APPENDIX N

Public Participation Process Documents

This page left intentionally blank.

Southwestern Indiana Area Redesignation Request and Maintenance Plan in Association with the Annual Standard for Fine Particulate Matter ($PM_{2.5}$)

Summary/Response to Comments Received at Public Hearing

IDEM requested public comment on the draft redesignation request and maintenance plan for Dubois, Vanderburgh, and Warrick Counties, Montgomery Township in Gibson County, Ohio Township in Spencer County, and Washington Township in Pike County, (herein referred to as the "Southwestern Indiana Area") from February 26, 2008 through March 31, 2008. A public hearing was also held on March 27, 2008. IDEM received comments from the following parties:

Chuck Bauer, Concerned Citizen	Bauer
Dale Beadles, Concerned Citizen	D. Beadles
Janet Beadles, Concerned Citizen	Ja. Beadles
Jed A. Beadles, Concerned Citizen	Je. Beadles
Teresa L. Beadles, Concerned Citizen	T. Beadles
Kathy Beck, Concerned Citizen	K. Beck
Nat Beck, President, Pike Gibson Citizens for Quality Environment	N. Beck
Christine Belt, Concerned Citizen	Belt
John Blair, President, Valley Watch, Inc.	Blair
Jessica Boyd, Concerned Citizen	Boyd
Samuel H. Bruntz, Staff Environmental Engineer, Alcoa, Inc.	Bruntz
David Coker, Concerned Citizen	Coker
Clayton Cole, Concerned Citizen	Cole
Jeff Courtney, Concerned Citizen	Courtney
David A. Crowe, Concerned Citizen	Crowe
Daniel Green, Concerned Citizen	Green
Kasey Greenwood, Concerned Citizen	Greenwood
Robert Grewe, President, Dubois County Development Corporation	Grewe
John Hewer, Concerned Citizen*[sic]*	Hewer
James Josey, Concerned Citizen	Josey
Bill Kothe, Concerned Citizen	Kothe
Rachael Lewis, Concerned Citizen	R. Lewis
Shannon Lewis, Vice President, Pike Gibson Citizens for Quality Environment	S. Lewis
Valerie J. McCoy, Concerned Citizen	V. McCoy
William McCoy, Refuge Manager, Patoka River National Wildlife Refuge and Management Area	W. McCoy
Ray McCormick, Concerned Citizen	McCormick
James Mosley, Environmental Consultant	Mosley
Dr. Stephen Obermeier, PhD, Purdue University, Civil Engineering/Geology	Obermeier
Joseph Nickolick, Board Member, Valley Watch, Inc.	Nickolick

Don Porter, Concerned Citizen	Porter
Pauline Singer, Member, Pike Gibson Citizens for Quality Environment	Singer
Stephen VanMeter, Member, Pike Gibson Citizens for Quality Environment	VanMeter
Richard Vernier, Concerned Citizen	R. Vernier
Sue Vernier, Conservation Chair, Evansville Audubon Society, Inc.	S. Vernier
Jean Webb, Concerned Citizen	Webb
Tiga Wertz, Concerned Citizen	Wertz
Steve Wahnsiedler, Concerned Citizen	Wahnsiedler
Bob Zasadny, Concerned Citizen	Zasadny
Ryan Zaricki, Concerned Citizen	Zaricki

Following is a summary of the comments received and IDEM's responses thereto:

General

Comment: The Dubois County Area Development Corporation supports IDEM's request to redesignate the Southwestern Indiana Area from nonattainment to attainment of the annual National Ambient Air Quality Standard (NAAQS) for fine particles simultaneously with U.S. EPA's approval of Indiana's redesignation request and maintenance plan. Redesignating the area to attainment will lead to a significant improvement in our region's economic development climate. We look forward to the completion of the final implementation efforts necessary to redesignate the area. (Grewe)

Comment: Alcoa Power Generating, Inc. – Warrick Power Plant and Alcoa, Inc. – Warrick Operations (hereafter Alcoa) appreciates the opportunity to provide comments in support of IDEM's petition to redesignate Warrick County to attainment of the annual NAAQS for fine particles. Alcoa is pleased that 2004 through 2006 ambient air monitoring data demonstrates that the 2006 design values for all of the $PM_{2.5}$ Federal Reference Method monitors located in the Southwestern Indiana Area are below the annual NAAQS for fine particles (15.0 $\mu g/m^3$).

Monitoring data for 2007 also supports Indiana's request to redesignate the area to attainment. Significant, permanent emissions realized as a result of the nitrogen oxide controls installed at regional power plants and industries no doubt have contributed to the attainment status indicated by the monitoring data.

Additional emissions reductions are expected as pollution control projects now under construction become operational. For example, the scrubbers being installed at the Aloca – Warrick Power plant are expected to provide a significant reduction in SO_2, emissions, which are a $PM_{2.5}$ precursor pollutant.

The Clean Air Interstate Rule (CAIR), Phase II of the NO_x SIP Call, Tier II vehicle emissions standards, diesel emission engine standards and ultra low sulfur diesel are expected to further improve air quality. Thus, Alcoa would expect the U.S. EPA to anticipate that future $PM_{2.5}$ monitoring data will show an improvement over presently available data. (Bruntz)

Response: IDEM appreciates the preceding comments and the support to redesignate the area to attainment. On July 11, 2008, the U.S. Court of Appeals for the District of Columbia Circuit Court vacated CAIR. Modeling analyses performed by

LADCO without CAIR in place still shows that existing and future improvements in air quality in the region due to other permanent and enforceable measures will ensure continued compliance (maintenance) with the annual NAAQS for fine particles.

Health Effects

Comment: Asthma rates are approximately five times higher in Evansville, Indiana than they are in Fort Wayne, Indiana. The only discernable difference that can account for this disparity is the fact that Fort Wayne has no coal-fired power plants in its proximity while Evansville is surrounded by coal-fired power plants. (Blair) (Wertz)

Response: Although fine particles are a known asthma trigger, there are a number of other triggers for asthma as well. The City of Fort Wayne has consistently monitored fine particle concentrations below the annual NAAQS for fine particles and is currently designated in attainment of standard. Based on 2004 through 2006 ambient air quality monitoring data, the Southwestern Indiana Area, including the City of Evansville, has attained the annual NAAQS for fine particles. In 2006, the U.S. EPA determined that the current annual NAAQS for fine particles is sufficient to protect public health.

Comment: In 2006, the U.S. EPA funded a study that was published in the March 2006 Journal of the American Medical Association. The study showed that exposure to a fine particle concentration level of 13.4 ug/m^3 would put 11.5 million elderly Americans at increased risk of cardiovascular and respiratory disease. This concentration level is 1.6 ug/m^3 lower than the current standard. More than one hundred and sixty-five million people live in areas where the fine particle levels are above the current annual NAAQS for fine particles.

We all need to ask what is at stake here. A study from the American Lung Association titled "New Studies Confirm that Current Levels of Particulate Air Pollution are Harmful to Human Health" illustrates the following statistics: Chronic exposure to particulate pollution shortens a person's life by one to three years. People with pre-existing cardiac and respiratory conditions have a higher than average risk of death from exposure to particulate pollution. Particulate pollution is also linked to heart rate variability and an increased risk of heart attacks. This is of particular concern when you look at the American Heart Association statistics that show that approximately 40.1% of the deaths in Pike County, Indiana and 37.99% of the deaths in Gibson County, Indiana are the result of cardiovascular disease. U.S. EPA's website also outlines the cardiovascular and respiratory health affects associated with exposure to fine particles. Please help us protect our quality of life. (N. Beck) (S. Lewis)

Comment: The principal issue being debated today is the level of particulate emissions in the lower Ohio River Valley of Indiana. It is clear that the present concentration level is essentially at the maximum permissible under law. Research has shown that fine particle pollution can lead to premature mortality, illness and lost productivity in the workplace. (Obermeier)

Comment: During the decision making process, stop and take a moment to consider those citizens that will be the most affected by your actions. Those most adversely affected will be our children, the elderly population, and people with chronic health conditions like asthma, and respiratory diseases. The decision you will make will have a major impact on all of the citizens of Indiana. The health and well-being of all Indiana citizens is in your hands. Now is the time to show us that you can act responsibly and do what is right to protect the citizens of Southwestern Indiana from harmful air pollution. You owe it to the citizens of Indiana and yourselves, please don't make the decision to redesignate the area in haste. I would like to see the quality of life improve here in our State, not worsen under your supervision. (Singer) (W. McCoy)

Comment: According to an article that appeared in the Evansville Courier and Press in March 2008, the U.S. EPA issued twenty-four Air Quality Alerts in the Southwestern Indiana Area in 2007. I wonder how many alerts were not issued in 2007 because monitoring data was not being tracked or recorded. I do not want to experience another respiratory attack like I had last year, I am afraid if there is a next time, the attack will even be more serious in nature. I hope the county health departments located in Southwestern Indiana and the U.S. EPA continue to take this health matter seriously and continue to issue Air Quality Alerts when necessary to protect the public from harmful levels of fine particles. (Belt)

Comment: I can literally feel the effects of the fine particles right now. I've gotten so use to the elevated levels of fine particles in the area when I wake up in the morning I can sense when the levels are elevated. I have to actually look on the internet every single day before I go outside and do anything strenuous to see if the fine particle levels are elevated. That is absurd. We should not grow accustom to getting sick. It's not normal for all of these children to have asthma. Redesignating the area to attainment will only encourage more pollution. (Boyd)

Comment: My family and I are active outdoors. In mid-2007, I discovered that residents of Southwestern Indiana are not typically notified in a timely manner of days that elevated levels of fine particles and/or ozone are likely to occur. As a result, I started monitoring $PM_{2.5}$ and ozone pollutant levels on my computer the best I can and notify my family when pollutant levels are expected to be elevated. (Bauer)

Comment: For years the ambient air quality monitors located in Southwestern Indiana have been the responsibility of the Evansville EPA. Over those same years, the Evansville EPA has been an advocate of relaxed air pollution rules and has shown a distinct bias toward increased economic activity instead of the protection of people's health. They have been unusually slow in alerting the public when pollutant levels increase to unsafe levels. (Blair)

Response: U.S. EPA's ambient air quality standards are based on multiple scientific studies and are set at levels designed to be protective of public health. In 2006, the U.S. EPA determined that the current annual NAAQS for fine particles is sufficient to protect public health. IDEM strives to assure that communities in Indiana comply with the health based standard as expeditiously as possible. Redesignating the area to attainment does not mean that public health will no longer be protected; it simply recognizes the fact that the area's air quality meets the annual health based NAAQS for fine particles. IDEM has prepared a maintenance plan to ensure continued compliance with the standard over time. Under that plan, IDEM will continue to monitor fine particle

levels and direct $PM_{2.5}$ and precursor emissions (NO_x and SO_2), and will take action to address any increases before a violation of the standard occurs.

The Evansville EPA and the Vanderburgh County Health Department Ozone Office review data from the ambient air quality monitors located in the area and weather forecasts provided by the National Weather Service to predict ground-level ozone and fine particulate levels.

Whenever it seems likely that ground-level ozone and fine particle levels in Southwestern Indiana may reach the orange, or "Unhealthy for Sensitive Groups" range based on U.S. EPA's Air Quality Index (AQI), the Evansville EPA, in cooperation with the Vanderburgh County Health Department Ozone Office and the Indiana Department of Environmental Management, declares a "AIR QUALITY ACTION DAY".

IDEM intends to continue working cooperatively with the Evansville EPA and the Vanderburgh County Health Department Ozone Office to ensure that Air Quality Action Days are issued whenever necessary to protect the citizens of Southwestern Indiana from harmful levels of ground-level ozone and fine particles.

IDEM has created SmogWatch www.smogwatch.in.gov to share air quality forecasts for each day. SmogWatch provides daily information about ground-level ozone and particulate matter air quality forecasts, health information, and monitoring data for seven regions of Indiana. Indiana experiences its highest levels of ground-level ozone from mid-May until mid-September. During this time, Smog Watch provides daily health information and ozone forecasts. Particulate matter information and forecasts are available year-round.

Comment: According to health studies located on EPA's website, there is substantial evidence that exposure to fine particles is harmful to the cardiovascular and respiratory health of the persons exposed. These adverse health effects can result in increased hospital admissions, emergency room visits, absences from school or work and restricted activity days. I can personally account for these severe adverse health effects, as I suffered a severe respiratory allergic attack as a direct result of exposure to elevated levels of fine particles. An Air Quality Action Day was not issued on this particular day, but were issued two and three days after my attack. This incident was very troubling to me, since I had never experienced a severe respiratory problem until I moved to the Evansville area. I later, discovered according to the monitoring data, $PM_{2.5}$ levels were 27.7 $\mu g/m^3$ and 29.9 $\mu g/m^3$. Incidentally, the 29.9 $\mu g/m^3$ reading at the Mill Road monitoring site was not listed in the monitoring information provided by the Vanderburgh County Health Department. As to why this information was left out can only be left to conjecture. (Belt)

Response: IDEM agrees with the commenter on the potential health effects of exposure to elevated levels of fine particles and strives to assure that communities in Indiana comply with the health based standards as expeditiously as possible.

IDEM intends to continue working cooperatively with the Evansville EPA and Vanderburgh County Health Department Ozone Office to ensure that Air Quality Action Days are issued whenever necessary to protect citizens of Southwestern Indiana from harmful levels of ground-level ozone and fine particles.

IDEM has created SmogWatch www.smogwatch.in.gov to share air quality forecasts for each day. SmogWatch provides daily information about ground-level ozone

and particulate matter air quality forecasts, health information, and monitoring data for seven regions of Indiana.

Comment: IDEM needs to acknowledge that adverse health impacts associated with fine particulate matter pollution also carries with it untold economic impacts related to lost time at work, unemployment, public assistance, increased medical costs and demands for more medical facilities. Any decision made by IDEM and/or the U.S. EPA to lessen control and containment of fine particulate matter should grant every benefit of the doubt in favor of protecting the health and well-being of the citizens of Indiana. It is my hope that IDEM and the U.S. EPA delay redesignating the Southwestern Indiana Area to attainment of the annual NAAQS for fine particles (W. McCoy)

Response: IDEM agrees with the commenter on the potential adverse health effects and economic impacts associated with exposure to elevated levels of fine particles. However, ambient air quality monitoring data for fine particles for the years 2004 through 2006 demonstrates that air quality has met the annual NAAQS for fine particles in the Southwestern Indiana Area. Therefore, the area is eligible for its air quality status to be classified consistent with other counties in the nation that measure air quality that meets the standard.

Comment: There is indisputable evidence that fine particulate matter pollution causes serious health problems and higher morbidity rates especially for the young, old and those suffering from debilitating conditions. If IDEM errs in their predictions regarding permanent and enforceable emissions reductions of fine particle matter, it will surely result in adverse health impacts for some of these less fortunate residents of our communities in Southwestern Indiana. (W. McCoy)

Response: IDEM agrees with the commenter on the potential health effects of exposure to elevated levels of fine particles. However, future year modeling projects air quality in the area to improve over the next ten years and continue to attain the current annual NAAQS for fine particles. This modeling takes into account projected emissions increases from industry and population growth, as well as national, regional and local emissions control strategies already in place and strategies to be implemented in the next few years. Therefore, the area is eligible for its air quality status to be classified consistent with other counties in the nation that measure air quality that meets the standard.

24-Hr. $PM_{2.5}$ Standard

Comment: Based on the 2005 ambient air quality monitoring data, fine particle levels can stay elevated for long periods of time. There have been days in the last two years when visibility was nil and asthma attacks ran rampant in the Southwestern Indiana Area. In 2006, fine particle levels soared to a whopping peak level of 73.6 ug/m^3 on a day that a high school athlete died of an unknown heart problem in Henderson, Kentucky. It was later found that his condition was consistent with illness exacerbated by increased levels of fine particle pollution. Such high readings are not a fluke. When conditions are right, fine particle formation from sulfur and nitrogen emissions from the numerous power plants in the region can get out of hand. Temperature inversions coupled with hot

weather can cause severe build-up of $PM_{2.5}$ that results in increased respiratory illness and other maladies, especially to people who suffer from these sorts of illness already. (Blair)

Response: While IDEM agrees that current ambient monitoring data indicates that the area is violating the 24-hour standard for fine particles. Designations for the new 24-hour standard have not been made by the U.S. EPA at this time. IDEM anticipates that if designations are made in late 2008 or early 2009, the area will have realized air quality benefits from recently implemented emissions control strategies and may not be violating the daily standard when designations occur.

Control Measures

Comment: It's hard to believe that pollution control technology will be able to reduce the overall amount of fine particle pollution to a level in compliance with the annual NAAQS for fine particles, as required by the Clean Air Act, especially within the next five years as stated in the redesignation petition. Are we to believe that this never-before attained record-breaking effort to reduce fine particle pollution will be accomplished every year in our near future? It seems very unlikely. (W. McCoy)

Response: Ambient air quality monitoring data for all of the monitoring sites located in the Southwestern Indiana Area demonstrate that the area has attained the annual NAAQS for fine particles for the three-year period ending in 2006. U.S. EPA and LADCO modeling for future year design values have consistently shown that even without CAIR existing and future improvements in air quality in the region due to declining emissions resulting from other future national and local permanent and enforceable measures will ensure continued compliance (maintenance) with the standard.

Furthermore, because this area is subject to significant transport of pollutants, significant regional SO_2 and NO_x reductions will ensure continued compliance (maintenance) with the standard with an increasing margin of safety. Therefore, the area is eligible for its air quality status to be classified consistent with other counties in the nation that measure air quality that meets the standard.

Comment: Section 107 (c) of the Clean Air Act requires a determination to be made that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from the State Implementation Plan and other federal requirements. If that is so, then IDEM has determined exactly were the pollution in this area is coming from. Where can a report on these findings be located, and what measures have been taken to permanently reduce fine particle and ground-level ozone levels in the region? (N. Beck)

Response: U.S. EPA's Redesignation Guidance (Page 9) states, "A State may generally demonstrate maintenance of the NAAQS by either showing that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory, or by modeling to show that the future mix of sources and emissions rates will not cause a violation of the NAAQS."

U.S. EPA and LADCO modeling for future year design values have consistently shown that even without CAIR existing and future improvements in air quality in the region due to declining emissions resulting from other future national and local

permanent and enforceable measures will ensure continued compliance (maintenance) with the standard. Based on this presentation, the Southwestern Indiana Area Nonattainment Area for fine particles meets the requirements for redesignation under the CAA (Section 107 (d) (3)) and U.S. EPA guidance. No specific report that addresses future emission projects on a source specific level has been performed by IDEM .

Annual $PM_{2.5}$ Standard

Comment: The chemistry of fine particle formation is well established and it is estimated by the U.S. EPA that more than 24,000 Americans have their lives shortened every year because of fine particle induced asthma, stroke, cancer and heart attacks. Recognizing this, U.S. EPA's Clean Air Scientific Advisory Committee, (CASAC), a blue ribbon panel of scientists recommended in 2005 and 2006 that the annual NAAQS for fine particles be set at a level as low as 13 ug/m^3 and no higher than 14 ug/m^3. For the first time in history, the U.S. EPA failed to heed the advice of the CASAC and retained the existing annual NAAQS for fine particles (15.0 ug/m^3). It was clear that the U.S. EPA was ignoring the scientific evidence on which the Clean Air Act requires standards to be set, "with an adequate margin of safety to protect human health." (N. Beck) (Blair) (Boyd) (S. Lewis) (S. Vernier) (Webb)

Comment: As someone who has been through having both parents suffer with and eventually succumb to lung cancer, I am particularly aware of the terrible nature of lung diseases. I understand that U.S. EPA's own scientists have recommended a more stringent annual NAAQS for fine particles as evidence indicated that significant health issues were observed at levels below the current standard of 15.0 ug/m^3. (R. Vernier)

Comment: Congress clearly wanted the Clean Air Act to function to protect health with a margin of safety. This petition is a rejection of the principles codified in the Clean Air Act in that it is clearly designed to allow for increased pollution in an area that already has air saturated with toxic chemicals, fine particles and ozone. All these chemicals impact the general health of the people of this region. (Blair)

Response: U.S. EPA's ambient air quality standards are based on multiple scientific studies and are set at levels designed to be protective of public health. The standards are reviewed every five years to determine whether they are sufficient to protect public health. In 2006, the U.S. EPA determined that the current annual NAAQS for fine particles is sufficient to protect public health. As studies continue in the future, the information will be used to determine if any changes need to be made to the annual NAAQS for fine particles.

Margin of Safety

Comment: The "adequate margin of safety" provision Congress wrote into the Clean Air Act and directed the U.S. EPA to demand as a protective margin for public health protection is not adequately addressed in the redesignation petition. This was in recognition of the real fact that high levels of fine particulate matter set at 15.0 ug/m^3 offers great harm to the health and well-being of many people. So, what is the "margin of safety" level? According to the redesignation petition, it appears future readings will be okay if they reach the levels recorded in 2005. (W. McCoy)

Comment: The whole NAAQS section of the Clean Air Act is designed to be protective of human health with an adequate margin of safety. The action IDEM is seeking to invoke today is not protective of the established understanding of human health and should be withdrawn by either IDEM or the U.S. EPA. (Blair)

Response: Ambient air quality monitoring data for all of the monitoring sites located in the Southwestern Indiana Area demonstrate that the area has attained the annual NAAQS for fine particles for the three-year period ending in 2006. U.S. EPA's Redesignation Guidance (Page 9) states, "A state may generally demonstrate maintenance of the NAAQS by either showing that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory, or by modeling to show that the future mix of sources and emissions rates will not cause a violation of the NAAQS."

U.S. EPA and LADCO modeling for future year design values have consistently shown that even without CAIR existing and future improvements in air quality in the region due to declining emissions resulting from other future national and local permanent and enforceable measures will ensure continued compliance (maintenance) with the standard. Furthermore, because this area is subject to significant transport of pollutants, significant regional SO_2 and NO_x reductions will ensure continued compliance (maintenance) with the standard with an increasing margin of safety. Based on this presentation, the Southwestern Indiana Area Nonattainment Area for fine particles meets the requirements for redesignation under the CAA (Section 107 (d) (3)) and U.S. EPA guidance.

2005-Baseline Year

Comment: The maintenance plan states that air quality data for the year 2005 will be used as a baseline. The air quality results from the year 2005 were called abnormal in the petition. Why is Indiana using 2005 as a baseline if the State considers the year abnormal? The annual average value for 2005 was also considerably above the standard (17.0 ug/m^3). (N. Beck) (S. Lewis) (W. McCoy)

Comment: Based on the ambient air quality monitoring data for 2004 through 2006 data, the Southwestern Indiana Area is barely meeting the annual NAAQS for fine particles. In the year 2005, all of the area's ambient air quality monitoring sites were above the standard (15.0 ug/m^3). It seems ironic that IDEM points out on Page 8 of the redesignation petition that "the elevated value for 2005 is considered an abnormal occurrence" then on Page 9 states that "Indiana is using 2005 as the base-year because it represents the center of the three-year design value". By using the high readings from 2005 for future year comparisons, this will enable IDEM to claim that fine particle concentration levels are not getting worse even though levels might be at a level in violation of the annual NAAQS as it was in 2005. (W. McCoy)

Response: In accordance with U.S. EPA's "Guideline on Data Handling Conventions for the PM NAAQS," U.S. EPA-454/R-99-008, April 1999, the annual ambient air quality standard for fine particles is met at an ambient air quality monitoring site when the three-year average of the annual average of fine particle concentrations (or the design value) is less than or equal to 15.0 μg/m^3. When this occurs, the site is said to be in attainment. Ambient air quality data from all the monitoring sites indicate that air

quality in the Southwestern Indiana Area met the annual NAAQS for fine particles for the three-year period ending in 2006 and is eligible for redesignation. Indiana is using 2005 as the base year because it represents the center of the three-year design value.

Monitoring Data/Missing Data

Comment: The U.S. EPA should take into account the fine particle monitoring data as it stands, but also consider the fact the monitoring data is incomplete and when all data sources are considered, the area is still in nonattainment of the annual NAAQS for fine particles. (Belt) (Wertz)

Comment: Data gaps like we have uncovered are exceptionally germane to making such decisions as IDEM is making with this redesignation petition. Sound data is mandatory if we are ever going to improve the public health of citizens in the region. (Blair)

Comment: If our design value was approaching the level recommended by CASAC of 14 ug/m^3, a level that is considered "safe", data missing on days of high levels would not be such an issue. But, in this case, IDEM is seeking to use incomplete data, knowing that there are significant and germane data gaps in its veracity with design values extremely close to the standard already. (Blair)

Comment: IDEM would have us believe that the actual data shows that over the last several years fine particle levels have improved to the point that we can be considered in "attainment" of the annual NAAQS for fine particles. Unfortunately, the data IDEM seeks to base this determination has serious data gaps and should stop this action in its tracks until at least another year of data is collected in order to see a valid picture of the trends IDEM suggests will make and keep our air clean and healthy. (Blair)

Comment: Using a three-year design value based on incomplete data to determine whether an area has attained the standard that is already set too high to be protective of human health is not what the whole NAAQS process was intended to be when Congress passed the Clean Air Act. (Blair)

Comment: The three-year readings (2004-2006) for this region, even by IDEM calculations using incomplete data, meet the standard with little room for error. One monitor, at the University of Evansville even surpasses the standard but through "rounding" manipulation IDEM claims that levels above the standard are "equal to or lower than the standard". Valley Watch believes that this petition should be rejected due to the high level of uncertainty presented by the data that IDEM is using that has a significant number gaps at times when those gaps could, indeed, change the outcome of the petition. (Blair)

Comment: Valley Watch is uncertain what the compilation of another year's data would yield, but whatever the result would be, it is essential that a redesignation be based on complete and verifiable data. In this case, data is neither complete nor verifiable and this petition should be rejected. (Blair)

Comment: What is the reason so many days of data are missing, especially when evidence is available to show that fine particle levels were high enough to raise the overall design value that pertains to air quality designations. There is no explanation attached to anything we have read to explain why any data is missing. Who knows? Was

it lost? Was it contaminated? Are the filters still available for analysis? Have they been tampered with? These are questions that need answers before we can claim air quality is now safe. (Blair)

Comment: In 2006 and 2007 numerous readings from the "official" monitor located at the Evansville Civic Center were missing entirely. In fact, during the months of June and August, two months when fine particle formation has historically been at its peak, more than half of the data is missing from this analysis. In June, six out of ten measurements are missing. In August, five out of ten measurements are also missing. Who knows what the reading on the Civic Center monitor would have been. Valley Watch believes that this significant data gap is sufficient reason to stop this process before it gets any further. But it is not simply the fact that the data is missing that is a problem, it is also a problem that on nine of the eleven missing days during those months, fine particle levels at the other Evansville monitors showed values in excess of the annual NAAQS with several reaching levels that doubled the standard. (Blair) (Boyd)

Comment: In the opening statement of the public hearing it was stated that three complete years of data are needed before redesignation can occur. As I understand it, there are not three years of complete quality assured ambient air quality monitoring data for the years 2004 through 2006 since sections of the data are unaccounted for. That should put a stop to this process right there on a technicality. (N. Beck)

Comment: Due to the questions surrounding the validity of the ambient air quality monitoring data, I am opposed to the Southwestern Indiana Area being reclassified to attainment at this time. (Zaricki)

Comment: When air quality monitoring data is missing or there are gaps in the data, an assumption should be made that the monitoring sites were in violation of the standard during this timeframe. At a minimum, when data is missing or gaps in the data exist, the assumed ratio of noncompliance days should be based on the actual ratio of noncompliance days experience at each of the ambient air quality monitoring sites during a specified timeframe. (Bauer)

Comment: Vanderburgh County should not be able to qualify for attainment status nor Southwestern Indiana in general based on ambient air quality monitor readings. In the past year, ambient air quality monitoring data shows that Vanderburgh County violated the annual NAAQS for fine particles several times. There is also a significant amount of data missing as well. (Wertz)

Response: Missing data may be the result of a variety of problems including power failure, machine malfunction, collection errors, and the sample time out of limits. Using available data, the 2004-2006 three-year average for fine particles (14.8 $\mu g/m^3$) for the University of Evansville monitor is incomplete; as it is missing the required amount of data in the second quarter of 2005. Based on a missing data review and data substitution performed by IDEM (see Appendix C) in accordance with U.S. EPA's "*Guideline on Data Handling Conventions for the PM NAAQS*", issued April 1999, the incomplete design value of 14.8 $\mu g/m^3$, is still identified as the monitor's true design value. As such, monitoring data for fine particles for the years 2004 through 2006 demonstrates that air quality has met the annual NAAQS for fine particles in the Southwestern Indiana Annual Fine Particle Nonattainment Area. Therefore, the area is eligible for its air quality status to be classified consistent with other counties in the nation that measure air quality that meets the standard.

Comment: Current fine particle and ground-levels ozone concentration levels are too high in the Evansville, Indiana area. It appears IDEM is trying to utilize the period of time when the most favorable ambient fine particle air quality monitoring data has occurred to redesignate the Southwestern Indiana Area into attainment. This will allow further pollution to occur in the region. (Bauer)

Response: Quality assured ambient air quality monitoring data for the years 2004 through 2006 demonstrates that air quality has met the annual NAAQS for fine particles in the nonattainment area. This fact, accompanied by the permanent and enforceable reductions in emission levels, supports that the area is eligible to be redesignated to attainment.

Comment: IDEM is proposing to redesignate the Southwestern Indiana Area based on the fact that the ambient air quality monitoring data was just below the standard two out of the last three years (2004 and 2006) even though the data of the third year (2005) was well above the standard. It should be noted that U.S. EPA data also shows that the area was in nonattainment of the standard the previous four years (2000-2003) or five out of the last seven years. Is it appropriate to redesignate the area at this time and remove the ambient air quality monitoring sites in the region that are in place to help protect our health? (VanMeter)

Comment: The redesignation petition states that IDEM is proposing to remove the ambient air quality monitoring sites from the Southwestern Indiana Area for a period of eight years based on the fact that the 2004-2006 monitoring data is slightly below the annual NAAQS for fine particles. Any reduction of pollution is a positive step, but this reduction is over a short period of time and removing the monitoring sites is a premature move on IDEM's part. (VanMeter)

Response: In accordance with U.S. EPA's "Guideline on Data Handling Conventions for the PM NAAQS," U.S. EPA-454/R-99-008, April 1999, the annual ambient air quality standard for fine particles is met at an ambient air quality monitoring site when the three-year average of the annual average of fine particle concentrations (or the design value) is less than or equal to 15.0 $\mu g/m^3$. When this occurs, the site is said to be in attainment. Ambient air quality data from all the monitoring sites indicate that air quality in the Southwestern Indiana Area has attained the annual standard for fine particles for the three-year period ending in 2006 and is eligible for redesignation.

The purpose of the redesignation petition and maintenance plan is to demonstrate and ensure that compliance of the air quality standard will be maintained in the future. As such, Indiana commits to continue monitoring concentrations of fine particles at the current monitoring site locations and will consult with U.S. EPA Region V staff prior to making any changes to the monitoring network.

Independent Data Study

Comment: IDEM's monitoring data for the Mill Road Monitor on July 7, 2007, as supplied by the Vanderburgh County Ozone Officer, JoAnn Alexandrovich, indicates a reading of 9.0 ug/m^3 for that day. However, the data taken directly from IDEM's website for that monitor indicates that readings on that monitor reached at least a 24-hour average of 32.1 ug/m^3. There is no explanation in the documentation as to why such disparities exist. Therefore, Valley Watch recommends that a truly independent analysis of previous years and 2008 data be undertaken to actually determine the veracity of the data. With that in mind, Valley Watch contacted Dr. Mark Krahling, Analytical Chemical Professor with the University of Southern Indiana to see if his department would be willing to undertake such a study to determine the validity of the data IDEM is using to support the redesignation request and maintenance plan for the Southwestern Indiana Area. His response was generally positive and he is willing to discuss how such a study could be performed and how it would be funded. In that regard, Valley Watch is willing to fund the first $1,000 of such a study if that would be matched by IDEM, the local EPA and/or the regional Chambers of Commerce. (Blair)

Response: Fine particle concentration levels are monitored at Mill Road monitoring site on a continuous basis to provide hourly values to IDEM's website and to AIRNow, EPA's national mapping program, on a near real time basis. These data are not validated at that time. The raw 24-hour value recorded for July 7, 2007, is 21.3 ug/m^3 and the validated value is 21.7 ug/m^3. The highest rolling 24-hour raw value on this date began at 5:00 p.m. and was 28.7 ug/m^3 and the validated value during this period was 29.1 ug/m^3. These data are not used for attainment/nonattainment purposes as no continuous monitors were designated as equivalent monitors at that time.

The Federal Reference Method (FRM) sampler collects a 24-hour value every third day at this site. Sample days in July 2007 were on July 2, 5, 8, 11, 14, etc. The following comparison of the validated FRM data to the validated continuous data indicates a strong correlation between the values collected from the two methodologies:

Date	FRM Data (ug/m^3)	Continuous Data/24-Hr. Avg. (ug/m^3)
7/2/07	7.9	8.5
7/5/07	9.0	8.9
7/8/07	23.4	24.8
7/11/07	6.4	4.7
7/14/07	13.9	15.4

IDEM has quality assured all the ambient air quality monitoring data for fine particles in accordance with 40 CFR 58.15 and the Indiana Quality Assurance Manual. Ambient air quality monitoring data from all the monitoring sites indicates that air quality in the Southwestern Indiana Area met the annual NAAQS for fine particles for the three-year period ending in 2006 and is eligible for redesignation. As such, IDEM does not foresee the need or have the funding available, to participate in an independent analysis of 2008 monitoring data and other previous years at this time. IDEM welcomes Valley Watch to conduct an independent study if so desired.

Delay Redesignation

Comment: IDEM is to be congratulated for putting together and analyzing a large volume of ambient air quality monitoring data for the Southwestern Indiana Area as contained within the redesignation request and maintenance plan. However, it seems presumptuous at this time for IDEM to recommend the area be redesignated to attainment based on current ambient air quality monitoring data. A review of the data collected from the four monitoring sites of record in Evansville and Jasper from 2000 through 2006 shows Vanderburgh and Dubois Counties were in violation of the annual NAAQS for fine particles five out of seven years. (W. McCoy)

Comment: I am not opposed to industry, economic growth, or improvement, but not at the expense of our health. Based on current ambient air quality monitoring data, it is still too early to determine whether or not the area can demonstrate attainment of the standard over a sustained period of time into the future. Therefore, IDEM should not redesignate the area to attainment at this time. (VanMeter)

Comment: I strongly urge that no change in the area's designation status be made for at least two years to see if the current downward trend toward compliance levels continues to reduce the levels of pollution below the annual NAAQS for fine particles. (Zasadny)

Comment: IDEM should use 2005 through 2007 monitoring data to determine the area's attainment status. The existing monitoring data for the third quarter of 2007 (July thru September) is significantly higher than the other three quarters of the year. However, the monitoring data for 2007 is missing data for the month of August. Therefore, the monitoring results for the third quarter are biased higher. Since the area's 2004 through 2006 design value is right at the standard, biasing your results higher is not protecting human health. (Webb)

Comment: If ambient air quality monitoring data for the year 2005 through 2007 is used, which is appropriate, it is easy to find huge data gaps. Therefore, any request to redesignate the area to attainment at this time would be dubious if not fraudulent. (Blair)

Comment: IDEM claims to have quality assured ambient air quality monitoring data to support this redesignation petition. However, approximately 13% of the ambient air quality monitoring data is missing in 2006 and 16% in 2007, mostly during periods when high levels of fine particles are historically recorded. Therefore, the ambient air quality monitoring data used to support this redesignation request must be thrown into question. (Blair) (Boyd)

Comment: At the least, going forward, please continue to gather and analyze data from the few ambient air quality monitoring sites that are currently in place in the Southwestern Indiana Area. If after two or three years of data collection, there is legitimate proof that air quality is improving and the three-average is well below the annual NAAQS, it would be reasonable and responsible at that time to revisit this issue. I respectfully request that IDEM not redesignate the area from nonattainment to attainment status of the annual NAAQS for fine particles at this time. (V. McCoy)

Comment: IDEM is reporting that the Evansville Metropolitan Statistical Area (MSA), which includes Gibson, Posey, Warrick, and Vanderburgh Counties, is barely below the annual NAAQS for fine particles. According to IDEM's 2008 Ambient Air

Monitoring Plan (Page 40), it states that the highest site design value in an MSA is generally determined to be the design value for the area. Hence, Evansville's 2004-2006 design value (14.8 $\mu g/m^3$) was barely under the annual NAAQS for fine particles while the Dubois County monitor average was equal to the standard (15.0 $\mu g/m^3$). This is even more troubling when you look at Appendix A of the redesignation request and maintenance plan, which shows that all of the monitors recorded readings equal to or above 17.0 $\mu g/m^3$. Additionally, Appendix A illustrates that 5 out of the last 8 years the Southwestern Indiana Area has been above the standard; with 2005 values being the second highest during this eight-year period. (S. Lewis) (N. Beck)

Comment: We are opposed to removing the nonattainment designation status from the Southwestern Indiana Area at this time. The ambient air quality monitoring data shows that the annual NAAQS for fine particles has only been met two out of the last seven years. 2005 was one of the worst years of record, with readings exceeding 17.0 $\mu g/m^3$. It was the 2nd highest reading in seven years of monitoring. It is also important to note that the ambient air quality monitoring readings for Vanderburgh County met the standard by only 0.2 $\mu g/m^3$ margins in 2006; while readings at the Dubois County monitor were equal to the annual NAAQS for fine particles. (D. Beadles) (Ja. Beadles) (Je. Beadles) (T. Beadles) (K. Beck) (Courtney) (Crowe) (Green) (Greenwood) (Hewer) (Josey) (Kothe) (R. Lewis) (S. Lewis) (Porter) (Singer) (Wahnsiedler)

Comment: As a resident of Gibson County, I would like to express my concern about IDEM's proposal to redesignate parts of Southwestern Indiana, including Gibson County as being in attainment with the annual NAAQS for fine particles. As I understand it, U.S. EPA's ambient air quality monitoring data indicates that the area has been in nonattainment of the standard five out of the last eight years and during the last three years were essentially right at the limit. (R. Vernier)

Comment: Air quality monitoring data for 2005 shows that the annual average value was 17.0 ug/m^3. Health experts recommend that fine particles levels not exceed 14.0 g/m^3 to be safe. The year 2005 was one of the worst years on record. IDEM failed miserably to protect the health and well-being of Indiana citizens. Where are the permanent improvements that IDEM claims to have put in place? How can citizens of Indiana put their trust and faith in IDEM when IDEM is going to use 2005 ambient air quality monitoring data as a guide to predict future air quality? IDEM should ensure that annual fine particle levels not exceed 14.0 ug/m^3, not just settle for levels below 2005. (Singer)

Comment: The Evansville Audubon Society would like to express our concern with Indiana's request to redesignate the Southwestern Indiana Area from nonattainment to attainment of the annual NAAQS for fine particles. U.S. EPA air quality monitoring data indicates that the area has been in nonattainment of the annual NAAQS for fine particles five out of the last eight years. For the three years (2004-2006) in which the area attained the annual NAAQS for fine particles, the three-year average of the annual average is essentially equal to the standard. During this three-year timeframe, ambient air quality monitors recorded levels that exceeded the annual NAAQS for fine particles. It is not clear in the redesignation request and maintenance plan how instrument accuracy, repeatability, and precisions were accounted for and if an error analysis was performed. (S. Vernier) (Singer)

Response: Based on information taken from U.S. EPA's "Guideline on Data Handling Conventions for the PM NAAQS," U.S. EPA-454/R-99-008, April 1999, the annual ambient air quality standard for fine particles is met at an ambient air quality monitoring site when the three-year average of the annual average of fine particle concentrations is less than or equal to 15.0 $\mu g/m^3$. Quality assured ambient air quality monitoring data for fine particles for the years 2004 through 2006 demonstrate that the Southwestern Indiana Area has attained the annual NAAQS for fine particles. Furthermore, ambient air quality monitoring data for 2005 through 2007 also demonstrates that the area has attained the annual NAAQS for fine particles. Therefore, the Southwestern Indiana Area is eligible for its air quality status to be classified consistent with other counties in the nation that measure air quality that meets the annual NAAQS for fine particles.

If emissions start increasing after the area is redesignated, or monitored violations occur, as part of the maintenance plan, IDEM commits to taking swift action in order to reverse the trend and take whatever action is necessary to ensure that the standard is reattained as expeditiously as possible.

IDEM has quality assured all of the ambient air quality monitoring data for fine particles in accordance with 40 CFR 58.15 and the Indiana Quality Assurance Manual.

Comment: IDEM's proposal to redesignate the area to attainment is premature and a great cause for concern among those who live in Southwestern Indiana. By lowering the standards for clean air, IDEM, whose mission is to create a healthier environment for our citizens, is disregarding the health and welfare of the people they are responsible to protect. (V. McCoy)

Comment: It seems to matter little what science might say or how many people become sick due to the enormous levels of myriad pollution in this region, the only thing that the State really desires is additional economic growth, even if that growth can be shown to be short term and deleterious to citizen's health. If the redesignation request and maintenance plan for the Southwestern Indiana Area is approved by the U.S. EPA, it will mean that people in this region will once again be forced to subsidize the profits of polluting industry with their health. If the redesignation request and maintenance plan is approved at the federal level it will serve to accelerate the feeling of disenfranchisement among the citizens of Southwestern Indiana. One thing is certain, however, and that is that this redesignation request and maintenance plan will not make our air healthier. In fact, the likely outcome is further degradation of regional air quality and those are the facts for which the Governor and IDEM should be very ashamed. (Blair)

Response: IDEM agrees that there are known health effects associated with exposure to elevated levels of fine particles. Federal ambient air quality standards are set at levels determined to be protective of human health. Ambient air quality monitoring data for fine particles for 2004 through 2006 demonstrates that air quality in the Southwestern Indiana Area has attained the annual NAAQS for fine particles. Therefore, the area is eligible for its air quality status to be classified consistent with other counties in the nation that measure air quality that meets the annual NAAQS for fine particles.

Comment: Until there is more data that proves conclusively that Southwestern Indiana has the will, along with the financial and technical capability to keep our air clean enough despite what our neighboring States might add to our air shed, the area should remain in nonattainment status at least until 2010. By then, more evidence will have been gathered to show proof that permanent improvements are making a real difference each and every year. (W. McCoy)

Comment: It's my understanding that IDEM has until April 2010 to meet the annual NAAQS for fine particles. If the area is redesignated to attainment in 2010, the redesignation request and maintenance plan could be based on 2007 through 2009 ambient air quality monitoring data, and if predictions are correct, the Southwestern Indiana Area should easily demonstrate attainment of the standard. (W. McCoy)

Comment: The U.S. Fish and Wildlife Service (the Service) has wildlife refuge properties located in Pike and Gibson Counties. The Service is required by the Clean Air Act to "preserve, protect and enhance air quality and air quality related values on Service lands". This includes visibility, flora, fauna, soil, water quality, cultural and historical resources and virtually all resources that are dependent upon and affect air quality. The Service's vision is "a Refuge System free of impacts from human-caused air pollution consistent with the Refuge System Improvement Act of 1997". This Act requires that: "the biological integrity, diversity and environmental health of the System are maintained". Please consider delaying redesignating this area to attainment of the annual NAAQS for fine particles until 2010. The risks are too great until future evidence of permanent improvements in air quality have been gathered over the next two years. (W. McCoy)

Comment: There are a number of new developments proposed for the Southwestern Indiana Area. Please consider delaying redesignating this area to attainment of the annual NAAQS for fine particles until the year 2010. (McCormick)

Comment: IDEM should delay proceeding with the redesignation request and maintenance plan for the Southwestern Indiana Area until 2010 when ambient air quality monitoring data from the Gibson County monitor has been made available for several years and additional monitoring data has been collected from the Evansville monitors to confirm that the measured pollutant reductions are real and that source reductions are continuing. (R. Vernier)

Comment: Because Valley Watch's purpose is the protection of public health, we strongly object to IDEM's redesignation request and maintenance plan as being premature, failing to protect community health, and being sufficiently inconclusive due to serious gaps in the supportive data to meet the level necessary to be acceptable under the Clean Air Act, especially since we are dealing with very small numbers and IDEM is desiring to make this decision at an extremely close margin. IDEM is seeking to claim that this region, one that sports the largest concentration of coal-fired power plants in the world now has safe air. Unfortunately, we remain a region with unhealthy air quality. Power plants, smelters and chemical plants in our region belch huge volumes of toxic chemicals in our air. Some of the region's coal-fired power plants are among the largest contributors of sulfur dioxide, nitrogen oxides, mercury and toxic pollution on the earth. (Blair)

Response: U.S. EPA's ambient air quality standards are based on multiple scientific studies and are set at levels designed to be protective of public health. In 2006, the U.S. EPA determined that the current annual NAAQS for fine particles is sufficient to protect public health. Quality assured ambient air quality monitoring data for the years 2004 through 2006 demonstrates that air quality has attained the annual NAAQS for fine particles in the nonattainment area. U.S. EPA and LADCO modeling for future year design values have consistently shown that even without CAIR existing and future improvements in air quality in the region due to declining emissions resulting from other permanent and enforceable measures will ensure continued compliance (maintenance) with the standard. Furthermore, because this area is subject to significant transport of pollutants, significant regional SO_2 and NO_x reductions will ensure continued compliance (maintenance) with the standard with an increasing margin of safety. As such, the area is eligible to be redesignated to attainment.

If emissions start increasing after the area is redesignated, or monitored violations occur, as part of the maintenance plan, IDEM commits to taking swift action in order to reverse the trend and take whatever action is necessary to ensure that standard is reattained as expeditiously as possible.

Meteorological Conditions

Comment: IDEM has chosen to use ambient air quality monitoring data from 2004 through 2006 to prove their case. That, by itself is faulty since data is available for 2007 and it is well know that 2004 was a year that had an exceptionally cool summer. U.S. EPA guidance demands that periods of "unusual meteorological conditions" should not be used in determining the designation of attainment status for an NAAQS. Because 2004 was exceptionally cool, the conditions for build-up of fine particles simply did not happen which resulted in reduced output from the numerous coal-fired power plants in the region to run air conditioners, etc. (Blair)

Comment: In 2004, the region experienced unusually cool weather. As such, 2004 should be considered an outlier and should not be used to determine the area's attainment status. (Webb)

Comment: An important factor IDEM has failed to consider is the weather. As we all know, weather has a huge impact on fine particle concentration levels. (Singer)

Comment: It is a recognized fact that weather patterns varying year-to-year are one of most important factors that influence the development and transport of fine particles. Stagnant surface conditions any time of the year and upper air ridging provide conducive conditions for the development and transport of fine particles. Page 36 of the redesignation petition points out that nitrates are bigger contributors to fine particle concentrations in the winter and sulfates are bigger contributors to fine particle concentrations in the summer. (W. McCoy)

Response: Modeling analyses have not found that the Southwestern Indiana Area has benefited from unusually mild meteorology from 2004 through 2006. More importantly, analyses do indicate that reductions in concentrations of fine particles better correlate with permanent and enforceable precursor emission reductions.

The 2007 monitoring data were not quality assured and available at the time the draft document needed to be placed on public notice. To ensure meeting U.S. EPA's

submittal deadline, as stated in the introduction section of the redesignation request and maintenance plan and the public hearing for this document, an addendum was added to the document and placed on IDEM's website prior to the public hearing, containing an analysis of the 2007 quality assured ambient air quality monitoring data. Based on the 2007 monitoring data, it should be noted that the 2004-2006 and 2005-2007 design values are identical (15.0 ug/m^3).

Precursor Emissions/CAIR

Comment: The redesignation request and maintenance plan is projecting lower levels of sulfur dioxide despite the fact that emissions from coal-fired power plants have been increasing in the area since 2002. Sulfur dioxide emissions in 2006 showed a very slight decrease from 2005, but were still above 2002 emissions levels. IDEM is claiming that modifications to coal-fired power plants will reduce sulfur dioxide emissions levels. However, most of the modifications will not take place until 2008. Additionally, once better technology is in place, these facilities will be able to increase production and still be within the parameters of their permits. Therefore, there is no concrete data to show that future sulfur dioxide emissions levels will be reduced by the amounts forecast. (N. Beck) (S. Lewis)

Comment: In 2005, Valley Watch was encouraged that the Clean Air Interstate (CAIR) Rule would result in a large reduction of NO_x and SO_2 in our region. However, when taking a look at the projected reductions at the two largest coal-fired power plants in the region (American Electric Power (AEP)/Rockport Power Plant and the Duke Energy/Gibson Generating Station), these reductions will be limited at best. Duke Energy is proposing to place scrubbers on three of the five electric generating units at the Gibson Generating Station resulting in SO_2 emissions reductions of approximately 50%. If Best Available Control Technology were placed on these units SO_2 emissions could be reduced by approximately 99%. AEP has no plans that we can ascertain to capture any of their enormous NO_x and SO_2 emissions until at least the year 2018 as required in a recent U.S. EPA settlement over new source review violations. (Blair)

Comment: In Appendix G of the redesignation request and maintenance plan, data shows that state-wide SO_2 emissions from coal-fired power plants (i.e. EGUs) from 2002 to 2006 increased by 42,166 tons. SO_2 is one of the primary precursor emissions for the formation of fine particles. (W. McCoy)

Comment: To further complicate the potential positive impacts of CAIR, a recent hearing initiated by industry to challenge the rule may well overturn the entire rule and send it back to the U.S. EPA as a remand. If this were to occur, all of the assumptions regarding CAIR made in the redesignation request and maintenance plan for the Southwestern Indiana Area would no longer be valid. (Blair)

Response: On July 11, 2008, the U.S. Court of Appeals for the District of Columbia Circuit Court vacated CAIR. However, additional modeling analyses show that even without CAIR existing and future improvements in air quality in the region due to declining emissions resulting from other permanent and enforceable measures will ensure continued compliance (maintenance) with the standard. Therefore, the area is still eligible for its air quality status to be classified consistent with other counties in the nation that measure air quality that meets the annual NAAQS for fine particles.

Future Economic Development

Comment: The claim will certainly be maybe that new technology will limit air pollution to acceptable levels. That will just not be true. If you look towards any of the coal-fired power plants presently in operation today, on a clear day, you will see deep layers of pollution stretching as far as the eye can see. No reasonable person could believe that this is not dangerous and has no effect on people who are breathing it. To allow even more fine particulate emissions to be released in the air is unconscionable. (V. McCoy)

Comment: Stop to consider that most of the coal-fired power plants were constructed in a limited geographic area in the 1960s and 1970s. In the past 40 to 50 years, these power plants have been burning coal and emitting nitrogen oxides, sulfur dioxides, fine solid particles of soot and mercury 365 days a year, 24 hours a day, every minute of every day. This is occurring in a concentrated area and not dispersed widely like coal burning prior to the advent of the large power plant era. We accept the pollution in the given area, in our backyards, fields, forests and water, everywhere in our daily lives, so we and others hundreds of miles removed can enjoy the benefits of electricity. While we breathe this contaminated air and the weak, sick, young and old suffer acute consequences, we should not allow ourselves and off-spring to be assaulted by even more fine particle pollution and chemical pollutants to meet the demands of a growing population and the incessant call for economic development. (W. McCoy)

Response: IDEM agrees that there are known health effects associated with exposure to elevated levels of fine particles. IDEM is petitioning the U.S. EPA to redesignate the Southwestern Indiana Area to attainment because air quality in the area is in compliance with the annual NAAQS for fine particles and should be redesignated back to attainment. If the area is redesignated to attainment and classified as maintenance, IDEM is committed to assuring air quality is maintained. The Clean Air Act requires that areas with maintenance plans ensure that no backsliding with regard to measured air quality take place. As such, precursor emissions that contribute to fine particle concentrations should not increase over time.

Comment: Redesignating the Southwestern Indiana Area to attainment means that more coal-fired power plants will be able to be built which citizens of this region do not want. High levels of fine particles emitted by coal-fired power plants are proven to lead to major increases in respiratory and cardiovascular health conditions and worsen pre-existing conditions. (Wertz)

Response: If the area is redesignated to attainment and classified as maintenance for the annual NAAQS for fine particles, IDEM has committed to assuring that air quality is maintained. Large projects that may represent emissions increases beyond normal expected growth would be subject to the new source review permitting program for attainment areas known as Prevention of Significant Deterioration (PSD). New major sources or major modifications of existing sources must install best available control technology and demonstrate that the resulting emissions would not cause or contribute to a violation of any NAAQS. These permits are subject to public review, comment and the opportunity for a public hearing to help ensure that these requirements are satisfied.

Comment: The redesignation request and maintenance plan does not illustrate the impact of pending developments that will affect our regional air shed. As the redesignation request and maintenance plan shows, the Evansville Metropolitan Statistical Area is barely below the annual NAAQS for fine particles. With all of the additional polluting industry developing on our door step, it remains to be seen if the area will continue to attain the standard. As the redesignation request and maintenance plan states, if the area is redesignated to attainment, it will be for an eight-year period. There are a number of new developments proposed for the Southwestern Indiana Area that must be considered before the area is redesignated to attainment for an extended period of time into the future. (N. Beck) (S. Lewis)

Response: In accordance with Section 175A of the Clean Air Act Amendments of 1990, IDEM is required to review and revise the maintenance plan horizon eight years after an area is redesignated to attainment. Redesignating the area to attainment does not mean that public health will no longer be protected; it simply recognizes the fact that the area's air quality meets the health based standard (i.e. NAAQS). IDEM prepared a maintenance plan to ensure continued compliance with the annual NAAQS for fine particles over time. Under the plan, IDEM will continue to monitor fine particle concentrations and emissions in the Southwestern Indiana Area, and will take action to address any increases before a violation of the standard occurs.

Comment: IDEM's website states: "Fine particles 2.5 microns or smaller, have been singled out as those responsible for many adverse respiratory problems". Everyone is concerned about the air quality and the economic development opportunities in the State of Indiana, but if IDEM relaxes environmental standards, it will be inviting more polluting industries to locate in Indiana. Enforce the standards that are already in place and maybe some cleaner industries will be attracted to the region. (N. Beck)

Comment: IDEM should be discouraging any additional polluting industries not encouraging them by redesignating the area to attainment. (Singer)

Comment: The Southwestern Indiana Area has the highest concentration of coal-fired power plants in the world. There are seventeen coal-fired power plants within a sixty-two mile radius of this area, with four more proposed at this time, plus ten or so proposed industries moving in if the air quality restrictions are removed. Plus, the extension of I-69 will also bring an additional seventeen thousand heavy-duty diesel trucks daily to the region. These new developments proposed for the Southwestern Indiana Area will significantly increase emissions in the region. The pollution that will be generated from proposed developments must be considered before the area is redesignated to attainment, even though the area currently demonstrates borderline attainment of standard. (VanMeter)

Comment: If I have learned anything in life, it is that nothing is as valuable and precious as good health, which I still cling to. To sacrifice human health on the altar of economic prosperity is a shortsighted, foolish tradeoff. (Zasadny)

Response: Petitioning the U.S. EPA to redesignate the area to attainment and reclassify the area to maintenance means that IDEM is committed to ensuring that air quality continues to attain the standard into the future. As such, new and expanding industries would be required to demonstrate that their emissions would not cause or contribute to a re-violation of the standard.

Comment: Currently, there is a lot of industry being developed near Vanderburgh County. The redesignation request and maintenance plan does not illustrate how these developing, potential polluters will affect the area's air quality. The proposed developments include, but are not limited to, five power plants and five ethanol refineries. They are developing in Posey, Gibson, Pike Counties, Indiana and Henderson County, Kentucky, and White County, IL. Additionally, the I-69 extension will bring the opportunity for major industry development that we cannot calculate. Currently, Warrick County is constructing an industrial development near the I-69 route to attract industry between I-69 and I-64. Pike County is contemplating a similar venture near the I-69 route in their county. (D. Beadles) (Ja. Beadles) (Je. Beadles) (T. Beadles) (K. Beck) (Courtney) (Crowe) (Green) (Greenwood) (Hewer) (Josey) (Kothe) (R. Lewis) (S. Lewis) (Porter) (Singer) (S. Vernier) (Wahnsiedler)

Comment: I understand that additional power plants and ethanol refineries are planned for the region, plus there will be a substantial increase in transportation related emissions if I-69 is built thorough the area as its backers insist it will. These developments will add pollutants, which are not offset by decreases in emissions elsewhere, and will probably push the area back into nonattainment. I could not find anything in the redesignation request and maintenance plan indicating that the proposed modifications to I-69 had been taken into account and if so, what assumptions had been made. (R. Vernier)

Comment: Southwestern Indiana boasts one of the largest coal-fired power plant's in the world. There are many other coal-fired power plants in the region, as well as, upwind in the States of Kentucky and Illinois. Studies have shown that in the next 20 years, we will need additional coal-fired power plants to generate as much as 10,600 megawatts of power to satisfy the projected demand for electricity. Any new coal-fired power plants that are constructed in the future will significantly increase pollutant levels in the region. (V. McCoy)

Comment: Another very important factor that IDEM is not considering is new source pollution. In my area of Southwestern Indiana, I know of at least ten possible sources that I think should be considered. These new sources of pollution include power plants, ethanol plants, railroad yards and the construction of I-69 that will start soon. I would like to emphasize the fact that in a 60 mile radius of my home there are seventeen coal-fired power plants. I have no reason to believe that IDEM will make Indiana a cleaner, healthier place to live, as the logo on their letterhead claims. I place none of my faith in IDEM to keep the air that my family breathes clean. I believe IDEM should be discouraging any possible air polluting industries, not encouraging them, when in fact, that's exactly what they will be accomplishing if the redesignation request and maintenance plan is approved. (Singer)

Comment: The only thing accomplished with attainment status is to open the flood gates for polluting industrial development. It is a medically proven fact, that our children in Southwestern Indiana have huge rates of asthma. For their sake, don't let our children pay the ultimate price for all of the political pressure for economic development. (D. Beadles) (Ja. Beadles) (Je. Beadles) (T. Beadles) (K. Beck) (Courtney) (Crowe) (Green) (Greenwood) (Hewer) (Josey) (Kothe) (R. Lewis) (S. Lewis) (Porter) (Singer) (Wahnsiedler)

Response: Although fine particles are a known asthma trigger, there are a number of other triggers for asthma as well. Based on the most recent three years of ambient air quality monitoring data, the Southwestern Indiana Area meets the federal health-based annual NAAQS for fine particles. U.S. EPA's ambient air quality standards are based on multiple scientific studies and are set at levels to be protective of public health. In 2006, the U.S. EPA determined that the current annual NAAQS for fine particles is sufficient to protect public health.

The maintenance plan has been drafted to comply with the Clean Air Act and ensures that there is a mechanism in place to keep precursor emissions at levels equal to or less than they were at the time the area complied with the standard. When an entity applies for an air permit in the future, IDEM will conduct the necessary evaluation to ensure that the area's air quality will not be jeopardized and continued compliance with the annual NAAQS for fine particles is assured.

Potential developments that IDEM was aware of (including I-69), were considered as part of the maintenance plan when we estimated economic growth and the corresponding increase in emissions. Emissions are expected to be lower in ten years than they are now. There are additional emissions controls "on the books" that have not been fully implemented yet, and these will help offset emissions due to area growth. In addition, major new sources will be subject to new source review permitting under the Prevention of Significant Deterioration rule requiring best available control technology and a demonstration that the emissions will not cause or contribute to a violation of any NAAQS.

Comment: Future year emissions do not take into account the fact that entities that operate electrical generating units can purchase pollution credits for other power plants outside of the region. This would allow entities that operate electrical generating units to violate emissions standards in the Southwestern Indiana Area by buying credits elsewhere. (W. McCoy)

Comment: Purdue University's State Utility Forecasting Group predicts Indiana will need more than 10,600 additional megawatts of electricity by 2023. That means three new power plants the size of the Gibson Generating Station, the third largest coal-fired power plant in the world producing 3,250 megawatts. Even with reductions in pollutant emissions, the increase in the amount of coal used to meet projected power demands will mean additional pollutant emissions. (W. McCoy)

Response: If the area is redesignated to attainment and classified to maintenance, IDEM is committed to assuring air quality is maintained. The Clean Air Act requires that areas with maintenance plans ensure that there's no backsliding with regard to measured air quality. As such, precursor emissions that contribute to fine particle concentrations cannot increase over time.

Comment: IDEM is recommending that the entire nonattainment area be redesignated to attainment even though some of these counties do not have and have never had air quality monitors for fine particles. (Wertz) (S. Lewis)

Comment: The total number of air quality monitors in the Southwestern Indiana Area should be doubled. This would show that the area's air quality is worse than what is currently assumed. (Bauer)

Comment: IDEM might want to consider placing additional ambient air quality monitors in the Southwestern Indiana Area to better track the pathway of air flows from point sources like power plants, as well as, industrial urban and high traffic areas. (W. McCoy)

Comment: The number of ambient air quality monitors in the Southwestern Indiana Area should be increased. (VanMeter) (Bauer)

Comment: I can see three coal-fired power plants from my back door and five coal-fired power plants border my county of residence. However, there are no ambient air quality monitors in my county. I can guarantee you from what I have observed living there for the last 54 years, air quality in the Southwestern Indiana Area is not improving. (McCormick)

Comment: Violations of air quality standards must be proven by data collected from ambient air quality monitoring stations. Enforcement actions are impossible without hard data. Computer models can't do that. (W. McCoy)

Response: IDEM conducts an annual review of Indiana's Ambient Air Monitoring Network per 40 CFR 58.10. This review is conducted to assess the current air monitoring network to determine if any changes are necessary to meet the monitoring goals and monitoring projects across the State of Indiana. Prior to submission to the U.S. EPA for final approval, the ambient air monitoring plan is available for public review and comment.

As part of the maintenance plan, IDEM will continue to operate an appropriate monitoring network to ensure continued compliance with the annual NAAQS for fine particles over time. IDEM will also take action to address any increases in concentration levels before a violation of the standard occurs.

Comment: In January 2008, after much input from the public, IDEM added a $PM_{2.5}$ monitor in Oakland City, Indiana. The fact that there is a high concentration of existing coal-fired power plants polluting this never before monitored area is why this monitor was installed. Why add the monitor to our community if the State already had plans to redesignate the area to attainment? Moreover, IDEM is recommending attainment for areas that have no monitors and have never been monitored. There are no $PM_{2.5}$ monitors and no data for Pike, Gibson, Warrick and Posey Counties. The air monitor in Oakland City was installed on the Pike-Gibson County line so that it could be representative of air quality of both counties; however the data is too new and was not included in the redesignation request and maintenance plan for the Southwestern Indiana Area. Additionally, this monitor has been operational for three months and citizens have not been able to obtain readings for this monitor, as IDEM does not have the results online. (N. Beck) (S. Lewis)

Response: The Oakland City $PM_{2.5}$ monitor was added as part of the annual review of the Indiana Air Quality Monitoring Network as per federal requirements. The proposed changes reflect program needs, federal monitoring changes, and budgetary constraints. All proposed network modifications are approved by the U.S. EPA. The sampler utilized at the Oakland City monitor is a filter based Federal Reference Method

(FRM) unit which runs every three days producing a 24-hour composite average. The unit is not continuous and therefore does not produce hourly $PM_{2.5}$ values. Data for this site can be supplied upon request. A meteorological monitor at this site does produce hourly values for wind speed and direction and this data is posted to IDEM's website.

Comment: Will the maintenance plan be enough to protect the citizens of the Southwestern Indiana Area? The redesignation request and maintenance plan fails to illustrate the fact that IDEM's 2008 Ambient Air Monitoring Plan reduced the total number of ambient air quality monitors throughout the State by five. If IDEM continues this trend, then there will not be enough monitoring data to ensure public safety. (N. Beck) (S. Lewis)

Response: The Indiana Air Quality Monitoring Network is reviewed annually as per federal requirements. The proposed changes reflect program needs, federal monitoring changes, and budgetary constraints. All proposed network modifications are approved by the U.S. EPA.

Comment: In 2007, IDEM presented their 2008 Ambient Air Monitoring Plan 2008 plan which recommended an overall reduction of eight ambient air quality monitor stations in the State of Indiana. After public outcry, three new ambient air quality monitoring stations were added in new locations for a net reduction of five monitors. With the increased emphasis on energy production facilities, it seems like a poor time to be reducing the number of ambient air quality monitors. (W. McCoy)

Comment: The Evansville Audubon Society is please by the actions taken by the State of Indiana, U.S. EPA and local industries that have led to possible improvements in air quality in the area. However, the monitoring data from the new monitor recently located in Gibson County (Oakland City) has not been taken into account. Historical data for Gibson County does not exist, yet much of the county is in the air shed of Duke Energy's Gibson Generating Station. Given prevailing southwesterly winds, pollution for this very large coal-fired power plant would not normally register on monitors located in Vanderburgh, Warrick and Posey Counties. Thus, it appears that fine particulate output of a very large emitter is not being considered in the redesignation request and maintenance plan. Therefore, we urge IDEM to wait until 2010 to incorporate and evaluate the new ambient air quality monitoring data from the Gibson County monitor (Oakland City), to determine if projected emissions reductions actually occur and to collect enough data from the existing monitors to reliably say there is a significant and continuing downward trend in $PM_{2.5}$ levels. (S. Vernier)

Response: Sections 7.5 through 7.9 of the redesignation request and maintenance plan provides an analysis of meteorological conditions which lead to high $PM_{2.5}$ levels in the Southwestern Indiana Area. The conclusions were that surface winds from any direction can transport pollutants from surrounding areas into the Southwestern Indiana Area and lead to high $PM_{2.5}$ levels. It should be noted that the Dubois County ambient air quality monitor provides information about fine particle concentration levels associated with westerly or southwesterly wind directions.

As such, IDEM believes that the current fine particulate monitoring network for Southwestern Indiana is adequate and accurately reflects fine particle concentration levels in the Southwestern Indiana Area. Quality assured ambient air quality monitoring data for

fine particles for the years 2004 through 2006 demonstrates that the area's air quality has met the annual NAAQS for fine particles and is eligible for its status to be classified consistent with other counties in the nation that measure air quality that meets the standard.

Comment: The Southwestern Indiana Area is barely in attainment of the annual NAAQS for fine particles based on a limited amount of data collected by IDEM. There are a substantial number of major developments proposed in the Southwestern Indiana Area, to ensure adequate monitoring data is collected in the future, IDEM should place two ambient air quality monitors in all eleven of the counties located in Southwestern Indiana Area. This request is contrary to IDEM's 2008 Ambient Air Monitoring Plan which determined that the total number of ambient air quality monitors located throughout the State of Indiana should be reduced by five. (McCormick)

Response: IDEM believes that the current fine particulate monitoring network for Southwestern Indiana is adequate and reflects the fine particulate air quality accurately. With the phasing out of the dedicated Section 103 Grant to fund the fine particulate monitoring program, it is not feasible to add any additional ambient air quality monitors in Southwestern Indiana and/or any other area of the State of Indiana at this time.

Clean Air Act

Comment: Pollution knows no boundaries whether it be state lines, county lines or township lines. We need more ambient air quality monitors in Southwestern Indiana not less. Air quality should be monitored on a continual basis not every three days. (N. Beck)

Response: The Indiana Air Quality Monitoring Network is reviewed annually in accordance with federal requirements. The proposed changes reflect program needs, federal monitoring changes, and budgetary constraints. All proposed network modifications are approved by the U.S. EPA. Continuous fine particulate monitoring is used for the daily Air Quality Index and to supply data to the U.S. EPA "AirNow" website. Filter-based FRM data are used to determine compliance with the annual NAAQS for fine particles. The Dubois County (Jasper) monitoring site is an FRM monitor that operates on a daily basis.

Comment: It is premature to redesignate the Southwestern Indiana Area to attainment. On June 25th, 2007, the Sierra Club and the American Lung Association filed a lawsuit against the U.S. EPA for not holding individual States up to the mandates set forth in the Clean Air Act. The basis for their lawsuit states that U.S. EPA requirements are much weaker than those mandated by the Clean Air Act and would allow life threatening levels of air pollution to continue years longer than legally allowed. This is exactly the issue we are dealing with here. The validity of attainment should be postponed until after this litigation is over and the validity of the U.S. EPA guidelines are reviewed. Let's talk about this again in 2011. Let's see if the trends and forecast in the redesignation request and maintenance plan become a reality and if U.S. EPA's guidelines are upheld or overturned. (N. Beck) (Singer)

Comment: Another issue that should perhaps justify the delay of any approval action of the redesignation request and maintenance plan by the U.S. EPA, is the fact that

the U.S. EPA is being sued in Federal Court challenging the U.S. EPA's April 2007 regulations governing how states must conduct their air quality planning to reduce fine particle pollution. The lawsuit claims that the U.S. EPA's requirements are much weaker than those mandated by the Clean Air Act. The concern is that lenient rules will allow life-threatening levels of air pollution to continue years longer than legally allowed. Should this lawsuit result in overturning U.S. EPA rules, any redesignation request and maintenance plan approved under these rules seemingly would be null and void. This is another good reason to delay redesignating the Southwestern Indiana Area into attainment of the annual NAAQS for fine particles. (W. McCoy)

Response: The Southwestern Indiana Area has attained the annual NAAQS for fine particles. The redesignation request and maintenance plan demonstrates that the Southwestern Indiana Area has complied with the applicable provisions of the 1990 Amendments to the Clean Air Act regarding redesignation of nonattainment areas for fine particles. As such, IDEM believes that the Southwestern Indiana Area is eligible for its air quality status to be classified consistent with other counties in the nation that measure air quality that meets the standard. IDEM will address any future changes to existing and/or future emissions control strategies as the need arises.

Ozone

Comment: According to IDEM's website, specific requirements in Section 107 of the Clean Air Act must be met in order for an area to be considered for redesignation to attainment. Section 107 (a) of the Clean Air Act requires a determination that the area has attained the annual NAAQS for fine particles. (It reads the very same thing for the 8-hour standard for ozone). The U.S. EPA recently revised the 8-hour standard for ozone to .075 parts per million. With the new 8-hour standard for ozone in effect, Vanderburgh and Warrick Counties were way over the standard based on the most recent three years of ambient air quality monitoring data (2005-2007). How can IDEM redesignate the area to attainment of the annual NAAQS for fine particles and ignore the area's air quality monitoring results for ozone? (N. Beck)

Comment: Elevated levels of ozone and fine particles are both a concern in the Southwestern Indiana Area. Why are these pollutants being addressed separately? Since the area also experiences elevated levels of ozone, shouldn't the annual fine particle and 8-hour ozone NAAQS be more stringent than an area that only experiences elevated levels of one of these pollutants. (Bauer)

Response: The Southwestern Indiana Area meets the current 8-hour ozone standard and was redesignated to attainment in 2006. The new 8-hour standard (0.075 ppm) does not take effect until 2011 and it is unknown whether or not this area will be in attainment. Since both of these pollutants are regional, many of the same controls are effective for both. However, federal programs regulate NAAQS separately and establish specific time frames for each of these pollutants. As such, IDEM will address the new 8-hour standard at a later date if the area is in fact designated nonattainment.

Comment: IDEM's own modeling analyses of particle matter sources have proven that Southwestern Indiana is significantly impacted by regional transport of fine particulate matter and its precursors (NO_x and SO_2). A question that needs to be

addressed in more detail is how successful can Indiana be in limiting fine particle emission from adjoining States, such as Kentucky and Illinois, that also share in the wealth of natural resources? (W. McCoy)

Response: U.S. EPA and LADCO modeling for future year design values have determined that the Southwestern Indiana Area is significantly impacted by regional transport of particulate matter and its precursors, and that regional SO_2 and NO_x reductions are an effective way to attain the annual NAAQS for fine particles in this area. These modeling analyses have also consistently shown that existing national emission control measures will bring the Southwestern Indiana Area into attainment of the annual NAAQS for fine particles. Emission control measures to be implemented in the next several years will provide even greater assurance that air quality will continue to meet the standard into the future. IDEM intends to continue working cooperatively with other States in the region to address regional air quality issues and will address any future changes to existing and/or future emissions control strategies as the need arises.

Other

Comment: If Indiana is going to continue to burn coal in the future to generate power, why can't it at least do so in an economically responsible manner that is not detrimental to our health? Indiana should explore cleaner coal burning technologies such as "Clean Coal Gasification", which research shows emits approximately 35% less particulates than a typical coal-fired power plant. Utilizing cleaner coal burning technologies such as Clean Coal Gasification would have a major impact on improving public health of the citizens here in the Ohio River Valley, since a large number of coal-fired power plants are already located here. 2004 data from the National Cancer Institute shows that every microgram increase in particulates, a few millionths of a gram, causes an 18% increase in heart attack fatalities. It appears probable that even a small increase in the removal of particulates would be highly cost effective. (Obermeier)

Response: Indiana is supportive and encourages the use of cleaner alternative energy technologies, such as Clean Coal Gasification, which will aid in improving air quality, increasing energy efficiency, and reducing the usage of fossil fuels.

Comment: Has IDEM considered the real possibility that the high cost of home heating oil and natural gas is going to lead many people heating their homes with wood? Wood smoke emissions will increase fine particle pollution. (W. McCoy)

Response: This is an issue of national concern. The U.S. EPA has launched a voluntary program to reduce air pollution from outdoor wood-fired boilers and has implemented a program to certify new wood stoves and fireplaces as energy efficient. Emissions from wood-combustion sources were included in the base-year inventory and expected growth is reflected in the future year inventories.

Comment: Air quality in the Southwestern Indiana Area will not only be adversely effected by the additional $PM_{2.5}$ that is created from the NO_x and VOC emissions that are released from proposed industrial growth, but will also experience increased $PM_{2.5}$ emissions from the increased number of diesel powered trucks and locomotives that will be needed to serve these new developments. Trains and trucks will

be idling for hours while loading and unloading fuel supplies, finished products, and industrial waste products. Currently, the permitting process does not require facilities to calculate how much $PM_{2.5}$ is added to our air shed from these activities. Another fact that is not outlined in the redesignation request and maintenance plan is that train locomotive engines have a very long serviceable life. Many in use today, especially small ones that move cars in rail yards and make local short runs, were built in the 1980s long before the day of emission controls to reduce particulates. The emission controls on trucks and equipment built after February 2007, as a result of U.S. EPA's Heavy-Duty Vehicle Emission Standards, have significantly increased the cost of purchasing a new truck. Therefore, companies and independent owner-operators are electing to purchase trucks built prior to February 2007 or are re-powering their existing vehicles. As a result, fleet turnover will take much longer than IDEM is anticipating and this reality is not outlined in the models set forth in the redesignation request and maintenance plan for the Southwestern Indiana Area. (N. Beck) (S. Lewis)

Response: IDEM has participated in regional planning and modeling of projected future emissions, including proposed controls on large utilities, on-road and off-road vehicles, and fuels, and has determined that the annual NAAQS for fine particles will continue to be attained with an increasing margin of safety in the coming years. IDEM intends to continue working cooperatively with other states through the Lake Michigan Air Directors Consortium on regional planning initiatives and modeling of project future emissions.

Comment: If government action is needed, it should target these concepts: encourage utilities to reward lower consumption and develop new, clean methods of providing energy, help industries develop new processes to reduce waste and pollutants and conserve material, promote conservation methods for all consumers, and finally, consider concepts of discouraging population growth and urban sprawl. (Zasadny)

Response: Indiana is supportive of these concepts. IDEM has established the Environmental Stewardship Program (ESP) which is a voluntary, performance based leadership program designed to recognize and reward Indiana regulated entities for going above and beyond current environmental regulations. ESP was modeled after the U.S. Environmental Protection Agency's National Environmental Performance Track Program and focuses on improving Indiana's environment and business climate through innovation and efficient resource allocation.

Participating organizations achieve environmental objectives through creating and implementing an environmental management system (EMS). Together, the EMS and the steward's commitment to continual environmental improvement will increase their efficiency, decrease environmental impacts, and may save the business time, money, and resources.

Comment: As fuel prices continue to rise, the push for alternative fuels such as bio-diesel and ethanol has led to a rush to construct energy intensive refineries to produce these fuels. To make it possible for these refineries to obtain an air pollution permit, the U.S. EPA increased the allowable limit of fine particle emissions from 100 tons a year to 250 tons a year. Each new refinery constructed in the region will lead to an increase in pollutant emissions at the expense of the health of the region's citizens. Especially

vulnerable are children, the elderly, and those who are already affected by respiratory illness. (W. McCoy) (V. McCoy)

Comment: Another source of new pollutant emissions in the region are peak power plant. As these peak power plants are constructed and begin to come online, they will qualify for air pollution permits based on annual levels of emissions even though they are typically only operated in the summer months during peak demand periods for electricity. This will generate increased pollutant emissions to the area at the worst possible time since the coal-fired power plants would have been at maximum power output but unable to meet demand. (W. McCoy)

Response: New or modified sources will still be required to go through the appropriate permitting process based on their potentials to emit. New source review guidance just released by the U.S. EPA describes the procedures to follow for sources emitting precursors of $PM_{2.5}$ (direct $PM_{2.5}$, NO_x and SO^2). IDEM will conduct the necessary evaluation to ensure that the area's air quality will not be jeopardized and continued compliance with the annual NAAQS for fine particles will be assured.

DUBOIS COUNTY AREA
DEVELOPMENT CORPORATION

RECEIVED
STATE OF INDIANA
MAR - 3 2008
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

March 27, 2008

Southwestern Indiana Area Fine Particles (PM2.5) Re-designation Petition and Maintenance Plan
Scott Deloney, Chief
Programs Branch
Office of Air Quality MC 61-50
100 North Senate Avenue
Indiana Department of Environmental Management
Indianapolis, Indiana 46206-2251

Dear Mr. Deloney:

Please accept this correspondence as evidence of the Dubois County Area Development Corporation's support of the Indiana Department of Environmental Management's request that the Southwestern Indiana Area Nonattainment Area for fine particulates be re-designated to attainment simultaneously with U. S. EPA approval of the Indiana State Implementation and Maintenance Plan.

This re-designation to attainment will be a significant improvement to our economic development climate.

I look forward to the completion of the final implementation efforts necessary to effectuate the re-designation.

Should have questions concerning our support, please contact my office at 812.482.9650.

Regards,

Robert Grewe, President

P 812.482.9650
F 812.482.9421
1103 Main Street
Jasper, Indiana 47546
www.DCADC.org
bgrewe@DCADC.org

ALCOA

Pm 1103

Alcoa

Warrick Operations
Highway 66
PO Box 10
Newburgh, IN 47629-0010 USA

March 24, 2008

RECEIVED
STATE OF INDIANA
APR 1 2008
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

Scott Deloney, Chief
Programs Branch
Office of Air Quality MC 61-50
100 North Senate Avenue
Indiana Department of Environmental Management
Indianapolis, IN 46206-2251

Re: Southwestern Indiana Area Fine Particle
(PM2.5) Re-Designation Petition and Maintenance Plan

Dear. Mr. Deloney,

Alcoa Power Generating Inc. – Warrick Power Plant and Alcoa Inc. – Warrick Operations (hereafter Alcoa) appreciate the opportunity to provide comments in support of IDEM's petition to redesignate Warrick County attainment for PM2.5.

Alcoa is pleased 2004, 2005 & 2006 monitoring data which shows the 2006 design values of all PM2.5 Federal Reference Method (FRM) monitors are below the annual NAAQS (National Ambient Air Quality Standard) of 15 µg/m3 (highest monitor design value was UE's monitor at 14.15µg/m3).

Monitoring data for 2007 also supports that the area meets the NAAQS. Significant, permanent emissions reductions realized as a result of the Nitrogen Oxide controls installed at regional power plants and industries no doubt have contributed to the attainment status indicated by the monitoring data.

Additional emissions reductions are expected as pollution control projects now under construction become operational. For example, the scrubbers being installed at the Alcoa – Warrick Power plant are expected to provide a significant reduction in SO2 emissions, which are a PM2.5 pre-cursor pollutant.

The Clean Air Interstate Rule, Phase II of the NOx SIP call, Tier II vehicle emission standards, diesel engine emissions standards and Ultra Low Sulfur Diesel fuel are expected to further improve air quality. Thus, Alcoa would expect EPA to anticipate that future PM2.5 monitoring data will show an improvement over presently available data.

Please feel free to contact me if you have any questions concerning these comments.

Sincerely,

Samuel H. Bruntz

Samuel H. Bruntz

Staff Environmental Engineer

Alcoa Inc. – Warrick Operations and

Alcoa Power Generating Inc. – Warrick Power Plant