OFFICE OF THE GOVERNOR

INDIANAPOLIS, INDIANA 46204-2797

JOSEPH E. KERNAN
GOVERNOR

October 7, 2003

Mr. Thomas V. Skinner
Regional Administrator
U.S. Environmental Protection Agency
Region 5
77 West Jackson Blvd.
Chicago, IL 60604

Dear Mr. Skinner:

Indiana is committed to the goals of the federal Clean Air Act and to working towards clean air for all Hoosiers.

Today, the Indiana Department of Environmental Management (IDEM) is forwarding its update to the July 15, 2003, recommendations for attainment designations with respect to the new eight-hour ozone health standard under separate cover.

On July 15, 2003, Governor O'Bannon strongly urged EPA to provide as much flexibility as allowed by the federal Clean Air Act to avoid the imposition of measures that may harm economic development in situations in which Indiana and others have already taken appropriate measures to ensure healthy air.

As a new Governor for the State, I want to reiterate Governor O'Bannon's concerns. It is apparent that Indiana has already put in place clean air measures that will address any eight-hour ozone nonattainment issues for most of Indiana, including the Evansville, Terre Haute, Fort Wayne, South Bend/Elkhart metropolitan areas and other more rural areas of our state. EPA should not take any step that will result in the mandatory imposition of unnecessary ozone control measures for these areas of the state until such time as it is shown, no earlier than 2007, that the existing ozone control measures will not be enough to meet the health standard.

I am confident that we can continue to work together to ensure that appropriate final decisions are made next year on the attainment status for all of Indiana.

Sincerely,

Joseph E. Kernan
Governor

LFK/jgm/sad
Attachments
cc: Lori Kaplan, Commissioner IDEM

RECYCLED PAPER

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

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October 7, 2003

Mr. Thomas V. Skinner
Regional Administrator
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Re Update to Recommendations on 8-Hour Ozone

Dear Administrator Skinner:

On July 15, 2003, I provided you with the State of Indiana's initial recommendations of designation of Indiana counties under the 8-hour ozone standard. I have attached a copy of that letter as Attachment A for your reference. In that letter, we committed to provide you with an update and any new information at the end of the 2003 ozone season. IDEM has quality assured the 2003 data and this letter provides that update. It also addresses issues related to classification of counties in Northwest Indiana, issues specific to LaPorte and Madison Counties and Southwest Indiana, and provides additional information your staff have requested.

For the most part, ozone levels measured during the 2003 season are consistent with our initial recommendations. Attachment B is a year-end compilation of ozone values from all monitors. Counties where 2001-2003 data show an exceedance of the standard that did not exceed based on 2000-2002 data and therefore according to USEPA's guidance would be considered nonattainment counties are:

- Delaware 88 ppb
- Vigo 87 ppb
- Warrick 85 ppb
- Floyd 86 ppb

Counties where the 2001-2003 data now show compliance with the standard and therefore would be considered attainment counties are:

- Posey 84 ppb
- Huntington 84 ppb
- Carroll 84 ppb

I note that these changes all involve just a few parts per billion on either side of the health standard. This is consistent with our understanding that these levels are heavily influenced by regional ozone levels and precursor emissions and should be positively affected when the region-wide NOx reductions are fully implemented in 2004. In light of this, I reiterate Indiana's position that US EPA should defer imposition of mandatory control measures such as stricter new source review and transportation conformity in areas predicted by US EPA's modeling to attain the standard with measures already on the books until it is clear that those reductions are not sufficient.

IDEM continues to urge US EPA to focus attention on those areas not expected to meet the standard with currently promulgated measures. Attachment C shows the counties in Indiana where technical work to date shows that additional planning and, possibly, local control measures will be needed. IDEM has already begun this process in these two regions of our state.

Northwest Indiana

Assuming that US EPA proceeds with Option 2 of its proposed implementation approach, IDEM believes that Lake and Porter Counties would be classified as moderate nonattainment counties. The area's 1-hour design value is 122 ppb and 8-hour design value is 101 ppb (Chilwaukee, WI), which falls within the moderate category proposed by US EPA. According to US EPA's proposed guidance, LaPorte County would also be classified as a moderate nonattainment county. LaPorte County's 1-hour design value is 135 ppb and 8-hour design value is 93 ppb.

IDEM also requests that LaPorte County be designated as its own nonattainment area, separate from the Lake/Porter County nonattainment area. It is a separate MSA and may be eligible for marginal instead of moderate classification, based on available information about the expected effect of regional NO_X controls. IDEM is currently reviewing USEPA's proposed guidance and available data to determine whether a petition could be submitted requesting marginal classification based on an expectation of attainment by 2007. IDEM has consulted with local officials in LaPorte County, who support a separate designation.

Madison County

Although under the recently revised MSA boundaries, Madison County is an independent MSA from the rest of the Central Indiana region, it previously was part of the regional MSA. IDEM requests that it be included as part of the Central Indiana nonattainment region. Madison County officials are fully engaged in the advisory group convened in Central Indiana and have expressed to IDEM their desire to be included as a part of the regional nonattainment area.

Southwest Indiana

In our July submittal, we deferred making a recommendation on four counties in southwest Indiana: Posey, Warrick, Vanderburgh and Gibson. For the second year in a row, only one county in the region has monitor readings exceeding the standard and that value is 85 ppb—as close as it could be to attainment. The region is heavily impacted by regional transport and expected to meet the health standard once the NOx reductions are fully implemented. As we indicated previously, if nonattainment designation means the imposition of mandatory measures even though available

evidence suggests that those measures are not needed and/or will not be effective, Indiana cannot as a matter of good public policy recommend nonattainment. In the event that US EPA feels it cannot take this approach, however, Indiana recommends that the nonattainment designation be restricted to Warrick County, the only county with a monitor that violates the ozone standard, even though we believe this outcome is not justified or sound environmental policy. Indiana intends to work actively with US EPA to assure that any areas that promptly meet the 8-hour health standard in 2004 or after are redesignated as expeditiously as possible to minimize the duration and adverse impacts of nonattainment status.

Additional Information and Other Issues

As requested by your staff, we have separately provided you with additional information about Dearborn County. I urge you not to base a nonattainment designation of Dearborn County on the presence of a single industrial source when that source is already subject to the regional NO_X rule and it has not been demonstrated that the source is influencing ozone levels in the Cincinnati area.

Indiana strongly encourages US EPA to find a way to treat Greene and Jackson Counties as rural areas affected by overwhelming transport. US EPA's proposed guidance recognizes the principle of avoiding "absurd results." To subject these two counties, as well as others where existing measures are expected to result in attainment of the standard, to new source review restrictions that will stigmatize those areas without contributing to improvements in air quality would indeed be absurd.

Finally, Attachment D includes information and analysis about the Terre Haute area. Indiana recommends that only Vigo County be considered for nonattainment status; the other counties in that MSA are essentially rural in nature, do not have measured air quality in excess of the standard, and are not contributing to elevated ozone levels in the Terre Haute area. In Delaware County, the MSA boundary includes only Delaware County itself so additional information or analysis is not necessary. Our earlier submittal included complete information on the Southwest Indiana region.

I look forward to further consultation with US EPA on this critical issue. I note that USEPA has not yet finalized its implementation guidance. The specifics of that guidance, when finalized, may warrant further discussion of the points raised in this letter. As I have noted above, Indiana has already begun the modeling and planning process in Central and Northwest Indiana to assure steady progress toward meeting the health standard for all Hoosiers. If you or your staff has questions about this letter or the attached information, please contact Janet McCabe of the Office of Air Quality at 317/232-8222.

Sincerely,

Lori F. Kaplan

Lori F. Kaplan
Commissioner

LFK/jgm

Attachments

OFFICE OF THE GOVERNOR
INDIANAPOLIS, INDIANA 46204-2797

FRANK O'BANNON
GOVERNOR

July 15, 2003

Mr. Thomas V. Skinner
Regional Administrator
U.S. Environmental Protection Agency
Region 5
77 West Jackson Blvd.
Chicago, IL 60604

Dear Mr. Skinner:

Indiana is committed to the goals of the federal Clean Air Act and to working towards clean air for all Hoosiers.

I have asked the Indiana Department of Environmental Management (IDEM) to conduct the evaluation required by the U.S. Environmental Protection Agency (EPA) with respect to the new eight-hour ozone health standard. The Commissioner of IDEM is forwarding Indiana's recommendations to date under separate cover today.

Indiana strongly urges EPA to continue to rely upon the advice of the state of Indiana as ozone data is collected yet this season before making your final determinations on attainment status for counties within Indiana. Indiana also urges EPA to provide as much flexibility as allowed by the federal Clean Air Act to avoid the imposition of measures that may harm economic development in situations in which Indiana and others have already taken appropriate measures to ensure healthy air.

I am confident that we can continue to work together to ensure that appropriate final decisions are made next year on the attainment status for all of Indiana.

Sincerely,

Frank O'Bannon

Frank O'Bannon

FOB/lfk/jgm
Attachments

cc: Lori Kaplan, Commissioner IDEM

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

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July 15, 2003

Mr. Thomas V. Skinner
Regional Administrator
U.S. Environmental Protection Agency
Region 5
77 West Jackson Blvd.
Chicago, IL 60604

RE: Recommendations Concerning Air Quality Designations for the 8-Hour National Ambient Air Quality Standards

Dear Mr. Skinner:

This letter is in response to the United States Environmental Protection Agency's (EPA) November 14, 2002, guidance memorandum concerning air quality designations for the 8-Hour National Ambient Air Quality Standard (NAAQS) for ozone. That guidance indicates EPA's intention to propose designations in the fall of 2003, and finalize them by April 15, 2004, and requests that states submit recommendations by July 15, 2003.

We all share the goal of air that meets national health standards for our citizens. In Indiana, thousands of citizens suffer from asthma and other respiratory ailments. Unhealthy ozone levels impair their enjoyment of our environment and can result in serious health impacts. This is unacceptable. We have made substantial progress towards our goal of healthy air since passage of the Clean Air Act over 30 years ago.

Designation of areas as attainment and nonattainment under the eight-hour ozone standard, adopted by EPA in 1997, formally begins the process of specific planning and implementation of clean air measures in areas that may not meet the new ozone health standard. Indiana is committed to completing the required planning process and to putting in place the necessary measures to provide healthy air for all of our citizens.

Indiana appreciates the opportunity to provide input and recommendations to EPA. We intend to be fully engaged in this important issue and submit our recommendations through this letter and attachments.

This letter includes several attachments and figures:

- Attachment I is a list of Indiana counties and Indiana's recommendation at this time.
- Attachment II includes analysis and discussion of each area within Indiana, using the criteria in USEPA's guidance documents.
- Attachment III contains additional technical support documentation for that analysis.
- Figure1 illustrates potentially affected Indiana counties and metropolitan statistical area (MSA) boundaries
- Figure 2 graphically depicts the recommendations listed in Attachment I.
- Figure 3 graphically depicts the areas within Indiana that require review of 2003 ozone season data prior to making any final nonattainment area recommendation.

Indiana's recommendations are contingent upon two very important factors:

1. **Ozone Readings in the Summer of 2003**

We are aware that EPA intends to make final designations based on ozone data from 2001-2003. Our evaluation to date and the recommendations enclosed with this letter are, of necessity, based on 2000-2002 data. For many areas of Indiana, we believe that ozone levels this summer are particularly critical for making a final determination. See Figure 3.

We will provide updated analysis and recommendations to EPA as promptly as possible after the 2003 data are fully quality assured.

EPA should not make any preliminary or final determination with respect to these areas of Indiana until we make our supplemental recommendations subsequent to completion of the 2003 ozone season.

2. **EPA's Implementation Guidance and Mandatory Requirements for Nonattainment Areas**

EPA has not finalized its implementation guidance that outlines the process for determining the regulatory implications of nonattainment status for various types of areas for the eight-hour ozone standard. The draft implementation guidance issued by EPA in May 2003 contains no actual rule language and contains so many options that it is impossible to explain clearly to citizens, local officials, and businesses what will be required if their county is designated nonattainment. Indiana does not support the application of nonattainment area new source review or automobile emission testing requirement or other "mandatory" requirements for any area within Indiana that will meet the new ozone standard within three years of the designation date of April 15, 2004. EPA's analyses to date suggest that most of Indiana, with the possible exception of the Chicago and Indianapolis metropolitan areas, should meet the new eight-hour ozone standard after implementation of currently required state and federal control measures.

We have found through the past two decades that areas designated as "nonattainment" received necessary attention and resources to improve air quality. However, these areas also have been tagged as areas where economic development is difficult and certain types of projects essentially precluded. In the early days of the Clean Air Act, when the air pollutants being addressed had very localized impacts, nonattainment boundaries were a sensible approach to identifying areas where air quality was unhealthy and where sources contributing to that pollution were located. In many cases, the "mandatory" control measures required by the Clean Air Act have been extremely effective in bringing pollution levels down.

As we have learned more about the causes and effects of ozone formation, however, tightly drawn nonattainment boundaries determined primarily by monitored air quality and urban area boundaries make less and less sense. The most significant ozone control programs in recent years, the NOx SIP Call and federal automobile standards, apply to sources regionwide or nationwide, not just to those in designated nonattainment areas. Air quality analyses to date suggest that most of the counties in Indiana where air quality currently does not meet the 8 hour ozone standard will meet that standard once the NOx SIP Call is fully effective in 2004.

According to the Clean Air Act and EPA's draft guidance for implementation of the eight-hour ozone standard, any county designated as nonattainment would be automatically subject to stricter new source review requirements for new and expanding sources. While it makes sense to avoid or minimize increases in emissions in nonattainment areas, we now know that these new source review requirements can have unintended consequences that, in many cases, just push new development to the outskirts of a nonattainment area. As a result, these requirements have contributed to sprawl, loss of farmland, and are inconsistent with policies that promote the development of brownfields. Development immediately adjacent to nonattainment areas can have just as deleterious an effect on local air quality as if the development occurred in the nonattainment area itself.

I understand that EPA recognizes this dilemma. However, the current EPA guidance on nonattainment designations and on eight-hour ozone implementation may have the consequence of requiring certain mandatory measures for areas of the country for which those measures are not needed and are not appropriate mechanisms to make progress on clean air. Therefore, IDEM recommends at the outset that EPA defer until 2007 additional mandatory measures on those metropolitan areas and counties that will achieve compliance with the current controls on the books to allow those controls to take effect.

Indiana intends to comment further on the draft guidance, but also must consider these uncertainties in making nonattainment designation recommendations at this time. However, it is difficult for Indiana to recommend nonattainment for areas that may attain the standard after the 2003 ozone season or that are not currently monitoring nonattainment (though they may be in a MSA with a monitor that is currently monitoring nonattainment). Attachments 1 and 2 note these areas within Indiana. In these areas, the consequences of a nonattainment designation are not clear and Indiana is not convinced that certain mandatory requirements

make common sense. Therefore, this uncertainty, combined with potential impact of the 2003 ozone season, convinces us that we should defer our recommendations for these areas until the close of the 2003 ozone season. EPA should not make any preliminary or final determination with respect to these areas until we make our supplemental recommendations.

In conclusion, Indiana has carefully reviewed EPA's March 28, 2000 boundary guidance memorandum, Indiana air monitoring data and considerable other data in developing these recommendations. We have consulted with the neighboring states and have solicited input and received comment from interested parties throughout Indiana. We will continue these discussions as the designation process proceeds.

As noted above, Attachment I outlines Indiana's preliminary recommendations concerning area designations and boundaries relevant to the 8-hour ozone standard, based on 2000 – 2002 monitoring data. As noted in Attachments 1 and 2, Indiana is deferring our recommendation for the Evansville MSA until October 2003. As the 2003 ozone season proceeds, we will update our recommendations as appropriate. In addition, depending on the timing of the release of a final implementation rule concerning the eight-hour ozone standard, IDEM may wish to provide updates to recommendations concerning nonattainment classifications. Please note that we have had time to do only a preliminary review of the recently revised Metropolitan Statistical Area (MSA) boundaries. Some discussion is included in Attachment II, but we will supplement this as necessary. At this time, we do not feel that the new boundaries will, in most cases, affect our recommendations. That review is included in the attached analysis, but we may supplement it in the future if needed.

We appreciate the opportunity to provide comments and recommendations to EPA concerning this matter. Likewise, we look forward to working with your staff as EPA moves forward with the designation process.

Should you have any questions or comments concerning IDEM's analysis and recommendations, please feel free to contact Janet McCabe, Assistant Commissioner, Office of Air Quality, at (317) 232-8222.

Sincerely,

Lori F. Kaplan

Lori F. Kaplan
Commissioner

LFK/jgm/sad

Attachments

cc: Cheryl Newton, EPA-Region 5
J. Elmer Bortzer, EPA-Region

ATTACHMENT I

Indiana July 15, 2003 Eight-Hour Ozone Designation Recommendations By County

County	Designation Recommendation
Adams	Attainment
Allen	Nonattainment
Bartholomew	Attainment
Benton	Attainment: Factor 1
Blackford	Attainment
Boone	Nonattainment
Brown	Attainment
Carroll	Attainment: Factor 1
Cass	Attainment
Clark	Nonattainment
Clay	Attainment: Factor 1
Clinton	Attainment
Crawford	Attainment
Daviess	Attainment
Dearborn	Attainment
Decatur	Attainment
DeKalb	Attainment
Delaware	Attainment: Factor 1
Dubois	Attainment
Elkhart	Nonattainment
Fayette	Attainment
Floyd	Nonattainment
Fountain	Attainment
Franklin	Attainment
Fulton	Attainment
Gibson	Recommendation Deferred*: Factors 1 & 2
Grant	Attainment
Greene	County Affected by Overwhelming Transport
Hamilton	Nonattainment
Hancock	Nonattainment
Harrison	Attainment
Hendricks	Nonattainment
Henry	Attainment
Howard	Attainment
Huntington	County Affected by Overwhelming Transport
Jackson	County Affected by Overwhelming Transport
Jasper	Attainment
Jay	Attainment
Jefferson	Attainment
Jennings	Attainment
Johnson	Nonattainment
Knox	Attainment
Kosciusko	Attainment
LaGrange	Attainment
Lake	Nonattainment
LaPorte	Nonattainment

ATTACHMENT I (page 2)

County	Designation Recommendation
Lawrence	Attainment
Madison	Nonattainment
Marion	Nonattainment
Marshall	Attainment
Martin	Attainment
Miami	Attainment
Monroe	Attainment
Montgomery	Attainment
Morgan	Nonattainment
Newton	Attainment
Noble	Attainment
Ohio	Attainment
Orange	Attainment
Owen	Attainment
Parke	Attainment
Perry	Attainment
Pike	Attainment
Porter	Nonattainment
Posey	Recommendation Deferred*: Factors 1 & 2
Pulaski	Attainment
Putnam	Attainment
Randolph	Attainment
Ripley	Attainment
Rush	Attainment
St. Joseph	Nonattainment
Scott	Attainment
Shelby	Nonattainment
Spencer	Attainment
Starke	Attainment
Steuben	Attainment
Sullivan	Attainment: Factor 1
Switzerland	Attainment
Tippecanoe	Attainment: Factor 1
Tipton	Attainment
Union	Attainment
Vanderburgh	Recommendation Deferred*: Factors 1 & 2
Vermillion	Attainment: Factor 1
Vigo	Attainment: Factor 1
Wabash	Attainment
Warren	Attainment
Warrick	Recommendation Deferred*: Factors 1 & 2
Washington	Attainment
Wayne	Attainment
Wells	Attainment
White	Attainment
Whitley	Attainment

**Recommendation will be made upon close of 2003 ozone season.*

Note: Factor 1 (Ozone readings in summer of 2003) and Factor 2 (EPA guidance and mandatory controls for nonattainment areas) are outlined in

ATTACHMENT II

IDEM's Assessment of the Eight-Hour Ozone Standard

Consistent with the United Sates Environmental Protection Agency's (EPA) March 28, 2000 guidance memorandum titled "Boundary Guidance on Air Quality Designations for the 8-Hour Ozone National Ambient Air Quality Standards„, the Indiana Department of Environmental Management (IDEM) has conducted a thorough review of the affected areas in Indiana. IDEM's review focused on the following primary and secondary analysis criteria:

Primary Analysis Criteria:

1. Monitoring data.

   - The standard is 0.08 parts-per-million (ppm) and determined by the average of the 4th highest 8-hour O_3 values over a three-year period. Due to rounding, values equal to or greater than 0.085 ppm (or 85 parts-per-billion) are considered to exceed the standard.

2. Existing MSA/CMSA boundaries

   - Per EPA guidance, 1999 MSA boundary definitions were used in IDEM's evaluation.
   - The U.S. Office of Management and Budget published revised MSA boundary definitions on June 6, 2003. IDEM has done a cursory evaluation of the counties affected by the new definitions and has incorporated the relevant information into this evaluation, as appropriate.

Secondary Analysis Criteria:

1. Emissions and air quality in adjacent areas (including adjacent MSAs/CMSAs).
2. Population density and degree of urbanization including commercial development.
3. Monitoring data representing ozone concentrations in local areas and larger areas (urban or regional scale).
4. Location of emission sources.
5. Traffic and commuting patterns.
6. Expected growth.
7. Meteorology.
8. Jurisdictional boundaries, including existing 1-hour nonattainment area boundaries.
9. Level of control of emissions.
10. Regional emission reductions (e.g., NO_x SIP call or other enforceable regional strategies).

Table I on the following page outlines the MSAs/CMSAs and Indiana Counties subjected to the analysis criteria. A map of the affected MSAs/CMSAs and Indiana Counties, titled Figure I, is attached to this document. Per EPA guidance, IDEM's core analysis is based on the 1999 defined MSA/CMSA boundaries. As a result of the 2000 Census, the 2003 MSA/CMSA boundary definitions were published on June 6, 2003. IDEM has incorporated a cursory review of the counties affected by the new boundary definitions into our core analysis. Figure 2, also attached, depicts the results of Indiana's analysis.

Table I

Indiana Counties Assessed

Cincinnati Area

Dearborne County

Franklin County[1]

Ohio County

Elkhart/Goshen/South Bend Area

Elkhart/Goshen MSA: Elkhart County

South Bend MSA: St. Joseph County

Evansville Area

Gibson County[1]

Posey County

Vanderburgh County

Warrick County

Fort Wayne Area

Adams County[2]

Allen County

DeKalb County[2]

Huntington County[2]

Wells County

Whitley County

Central Indiana Area

Boone County

Brown County[1]

Hamilton County

Hancock County

Hendricks County

Johnson County

Madison County (Anderson Area)[3]

Marion County

Morgan County

Putnam County[1]

Shelby County

Lafayette Area

Benton County[1]

Carroll County[1]

Tippecanoe County

Louisville Area

Clark County

Floyd County

Harrison County

Scott County[2]

Washington County[1]

Michigan City/LaPorte Area

LaPorte County

Muncie Area

Deleware County

Northwest Indiana

Jasper County

Lake County

Newton County[1]

Porter County

Terre Haute Area

Clay County[1]

Sullivan County

Vermillion County

Vigo County

Other Affected Counties

Greene County

Jackson County

Perry County

[1] County added to MSA in June 2003 as a result of the 2000 Census.

[2] County removed from the MSA in June 2003 as a result of the 2000 Census.

[3] County redefined as a seperate MSA in June 2003 as a result of the 2000 Census.

As a result of extensive analysis, IDEM has developed the following evaluation of nonattainment area boundaries for designating areas under the 8-Hour NAAQS for ozone. This evaluation is based on 2000-2002 monitoring data and shall be updated once 2003 monitoring data is quality assured. In some areas of the state, evaluation for attainment or nonattainment is straightforward. In some areas, it is clear that another season of ozone data should be collected before any recommendation on designations is made.

Cincinnati Area:

Indiana Counties within the Area:

Dearborn, Franklin, and Ohio

Monitor Values:

There are no monitors located within Dearborn, Franklin, or Ohio Counties.

Evaluation:

County	July 15, 2003 Designation Recommendation
Dearborn	Attainment
Franklin	Attainment
Ohio	Attainment

Discussion:

There are no monitors located in Dearborn and Ohio Counties. The emissions inventories for Dearborn and Ohio Counties are insignificant in comparison to the other counties within the CMSA, although there is a fairly large power plant in Dearborn County. The air quality within Dearborn and Ohio Counties, as with the CMSA as a whole, will benefit greatly from the emission reductions associated with the NO_x SIP Call and new federal engine and fuel standards. Ohio and Dearborn Counties are predominantly rural in nature with very low population densities. Ohio County's population density is one of the lowest in the state. Although Dearborn County's population growth rate appears significant in terms of percentage increase, the volume in terms of growth is insignificant. Dearborn and Ohio Counties have not been included in previous Greater Cincinnati nonattainment designations. Likewise, there are three Kentucky Counties within the CMSA that have been excluded in previous designations. Therefore, it is recommended that Dearborn and Ohio Counties be designated attainment.

2003 MSA Boundary Definition:

The U.S. Office of Management and Budget published revised MSA boundary definitions on June 6, 2003. For the Indiana portion of the Cincinnati CMSA, Franklin County was incorporated into the revised CMSA boundaries. There are no ozone monitors in Franklin County. Franklin County's total population is 22,586 and its annual population growth rate is 1.5%. Countywide annual total VOC emissions are less than 4,000 tons, and annual total NO_x emissions are just above 2,000 tons, which is insignificant compared to other counties within the CMSA. Therefore, it is recommended that Franklin County be designated attainment.

Evansville Area:

Indiana Counties within the Area:

Gibson, Posey, Vanderburgh, and Warrick.

Monitor Values (4th highest average value 2000 - 2002 in parts per million):

COUNTY	MONITOR LOCATION	Value
Gibson	Toyota	0.071
Posey	St. Phillips	0.087
Vanderburgh	Mill Rd.	0.083
Vanderburgh	Scott School	0.077
Warrick	Alcoa	0.084
Warrick	Boonville H.S.	0.08
Warrick	Tecumseh H.S.	0.08

Evaluation:

County	July 15, 2003 Designation Recommendation
Gibson	Recommendation deferred until close of 2003 ozone season.
Posey	Recommendation deferred until close of 2003 ozone season.
Vanderburgh	Recommendation deferred until close of 2003 ozone season.
Warrick	Recommendation deferred until close of 2003 ozone season.

Discussion:

The only monitored violation of the standard within the Evansville Area is a marginal violation of .087 PPB at the St. Phillips site in Posey County.

According to recent EPA modeling, the entire Evansville Area will attain the 8-hour standard upon the implementation of the NO_x SIP Call and federal engine and fuel standards. These measures, combined with additional existing controls will reduce total NO_x emissions by 61% and total VOC emissions by 17% by 2007 within Indiana's portion of the Evansville metropolitan area.

Indiana wishes to further assess the Evansville Area upon the close of the 2003 ozone season prior to making a designation recommendation given that:

- six of the seven monitor sites within Indiana's portion of the Evansville region are in compliance with the 8-hour standard,
- the marginal nature of the one Posey County monitor violation,
- the expected clean air benefits from the regional NO_x reductions already required and
- the fact that the consequences of a nonattainment designation are still unclear.

Fort Wayne Area:

Counties within the Area:

Adams, Allen, DeKalb, Huntington, Wells, and Whitley.

Monitor Values (4th highest average value 2000 - 2002 in parts per million):

COUNTY	MONITOR LOCATION	Value
Allen	Leo H.S.	0.088
Allen	Fort Wayne	0.084
Huntington	Roanoke	0.086

Evaluation:

County	July 15, 2003 Designation Recommendation
Adams	Attainment
Allen	Nonattainment
DeKalb	Attainment
Huntington	Affected by Overwhelming Transport
Wells	Attainment
Whitley	Attainment

Discussion:

One of the two monitor values for the ozone monitors located within Allen County is above the standard. The monitor within Huntington County has been in place for three years and has a current value marginally above the standard (.086). The majority (over 50%) of the MSA's emissions (NOx and VOC) are generated within Allen County. A substantial portion of Allen County is rural and due to existing land use controls, urban growth is limited to the central portion of Allen County (Fort Wayne). The remaining portion of the MSA is rural and maintains fairly low population density. The majority of the region's traffic congestion is confined to the Fort Wayne Urban Area within Central Allen County and all counties within the MSA maintain workforces that exceed 63% in-county employment ratios. Therefore, it is recommended that the nonattainment area designation be limited to Allen County.

The ozone monitor in Huntington County has been in place since 2000. This monitor was sited as a background monitor for the Fort Wayne area and it currently monitors a value marginally above the standard. Huntington County is predominantly rural. At this time, IDEM recommends that Huntington County be considered a county affected by overwhelming transport. IDEM does not believe that the fact that Huntington County is adjacent (in this case upwind) to an MSA should preclude its obvious characterization as a county whose modestly high ozone values are caused by transported ozone. Huntington County will benefit greatly from the NO_x SIP Call and new federal engine and fuel standards, thereby ensuring compliance with the 8-hour standard by 2007. Upon the close of the 2003 ozone season, IDEM will further assess Huntington County and may revise its recommendation.

2003 MSA Boundary Definition:

The U.S. Office of Management and Budget published revised MSA boundary definitions on June 6, 2003. For the Fort Wayne MSA, boundaries changed significantly. Adams, DeKalb, and Huntington counties are no longer part of the MSA. The revised boundary definition further supports our evaluation and recommendation for the Fort Wayne MSA.

Central Indiana Area:

Counties within the Area:

Boone, Brown, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Putnam, and Shelby.

Monitor Values (4th highest average value 2000 - 2002 in parts per million):

COUNTY	MONITOR LOCATION	Value
Boone	Whitestown	0.088
Hamilton	Noblesville H.S.	0.093
Hancock	Fortville	0.092
Hendricks	Avon	0.088
Johnson	Trafalgar	0.087
Madison	E. Elementary	0.091
Marion	Mann Rd.	0.084
Marion	Harding St.	0.086
Marion	Fort Benjamin	0.089
Marion	Naval Air Center	0.089
Morgan	Monrovia	0.087
Shelby	Fairland	0.093

Evaluation:

County	July 15, 2003 Designation Recommendation
Boone	Nonattainment
Brown	Attainment
Hamilton	Nonattainment
Hancock	Nonattainment
Hendricks	Nonattainment
Johnson	Nonattainment
Madison	Nonattainment
Marion	Nonattainment
Putnam	Attainment
Morgan	Nonattainment
Shelby	Nonattainment

Discussion:

There is a monitored violation of the standard in each of the nine counties within the MSA. The Indianapolis MSA functions as a region, and Marion County (Indianapolis) is a sphere of influence in terms of employment/commuting, commerce, and recreation to the other counties within the MSA. The Indianapolis MSA's population density is spreading well beyond Marion County. In fact, the counties surrounding Marion County represent the fastest growing counties in the state. Mobile source emissions (NO_x and VOC) represent the largest portion of the emissions inventory for Marion County, as well as for the MSA as a whole. Analysis indicates that the mobile source emissions for Marion County and the MSA are regional in nature. For these reasons, it is recommended that the MSA, as defined in 1999, be designated nonattainment.

2003 MSA Boundary Definition:

The U.S. Office of Management and Budget published revised MSA boundary definitions on June 6, 2003. Brown and Putnam Counties were incorporated as part of the Indianapolis MSA and Madison County was excluded from the Indianapolis MSA and defined as the Anderson MSA. There are no ozone monitors in Brown or Putnam Counties.

The total population of Brown County is just over 16,000 and 90% of its VOC inventory results from biogenics. Total NO_x emissions released within Brown County are less than 900 tons, mainly from motor vehicles. The total emissions inventory for Brown County is insignificant compared to the counties within the true urban area.

The total population of Putnam County is around 35,000, with an annual growth rate of 1.6%, compared to Hamilton County as an example with a population of 176,000 and an annual growth rate of 14%. The majority of the total VOC inventory results from biogenics (42%). Total VOC and NO_x emissions released within Putnam County are less than 6,000 tons, both of which are insignificant compared to the inventories for the counties within the true urban area.

IDEM recommends that Brown and Putnam Counties be designated attainment. IDEM will provide a recommendation to EPA concerning how to classify Madison County (separate nonattainment area or part of Indianapolis region) at a later date.

Louisville Area:

Indiana Counties within the Area:

Clark, Floyd, Harrison, Scott, and Washington

Monitor Values (4th highest average value 2000 - 2002 in parts per million):

COUNTY	MONITOR LOCATION	Value
Clark	Charlestown	0.09
Floyd	New Albany	0.083

Evaluation:

County	July 15, 2003 Designation Recommendation
Clark	Nonattainment
Floyd	Nonattainment
Harrison	Attainment
Scott	Attainment
Washington	Attainment

Discussion:

The value for the Charlestown monitor in Clark County exceeds the standard. Historical monitoring data as outlined below illustrate monitors in both Clark and Floyd Counties have had multiple annual exceedances of the standard. Harrison and Scott Counties are predominately rural in nature, with low to moderate population density. Clark and Floyd Counties account for 71% of the area's overall VOC emissions and 81% of the area's NOx emissions. There are no major stationary sources located within Harrison or Scott Counties. Scott County in particular maintains a high in-county workforce employment rate at 60%, meaning that there is not much commuting occurring between Scott County residents and the remainder of the CMSA.

Clark and Floyd Counties were designated nonattainment under the one-hour ozone standard in 1991. Harrison and Scott Counties were excluded from previous nonattainment designations, and growth in Harrison and Scott Counties has not been significant. Currently, Harrison County accounts for 15% of the VOC emissions that comprise Indiana's portion of the MSA and only 12% of the NOx. Likewise, Scott County only accounts for 13% of the VOC and 7% of the NOx emissions within the Indiana portion of the MSA. It does not appear that emissions from Harrison or Scott Counties have a significant impact on air quality within the Louisville MSA. Therefore, it is recommended that the nonattainment area designation be limited to Clark and Floyd Counties.

Annual 4th Avg High Value

	Charlestown	New Albany
1995	0.098	0.094
1996	**0.081**	0.091
1997	0.097	**0.084**
1998	0.104	0.100
1999	0.089	0.094
2000	0.085	**0.077**
2001	0.086	**0.076**
2002	0.100	0.097

2003 MSA Boundary Definition:

The U.S. Office of Management and Budget published revised MSA boundary definitions on June 6, 2003. As a result, Scott County is no longer part of the MSA. Washington County has been incorporated into the revised boundary definition for the Louisville MSA. The total population of Washington County is just under 29,000, with an annual growth rate of 2%, compared to a total population of 175,000 in Clark and Floyd Counties. The largest portion of the annual VOC inventory results from biogenics (63%). Total NO_x emissions released within Washington County are around 2,000 tons, which is insignificant in comparison to the 19,000 tons emitted in Clark and Floyd Counties. There are no ozone monitors in Washington County.

IDEM recommends Washington County be designated attainment.

Michigan City/LaPorte Area:

Indiana Counties within the Area:

LaPorte

Monitor Values (4th highest average value 2000 - 2002 in parts per million):

COUNTY	MONITOR LOCATION	Value
LaPorte	Michigan City	0.092
LaPorte	LaPorte	0.084

Evaluation:

County	July 15, 2003 Designation Recommendation
LaPorte	Nonattainment

The monitor value for the Michigan City ozone monitor located within LaPorte County is above the standard. Although LaPorte County is affected by regional transport, there is a notable population density and a significant amount of travel occurs between LaPorte County and the Greater Chicago Area, including Lake and Porter Counties. It is recommended that LaPorte County be designated nonattainment, however, there are two options to consider in terms of boundaries:

Option 1

LaPorte County is adjacent to Lake and Porter Counties. Technical analysis demonstrates that LaPorte County is affected by regional transport, and the solution to the area's air quality problem rests significantly on region-wide controls. LaPorte County is served by a Metropolitan Planning Organization that maintains a travel demand model for Lake,

Porter, and LaPorte Counties. Therefore, LaPorte County could be designated along with Lake and Porter as part of the Northwest Indiana nonattainment area.

Option 2

Based on the 2000 Census, LaPorte County will be designated a separate MSA/CBSA later in 2003. LaPorte County has the option of creating its own Metropolitan Planning Organization. In addition, LaPorte County was excluded from nonattainment designations under the 1-hour ozone standard. Over 78% of the workforce residing in LaPorte County is employed within the county. Lake and Porter Counties will still be affected by the 1-hour ozone standard following 8-hour designations, and could have a different compliance date established. In addition, based on previous modeling, it appears that LaPorte County could attain the 8-hour standard by 2007 (prior to Lake and Porter Counties) without additional controls. Therefore, LaPorte County could be designated as a separate nonattainment area.

IDEM will continue to discuss this issue with interested and affected parties in the region and provide further input to EPA prior to designations being finalized.

Northwest Indiana:

Counties within the Area:

Jasper, Lake, Newton, and Porter.

Monitor Values (4th highest average value 2000 - 2002 in parts per million):

COUNTY	MONITOR LOCATION	Value
Lake	Gary IITRI	0.083
Lake	Hammond	0.092
Lake	Lowell	0.079
Porter	Ogden Dunes	0.09
Porter	Dunes Lake Shore	0.084
Porter	Valpo	0.086

Evaluation:

County	July 15, 2003 Designation Recommendation
Jasper	Attainment
Lake	Nonattainment
Newton	Attainment
Porter	Nonattainment

Discussion:

Values for multiple ozone monitors within Lake and Porter Counties are above the standard. Lake and Porter Counties comprise the PMSA, which is Indiana's portion of the greater Chicago CMSA.

2003 MSA Boundary Definition:

The U.S. Office of Management and Budget published revised MSA boundary definitions on June 6, 2003. As a result, Newton and Jasper Counties have been incorporated into the revised boundary definition for the Chicago CMSA (Gary PMSA). There are no ozone monitors in Newton or Jasper Counties. The total population of Newton County is just over 15,000, with an annual growth rate of 1.2%. The total population of Jasper County is around 30,000, with an annual growth rate of 1.1%. Total NO_x and VOC emissions released within Newton and Jasper Counties are insignificant compared to those associated with Lake and Porter Counties.

IDEM recommends that Newton and Jasper Counties be designated attainment.

South Bend/Elkhart/Goshen Area:

Counties within the Area:

Elkhart MSA: Elkhart County

South Bend MSA: St. Joseph County

Monitor Values (4th highest average value 2000 - 2002 in parts per million):

COUNTY	MONITOR LOCATION	Value
Cass (MI)	Cassopolis	0.09
Elkhart	Bristol*	0.099
St. Joseph	Granger	0.09
St. Joseph	South Bend	0.087
St. Joseph	Potato Creek	0.083

**Monitor site relocated in 2002. Value referenced is the 4th high value for the first year at the new site.*

Evaluation:

County	July 15, 2003 Designation Recommendation
Elkhart	Nonattainment
St. Joseph	Nonattainment

Discussion:

Values for two of the three monitors located within St. Joseph County are above the standard. The monitor located in Elkhart County was relocated in 2002 due to apparent interference from a nearby treatment plant. The 4th high ozone value for the first year (2002) at the new monitoring site is .099. Elkhart County accounts for the vast majority of the region's NO_x and VOC emissions inventories. An equal amount of traffic volume and congestion occurs in St. Joseph and Elkhart Counties. Elkhart County's growth rate

is twice that of St. Joseph County. St. Joseph and Elkhart Counties are under the jurisdiction of a single Metropolitan Planning Organization and are within the same Transportation Management Area. St. Joseph and Elkhart Counties were designated as one nonattainment area in 1991, and maintenance area in 1994 under the 1-hour ozone standard. In addition, there is a downwind monitor in Cassopolis, Michigan, just north of the South Bend and Elkhart/Goshen MSAs that maintains a value above the standard. It appears that emissions deriving from Elkhart County have an influence on air quality elsewhere within the region. Therefore, it is recommended that the South Bend and Elkhart MSAs be designated as one nonattainment area.

Other Counties:

Counties Affected:

Greene, Jackson, and Perry

Monitor Values (4th highest average value 2000 - 2002 in parts per million):

COUNTY	MONITOR LOCATION	Value
Greene	Plummer	0.089
Jackson	Brownstown	0.085
Perry**	AK Steel	0.09

*** Operation of this monitor discontinued following the 2001 ozone season. The three year average reflected is 1999-2001.*

Evaluation and Discussion:

Greene County

The monitor within Greene County has a fourth highest average value above the standard for the 2000 – 2002 period. However, the monitor site in Greene County was strategically chosen to evaluate transport as a background monitoring site for Greater Indianapolis. Greene County is a rural county with a very modest emissions inventory and sparse population.

Jackson County

The monitor within Jackson County also has a fourth highest average value above the standard for the 2000 – 2002 period. The monitor site in Jackson County was also strategically chosen to evaluate transport as a background monitoring site for Greater Indianapolis. Jackson County is a rural county with a very modest emissions inventory and sparse population.

Greene and Jackson counties are rural counties with sparse population density and insignificant emissions inventories. These counties are most likely affected by transport and will benefit greatly from the NO_x SIP Call and new federal engine and fuel standards, thereby ensuring compliance with the 8-hour standard by 2007. At this time, Indiana recommends that these counties be designated as counties affected by overwhelming transport.

2003 MSA Boundary Definition:

The U.S. Office of Management and Budget published revised MSA boundary definitions on June 6, 2003. As a result, Greene County has been incorporated into the revised boundary definition for the Bloomington MSA. The total population of Greene County is just over 34,000, with an annual growth rate of 1.2%. The largest portion of the annual VOC inventory results from biogenics (61%). Total NO_x emissions released within Greene County less than 5,000 tons. There are no metropolitan areas within Greene county and there are no cities or towns within the county that are contiguous with the Bloomington Urban Area. Greene County is upwind of the Bloomington Metropolitan Area, so ozone levels in Greene County would not be influenced by the metropolitan area. Therefore, consistent with the 1999 MSA boundaries and IDEM's evaluation, IDEM believes that Greene County should be treated as an isolated rural county subject to overwhelming transport.

Perry County

Although the Perry County monitor* was taken out of service following the 2001 ozone season, it maintained a 3-year average above the standard through the 2001 season. The majority of Perry County is rural, and the emissions inventory is minimal. Air quality in the county is substantially influenced by upwind sources, including those to the south in Kentucky. IDEM is relocating a monitor in Perry County and it should be operational prior to the close of the 2003 ozone season. IDEM prefers to wait for three years of data from the new site prior to assessing Perry County's attainment status. At this time, IDEM recommends that Perry County be designated attainment/unclassifiable.

**This monitor was operated by AK Steel for three years, as required by its air construction permit.*

Areas to Assess After Close of the 2003 Ozone Season:

Areas/Counties Affected:

Carroll County (Downwind site for Lafayette MSA)

Delaware County (Muncie Area)

Terre Haute Area (Clay, Sullivan, Vermillion, and Vigo Counties)

Monitor Values (4th highest average value 2001 - 2002 in parts per million):

Carroll County (monitor is a downwind site for the Lafayette MSA)

COUNTY	MONITOR LOCATION	Value
Carroll*	Flora	0.087

Delaware County (Muncie Area)

COUNTY	MONITOR LOCATION	Value
Delaware*	Albany	0.089

Terre Haute Area

COUNTY	MONITOR LOCATION	Value
Clark (IL)*	West Union	0.08
Vigo	Terre Haute	0.079
Vigo*	Sandcut	0.091

**Monitors have only been in service for two years.*

There are no current violations of the standard in these three MSAs. However, each of these areas contains a monitor with a two-year average 4th high value that is above the standard. Therefore, IDEM will evaluate these areas upon the conclusion of the 2003 ozone season prior to further evaluating their attainment/nonattainment status.

F i g u r e I

Indiana MSA Boundaries and Counties with O3 Monitors

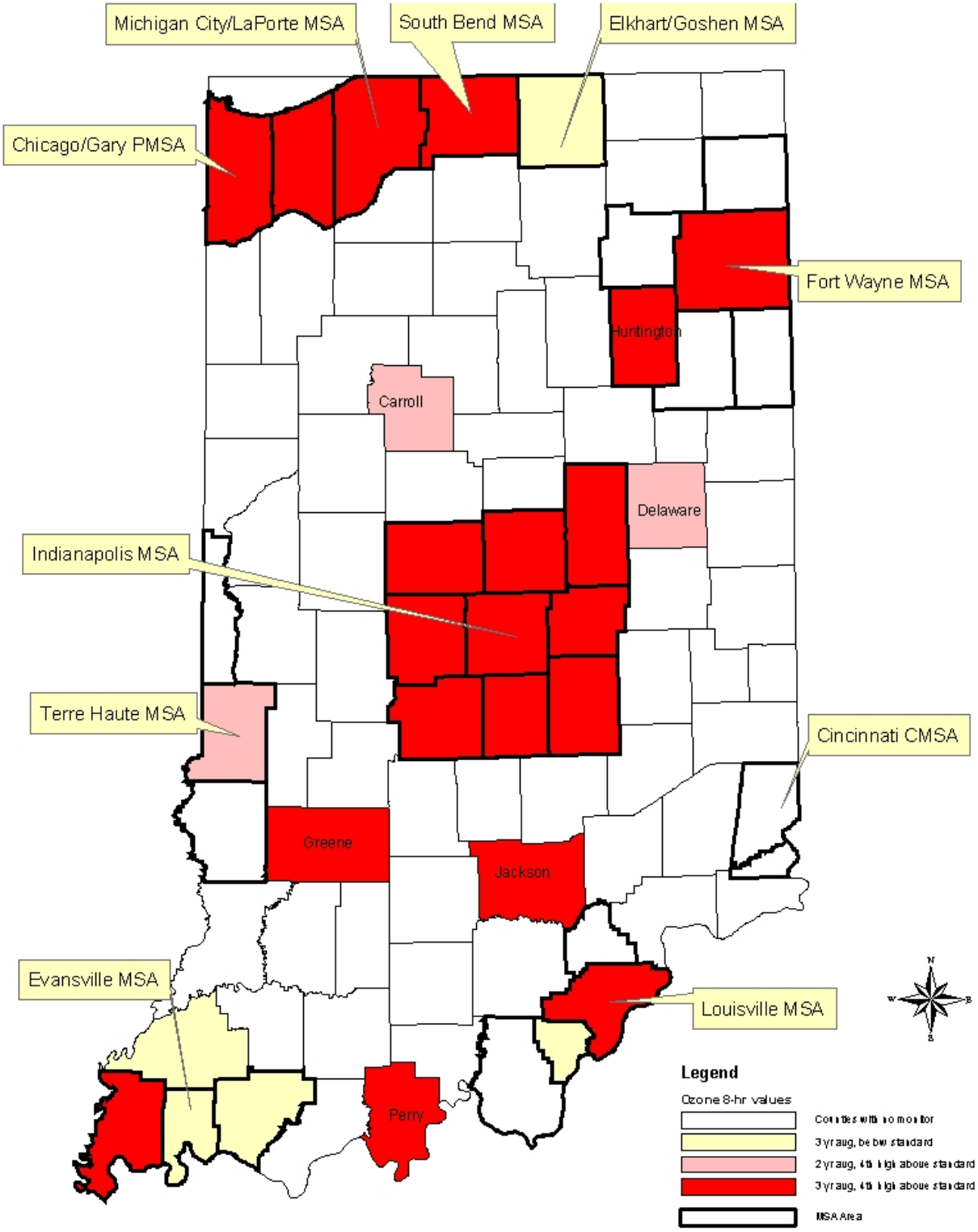


Figure 2

Indiana's July 15, 2003 Recommendations

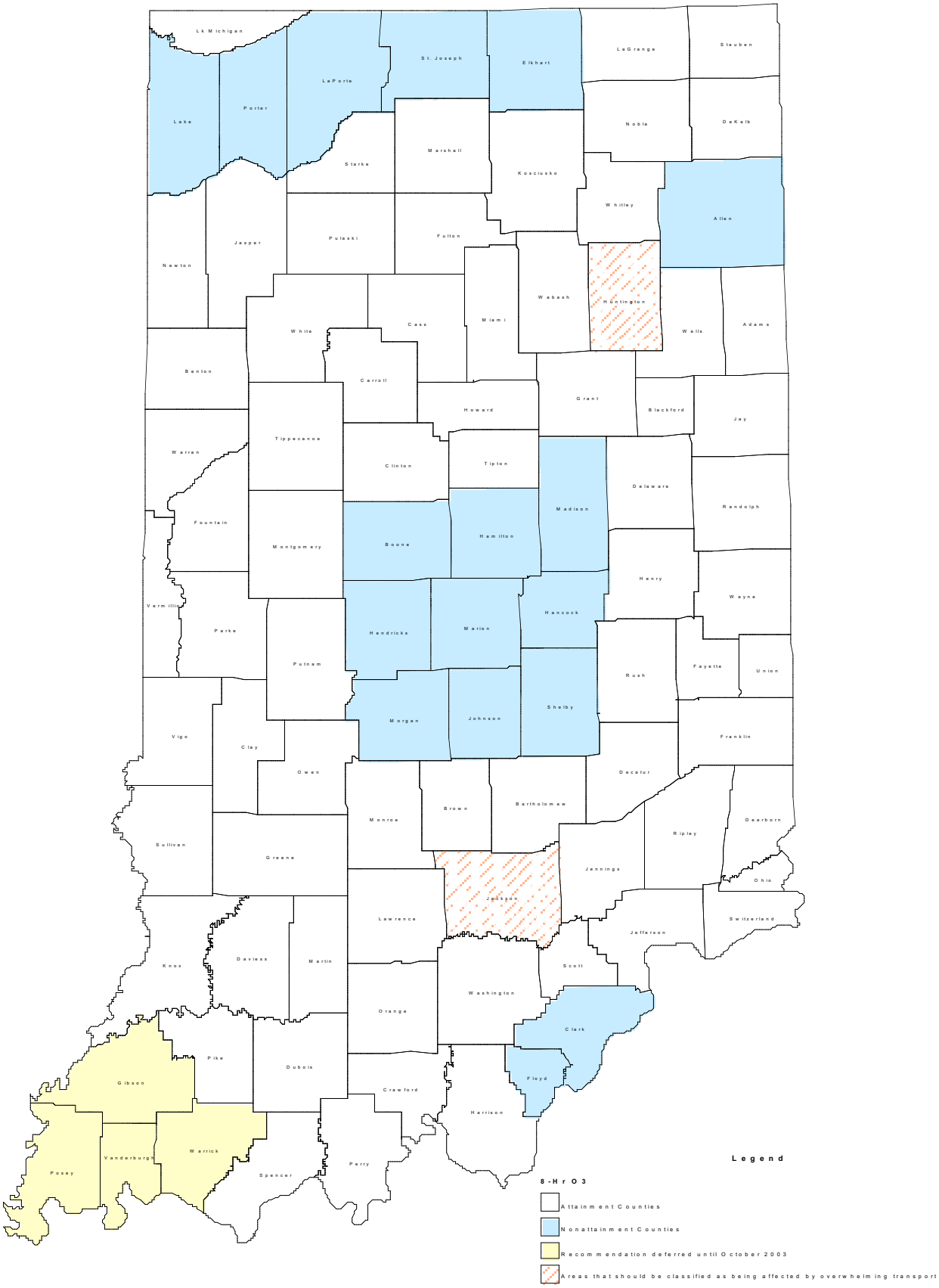
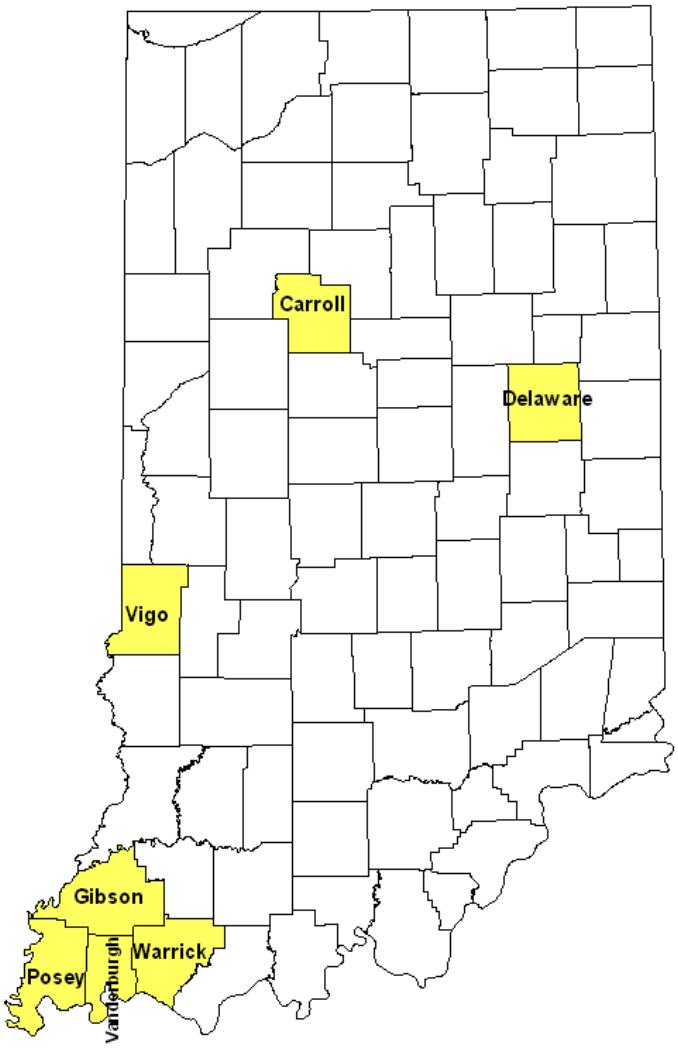


Figure 3

Areas That Can Be Affected by 2003 Ozone Season

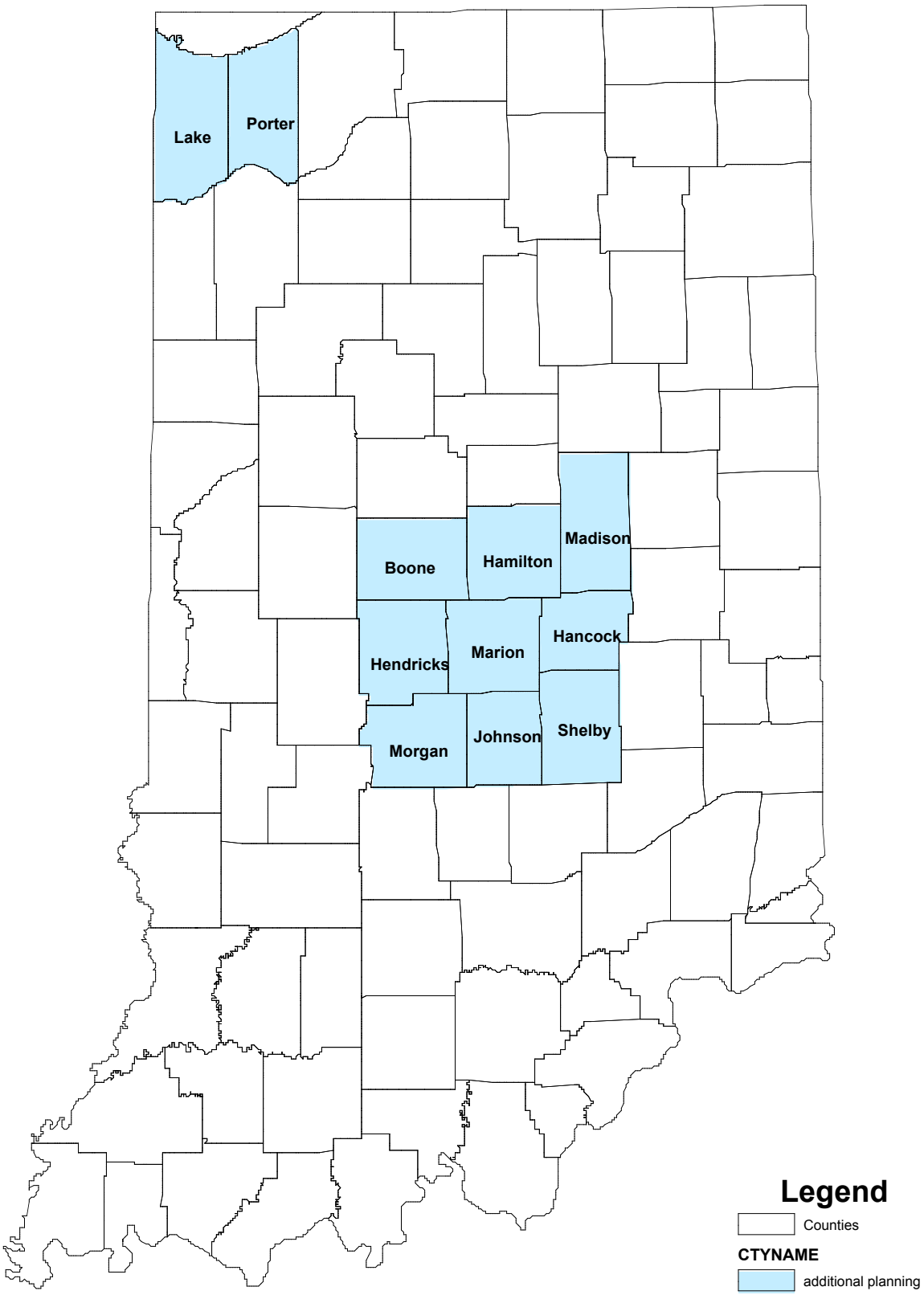


ATTACHMENT B

Summary of 8-Hour Ozone Values
By Monitor Site

COUNTY	MONITOR LOCATION	2000-2002 Value	2001-2003 Value
Allen	Leo H.S.	0.088	0.088
Allen	Fort Wayne	0.084	0.085
Boone	Whitestown	0.088	0.089
Carroll	Flora	0.087*	0.084
Cass (MI)	Cassopolis	0.09	0.093
Clark	Charlestown	0.09	0.092
Clark (IL)	West Union	0.08*	0.075
Delaware	Albany	0.089*	0.088
Elkhart	Bristol	0.073	0.093*
Floyd	New Albany	0.083	0.086
Gibson	Toyota	0.071	0.071
Greene	Plummer	0.089	0.089
Hamilton	Noblesville H.S.	0.093	0.096
Hancock	Fortville	0.092	0.094
Hendricks	Avon	0.088	0.085
Huntington	Roanoke	0.086	0.084
Jackson	Brownstown	0.085	0.085
Johnson	Trafalgar	0.087	0.086
Lake	Gary IITRI	0.083	0.084
Lake	Hammond	0.092	0.09
Lake	Lowell	0.079	0.081
LaPorte	Michigan City	0.092	0.093
LaPorte	LaPorte	0.084	0.087
Madison	E. Elementary	0.091	0.095
Marion	Mann Rd.	0.084	0.082
Marion	Harding St.	0.086	0.085
Marion	Fort Benjamin	0.089	0.092
Marion	Naval Air Center	0.089	0.089
Morgon	Monrovia	0.087	0.085
Porter	Ogden Dunes	0.09	0.087
Porter	Dunes Lake Shore	0.084	0.086
Porter	Valpo	0.086	0.086
Posey	St. Phillips	0.087	0.084
Shelby	Fairland	0.093	0.094
St. Joseph	Granger	0.09	0.093
St. Joseph	South Bend	0.087	0.088
St. Joseph	Potato Creek	0.083	0.084
Vanderburgh	Mill Rd.	0.083	0.083
Vanderburgh	Scott School	0.077	0.077
Vigo	Terre Haute	0.079	0.077
Vigo	Sandcut	0.091*	0.087
Warrick	Alcoa	0.084	0.085
Warrick	Boonville H.S.	0.08	0.081
Warrick	Tecumseh H.S.	0.08	0.081

*Calculation based on two-year average 4th high value.

ATTACHMENT C

Areas That Will Likely Require Additional Planning