflect the removal of Cape Girardeau County.