



**Environmental
Protection Agency**

Division of Air Pollution Control

**Response to Comments
PM_{2.5} Redesignation Request for the 1997 PM_{2.5} Annual Standard
for the Columbus Area**

Agency Contact for this Package

Division Contact: (Carolina Prado, Division of Air Pollution Control, 614-644-2310, Carolina.Prado@epa.state.oh.us)

Ohio EPA held a public hearing in Columbus, OH on April 21, 2011, regarding the Redesignation Request and Maintenance Plan for the Columbus PM_{2.5} Nonattainment Area. This document summarizes the comments and questions received at the public hearing and during the associated comment period, which ended on April 21, 2011. Ohio EPA reviewed and considered all comments received during the public comment period.

By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. The name of the commenter follows the comment in parentheses.

During the public comment period, the Ohio Department of Transportation (ODOT) advised Ohio EPA of an error in the MOVES post-processor assumptions utilized to generate on-road emissions in the Columbus area. ODOT, together with the Mid-Ohio Regional Planning Commission, corrected the errors and re-analyzed the mobile emissions using MOVES. The new analysis resulted in an increase in the total on-road mobile emissions; however, the effect on the overall area emissions is minimal and a 15% safety margin, for transportation conformity purposes, was still allocated. Therefore, the final document does contain revised on-road mobile emissions numbers as compared to the draft document.

General Comments/Overall Concerns

Comment 1: The Mid-Ohio Regional Planning Commission (MORPC) is a voluntary association of over 40 local governments in central Ohio. Our members recognize the importance of clean air and how it impacts the quality of life in the region. Most

importantly, we want to ensure that central Ohio maintains healthy air quality levels. As you know, according to U.S. EPA exposure to fine particulate matter (PM_{2.5}) can lead to a variety of short and long-term health effects, including triggering asthma and heart attacks, arrhythmias, increased susceptibility to respiratory infections, reduced lung function, the development of chronic bronchitis and even premature death. Furthermore, if our region does not continue to work diligently to manage air pollution, it could adversely impact our ability to attract and retain businesses.

We believe Ohio EPA has demonstrated attainment of the 1997 Annual PM_{2.5} National Ambient Air Quality Standard in the central Ohio area (Coshocton, Delaware, Fairfield, Franklin, and Licking counties) and strongly support the agency's request for redesignation to attainment.

We support the procedures outlined in the Contingency Plan as reasonable measures to proactively address potential future PM_{2.5} levels above of the standard (Chester R. Jourdan, Jr., Executive Director, MORPC)

Response 1: Thank you for your comment and support on Ohio's PM_{2.5} Redesignation Request for the Columbus nonattainment area.

Comment 2: We would like to ensure the Mobile Vehicle Emission Budgets outlined in the document provide adequate margin to allow the region to demonstrate transportation conformity as required by federal regulations. We believe the 15 percent increase in the 2015 and 2022 projections for the mobile emissions budget is adequate for these purposes (Chester R. Jourdan, Jr., Executive Director, MORPC).

Response 2: Thank you for your comment on Ohio's PM_{2.5} Redesignation Request for the Columbus nonattainment area. The mobile emission budgets outlined in the document were established through agreement among the members of Columbus Area Interagency Consultancy Group.

Comment 3: MORPC will continue to do its part to reduce PM_{2.5} emissions at the local level by promoting Travel Demand Management programs, such as transit, vanpooling and carpooling, and working with diesel fleets to install emission-control technology. We will also continue to fund and administer a regional Air Quality Awareness Program,

including daily air quality forecasts for the public (Chester R. Jourdan, Jr., Executive Director, MORPC).

Response 3: Thanks for your support and commitment to help improve the Columbus Area air quality.

Comment 4: **The Agency projects that PM_{2.5} emissions from on-road mobile sources will drop from 968.60 tons in 2008 to 486.25 in 2015. The Agency incorporated a 15% margin of safety when coming up with the projected numbers. The agency states a 15% margin of safety is justified because the variation in VMT forecast; expected modifications to TDM and mobile emission models and total decrease in emissions from all sources.**

Several questions remain: did the modeling take into account the economic recession when not as many new trucks may have been purchased/used on the road? Did it take into account the possibility that not as many construction projects occurred over the three year span? Did the modeling over emphasis the 2007 on road diesel emission rule and its impact? Did the model take into account the anti-module transportation option environment we now face? Did the model take into account the growing trend of using outdoor wood fired boilers (which contribute to PM_{2.5} emissions)? (David R. Celebrezze, Ohio Environmental Council).

Response 4: The mobile emission budgets for the Columbus area redesignation, were agreed upon as part of the interagency consultation process, include the emission estimates calculated for 2015 and 2022 with an additional 15 percent margin of safety allocated to PM_{2.5} and NO_x in 2015 and 2022. In an effort to accommodate future variations in travel demand models and VMT forecast when no change to the network is planned, Ohio EPA consulted with U.S. EPA to determine a reasonable approach to address this variation. Based on this discussion, a 15 percent margin of safety allocation was agreed upon and has been added to the emissions estimates for this nonattainment area. This area continues to show maintenance of the standard with the additional 15 percent margin of safety.

All methodologies, the latest planning assumptions, and the safety margins allocations were determined through the interagency consultation process described in the Transportation Conformity Memorandum of Understanding (MOU) among

MORPC, Ohio DOT, and Ohio EPA. Ohio EPA believes a 15 percent margin of safety is appropriate because: 1) there is an acknowledged potential variation in VMT forecast and potential estimated mobile source emissions due to expected modifications to TDM and mobile emissions models; and 2) the total decrease in emissions from all sources is sufficient to accommodate this 15 percent allocation of safety margin to mobile sources while still continuing to maintain the total emissions in the Columbus area well below the 2008 attainment level of emissions.

Ohio EPA and the interagency consultation group used USEPA approved methodologies and assumptions developed by USEPA through the MOVES model. This includes assumptions built into the MOVES model regarding USEPA's 2007 on road diesel emission rule and its impact. Ohio EPA believes the assumptions included in the model, along with the 15 percent margin of safety, provide for a very conservative estimation of mobile emissions. Please refer to the technical support documents included in the redesignation request for additional information regarding assumptions.

Comment 5:

The Ohio EPA and many groups in Ohio, including OEC, have made great strides in cleaning the air. But we should not rest on our laurels. No doubt the air is cleaner than it was before but the real question is has state government done enough? We know that the full health benefits from the onroad and nonroad diesel clean up regulations won't be felt for another 20-30 years. In the meantime 11-12 million existing diesel engines continue to turn out the deadly pollutants. Maybe 1 million or 1.5 million have been cleaned up; but that still leaves a substantial number of dirty diesel engines out there.

If accepted, the redesignation took us more than 14 years to meet the standard. As we move forward we can't afford to wait another 14 years to meet any newer standard that may come out. We must do everything feasible to achieve maximum reductions in diesel pollution (David R. Celebrezze, Ohio Environmental Council).

Response 5:

Thank you for your comments and concern for the Ohio EPA proposed redesignation and maintenance of the Huntington-Ashland PM_{2.5} Nonattainment Area. The Ohio EPA strives to constantly improve air quality for all Ohio and during the last 14 years (since the establishment of the PM_{2.5} annual standard) Ohio EPA has been working together with the regulated community to

reduce atmospheric emissions and achieve or go beyond USEPA's mandates.

Moreover, achieving significant reductions in particulate matter is one of Ohio EPA's priorities. Over the past 14 years Ohio EPA has made significant progress in reducing particle pollution in the Columbus area and has now attained the federal quality standard (which is shown in this redesignation request). This is evidenced in the actual PM_{2.5} monitoring data in the area. For the monitors located in Franklin County, monitoring data has shown a decrease in PM_{2.5} from a high of 18.03 ug/m³ during the 1999 to 2001 period to a low of 11.3 ug/m³ during the 2008 to 2010 period. Lowering PM_{2.5} emissions and meeting the federal air quality standard was achieved by controlling and modernizing facilities and/or sources in the area; USEPA studies show that PM_{2.5} emission reductions results in better health protections for the people living near these facilities.

USEPA is currently reviewing the PM_{2.5} standards and may choose to strengthen them in the near future. Ohio EPA will continue to strive to develop programs and implement strategies that will allow for Ohio's areas to achieve the standard as expeditiously as practicable and by the attainment date.

Comment 6: **Additional steps the Ohio EPA and state government can take to reduce the death toll from diesel engines:**
*Fund the Diesel Emission Reduction Grant program in the amount of \$20 million a year;
*Adopt clean construction requirements on all public works projects that require 85% or more reduction in pollution from the construction vehicles;
*Adopt a no-idling law with no more than idling for 5 minutes in a 60 minute time frame with few exceptions;
*Adopt an E-check-like program for on road diesel trucks;
* (Re)invest in Truck Stop Electrification; and
*Develop a low/no interest program that targets tier zero construction vehicles to be replaced with tier 3 or 4.
Additionally, adopt strong rules regulating the OWB menace (David R. Celebrezze, Ohio Environmental Council).

Response 6: Thank you for your comment and suggestions. Ohio EPA will continue to work to reduce air pollution, considering options such as those the commenter has outlined above.

Comment 7: **We need the Kasich Administration and the General Assembly to step up and make Ohio a leader in the Midwest**

instead of a laggard when it comes to cleaning up poor air quality. We know that every dollar invested in diesel cleanup yields anywhere from \$12 to \$20 in health care savings. The days of dirty, deadly, diesel emissions are numbered, let's put the final nail in the coffin by adopting strong measures that protect the public's health (David R. Celebrezze, Ohio Environmental Council).

Response 7:

Thanks for your comment and concern. As discussed above, over the past 14 years Ohio EPA has made significant progress in reducing particle pollution in the Columbus area. Ohio EPA's mission is to "to attain and maintain the air quality at a level that will protect the environment for the benefit of all." Ohio EPA will continue to work diligently towards this mission.

End of comments