



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

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December 17, 2007

Ms. Mary A. Gade  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
77 West Jackson Boulevard  
Chicago, IL 60604-3950

Re: Preliminary Recommendations Concerning Air Quality Designations for the 24-hour Fine Particle (PM<sub>2.5</sub>) National Ambient Air Quality Standard

Dear Ms. Gade:

This letter is in response to your July 9, 2007 letter to Governor Daniels and the United States Environmental Protection Agency's (U.S. EPA) June 2007 guidance memorandum concerning air quality designations for the revised 24-Hour Fine Particle (PM<sub>2.5</sub>) National Ambient Air Quality Standard (NAAQS). The guidance indicates U.S. EPA's intention to propose designations in mid - 2008 and finalize them by December 18, 2008, and requests that states submit their recommendations for area designations by December 18, 2007.

In October 2006, the U.S. EPA promulgated revised PM<sub>2.5</sub> standards with an effective date of December 18, 2006 for the new standard. Although the U.S. EPA retained the annual PM<sub>2.5</sub> standard, the 24-hour PM<sub>2.5</sub> standard was changed from 65 micrograms per cubic meters (µg/m<sup>3</sup>) to 35 µg/m<sup>3</sup>.

Enclosed you will find quality assured monitoring data from 2004-2006 for Indiana's PM<sub>2.5</sub> monitoring network. The PM<sub>2.5</sub> monitored concentrations have declined since 2002, resulting in just two Indiana counties (Clark and Marion) with average design values above the 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.

Based on this continued downward trend in  $PM_{2.5}$  monitored concentrations, Indiana firmly believes that the nonattainment boundaries for the 24-hour  $PM_{2.5}$  standard should be limited to counties that possess a three-year average ambient monitor-based design value above the 24-hour  $PM_{2.5}$  standard. State and U.S. EPA resources should be used to focus on the counties with monitoring data which exceeds the NAAQS. This is supported by the fact that in Indiana, air quality in the surrounding counties do not significantly contribute to the exceeding monitors and air quality in those counties will be further improved by recently implemented national control measures. The state will provide further evidence of this along with the quality assured 2007 monitoring data in early 2008.

The only two Indiana counties that currently measure ambient concentrations above the 24-hour standard for fine particles are Clark and Marion. More specifically, only the cities of Jeffersonville and Indianapolis measure air quality above the standard. In the case of Indianapolis, four of the five monitors within the city measure air quality below the NAAQS, while only one monitor measures air quality above the standard. The isolated portion of Marion County that measures air quality above the standard is within the urban core. All monitors located outside the urban core measure air quality that meets the standard. The vast majority of the major stationary sources for fine particles and its precursors are located upwind of the exceeding monitor, within Marion County, and downwind of a monitor that measures air quality that meets the standard. Therefore, limiting the nonattainment area boundary to Marion County will enable the State of Indiana to adequately address the standard and ensure that all monitors within Marion County attain the standard expeditiously.

Similarly, while the Clark County community of Jeffersonville currently measures concentrations above the 24-hour standard for fine particles, the monitor located in Floyd County, sited within just a few miles downwind of Jeffersonville, measures air quality below the standard. As is the case with Marion County, measured values at the Jeffersonville site are more representative of localized concentrations than regional. Jeffersonville is located directly downwind of Louisville and is in immediate proximity of the urban core, which is where higher measured concentrations are collected. However, Floyd County is not directly downwind of Louisville proper, is more rural in nature, and is situated a notable distance from the urban core. As a result, Floyd county measures air quality that meets the standard. Therefore, based on monitoring data through 2006, only Clark County should be designated as part of the Louisville nonattainment area, and Floyd County should be designated as attainment based upon its monitored air quality.

Indiana believes that only data from monitors specifically identified within the Air Quality Monitoring Network Plan as ambient air quality monitors should be considered when designating nonattainment areas. The U.S. EPA established the criteria as to how monitors are to be sited, and Indiana's monitoring network clearly identifies the monitoring sites that measure ambient air quality comparable to the NAAQS for fine particles. The U.S. EPA reviews and approves Indiana's monitoring network plan on an annual basis, and recognizes the difference between criteria for ambient sites and the criteria used for those sites that are not comparable to the NAAQS for fine particles. Thus, data from monitors sited and referenced within Indiana's Air Quality Monitoring Network Plan as source-oriented, transport or background should be excluded from consideration when issuing nonattainment designations.

When the U.S. EPA designated areas under the current 8-hour ozone standard in June 2004, there were twenty-three counties and one township designated nonattainment in Indiana. However, within four months of designation, six of these 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.

Because of the public stigma associated with nonattainment designations, Indiana urges the U.S. EPA to carefully review future monitoring data, as well as federal and regional modeling of expected national control measures prior to imposing undue economic hardship on areas that are adjacent to counties where monitoring data currently exceeds the 24-hour  $PM_{2.5}$  standard. Monitoring data indicates that Indiana's air quality is improving. Federal 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.

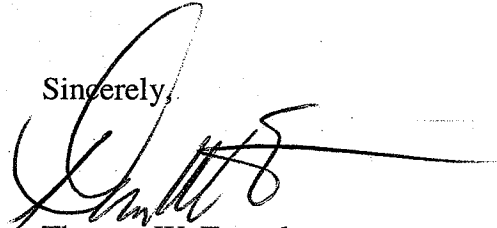
Recent modeling (referred to as Round 5) conducted by the Lake Michigan Air Directors Consortium has demonstrated that every monitor in the state of Indiana will attain the 24-hour  $PM_{2.5}$  standard by close of 2009. Therefore, I wish to once again encourage the U.S. EPA to delay its designation actions until December 18, 2009.

At the  $PM_{2.5}$  Workshop held by the U.S. EPA on June 20-21, 2007 in Chicago, Illinois, the U.S. EPA notified states that designations under the 24-hour standard could be based on the use of future data. Therefore, as the U.S. EPA proceeds, Indiana asks that the U.S. EPA consider future data as well, including the anticipated reductions from recently implemented national and state control programs like CAIR, and the associated benefits to future year model-based concentrations. This would not differ much from the results achieved by the Early Action Compacts in relation to the current 8-hour ozone standard.

M. Gade  
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Indiana reserves the right to supplement and/or revise the recommendations contained herein once the 2007 air quality monitoring data has been quality assured in early 2008. 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,

A handwritten signature in black ink, appearing to read 'Tom Easterly', with a long horizontal flourish extending to the right.

Thomas W. Easterly  
Commissioner

TWE/sad/pd  
Enclosures

cc: Steve Rothblatt, Region 5  
John Mooney, Region 5  
Dan Murray, IDEM-OAQ

## Enclosure 1

Indiana PM2.5 Summary (2000-2007)

Daily NAAQS = 65 ug/m3 (through 2006)

Daily NAAQS = 35 ug/m3 (2007 on)

| County    | Site #    | City           | Site Name                    | Daily 98th Percentile Values |      |      | Daily Site Design Value |
|-----------|-----------|----------------|------------------------------|------------------------------|------|------|-------------------------|
|           |           |                |                              | 2004                         | 2005 | 2006 | 04-06                   |
| ALLEN     | 180030004 | Fort Wayne     | Beacon St                    | 31.0                         | 38.4 | 26.2 | 32                      |
| ALLEN     | 180030014 | Fort Wayne     | Taylor Univ                  | 28.3                         | 34.9 | 26.5 | 30                      |
| CLARK     | 180190006 | Jeffersonville | Pfau                         | 28.4                         | 45.5 | 35.9 | 37                      |
| DELAWARE  | 180350006 | Muncie         | Muncie Central HS            | 27.2                         | 37.3 | 27.4 | 31                      |
| DUBOIS    | 180372001 | Jasper         | 200 W 6th St                 | 30.0                         | 41.2 | 31.6 | 34                      |
| ELKHART   | 180390003 | Elkhart        | Pierre Moran School          | 31.4                         | 36.2 | 25.5 | 33                      |
| FLOYD     | 180431004 | New Albany     | Green Valley School          | 26.7                         | 40.1 | 28.2 | 32                      |
| HOWARD    | 180670003 | Kokomo         | 215 W Superior St            | 27.6                         | 37.6 | 27.6 | 31                      |
| LAKE      | 180890006 | East Chicago   | Franklin School              | 33.0                         | 39.9 | 29.4 | 34                      |
| LAKE      | 180890027 | Highland       | Eldon Ready School           | 30.1                         | 37.1 | 25.8 | 31                      |
| LAKE      | 180890031 |                | Water Plant, 650 Madison St. | Site began 07/01/05          | 39.6 | 27.1 | 33 <sup>2</sup>         |
| LAKE      | 180891003 | Gary           | Ivanhoe School               | 30.5                         | 39.0 | 25.8 | 32                      |
| LAKE      | 180892004 | Hammond        | Purdue                       | 31.9                         | 37.6 | 26.2 | 32                      |
| LAKE      | 180892010 | Hammond        | Robertsdale                  | 28.4                         | 40.9 | 27.9 | 32                      |
| LA PORTE  | 180910011 | Michigan City  | Marsh Elementary Sch         | 31.6                         | 37.5 | 25.5 | 32                      |
| LA PORTE  | 180910012 | LaPorte        | 1119 Lake St                 | 26.6                         | 36.5 | 24.7 | 29                      |
| MADISON   | 180950009 | Anderson       | 44 W 5th St                  | 28.2                         | 38.3 | 28.0 | 32                      |
| MARION    | 180970042 | Indianapolis   | Mann Road                    | 29.3                         | 39.4 | 31.0 | 33                      |
| MARION    | 180970078 | Indianapolis   | Washington Park              | 31.0                         | 42.5 | 31.7 | 35                      |
| MARION    | 180970079 | Indianapolis   | 7250 E. 75th St              | 28.7                         | 43.4 | 30.7 | 34                      |
| MARION    | 180970081 | Indianapolis   | W 18th St                    | 31.9                         | 45.7 | 34.8 | 37                      |
| MARION    | 180970083 | Indianapolis   | E. Michigan St.              | 31.3                         | 40.3 | 33.5 | 35                      |
| PORTER    | 181270020 |                | Dunes Natl Lakeshore         | 29.7                         | 37.6 | 26.6 | 31                      |
| PORTER    | 181270024 | Ogden Dunes    | Water Treatment Plant        | 29.1                         | 37.5 | 26.1 | 31                      |
| ST JOSEPH | 181410014 | South Bend     | Nuner Elementary Sch         | 26.7                         | 40.2 | 24.9 | 31                      |
| ST JOSEPH | 181410015 | South Bend     | Shields Dr                   | Site began 06/06/06          |      | 24.9 | 25 <sup>1</sup>         |
| ST JOSEPH | 181411008 | South Bend     | Angela & Eddy                | 27.4                         | 37.3 | 24.7 | 30                      |
| ST JOSEPH | 181412004 | South Bend     | LaSalle HS                   | 25.1                         | 35.8 | 24.1 | 28                      |

| County      | Site #    | City        | Site Name          | Daily 98th Percentile Values |      |      | Daily Site Design Value |
|-------------|-----------|-------------|--------------------|------------------------------|------|------|-------------------------|
|             |           |             |                    | 2004                         | 2005 | 2006 | 04-06                   |
| TIPPECANOE  | 181570008 | Lafayette   | 3401 Greenbush St  | 26.4                         | 49.3 | 27.0 | 34                      |
| VANDERBURGH | 181630006 | Evansville  | Civic Center       | 28.3                         | 42.5 | 30.5 | 34                      |
| VANDERBURGH | 181630012 | Evansville  | W Mill Rd          | 27.5                         | 41.5 | 27.9 | 32                      |
| VANDERBURGH | 181630016 | Evansville  | Univ of Evansville | 28.3                         | 37.0 | 29.5 | 32                      |
| VIGO        | 181670018 | Terre Haute | Lafayette St       | 26.9                         | 43.1 | 31.0 | 34                      |
| VIGO        | 181670023 | Terre Haute | Devaney School     | 30.4                         | 42.5 | 29.1 | 34                      |

Nonattainment

Incomplete Data

<sup>1</sup> One Year of data

<sup>2</sup> Two Years of data

| Background, Transport and Source Oriented Monitors <b>NOT</b> Used For Attainment Purposes |           |              |                   |                              |      |      |                         |
|--|-----------|--------------|-------------------|------------------------------|------|------|-------------------------|
| County   | Site #    | City         | Site Name         | Daily 98th Percentile Values |      |      | Daily Site Design Value |
|  |           |              |                   | 2004                         | 2005 | 2006 | 04-06                   |
| DUBOIS   | 180370004 | Jasper       | Sports Complex    | Site began 02/01/06          |      |      | 34 <sup>1</sup>         |
| DUBOIS   | 180370005 | Jasper       | Golf Course       | Site began 02/01/06          |      |      | 32 <sup>1</sup>         |
| HENRY  | 180650003 | n/a          | Shenandoah HS     | 26.9                         | 37.3 | 27.2 | 30                      |
| KNOX   | 180830004 | n/a          | SW Purdue Ag Cntr | 29.9                         | 41.8 | 36.2 | 36                      |
| LAKE   | 180890022 | Gary         | IITRI             | 45.8                         | 40.4 | 28.5 | 38                      |
| LAKE   | 180890026 | Gary         | Burr St           | 38.6                         | 43.7 | 30.4 | 38                      |
| MARION   | 180970043 | Indianapolis | S. West St        | 31.7                         | 43.9 | 37.5 | 38                      |
| MARION   | 180970066 | Indianapolis | English Ave       | 31.1                         | 44.0 | 36.2 | 37                      |
| SPENCER  | 181470009 | Dale         | David Turnham Sch | 25.2                         | 36.1 | 27.7 | 30                      |

Nonattainment

Incomplete Data

<sup>1</sup> One Year of data

<sup>2</sup> Two Years of data