



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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May 30, 2008

Mr. Bharat Mathur
Acting Regional Administrator
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, IL 60604-3950

Re: Recommendations Concerning Air Quality Designations for the
24-hour Fine Particle (PM_{2.5}) National Ambient Air Quality
Standard

Dear Mr. Mathur:

On December 17, 2007, Indiana submitted preliminary recommendations responding to your July 9, 2007 letter to Governor Daniels concerning air quality designations for the revised 24-hour Fine Particle (PM_{2.5}) National Ambient Air Quality Standard (NAAQS). Indiana's preliminary recommendations were based on 2004-2006 monitoring data. Please consider this letter, along with the attached support documents, our final submittal based on quality assured monitoring data from 2005-2007.

In October 2006, the U.S. EPA promulgated revised PM_{2.5} standards with an effective date of December 18, 2006 for the new standard. Although the U.S. EPA retained the annual PM_{2.5} standard, the 24-hour PM_{2.5} standard was changed from 65 micrograms per cubic meters ($\mu\text{g}/\text{m}^3$) to 35 $\mu\text{g}/\text{m}^3$.

Enclosed you will find quality assured monitoring data from 2005-2007 for Indiana's PM_{2.5} monitoring network. The PM_{2.5} monitored concentrations have trended downward since 2002, resulting in just five Indiana counties (Knox, Lake, Marion, Tippecanoe and Vanderburgh) with average design values above the new 24-hour standard. Indiana expects this downward trend to continue over the next few years with the continued phase-in of recently implemented federal and state regulations.

Indiana firmly believes that the nonattainment boundaries for the 24-hour PM_{2.5} standard should be limited to the Indiana counties that actually possess a three-year average ambient monitor-based design value above the standard. With the exception of the monitors in the largest urban area in Indiana (Indianapolis), monitor values in the other four counties exceed the standard by only 1 or 2 $\mu\text{g}/\text{m}^3$. Limiting the designated nonattainment areas is further supported by the fact

that in Indiana, air quality in the counties adjacent to the larger urban areas does not significantly contribute to the exceeding monitors and air quality in those counties will be further improved by the continued phase-in of recently implemented national and state control measures.

To further emphasize this point, recent regional modeling (referred to as Round 5) conducted by the Lake Michigan Air Directors Consortium has demonstrated that every monitor in the state of Indiana will attain the 24-hour PM_{2.5} standard by close of 2009. Current modeling is predicting 2009 reductions ranging from 5 to 8 µg/m³ at Indiana monitors currently exceeding the standard.

The five Indiana counties that currently measure ambient concentrations above the new 24-hour standard for fine particles are Knox, Lake, Marion, Tippecanoe and Vanderburgh. More specifically, only the cities of East Chicago, Indianapolis, Lafayette and Evansville measure air quality above the standard. In the case of Northwest Indiana, five of the six monitors within the county measure air quality below the NAAQS, while only one monitor (East Chicago) measures air quality above the standard. There are two source oriented monitors in Northwest Indiana and only one of them (Gary-Burr St) is above the standard. The vast majority of the major stationary sources for fine particles and its precursors are located in the Chicago area northwest of the exceeding monitor. Therefore, limiting the nonattainment area boundary to Lake County will enable the State of Indiana to adequately address the standard and ensure that all monitors within Lake County attain the standard as expeditiously as possible.

The following enclosures are included with this letter:

- Enclosure 1 2005-2007 Monitoring Data
- Enclosure 2 List of Counties with Data and Recommendation
- Enclosure 3 Map of Recommended Counties
- Enclosure 4 Assessment of the Daily Fine Particulate (PM_{2.5}) Standard and Technical Support Documents
- Appendix A 2004-2007 Exceptional Events Data
- Appendix B Incomplete Data Analysis
- Appendix C Unmonitored Data Analysis
- Appendix D Chicago Area Analysis
- Appendix E Growth Rates and Patterns
- Appendix F Commuting Patterns
- Appendix G Emissions Report

The current scenario is similar to the 8-hour ozone designations made in June 2004. At that time the U.S. EPA designated twenty-three counties and one township as nonattainment in Indiana under the 8-hour ozone standard. However, within four months of designation, six of those counties (five separate nonattainment areas) attained the standard and were thereby eligible for redesignation. Another six counties attained the standard by the close of the 2005 ozone season, and all twenty-three counties attained the standard within two years of being designated. This placed a significant burden on state and federal resources, and resulted in undue hardship on the economies of the affected communities. Though some areas met the criteria for a nonattainment designation for a total of four months, the nonattainment designation was effective for eighteen months or longer in some instances.

Monitoring data indicates that Indiana's air quality is improving. Because there is a public stigma associated with nonattainment designations, Indiana urges the U.S. EPA to carefully review data, as well as federal and regional modeling of the expected impact of promulgated state and national control measures prior to imposing undue economic hardship on areas that are adjacent to counties where monitoring data currently slightly exceeds the new 24-hour PM_{2.5} standard. Federal and state control programs like the Clean Air Interstate Rule (CAIR) and cleaner engine and fuel standards are expected to reduce the precursors for fine particles as well as direct fine particle concentrations further over the next few years.

Although the Clean Air Act (CAA) requires the U.S. EPA to complete the designation process within two years of the effective date of the standard, it does allow EPA to take up to an additional year to issue designations (i.e., no later than three years after the effective date of the standard). In this case, that enables U.S. EPA to delay issuance of designations until December 18, 2009. Indiana urges U.S. EPA to take advantage of this CAA provision to fully realize the effects from some of the recently implemented federal and state control measures, prior to imposing an undue resource burden on states, U.S. EPA and the areas that will likely attain the standard by 2009.

Thank you for this opportunity to provide recommendations on this important matter. If you have any questions, please feel free to contact me at (317) 232-8611 or Dan Murray at (317) 232-8222.

Sincerely,



Thomas W. Easterly
Commissioner

TWE/sad/pd
Enclosures

cc: Cheryl L. Newton, U.S. EPA Region 5
Steve Rothblatt, U.S. EPA Region 5
John Mooney, U.S. EPA Region 5
Dan Murray, IDEM-OAQ