VALLEY WATCH, Inc.
800 Adams Avenue • Evansville, IN 47713 • (812) 464-5663

December 10, 2018

Doug Logan, IDEM, Office of Air Quality
100 North Senate Avenue,
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Regarding: Operation Permit No.: T147-39554-00065
Mr. Logan:

Please accept these comments as one set of comments filed by Valley Watch, Inc., on the above captioned project. Valley Watch will also file joint comments through EarthJustice in a separate filing.

First, I would like to formally file a complaint due to Mr. Logan's refusing to talk with me when I reached out to him earlier this year. It is clear from reading correspondence between Logan and the applicant that he was more than willing to engage them in an extremely cooperative manner throughout the permitting process. That same cooperative spirit should have been afforded to serious inquiries made by a concerned Hoosier who wished to ask some specific questions regarding his and others' discussions with Mr. Merle, Mr, Otte, Mr. Lang and others from Kellogg Brown and Root (KBR), the owners of the technology being proposed.

Second, Valley Watch still questions how emissions projections for this plant were assessed, given that there are no operating plants using this technology with coal as a feedstock in the western hemisphere, if not the world. As far as we know, the only operating plants using the Veba Combi Cracker technology are located in the autocratic countries of Russia and China and to date, we have been unable to ascertain anything specific about those emissions or even if they use coal or other feed stock as their feedstock. Riverview and KBR have failed to adequately measure those emissions, let alone measuring them using a feedstock of #6 Illinois Basin Coal which the applicant claims will be the feedstock for their process. To claim that any of the data presented by the applicant and their representatives is verifiable is simply not true.

Further, we object to the issuance of this permit as a "hybrid" project, part refinery and part a coal conversion process. If there is no classification for this type of unit, then it is incumbent on the applicant to build a much smaller demonstration facility, one that can operate using the same feedstock as the proposed plant and gathering real emissions data from the operation of that demonstration sized project instead of merely speculating on emissions as the applicant and IDEM have done with this draft permit.

Also, we object to the issuance of this draft permit because the applicant failed to provide the necessary full year's worth of air monitoring at the site as required by both the Clean Air Act and its Amendments [42 U.S.C. 7475 Section 165 (e)(2)]and the Code of Federal Regulations [Section 51.166(iv)] as well as the New Source Review Workshop Manual. This was clearly not done as required prior to Riverview making application for their permit. In the absence of this data, especially in an area which is surrounded

by so many mega sources of coal pollution including SO2, NOx, H2s, CO, other HAPS, and VOC, it is virtually impossible to predict even accurate emissions impacts on the people and environment surrounding a proposed plant. Sadly, in this case, toxic emissions are huge just south of the proposed site with just two industries emitting nearly FIFTEEN MILLION pounds of toxic chemicals less than twenty miles away.

Congress made the monitoring provision law exactly for situations like this one. This project is proposed for greenfield that is currently agricultural land and there is almost no real data available for this site. IDEM should have required monitors for ozone, fine and course particles, SO2, NO2, lead, and a regimen of HAPS before they eve accepted an application for this facility. IDEM simply ignored Congress' wishes, the Code of Federal Regulations and the New Source Workshop Manual in an effort to claim "no data, no problem."

Modeling issues abound

All statistics classes admonish students that models are only as good as the input data they use. "Garbage in-Garbage out" is often the way it is referred. In this case, it is clear that the input data were in fact, "garbage."

First, the modelers summarily failed to even input a number of significant sources of emissions. They did cherry pick the sources they wanted, including the emissions from the giant Rockport power plant in Rockport. They failed to acknowledge that this source has emissions mostly from a smokestack that is 1,040 feet above the ground. Those emissions are unlikely to have any impact on the proposed site since even when the wind blows from that source toward the plant site, those emissions will travel far overhead and not fall to the earth for some additional distance from the site. The Rockport plant (2600MW) was the last plant in the USA to be granted permission to use a "tall stack." Under the Clean Air Act Amendments of 1977 tall stacks were declared illegal and stack height was severely restricted.

The Riverview site sits near the middle of the largest concentration of coal fired power plants in the western hemisphere. More than a dozen sources contribute to a chronic air pollution problem for the region. The entire area is inadequately served by any sort of monitoring network with only the Evansville metro area having monitors to really assess various ambient levels of pollution.

KBR and IDEM modelers failed to include significant sources including: the Duke Energy Gibson power plant- 70 KM (3340 MW), TVA Paradise Fossil plant 100 KM (1150 MW), Big Rivers Electric Coleman Station 30 KM (443 MW), Big Rivers Green and Reid Stations 76 KM (584 MW), Big Rivers DB Wilson plant 73 KM (417 MW), Vectren FB Culley power plant 41 KM (265 MW), Vectren AB Brown power plant 70 KM (530 MW).

All these sources reside upwind of the site some or most of the year and contribute to the overall ambient air quality of the Dale community. Of course the inclusion of these sources would add significantly to the model results and to leave them out is tantamount to total misrepresentation of the model if not actual fraud in our view. EPA should consider withdrawing the delegation they have given IDEM to administer air permitting for EPA since IDEM plays so loose and fast with data and other aspects of the permitting process in favor of applicant and polluters.

To more clearly understand the apparent obfuscation practiced by IDEM and KBR in their modeling, it is important to note that for NO2, they chose/allowed a monitor more than 400 KM away to be used for model inputs. Apparently, the modelers simply chose to ignore the NO2 monitor in Evansville, just 56 KM from the proposed plant site. It is anyone's guess as to why this sort of thing would happen but

Valley Watch suspects the worst on the part of IDEM and their modelers since, in the past, we have caught IDEM actually altering the source code of the model to get the results they desired (See Exhibit 1-an affidavit by Dr. Howard Dunn that shows the incorrect data manipulation by IDEM).

On another occasion, in 2008, IDEM petitioned USEPA to redesignate Evansville and Vanderburgh County as attainment of the NAAQS for fine particles. Sadly, and what we believe to be fraudulent, IDEM simply left out days when the region was under air quality alerts for fine particles according to AirNow in offering their petition to EPA to claim attainment (See Exhibit 2).

We feel that IDEM has little regard for actual facts when it comes to giving permission for a new source to pollute and distrust them greatly. Further, we were told by a State Representative shortly after a new Commissioner took office that the new Commissioner told him very directly that IDEM from that point on (2005) was now to be considered "an economic development agency." Since then, they have proven that statement true repeatedly, especially when it comes to coal either for mining or for its use as fuel or in this case feedstock.

It should also be noted that a recent study, published by Resources for the Future ([HYPERLINK "http://www.rff.org/valuables/research/publications/using-satellite-data-fill-gaps-us-air-pollution-monitoring-network"] linked due to size) makes a credible case that satellite data and a lack of empirical data from monitors on the ground indicates that Spencer County should already be considered as non-attainment of the fine particle NAAQS (see testimony of Jean Webb). If that credible evidence is taken into account, it could be that Riverview Energy would be forced to find "offsets" for all of their criteria pollutants. This is clearly another example of IDEM failing to do their due diligence to actually predict the overall impact of a new facility in Spencer County. This is yet another reason why Congress required a full year's worth of pre-construction monitoring prior to filing an application for a TV or Operating Permit. IDEM requires no pre-construction monitoring and thus, cannot do much more than speculate on the impacts a new source will have.

Carbon Dioxide

In the last six weeks, citizens of the world and the USA have been informed of a pending disaster from the increased and continual emissions of carbon dioxide. The UN Intergovernmental Panel on Climate Change ([HYPERLINK "http://www.ipcc.ch"]) and the Federal Government's, National Climate Assessment ([HYPERLINK "https://nca2014.globalchange.gov/report"]) both warned of dire impacts on human health, agriculture, disaster preparedness, global economies, species extinction and more. Both reports, prepared by distinguished groups of actual scientists, called for the immediate reduction in emissions of greenhouse gases including CO2.

While the draft permit allows for the direct emission of 2,276 tons per year of CO2, it fails to address the huge emissions of carbon dioxide from the burning of the product coming from the plant which is 3,777,312 tons per year assuming all of the product is actually consumed. Additionally the CO2 emitted from consuming the Naphtha product is 983,813 tons each year. That then totals 4,763,401 tons of CO2 emissions emanating from the facility and the product it will produce each year.

Of course there are other emissions that will impact climate as well. Those include the CO2 emissions from coal mining for the feedstock of the plant, those CO2 emissions from transporting coal and other products to the site, the operation generated emissions of the electrical usage of the plant as well as plant illumination and pumps for water input to the plant and wastewater from the plant, etc.. There are also methane emissions from fugitive leaks from the plant as well as any of the naphtha, which is highly volatile.

If we are warned that we must reduce our CO2 and other greenhouse emissions by scientists across the world, it seems fool hardy to allow this facility to introduce nearly five million additional tons of CO2 to the atmosphere each year it is in operation.

IDEM claims it has zero legal authority to address the massive new emissions of CO2 this plant will cause. But the original law that set up the Agency, passed by the Indiana Legislature gives them broad, but mostly unused, authority to protect the health and environment of the entire state. IDEM should exercise this authority for all pollutants in assessing this permit instead of purely relying on the dreams and prognostications of an applicant who sees this proposal as a pathway to riches.

Since IDEM is determined to permit this facility to operate, it must require that those emissions be offset in their entirety in this same region so as to protect the health of the planet and all Hoosiers in the future.

"No Significant Impacts"

IDEM failed miserably to adequately analyze the impacts this plant will have on the surrounding region. But in their public notice of the issuance of a draft permit, they arrogantly declared the plant would have, "no significant impacts." That moniker was seen across the USA as the Associated Press reported it in headlines across the country.

First, that defies reason. IDEM apparently does not consider the fact that this plant is being built inside the town limits of Dale and will usurp more than 500 acres of the town's physical size., not quite doubling the size. Further, it is a coal refinery and even it if was nothing more than handling the huge quantities of coal required, it would have a major impact on the lives, health and environment of the people who now reside in an essentially rural environment that will be forced to live in what will be described as a major industrial undertaking.

Noise, light, dirt and dust, increased traffic, power lines, pipelines, coal laden unit trains, handling coal will irrevocably change their lives, but sadly, they will not be allowed any sort of input into that decision. It is questionable if any IDEM employee had even visited the subject town, or the proposed site prior to the public hearing on this permit on December5, 2018.

Additionally, IDEM and its staff lack the necessary qualifications to make determinations regarding epidemiological impacts resulting from the operation of this plant. If those people actually do exist, then they should be identified, along with their academic credentials enumerated. This is necessitated since IDEM is claiming expertise they do not have as far as we can tell.

IDEM has a history of being in business to make sure that pollution is permitted any time an applicant desires. They admit as much in the "Permit Summary" they distributed at the Public Hearing December 5, 2018 in Lincoln City, IN, saying they are "required" to issue permits essentially if the applicant crosses their "t"s and dots their "i"s. Valley Watch has been following IDEM since its inception in 1986 and we know of zero applications they have not allowed to get permitted.

And, often, those permits are rewritten by IDEM to accommodate polluters' needs over the health of the people who are then forced to live next to a major polluter. If a permit holder cannot meet the conditions of their permit, it is common for IDEM to issue a "significant permit modification" to further accommodate their needs even if construction has yet to begin. If a permit holder has a hard time meeting the construction time requirements of a permit due to a variety of reasons, IDEM always issues an eighteen-month extension and has been known to do so more than once without any updates to the BACT or LAER requirements, no matter if significant technological improvements have been made to emission controls.

Veba Combi Cracker Technology

The applicant makes a big deal out of the fact that the developer of the original version of this technology was awarded a Nobel Prize. That was in 1931 in Nazi Germany, who was desperate for liquid fuels as they began their military build up which ended with WWII. They do not say why this technology lost out to Fischer -Tropsch technology that achieved the same end product. The Hitler regime chose Fischer -Tropsch over Veba Combi Cracker for reasons Valley Watch suspects are tied to economics, poison and waste.

Additionally, when the Nazi regime ended, many Nazi sympathizers fled to South Africa after the War where they sought to use the Fischer-Tropsch process to keep liquid fuels flowing in that country under apartheid. SASOL, LTD., used the Fischer-Tropsch process to derive liquid fuels because most oil producing countries across the globe sanctioned crude oil sales to South Africa during that dubious time. Veba Combi Cracker technology was available to that company but lost out due to a variety of reasons, including economic costs.

In November, 2018, SASOL announced they were abandoning their entire coal to liquids program because it was no longer competitive and the environmental and health costs were too high for it to be sustained. All along, SASOL had the Veba Combi Cracker technology available to them to alter their business model but chose to abandon coal to liquids technology all together.

Currently, according to IDEM's Doug Logan, the Veba Combi Cracker is not currently operating anywhere in the world although there have been two of them built in the autocratic countries of Russia and China. Why they are no longer operating is anyone's guess but IDEM was not even concerned enough with that fact to investigate why.

Since IDEM has done little to nothing to investigate emissions or operating parameters for the Veba Combi Cracker in either China or Russia, Valley Watch assumes that they are not operating using coal as a feedstock and are more likely to be using cleaner, higher carbon content "petroleum coke" to fuel their process. Pet Coke as it is often referred, is not a perfect fuel but since it is a waste product of petroleum refining, we know that it lacks the quantities and qualities of the contaminants that are found in #6 Illinois coal. Therefore, the emissions even if they were quantified from the existing, but not operating Veba Combi Cracker plants in the communist countries of China and Russsia, would likely be considerably less than highly contaminated #6 Illinois coal.

Financial Considerations not considered

This plant, once it commences construction, will irrevocably alter the physical nature of the Dale community and town. Even if construction begins and is not finished, as Valley Watch feels is likely to be the case, the visual and physical landscape of the community will be significantly and permanently changed. Valley Watch would assert that IDEM should require the applicant to restore the site to its original topography as agricultural land if the applicant begins but doe not finish the project as planned in a timely fashion. Indiana greenfield availability is a serious issue for new developments and across the nation as climate change and a host of other environmental issues challenge developers, especially for issues like ample fresh water.

IDEM should undertake a thorough examination of the financial resources and responsibility of the applicant to assure that once they begin construction, they are financially capable of finishing it, including inflationary factors impacting steel, and other components used in the plant. This analysis should also include all the pollution controls required in the permit and accurate cost analysis of the

project. Currently, the applicant claims the plant will cost $2.5 billion to construct but that figure has not changed since the applicant first proposed building this plant in Vermillion County in 2010. Several aspects of the proposal have experienced significant cost increases both due to inflation as well as the recent tariffs imposed on steel and aluminum by the Trump Administration just this year.

IDEM should not issue a final permit until they are fully confident this applicant has the financial resources to build and finish the project in a timely manner or else make, as a condition of the permit the provision Valley Watch has requested above.

In this regard, it should be noted that the Dale, IN Zoning Board stated during public discussion of the zoning change from agriculture to major industrial that if the plant is not built, the industrial zoning would be withdrawn and the land zoned back to agriculture. IDEM should reflect the same if they actually issue a Final Permit for Riverview to construct and operate.

Conclusion

This draft permit is close to fraudulent. No data is given to support it but vague assurances from the applicant and possible vendors as to its veracity. In too many cases, IDEM even leaves the choice of technology for emission controls undetermined.

IDEM's "modeling" of potential emissions is seriously flawed and should be redone using sources of real data including requiring the applicant to monitor various air quality parameters for a full year prior to issuing a new draft permit for public review, as required by the Clean Air Act.

IDEM should also include ALL the numerous sources of pollution that were left out of the model runs IDEM and the applicant performed. To use a model absent those sources to determine the impacts to health and the environment is tantamount to fraudulent behavior and IDEM should be ashamed to present such a model for public review.

It is known that numerous phone calls and meetings with the applicant took place but IDEM offers no records of the discussion or decisions that took place in those meetings and calls for the public to review and ascertain for themselves whether IDEM is acting according to established law and regulation.

IDEM has failed to comply with Indiana's Public Records regulations throughout this permitting process. Valley Watch and colleagues have made formal Public Records requests as early as late summer which IDEM has failed to comply with Public Records regulation.

IDEM refuses to extend the comment period for the permit as Valley Watch and colleagues have requested until they actually do comply with the Public Records request. **We continue with that request in these comments.**

IDEM makes hyperbolic statements regarding the impacts this plant will cause and offers near zero proof to support those statements.

This technology has a limited and questionable history. Just because there are two facilities using this technology in two autocratic, dictatorships does not mean that the technology is appropriate for the United States, whose democracy is dedicated to serving all its citizens and not just the upper economic class. Real emissions data may be available for those two projects but IDEM made no effort to even investigate that possibility, And if they had, the data would not accurately reflect on the likely emissions from the proposed plant due to differences in feed stocks.

This project is little more than an experiment, both for the technology involved but also as to its impact on human health and environment of the surrounding region. IDEM, in this draft permit, almost completely dismisses the experimental nature of the proposal and ignores the fact that there is almost zero actual data to be used to determine the levels of control necessary to adequately maintain safe air quality in the region. This is especially true in the BACT and LAER analyses of the proposal.

Last, Valley Watch has serious problems with the below picture of Indiana Governor Eric Holcomb and Riverview president, Greg Merle exchanging pleasantries outside the American Embassy in Switzerland last Spring, at a time when IDEM was supposed to be undertaking a serious review of the project unfettered by political considerations. Since the Governor was out of the State and the Country at the time, we are unsure if laws regarding conflicts of interest, political donations, agreements, and a multitude of other corrupt possibilities would apply to such a meeting. But at the very least, knowing that this meeting even took place raises serious questions as to the influence the Governor may have exerted in issuing this Draft Permit. The Governor, at a minimum, raised a red flag allowing this meeting to take place in a foreign land with someone who had direct business (this Draft Permit) with the state at the same time.

We look forward to your complete response to our concerns and hope that you will refuse to issue a Final Permit to this plant until those answers are given and verified.

Sincerely,

John Blair, president

Cc: media, Michael Langman (USEPA Region 5), Paymon Danesh (USEAP Region 5),

Select Local and State Officials

Enclosures

Affidavit of Dr. Howard Dunn, on less than honest behavior of IDEM in a modeling protocol

Narrative and Spreadsheet on missing data IDEM sought to dismiss in a redesignation petition

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Exhibit Number 1

BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

IN THE MATTER OF: CONAGRA SOYBEAN PSD APPEAL NOS. 98-27 and 98-28
PROCESSING COMPANY
)
PSD Permit No. CP-129-8541-00039

AFFIDAVIT

Howard E. Dunn, being duly sworn under oath, says and deposes as follows:

1. The Affiant, Howard E. Dunn, is an adult and is competent to testify on the matters stated herein.

2. The Affiant resides at Ex. 6 Personal Privacy (PP)

3. The Affiant has received a Doctorate of Philosophy in organic chemistry from the University of Illinois. He is employed as a professor of chemistry at the University of Southern Indiana, located in Evansville, Indiana.

4. Approximately 9 to 10 years ago, the Affiant and several other scientists having a strong interest in environmental science issues formed an informal association known as ChemQuery. ChemQuery presently comprises 15 scientists.

5. In 1998, Affiant became aware of public announcements of the plans of ConAgra Soybean Processing Company ("ConAgra") to locate a large soybean processing facility in Posey County, Indiana, in the vicinity of Mt. Vernon.

6. As Affiant and certain other members of ChemQuery learned more of ConAgra's plans for the soybean processing plant, their concern grew over the potential adverse environmental impacts posed by the project. One of the particular concerns involved the projected potential emissions of volatile organic compounds (VOCs) and nitrogen oxides (Nox) from the proposed plant's operations, since these air pollutants are generally recognized as precursors of ozone formation. These concerns arose, in part, from the historical difficulties experienced by Vanderburgh and Posey Counties in

achieving compliance with the U.S. Environmental Protection Agency's former one-hour National Ambient Air Quality Standard (NAAQS) for ozone of 120 parts per billion (ppb).

7. The PSD permit for the proposed ConAgra plant was issued by IDEM in mid-August, 1998. The permit, as issued, would allow 937 tons per year of VOC emissions. This represents a very substantial increase above allowable VOC emissions from other stationary sources in or affecting Vanderburgh County, Indiana.

8. As Affiant investigated the proposed PSD permit for the ConAgra plant and the technical information concerning the projected ozone impacts, his concerns grew. Affiant became aware of questions over the technical validity of the air quality modeling employed by the Indiana Department of Environmental Management (IDEM) to assess the projected ozone impacts. One source of these questions was a technical review of the IDEM modeling by a technical consulting firm known as ENVIRON. The ENVIRON review concluded, among other things, that certain inputs to the RPM-IV air quality model used by IDEM were not correctly stated, with the result that ambient ozone concentrations would be underpredicted by the model..

9. Affiant and others from ChemQuery raised their concerns, as described above, to officials at the IDEM over a period of several months during late 1998 and early 1999. Among other actions, ChemQuery requested that IDEM rerun the RPM model with corrected inputs and make the results available to ChemQuery.

10. In early April, 1999, Janet McCabe, Assistant Commissioner for the IDEM's Office of Air Management, invited Affiant and other members of ChemQuery to visit IDEM on April 13, 1999, to discuss the issues over air quality modeling pertaining to the ConAgra PSD permit.

11. On April 13, 1999, Affiant and two other members of ChemQuery, Dr. Jeff Seyler and Dr. Tom Pickett, as well as Dr. Joanne Alexandrovich, the ozone officer from Vanderburgh County's Health Department, met with IDEM representatives involved in the air quality modeling for the ConAgra permit, including Mark Derf, Ken Ritter, and others.

12. During the meeting of April 13, 1999, at IDEM, Mark Derf conducted a run of the RPM-IV modeling program with the following corrected input parameters:

- Actual meteorological conditions for the test date of July 12, 1995;
- Actual measured ambient NOx values for Vanderburgh County for this date;
- Corrected NO to NO_2 emission ratio (95:5 rather than 5:95, on a mass basis); and
- Corrected molecular weight for the PAR parameter to reflect hexane emissions (14 g/mole rather than 86.2 g/mole) in accordance with the RPM-IV operator's manual.

With these revised inputs, which are consistent with the ENVIRON criticisms, the RPM model output predicted an increase in ambient ozone concentration of seven (7) ppb as a result of the proposed emissions from the ConAgra plant in contrast to the one (1) ppb ozone impact previously predicted by IDEM's modeling. In addition, the time of the predicted peak ozone concentration shifted from late morning as depicted by IDEM's modeling in support of the ConAgra permit to late afternoon with the revised inputs, as would be expected from ambient monitoring.

FURTHER AFFIANT SAITH NOT.

_____

Howard E. Dunn, Ph.D.

STATE OF INDIANA)
) SS:
COUNTY OF VANDERBURGH)

Before the undersigned, a Notary Public in and for said County and State, on this _____ day of April, 1999, personally appeared Howard E. Dunn, Ph.D., who, being sworn upon oath, stated that the foregoing statements are true and accurate and acknowledged his signature as appearing hereinabove.

_____
Notary Public

_____
Printed

My Commission expires:

Residing in _____ County, IN

_____

Exhibit Number 2

The first part of this exhibit is a narrative from comments filed by Valley Watch, Inc. dated March 27, 2008 regarding a petition by the Indiana Department of Environmental Management to redesignate Vanderburgh County as "attainment" of the NAAQS for fine particles that year. After the narrative there are four spreadsheets showing the missing data discussed in the narrative for 2004-2007. Together, they show what Valley Watch believes is corrupt intent on the part of IDEM to use extremely cherry picked data to make their case. And if they did it then, they are likely to do the same now.

"Serious Data Gaps in this analysis

IDEM would have us believe that 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 NAAQS for PM2.5.

Unfortunately, the data they seek to base that determination on has serious gaps which 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 suggest will make and keep our air clean and healthy.

First, IDEM has chosen to use data from 2004, 2005 and 2006 to prove their case. That, by itself is faulty since data is available for 2007 and it is well known that 2004 was a year that had an exceptionally cool summer. EPA guidance, which is usually not followed, demands that periods of "unusual meteorological conditions" should not be used in determining the designation of attainment status for the NAAQS.

Because 2004 was exceptionally cool, the conditions for build up of fine particles simply did not happen. That resulted in reduced output of the numerous power plants in the region to run air conditioners, etc.

But, that is only a minor aspect of the serious data gaps we have identified. If data for 2005, 2006 and

2007 is used, which is appropriate, it is easy to find huge gaps that make any determination to attainment dubious if not fraudulent.

IDEM claims to have data to back up this petition but when 13% of the data is missing in 2006 and 16% in 2007, mostly during periods when high levels of fine particles are historically formed, their whole data set must be thrown into question.

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 ten measurements are also missing.

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, PM 2.5 levels at the other Evansville monitors showed values in excess of the Annual NAQQS for PM 2.5 with several reaching levels that doubled the standard. ***Please see Exhibit 3 a spreadsheet of missing data from 2006 and 2007.***

Who knows what the reading on the Civic Center monitor would have been? We feel that this significant data gap is sufficient reason to stop this process before it goes any further.

What caused the data gaps is uncertain. Malfeasance, ineptitude, even intent could be responsible. For years the monitors have been the responsibility of the Evansville EPA. Over those same years, the local 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 pollution increases to unsafe levels.

The head of the Evansville EPA, the person responsible for collecting the data is a former member of the "Environmental Committee" of the local Chamber of Commerce. Now, she is married to another Committee member.

The Chamber is presided over by a man, who just last year very publicly complained about our PM 2.5 designation as somehow being unfair. Specifically, Chamber president, Matt Meadors declared at the Energy Summit of Southwest Indiana on August 31, 2007, "Personally, I believe the designation is unfair and shortsighted, I do not believe the region deserves to be punished and penalized simply because we have been blessed with an abundance of coal and the corresponding coal generating power facilities that locate here on top of these deposits."

We do not like the appearance of all this. The connections between the regulators and those they are supposed to regulate should be above even the appearance of impropriety. In this case they clearly are not.

What is the reason so many days of data are missing, especially when evidence is available to show that 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 filer samples still available for analysis? Have the been tampered with? These are questions that need answers before we can claim air quality is now safe.

If our design value was approaching the level recommended by CASAC of 14 μg/m3, 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 gaps in its veracity with design values extremely close to the standard already.

The three year readings for this region, even by IDEM calculations using incomplete data, meet the standard with very 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,' a bureaucratic spin if we ever saw one.

Valley Watch believes that this petition should be rejected due to the high level of uncertainty presented by the data IDEM is using that has so many significant gaps at times when those gaps could, indeed, change the outcome of the petition.

To have values based on faulty data determine attainment of a 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.

Congress clearly wanted the Act to function to protect health with a margin of safety. This petition is a rejection of the principles codified in the 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 and IDEM knows that-they just don't seem to care.

We are 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, the data is neither complete or verifiable and the petition should be rejected."

2004 Missing PM Data

U of E Dates Missing	Civic Center Data	Mill Road Data
3/7/04	4.7	4.6
3/19/04	8.9	9.3
3/22/04	9	8.6
7/5/04	11.5	11.7

Mill Road Dates Missing	Civic Center Data	U of E Data
5/30/04	11	11.1
9/18/04	---	6
9/27/04	---	14.8

Civic Center Dates Missing	U of E Data	Mill Road Data
1/28/04	12.1	13
4/27/04	6.4	6.4
5/21/04	13.6	13.8
7/14/04	7.7	8
9/18/04	6	---
9/27/04	14.8	---
12/23/04	13.4	12.6
12/26/04	23.2	22.6

2005 Missing PM Data

U of E Dates Missing	Civic Center Data	Mill Road Data
5/25/05	6.7	6.5
5/28/05	7.7	9
5/31/05	16.6	14.7
6/3/05	17.6	16.4
6/6/05	15	14.7
6/9/05	10.7	11.6
6/12/05	8	7
6/15/05	7.5	7.6
6/27/05	43.2	43.4
12/6/05	19.3	21.2

Civic Center Dates Missing	U of E Data
3/26/05	28.5
3/29/05	11.4

Mill Road Dates Missing	Civic Center Data	U of E Data
3/14/05	16.2	17.4
8/11/05	24.4	25
8/17/05	26.1	25.6
9/1/05	16.2	15.6
9/19/05	20.4	20.5
10/13/05	25.8	24.5
10/16/05	8.3	9.6

Exhibit 3 - 2006 Missing PM Data

U of E ates Missin	Civic Center Data	Mill Road Data
2/25/06	8.6	---
7/25/06	21.4	22.8
7/31/06	---	16

Mill Road ates Missin	Civic Center Data	U of E Data
2/25/06	8.6	---
5/11/06	4.7	4.6
5/29/06	15.9	16.1
6/1/06	19.7	19.5
9/8/06	---	26.2
9/11/06	---	16.4
10/20/06	7.8	8.8
10/23/06	9.1	8.1
10/26/06	11.1	12.7
10/29/06	8.5	9.7
11/1/06	6.6	6.5

Civic Center Dates Missing	U of E Data	Mill Road Data
2/13/06	10.2	10.4
2/19/06	9.4	8.8
2/22/06	21.2	19.9
5/20/06	9.6	8.9
5/23/06	20.2	10.5
6/16/06	15.1	15
6/25/06	27.5	26.5
7/28/06	8.9	8.2
7/31/06	---	16
9/2/06	11	11.4
9/5/06	16.8	16.4
9/8/06	26.2	---
9/11/06	16.4	---
9/14/06	11.7	11.6
12/4/06	7.5	7.9
12/7/06	6.9	8.7

Exhibit 3 - 2007 Missing PM Data

U of E Dates Missing	Civic Center Data	Mill Road Data
6/26/07	16.8	---
7/14/07	15.5	13.9
8/1/07	34.4	31.1
9/6/07	33.6	24.6
9/9/07	15.1	11.7
11/23/07	7.6	8.7
12/8/07	21.1	19.7
12/11/07	10.2	10.8
12/23/07	3.4	3.3
12/26/07	14.3	11.4

Mill Road Dates Missing	Civic Center Data	U of E Data
2/14/07	7.9	7.1
2/17/07	14.8	15.2
2/20/07	10.8	9.9
5/18/07	7.8	8.8
5/21/07	15	14.9
6/26/07	16.8	---
10/15/07	---	15.5
10/24/07	5	4

Civic Center Dates Missing	U of E Data	Mill Road Data
4/6/07	5.8	6.7
4/18/07	11.2	11
4/21/07	19.7	19.3
5/24/07	25.8	23.9
5/27/07	27.7	29.9
6/2/07	22.3	19.8
6/5/07	8	7.7
6/11/07	16.5	17.2
6/14/07	31.5	28.2
6/17/07	29.6	29.1
6/23/07	20.2	20.6
7/8/07	26.2	23.4
8/4/07	30	28.8
8/7/07	18.2	18.3
8/10/07	11.1	11.5
8/13/07	24.7	25
8/16/07	25.2	24.4
10/15/07	15.5	---
10/30/07	17	14.1