BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

Jasper Municipal Electric Utility
Permit No. T037-32039-00002

Issued by Indiana Department of
Environmental Management,
Office of Air Quality

PETITION FOR OBJECTION TO THE ISSUANCE OF A STATE TITLE V PERMIT No. T037-32039-00002

Petition No.:

PETITION OF HEALTHY DUBOIS COUNTY, INC., TO OBJECT TO ISSUANCE OF A TITLE V OPERATING FOR THE JASPER MUNICIPAL ELECTRIC UTILITY

Pursuant to Clean Air Act §505(b)(2), 42 U.S.C. § 7761d(b)(2), 40 C.P.R. §70.8(d) and 40 C.P.R.§ 70.7(f) and (g), Healthy Dubois County, Inc., ("HDC") hereby petitions the Administrator of the United States Environmental Protection Agency ("Administrator") to object to the Title V Operating Permit No. T037-32039-00002 ("Permit") reissued in May 2013, by the Indiana Department of Environmental Management ("IDEM") for the coal-fired, steam generating, electricity producing power plant ("Source") owned by the City of Jasper, Indiana ("City") and historically operated by the City's Jasper Municipal Electric Utility ("JMEU"or "Source").

The Administrator should object to the issuance of the Title V Permit due to:

(A.) IDEM's failure to hold a public hearing before issuing the Title V Permit, even though Public Comments repeatedly requested such;

(B.) IDEM's failure to require and establish emissions limits in permits that are protective of human health;

(C.) IDEM's failure to specify or require in the Permit adequate monitoring to ensure enforcement of emissions limits;

(D) the locale's history of nonattainment, and PSD;

(E) IDEM's failure to obtain and require a complete application before issuing the Permit, and

(F) IDEM's issuance of the Permit without adequately and meaningfully responding to Public Comments.

I. INTRODUCTION

Jasper Municipal Electric Utility ("JMEU") owns a presently coal-fired, stoker boiler, described in the 2008-issued and in the draft permit of this 2013-issued Permit and in 326 IAC 6.5-4-18 as having a heat input capacity of 192 MMBtu/hr, generating steam for its electricity generator of approximately 14.5 megawatt capacity located in Jasper, Indiana. This plant was constructed in 1967 and fitted with an electrostatic precipitator in 1993 as part of a settlement of a violation of its operating permit PM limits (Permit § D.1; Application pages 167-173). The JMEU Title V Permit T 037-32039-00002, a renewal, became a proposed permit, variously, according to the IDEM website information and a letter from IDEM agent Hotopp to Alec Kalla of Healthy Dubois County, Inc., dated May 26, 2013, on the 24th , 25th or 26th of April, 2013, and is published as issued as final by the Indiana Department of Environmental Management May 15, 2013. Although the Source has been, most days, inactive during the past few years, the City maintains it is in operational status and has leased the Source to Twisted Oak Corporation, which intends to both enlarge the Source to include a natural gas turbine generator and to change the fuel from coal to miscanthus. IDEM's proposed permit, according to written notification from IDEM to Alec Kalla, was sent to EPA Region V on April 26, 2013, but may have been sent as early as April 24th. The same notice to Kalla states that the EPA's 45 day review period ends on May 11, 2013. This appears to be an error, as the review period is 45 days; and, thus, June 11th would be the 46th day after April 26th.

A Petition to/for Object(ion) must be filed with the Administrator during the 60 days following the 45 day review period. This Petition is so filed regardless of the exact closing date of the review period. A Petition must be based upon issues raised with reasonable specificity during the public comment period for the permit unless the petitioner demonstrates it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

That public comment period began in August 2012 and closed in September 2012. The public, including Alec Kalla, raised numerous significant issues by submitting several comments and objections, together with repeated requests for a public hearing on the Permit issuance. The Sierra Club Hoosier Chapter and Hoosier Environmental Council both opposed the renewal of this permit and requested a public hearing. Eleven commenters requested a public hearing. IDEM held no public hearing concerning the JMEU permit during the permitting process.

II. GROUNDS FOR OBJECTION

Applicable to all matters raised in this Petition is IDEM's acknowledgment in Permit § B.4

on page 7 of 39, that, "Unless otherwise stated all terms and conditions in this permit...are enforceable by...U.S. EPA...." By law, each portion of regulation or statute not federally enforceable must be identified as such in the Permit.

Also applicable to all matters raised in this petition is 42 USC §7661 d (b) 2: "The Administrator shall issue an objection within such period if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of this chapter, including the requirements of the applicable implementation plan."

A. IDEM issued this Permit without first holding a public hearing as was requested numerous times in submitted Public Comments, and as is required by the U.S.C., CFR, IAC and case law.

Relevant regulations and rulings include:

1. 42 U.S.C. §7661 (b) (6):

"...(b) Regulations. The Administrator shall promulgate within 12 months after November 15, 1990, regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These elements shall include each of the following:...."

"(6) Adequate, streamlined, and reasonable procedures for expeditiously determining when applications are complete, for processing such applications, for public notice, including offering an opportunity for public comment and a hearing..."

2. 40 CFR §70.8 - Permit review by EPA and affected States.

"(h) Public participation. Except for modifications qualifying for minor permit modification procedures, all permit proceedings, including initial permit issuance, significant modifications, and renewals, shall provide adequate procedures for public notice including offering an opportunity for public comment and a hearing on the draft permit."

3. 40CFR §70.7 (h):

"(h) Public participation. Except for modifications qualifying for minor permit modification procedures, all permit proceedings, including initial permit issuance, significant modifications, and renewals, shall provide adequate procedures for public notice including offering an opportunity for public comment and a hearing on the draft permit."

4. 326 IAC 2-7-17 Public participation and notice to affected states.

"(c) All Part 70 permit proceedings, including initial Part 70 permit issuance, significant modifications, minor permit modifications, and renewals, shall provide adequate procedures for public notice, including offering an opportunity for public comment and a hearing on the draft Part 70 permit as follows:

(1) Prior to issuing a Part 70 permit, the draft permit shall be....

(C) The notice shall include the following:

(i) Notification of receipt of the permit application.

(ii) The commissioner's draft approval of the permit application.

(iii) Notification to the public of the following:

(AA) At least a thirty (30) day period for submitting written comments to the commissioner and a brief description of the comment procedures required by this section.

(BB) The opportunity for a public hearing including a statement of procedures to request a hearing (unless a hearing has already been scheduled) for consideration of the permit application.

5. 326 IAC 2-8-6 Federally enforceable requirements.
Authority: IC 13-1-1-4; IC 13-7-10 Affected: IC 4-22-9-5, Sec. 6

"(a) The commissioner may not issue a FESOP that waives, or makes less stringent, any limitation or requirement contained in or issued under the state implementation plan (SIP) or requirements that are otherwise federally enforceable under the CAA. Permits that do not conform to the requirements of this rule and the requirements of U.S. EPA's underlying regulations may be deemed by the U.S. EPA not federally enforceable.

"(b) All terms and conditions in a FESOP, including any provisions designed to limit a source's potential to emit, are enforceable by the U.S. EPA and citizens under the CAA. (Air Pollution Control Division; 326 IAC 2-8-6; filed May 25, 1994, 11:00 a.m.: 17 IR 2274)"

6. 326 IAC 2-7-7 Federally enforceable requirements Authority: IC 13-1-1-4; IC 13-7-10 Affected: IC 4-22-9-5, Sec 7.

"(a) All terms and conditions in a Part 70 permit, including any provisions designed to limit a source's potential to emit, are enforceable by the U.S. EPA and citizens under the CAA.

(b) Notwithstanding subsection (a), the commissioner shall specifically designate as not being federally enforceable under the CAA, any terms and conditions included in a Part 70 permit that are not required under the CAA or under any of its applicable requirements. Permit terms and conditions so designated are not subject to the requirements of this section, and are not subject to the U.S EPA and affected state review provisions in sections 8, 9, 11, 12, 17, and 18 of this rule. (Air Pollution Control Division;326 IAC 2-7-7; filed May 25, 1994, 11:00 a.m.: 17 IR 2260)

Argument:

The Petitioner could not find anywhere in the Permit text stating that the Commissioner had designated regulations requiring a public hearing not federally enforceable. The issuance of this Permit is a renewal of the JMEU's 2008 permit. Nowhere does IDEM or JMEU state that this is a permit proceeding for modification qualifying for minor permit modification procedure as would be exempt from the public hearing requirement under 40 CFR § 70.7 (h), but not by 326 IAC § 2-7-17.

The U.S. Court of Appeals, 2nd Circuit, has determined that:

> "We will not defer to an agency's interpretation that contravenes Congress' unambiguously expressed intent. See Chevron, 467 U.S. at 842-43, 104 S.Ct. 2778 (stating that if statute speaks clearly "to the precise question at issue," we "must give effect to the unambiguously expressed intent of Congress"); Barnhart v. Walton, 535 U.S. 212, 217-18, 122 S.Ct. 1265, 152 L.Ed. 2d 330 (2002) (same). When the question is not one of the agency's authority but of the reasonableness of its actions, the "arbitrary and capricious" standard of the APA governs. See generally Arent v. Shalala, 70 F.3d 610, 614-16 (D.C.Cir.1995) (discussing relationship between Chevron and the APA); see also Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 103 S.Ct. 2856, 77 L.Ed.2d 443 (1983) (applying arbitrary and capricious standard)." [321 F.3d 316 New York Public Interest Research Group v Christine Todd Whitman et al, U.S. Court of Appeals, 2nd Circuit, decided 27 February 2003 (hereafter "NYPIRG")],at 25.

The same court in NYPIRG, at 5, ruled that Congress intended that agency (EPA) actions not be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." U.S.C. § 706 (2) (A). Petitioner argues that the same is applicable to IDEM.

42 U.S.C. §7661 (b) (6) unambiguously expresses the intent of Congress that a permitting agency, such as IDEM is, is to offer an opportunity for a public hearing.

While IDEM's permitting process allowed the public to submit comments and objections concerning the draft permit, without meaningful response from IDEM to significant issues raised in comments that opportunity to comment is meaningless. IDEM conflated and edited the public comments and responded in the Proposed Permit papers to IDEM's version of comments, but the Responses failed for many issues to give meaningful and clear resolution of the issues raised. If this were not the case, this petition would not be presented.

Had a public hearing been held, IDEM would have had the opportunity for dialogue with commenters. Only with the back and forth of dialogue can a root cause analysis of disagreement and confusion over an issue be performed, can it be clear that a question has been resolved, and can both sides of a discussion understand the other's reasoning and statements. IDEM chose to respond only

in the Proposed Permit, giving itself and the commenters no opportunity for dialogue. IDEM also allegedly misconstrued or misinterpreted some comments, while failing entirely to address others, such as the requests to hold a hearing. A hearing would have enabled IDEM to resolve every single issue raised in this petition and resolve them in the Proposed Permit, while the mere acceptance of public comments did not. The lack of a public hearing thus effectively deprived the public of any meaningful opportunity to comment and deprived the public of meaningful responses from IDEM.

The draft permit Notice of a 30-Day Period For Public Comment, issued in August 2011, states plainly that a citizen need only write to the permit writer, Mr. Khan, and request a hearing. Commenters asked IDEM for any further necessary requirements to engender a hearing, and no further requirements were offered by IDEM. There were no more complicated procedures and no minimum necessary number of requests specified for a hearing to be held listed in the Notice of 30-Day Period For Public Comment; only a requirement that one submit a request in writing that a public hearing be held. Many citizens did so, but no hearing was held. The Draft Permit's Notice of 30-Day Period For Public Comment stated also, "If adverse comments concerning the air pollution impact of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing." IDEM solely offered the public the opportunity to request that a public hearing be held, but not the actual opportunity for a public hearing

Petitioner argues that IDEM thus announced either its ignorance of permitting regulations or IDEM's intent to stand in violation of both Indiana Administrative Code and of federal law and regulations regarding holding a public hearing. Petitioner argues IDEM is required to have held a hearing because one was requested by public comment(s); it is not IDEM's choice to disregard such a request.

The Sierra Club Hoosier Chapter opposed the renewal of this permit and requested a public hearing. Mr. Rock Emmert, who raised issues and actually has a Ferdinand, IN, address near the Source, stated, "IDEM should not merely hold a public hearing about this draft permit/renewal; it should firmly deny this permit." Mr. Michael Hicks, of Jasper, IN, commented on the adverse effects of pollution resulting from the issuance of this Permit and requested a hearing. Mr. Jesse Kharbanda, for the Hoosier Environmental Council, also commented adversely on the issuance of this permit and requested a public hearing. Jeanne Melchior, Cara Beth Jones, Megan Anderson, Denise Schnell, Kelly Flamion, Kristine Dalton, Gina Herman and Alec Kalla all requested a public hearing, Kalla repeatedly. This many requests for a hearing on a permit for a small municipally owned power plant in a city of estimated population 15,157 (quickfacts.census.gov) should be sufficient to engender a public hearing. IDEM has previously held hearings on permits when Kalla alone has requested one. (In the matters of Jasper Seating, French Lick, IN and Texas Transmission, permit for the compressor station in French Lick, cited in IDEM Responses) None was held and IDEM did not so much as mention these requests in IDEM's Responses to Comments.

IDEM has cited no law or regulation requiring a certain number of requests be made in order for a public hearing to be held. IDEM failed to specify or define what constitutes a significant number of requests. IDEM issued the Permit without and before responding adequately and meaningfully

to public Comments in its Response and without holding a public hearing as was repeatedly requested and as is required by law and regulation.

IDEM failed to meaningfully respond to Comments by not explaining its reasoning for not holding a public hearing. IDEM's Responses failed to encompass at all the issue of a public hearing raised in Public Comments. IDEM is required to issue Responses addressing issues raised in Public Comments by:

> "It is a general principle of administrative law that an inherent component of any meaningful notice and opportunity for comment is a response by the regulatory authority to significant comments." (in re U.S. Steel Corp-Granite City Works, Order Granting in Part and Denying in Part Petition for Objection to Permit, Pet. No. V-2009-03, at 7 (E.P.A. Jan. 31, 20II) [hereinafter "Granite City Works Decision]; in re Wisconsin Public Service Corporation's JP Pulliam Power Plant, Order Granting Petition for Objection to Permit, Pet. No. V-2009-01, at 5 (E.P.A. June 28, 2010) (same) [hereinafter "Pulliam Decision"]);
>
> And
>
> "In practical terms, "the opportunity to comment is meaningless unless the agency responds to significant points raised by the public.'" [(*Home Box Office v. FCC*, 567 F.2d 9, 35, D.C. Cir. 1977)];
>
> And,
>
> Responses to comments must address the issues raised in a meaningful fashion, and though perhaps brief, must nonetheless be clear and thorough enough to adequately encompass the issues raised by commenters. (in "Granite City Works Decision" as above; in "Pulliam Decision" as cited above).

Rather, 40 CFR § 124.17 (a) (2) requires that in its Response to comments, in an Agency such as IDEM "...the Director shall issue a response to comments." Furthermore, this response shall "(2) Briefly describe and respond to all significant comments on the draft permit or the permit application (for section 404 permits only) raised during the public comment period, or during any hearing." Although 40 C.F.R. §124.17(a)(2) may formally apply to water permits, it has routinely been applied by the courts within the context of the Clean Air Act as well. (*See* in re Amerada Hess Corp Port Reading Refinery, PSD Appeal No. 04-03, 12 E.A.D. pp2, 16-20 (EAB 2005) [hereafter "Amerada Hess"]; In re Vulcan Construction Materials, LP, ' PSD Appeal No. 10-11, Slip Op at 27 (March 2, 2011) (EAB) [hereafter "Vulcan"]; in re N. Mich. Univ. Ripley Heating Plant, PSD Appeal No. 08-02, Slip Op at 47, (Feb18, 2009) (EAB) [hereafter "NMU"]).

"The Administrator has previously granted Title V petitions to object where the permitting agency failed to sufficiently respond to significant comments. (*See*, e.g., JP Pulliam Decision at 5;

see also Amerada Hess, Slip Op. at 16.) For example, in the Granite City Works Decision, the Administrator granted a petition to object where, in response to significant comments regarding the insufficiency of the permit's monitoring requirements, the permitting agency had simply stated that the relevant requirements were fulfilled without providing any supporting analysis." (Granite City Decision at 5-33). IDEM should have been aware of this standard.

IDEM did not hold a public hearing on this Permit even though citizens requested a public hearing. IDEM acted contrary to the intent of Congress, contrary to law, contrary to regulation, and acted arbitrarily and capriciously. For these reasons, the Administrator should grant this petition by Healthy Dubois County, Inc., and object to the Permit. This failure by IDEM to hold a public hearing is egregious enough that the Administrator should rescind the issued Permit.

B. IDEM failed to comply with regulation requiring emissions limits in permits be protective of public health.

Relevant regulations and rulings include:

1. 42 U.S.C. § 7401(b)(1) states the purposes of the CAA which include:
   "The purposes of this subchapter are—
   (1) to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population;..."

2. 40 CFR § 70.6, Permit Content, includes the following text:

"(a) Standard permit requirements. Each permit issued under this part shall include the following elements:

(1) Emissions limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance."

3. 326 IAC 2-6.1-5 Operating permit content Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11 Affected: IC 13-15; IC 13-17, Sec. 5.

"(a) Permits or permit revisions issued under this rule shall contain the following:

(1) Emission limitations for any source or emissions unit that assure:

(A) the ambient air quality standards set forth in 326 IAC 1-3 will be attained or maintained, or both;

(B) the applicable prevention of significant deterioration maximum allowable increases set forth in 326 IAC 2-2 will be maintained;

(C) the public health will be protected; and

(D) compliance with the requirements of this title and the requirements of the CAA will be maintained. "

4. In NYPIRG, the U.S. Court of Appeals, 2nd Circuit ruled, at 34:

> "We are persuaded that NYPIRG's members' allegations about the health effects of air pollution and of uncertainty as to whether the EPA's actions expose them to excess air pollution are *sufficient* to establish injury-in-fact, given that each lives near a facility subject to Title V permitting requirements." Merely living near the JMEU Source adversely affects the health of individuals and, since individuals make up the public, adversely affects public health.

5. Although 40 C.F.R. §124.17(a)(2) formally applies to water permits, it has routinely been applied by the courts within the context of the Clean Air Act as well. (*See*, e.g.,in Amerada Hess; in re Vulcan Construction Materials, LP, ' PSD Appeal No. 10-11, Slip Op at 27 (March 2, 2011) (EAB); In NMU, Slip Op at 47). This regulation reads:

> "40 CFR§ 124.17 Response to comments.
>
> (a) (Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).) At the time that any final permit decision is issued under § 124.15, the Director shall issue a response to comments. States are only required to issue a response to comments when a final permit is issued. This response shall:
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> (1) Specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and
>
> (2) Briefly describe and respond to all significant comments on the draft permit or the permit application (for section 404 permits only) raised during the public comment period, or during any hearing."

Argument:

A permitting agency must provide responses to significant comments submitted during the public comment period. Under 42 U.S.C. §7661 (b) (6), all Title V permit programs must "offer[] an opportunity for public comment and a hearing." *See also* 40 C.F.R. §70.7 (h). It is a general principle of administrative law that an inherent component of any meaningful notice and opportunity

for comment is a response by the regulatory authority to significant comments." (*See* "Granite City Works Decision," at 7; "JP Pulliam Decision," at 5)

In practical terms, "the opportunity to comment is meaningless unless the agency responds to significant points raised by the public." (Home Box Office v FCC, 567 F.2d 9, 35 (D.C. Cir. 1977). Responses to comments must address the issues raised in a meaningful fashion, and though perhaps brief, must nonetheless be clear and thorough enough to adequately encompass the issues raised by commenters. (*See* "Granite City Works Decision"; "JP Pulliam Decision").

326 IAC 2-5.1-3 (e)(1)(c) requires emissions limits in a permit be protective of public health. It does not require that they merely satisfy the IDEM Commissioner's concept of protective of public health, but that they in fact be protective of public health. Also, none of these 326 IAC regulations are designated in the permit text as having been designated by the Commissioner as being not federally enforceable, as per 326 IAC 2-7-7. Consequentially, IDEM should be found to be in violation of 42 U.S.C. §7401 (b)(1), 40 C.F.R. §70.6, and 326 IAC 2-6.1-5, because the Permit was issued without addressing key pollutants such as mercury, dioxins and PM2.5.

The Permit contains no limitations on emissions of mercury nor of dioxins. Dioxins are acknowledged in common usage in permitting to include both dioxins and furans. Both mercury and dioxins are well known and well documented to be toxic. Both are HAPs, so there is no need of documenting the danger to public health due to these emissions. IDEM issued this Permit without complying with all applicable regulations concerning limiting emissions of mercury and dioxins.

The Permit also did not address PM2.5. PM2.5 includes ultrafine particulates of which there is no safe level of exposure. This is not a BACT determination in which cost per quantity of controlled (captured) pollutant is a consideration; the rules state the emissions limits must be such that the public health will be protected. Please see the following from the "Report on Medical Risk and Concerns in Regard to Proposed Crematory in Paoli, Indiana" by Dr. William Sammons, 2012, (hereafter "Dr. Sammons"):

> "Even at atmospheric levels lower than the current NAAQS [National Ambient Air Quality Standards], particulate matter exposure is linked to mortality and hospital visits [17] commonly through the impact on respiratory and cardiovascular disease [18]. In addition, exposure to particulate matter and ozone has been linked to poor birth outcomes [19]. New research has shown significant links to many other diseases including autism, Alzheimer's disease, congenital abnormalities, multiple types of cancer, and interference with significant bioregulatory systems within the body that regulate blood pressure and blood clotting [20] as well as evidence that exposure to PM2.5 and ultrafines causes increased deposition of atherosclerotic plaque [21] and accelerates other harmful pathological processes such as oxidation stress and apoptosis in cells, especially nerve cells. [22]

References17-27 and 60-63 are numbered as in "Dr. Sammons."

17 Pope CA, III, Dockery DW. Health effects of fine particulate air pollution: Lines that connect./

"While PM10 is "trapped" in the bronchial tree, PM2.5 um [microns] reaches the alveoli, the actual anatomical structures where oxygen exchange occurs in the lung. Of greater concern, particles reach the alveoli at "diameters" which are significantly smaller than 2.5 um, particles in the nano/ultrafine category that are .001-1.0 um. The most detailed study showed that fewer than one alveoli in a thousand has a coarse particle [PM10] per day, but that a typical alveolus may be exposed to several hundred ultrafine particles per day.[23]

"While PM2.5 has been shown to cause significant cardiorespiratory morbidity and mortality, there is increased concern about ultrafines/nano particulates because these penetrate through the alveoli and are then disseminated in the blood. A review article published by the American Heart Association in 2005 detailed the multiple health risks at a causal level associated with current levels of exposure to particulate pollution, [24] but a follow-up article in 2010 also published by the American Heart Association stated:

Air Waste Manag. Assoc. 2006;56:709-741; Hubbell BJ, Hallberg A, McCubbin DR, Post E. Health-related benefits of attaining the 8-hr ozone standard. Environ. Health Perspect. 2005;113:73-82.

18 Laden F, Schwartz J, Speizer FE, Dockery DW. Reduction in fine particulate air pollution and mortality: Extended follow-up of the Harvard Six Cities study. Am.J. Respir. Crit Care Med. 2006;173:667-672.

19 Gray S, Edwards S, Miranda ML. Assessing exposure metrics for PM and birth weight models./ Expo. Sci. Environ. Epidemiol. 2010;20:469-477;Ritz B, Wilhelm M, Hoggatt K], Ghosh JKC. Ambient air pollution and preterm birth in the environment and pregnancy outcomes study at the university of California, Los Angeles. Am. J. Epidemiol. 2007;166:1045-1052; Bell ML, Ebisu K, Belanger K. Ambient air pollution and low birth weight in Connecticut and Massachusetts. Environ. Health Perspect 2007;115:1118-1125; Ritz B, Yu F, Fruin S, Chapa G, Shaw GM, Harris JA. Ambient air pollution and risk of birth defects in Southern California. Am.]. Epidemiol. 2002;155:17-25.

20 Leo Bouthillier and others, "Acute Effects of Inhaled Urban Particles and Ozone; Lung Morphology, Macrophage Activity, and Plasma Endothelin-1,"*American Journal of Pathology* Vol. 153, No. 6 (Dec. 1998), pgs. 1873-1884)

21 Suwa T, Hogg JC, Quinlan KB, et al. Particulate air pollution induces progression of atherosclerosis.) *Am Coll Cardiol.* 2002;39:935-942.

22 http://www.youtu be.com/watch ?v=BaZStZO44fM&feature=relmfu

23 Lighty, J.S., et. al., Combustion Aerosols: Factors Governing Their Size and Compostion, *J Air & Waste Management*, 50:1565-1618; International Commission on Radiological Protection Task

> "This body of evidence has grown and has been strengthened substantially since publication of the first AHA scientific statement... During the past 15 years, the magnitude of evidence and number of studies linking air pollution to cardiovascular disease has grown substantially. A reasonable argument can now be made that the 'real' effects are likely to be even stronger than previously estimated."[25]

> "A significant factor in the pathogenesis of the effects of these particles is that ultrafine/nano particulates have the ability to cross every membrane in the body, including the blood brain barrier and the placenta. There are on[ly] a few biochemical agents which possess this capacity. Ultrafines are 10 to 50 times as damaging to lung tissue, compared to larger fine particles. [26] Furthermore, individual particles have been shown to be capable of inducing inflammation and oxidative stress, suggesting that particle number concentrations, which are dominated by ultrafine particles, may be more indicative of some potential health impacts than particle mass concentrations." [27] ("Dr. Sammons")

Further, this source will emit dioxins/furans. The level of exposure of Americans to dioxins is already extreme. Permitting any addition to this dose is not protective of human health, yet this permit does not limit dioxin/furan emissions, does not even mention them except in IDEM's Responses to its Comments. Instead, IDEM calls its estimate of dioxin/furan emissions, which works out to be a PTE of 0.585 gram/year, "insignificant." (*See* permit TSD Addendum, p 7 of 10, Response #16) Petitioner acknowledges that 40 CFR 52.21 (b) (23) (i) classifies this amount of dioxin "insignificant," but argues that this classification is not protective of public health and IDEM has a duty, imposed by 42 U.S.C. § 7401 (b) (1) and by 326 IAC 2-5.1-3(e) (1) (c) and 40 CFR § 70.6, to regulate beyond 40 CFR 52.21 b 23 (i).

The 0.585 grams/year amount of dioxin, compared to the 0.174 grams of dioxin (calculated from information in BBC News article, "Dioxin Scare: German feed fat 'contains 77 times limit" 07 January 2011) which caused Germany to order closed 4700 farms in 2011 is anything but insignificant. IDEM's estimate of JMEU's dioxin PTE is sufficient to contaminate and close 15,801 German farms, by the Petitioner's calculations. Dr. Sammons finds that:

Force on Lung Dynamics; *Health Physics* 1966,12, 173-207; Daigle CC, Chalupa DC, Gibb FR, et al. Ultrafine particle deposition in humans during rest and exercise. *Inhal Toxicol.* 2003;15:539 -552.50.

24 *Circulation*, 109:2655-2671, 2004.

25 *Circulation*, 121:2331-2378,2010.

26 Ning Li and other, "Ultrafine Particulate Pollutants Induce Oxidative Stress and Mitochondrial Damage," *Environmental Health Perspectives* Vol. Ill, No. 4 (April 2003), pgs. 455-460

27 Donaldson, K.(et al.(Combustion-derived nanoparticles: A review of their toxicology following inhalation exposure. *Particle and Fibre Toxicology*, 2005.2(1): p. 10)

> "There continues to be debate about what if any level of exposure *[to dioxin]* can be tolerated. The current proposed "safe" exposure for a 100 kg person, considering only noncancer effects, is 0.00000000000015 4lbs/day."[60] This figure, from the EPA, means JMEU's ostensibly insignificant amount of dioxin emissions would exceed the "safe" daily dose, each day of each year, for 35,000 people each weighing 220 pounds. This is in addition to the daily dose ingested from sources such as food not related to JMEU.

Continuing from Dr. Sammons, pages 22 and 23, "Because of the high fat content of breast milk and the relatively high body fat for infants, nursing babies have a body burden of dioxin that is elevated. "[61]

Furthermore, "The federal Agency for Toxic Substances and Disease Registry (ATSDR) has confirmed this estimate that the average infant in the United States that is breast fed receives a dose of dioxin and related compounds (PCBS and furans) that is fifty times greater(5000%) than the 1 pg/kg-day virtually safe dose set for dioxin-like compounds by that agency. [62]

"EPA has not been able to set a safe threshold but has been using techniques based on establishing a LOEAL [lowest observed adverse effect level]. These have resulted in demonstration of diabetes mellitus, thyroid disease/increased TSH in infants, hepatic disease, immune disorders, and dental defects, especially with exposure at less than five years of age." [63]

Similarly, the emission limit on dioxin in this permit is not protective of public health and fails to comply with 326 IAC 2-5.1-3(e) (1) (c) and 42 U.S.C. § 7401 (b) (1). In fact, IDEM has placed no limit on dioxin emissions from JMEU. IDEM indicates in its Response #8 that 10 ton per year of a single HAP is not a limit. No limit on dioxin emissions is found in the Permit. Allowing unlimited emissions of dioxins, or even emissions in a quantity sufficient to cause the German government to close thousands of farms, and sufficient to continuously exceed the "safe" daily dosage for 35.000 adults cannot be reasonably construed to be protective of public health. The Permit was issued without IDEM having received complete information concerning dioxin emissions, as required by 40 CFR 70.5 (c) , especially –(3). The application and permitting process failed to comply with 40CFR70.5(b)(b) and 40CFR70.5(a)2 and 326IAC2-5.1-3(e)(1)(c) .

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60 http://www.epa.gov/iris/subst/1024.htm Page 22 of 'Dr. Sammons").

61 http://hero.epa.gov/index.cfm?action=reference.details&reference id=198088:
Kreuzer, PE; Csanady, GA; Baur, C; Kessler, W; Papke, O; Greim, H; Filser, JG.(1997). 2,3,7,8-Tetrachlorodibenzo-p -dioxin (TCDD) and congeners in infants. A toxicokinetic model of human lifetime body burden by TCDD with special emphasis on its uptake by nutrition. *Arch Toxicol* 71: 383-400.

IDEM, in its Response #8 states, "There are no state or federal applicable requirements that would lower the level of HAP emissions." In its Response #1, IDEM, referring to NAAQS and limits that apply to this Source, states, "These standards are set at levels that protect human health, including the health of sensitive persons...." IDEM offers no proof of these statements.

The EPA, however, has written these statements:

> "As required by the Clean Air Act, (1), EPA periodically conducts comprehensive reviews of the scientific literature on health and welfare effects associated with exposure to the criteria air pollutants. (2-7) The resulting assessments serve as the basis for making regulatory decisions about whether to retain or revise the NAAQS that specify the allowable concentrations of each of these pollutants in the ambient air. (8)
>
> And,
>
> "The primary standards are set at a level intended to protect public health, including the health of at-risk populations, with an adequate margin of safety. In selecting a margin of safety, EPA considers such factors as the strengths and limitations of the evidence and related uncertainties, the nature and severity of the health effects, the size of the at-risk populations, and whether discernible thresholds have been identified below which health effects do not occur. In general, for the criteria air pollutants, there is no evidence of discernible thresholds. (2-7)
>
> And,
>
> "The Clean Air Act does not require EPA to establish primary NAAQS at a zero-risk level, but rather at a level that reduces risk sufficiently so as to protect public health with an adequate margin of safety. In all NAAQS reviews, EPA gives particular attention to exposures and associated health risks for at-risk populations. Standards include consideration of providing protection for a representative sample of persons comprising at-risk populations rather than to the most susceptible single person in such groups. Even in areas that meet the current standards, individual members of at-risk populations may at times experience health effects related to air pollution. (9-13)" (p 39 of 504 of *ACE 3*, EPA 240 R-13-001, January 2013, http://www.epa.gov/ace/publications/ACE3_2013.pdf)

62 Toxicological Profile for Chlorinated Dibenzo-p-Dioxin, ATSDR, December, 1998.

63 www.epa.gov/iris/supdocs/dioxinvlsup.pdf

ACE 3 contains a caveat which an older edition of *ACE* did not: "The presentation of findings from the scientific literature in ACE3 is not intended to constitute an authoritative summary or conclusion on the weight of scientific evidence." (Page 7 of *ACE 3*)

The EPA has also written, "Based on the latest scientific criteria ...Primary standards must be requisite to protect public health with an adequate margin of safety*•
*Legislative history shows Congressional intent to protect a representative sample of the most sensitive groups, not the most sensitive individuals." The composition of the representative sample is not provided nor is a listing of all the sensitive groups. ("Evaluating the pre-NAAQS Era," page 18 of 92, www.epa.gov/air/caa/Part2.pdf)

At http://www.epa.gov/pm/health.html the EPA states, "Numerous scientific studies have linked particle pollution exposure to a variety of problems, including: premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing."

The above excerpts show that there is no threshold below which exposure to particulate matter demonstrates no adverse health effects and that particle pollution exposure is linked to serious even fatal health damage in members of sensitive groups. The excerpts do not state the link is to health problems only in the most sensitive members of the sensitive groups. This all shows the inadequacy of the NAAQS to protect public health. NAAQS does not effectively protect the sensitive groups' members and so it cannot protect the sensitive groups, whether a representative sample of the sensitive groups or all of the sensitive groups, and in reality the ordinary citizenry. Emissions limits set so that air quality meets only NAAQS, therefore, are not protective of public health.

During the process of setting the particulate matter NAAQSs, the EPA's own Clean Air Scientific Advisory Committee has, in writing, stated that the proposed standard was too high. (*EPA's Review of the National Ambient Air Quality Standard for Particulate Matter,* EPA-SAB-CASAC-05-007, page 4) Further, establishing a NAAQS is a lengthy process, necessarily entailing relying on information some of which is years old and out dated, superceded by more recent research.

In addition to the material above, which refutes the immediately preceding IDEM statements, is this:

> "The Clean Air Act (CAA) mandates that EPA regulate emissions of more than 180 commonly used industrial chemicals and compounds known as hazardous air pollutants (HAPs) Unfortunately, EPA does not regulate or restrict emissions of these HAPs based on the health risks posed by ambient-air concentrations or actual exposures to these toxic substances. Instead, EPA has primarily regulated emissions of these HAPs by imposing technology-based emission controls on major sources of these HAPs. Years after those controls are installed, EPA evaluates the health risks that remain, i.e., residual risks, from

facilities that emit the HAPs. Even then, EPA does not evaluate these health risks based on actual ambient concentrations of these pollutants—instead, EPA bases its assessment on engineering calculations. EPA's own research indicates that air pollution is posing significant health risks, particularly in urban areas. EPA needs to focus on devising and implementing the programs that were delegated to them under the 1990 CAA Amendments to restrict ambient concentrations of HAPs to levels that will provide adequate protection of public health." (abstract of "Dangerous Air Apparent: How EPA's Hazardous Air Pollutant Program Has Failed to Address Toxic Hotspots" May 2012, *Environmental Law Review,* 42 ELR 10475 Issue:5, Author: Rhonda L. Ross and Tammy Asher)

A great quantity of published material exists refuting the notion and statements that limits used by IDEM are protective of public health. IDEM issued the Permit without including in it emissions limits that are protective of public health. In this, IDEM failed to comply with federal and state requirements and regulations.

For these reasons, the Administrator should grant this Petition and object to the Permit.

C. IDEM failed to require or specify sufficient monitoring requirements to ensure compliance with the particulate matter limits in the Title V Permit, failed to show that the Permit's provisions are adequate to ensure compliance with its particulate matter limits, and failed to adequately explain its reasoning in choosing the monitoring methods and schedules it chose, in violation of IAC, C.F.R., and interpretive case law.

Argument:

When Congress amended the Clean Air Act in 1990 and added the Title V permitting program, Congress mandated that each permit issued shall set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions. 40 C.F.R.§ 70.6(c)(1) provides that all Title V permits shall contain "compliance certification, testing, monitoring, reporting, and record keeping requirements sufficient to assure compliance with the terms and conditions of the permit"). The D C. Circuit has explained that, under § 70.6(c)(l), "a permitting authority may supplement an inadequate monitoring requirement so that the requirement will 'assure compliance with the permit terms and conditions.'" *(See also* Sierra Club v. U.S. EPA, 536 F.3d 673, 680 (D.C. Cir. 2008). But IDEM has not so supplemented the requirement.

With respect to another Plant's Title V Permit, EPA has explicitly warned Michigan Department of Environmental Quality, "In a petition situation, if it's not clear why the state chose a certain monitoring method (including frequency), EPA may grant [a petition to object] on the basis of insufficient response to comments." (email from Beth Valenziano, U.S. EPA Region 5, to Mina Clemorew, Michigan government, et al, [hereafter "EPA Email"], EPA comments on Michigan

Department of Environmental Quality pre-proposed Staff Report DTE River Rouge, September 8, 2011; at 12)

IDEM did not satisfy this standard in its responses to public comments, and did not justify its decision to require stack testing every five years, nor every two years, nor did it justify its decision to rely upon visual opacity observations as an indication of particulate emissions. The justification for the last is especially substandard when the application indicates on page172 of 175, item 7, that Continuous Opacity Monitoring was scheduled to be in place on the JMEU in 1992. IDEM did not satisfy the standard in its Response #2 as to why IDEM chose to make use of an average instead of the worst case, especially when IDEM has stated that a PTE is to be based upon the worst case scenario. IDEM's webpage, "Air Permit: Terms and Definitions," provides IDEM's statement of what PTE is:

> "The potential to emit (See 326 IAC 2-1.1-1(16)) is the total potential emissions of any regulated pollutant which could result from operating under a "worst case operating scenario," running twenty four hours a day (with no pollution control equipment), 365 days a year at full capacity." (www.in.gov/idem/4826.htm)

The rationale for the monitoring requirements selected by a permitting authority must be clear and documented in the permit record (e.g., in the Statement of Basis). *See* 40 C.F.R. §70.7(a)(5); *see also* CITGO Order, Order Responding to Petitioners' Request that the Administrator Object to the Issuance of a Title V Operating Permit, Petition Number VI 2007-01, at 7. [hereafter "CITGO"]) Also, "While the permit includes monitoring requirements for opacity at stationary vents, there is no indication in the permit record that TCEQ evaluated whether the frequency and timing requirements of the monitoring for opacity at all stationary vents are sufficient to assure compliance with the terms and conditions in the permit as required by section 504(c) of the CAA. Similarly, the permit record does not include an explanation as to how the monitoring requirements for opacity that are included in the permit are 'sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit.'
40 C.F.R. §§70.6(a)(3)(i)(B)" (CITGO Order, pp 5, 6)

IDEM did not explain its rationale. This Petitioner argues that the EPA determinations in the above paragraph apply to the JMEU Permit.

IDEM did not show how the opacity monitoring specified in the Permit is adequate to ensure compliance with permit limits. Petitioner will present evidence that opacity of JMEU emissions is not sufficiently linearly correlated with particulate matter emissions to provide meaningful indication of compliance with permit limits.

In making the Other Change, listed on page 9 of 10 of the TSD Addendum, following the IDEM comments and Responses, IDEM, without explanation, changed the Permit requirement for stack testing of PM from every five years to "by December 31 of every second calendar year following the most recent valid compliance demonstration." IDEM's Response #11 states, "This is

consistent with IDEM requirements for this size boiler and this five year period for testing shows reasonable compliance with emission limits." Then, in Other Change, five years is changed to possibly less than two years, if the demonstration were to occur in June or October of a year. Quite conceivably it is changed to never being required if IDEM decides that something other than a stack test of particulate emissions, such as the visual opacity observation made by or for JMEU, is a valid compliance demonstration. IDEM does not specify in the Other Change nor afterwards what that something other than a stack test might be which would constitute a valid compliance demonstration. There is no way that an unspecified method of demonstrating compliance can be claimed to specify sufficient monitoring requirements to ensure compliance with particulate matter limits in the Permit. IDEM failed to specify sufficient monitoring requirements as is required.

The JMEU Permit specifies two methods of monitoring particulate matter emissions: visual observation of opacity and stack testing, despite the application indicating on page 172, item 7, that a Continuous Opacity Monitor was scheduled to be in place in 1992. Page 79 of the Application, under, "...August 1996 Compliance Monitoring Program, Electrostatic Precipitator, item 3/4 A. Continuous Opacity Monitoring," clearly shows that a COMS existed in August 1996. Whether the COMS has been removed is unknown. It was scheduled to be in place; such could now be required to be again in use.

IDEM specifies in Permit Section C.1 (b) that Method 9 be used for JMEU Opacity Monitoring. EPA Method 9, "VISUAL DETERMINATION OF THE OPACITY OF EMISSIONS FROM STATIONARY SOURCES," Section 2.5, "Data Reduction, " specifies that 24 opacity observational readings be averaged to determine the average opacity for each set (called a run) of observations, but not that the set (run) figures then be averaged. IDEM Response #3 twice references IDEM's use of such secondary averages with no explanation of its reasoning.

The Title V Permit, page 9 of 10 of TSD Addendum, Change 1, requires JMEU to stack test, as per 326 IAC 3-6, PM emissions once every second calendar year. If IDEM were to accept something other than a stack test as "valid compliance demonstration," the language of Change 1 could result in stack tests never again being performed. While the second calendar year timing may be an improvement over the Proposed Permit, which required testing only once every 5 years, it still does not assure compliance with applicable requirements. IDEM's response to comments did not explain why the Agency chose every second calendar year for stack test, nor why the Agency chose its original every five year schedule, nor why it had chosen stack testing and visual opacity observation over CEM and COMS.

This Source has a history (permit Application, p168of 175) of emitting particulate matter in quantities exceeding permit limits and stack testing every two years is inadequate to insure compliance when emissions vary significantly within hours (test data emailed by Jasper's General Manager of Utilities Mr. Bud Hauersperger to Kalla on December 22, 2010)

The EPA documents the variability of a source's emissions by stating, "In addition to the source-to-source variability discussed above, a single emission source will also exhibit within-source

variability. To assess within-source variability and the range of short-term emissions from a source, one needs either a number of tests performed over an extended period of time or continuous monitoring data from an individual source." (*EPA-454/R-95-015REVISED, PROCEDURES FOR PREPARING EMISSION FACTOR DOCUMENTS,* p. 2-4)

Kalla commented to IDEM, September 12, 2012, in part, "Testing of compliance of PM emissions limits is required to occur only every five years (D.1.5 of the draft permit). Testing is to be by EPA Method 5, which can measure only filterable particulate matter. PM 2.5 will also include condensible particulates." *(EPA STUDENT MANUAL: PRIMARY v SECONDARY & CONDENSIBLEvFILTERABLEP,* viewable at www.epa.gov/eogaptil/course419b/studentmanual/sm_chpter_5.pdf

The EPA Student Manual includes the following under Section 5.1.1 and 5.1.2, respectively:

> "Filterable versus Condensable PM
> Filterable PM is particles that are directly emitted as a solid or liquid at stack or release conditions and captured on the filter of a stack test train. Filterable PM may be PM10 or PM2.5. Condensable PM is material that is in the vapor phase at stack conditions but condenses and/or reacts upon cooling and dilution in the ambient air to form a solid or a liquid particulate immediately after discharge from the stack. Condensable PM is almost always PM2.5 or less. Combustion sources typically emit both filterable and condensable emissions. Examples include boilers....
>
> "Primary versus Secondary PM
> Primary PM is the sum of the filterable and the condensable PM. All primary particles are emitted directly from a stack. Secondary PM is particles that form through chemical reactions in the ambient air after dilution and condensation has occurred. Secondary PM is formed downwind of the source."

This specification of Method 5 for monitoring, without monitoring of condensible particulate matter emissions (usually measured by Method 202), to ensure compliance with emissions limits is inadequate to ensure such compliance. Particulate matter and PM2.5 will include condensible, so IDEM's specification of only Method 5 and visual Opacity observation is inadequate to ensure compliance with emissions limits. In its Responses to public comment, IDEM did not adequately nor meaningfully explain its reasoning for its choice of monitoring.

For these reasons, the administrator should accept this petition and object to the issuance of the permit.

Further, the public Comments include,

> "Opacity monitoring is not a valid method of monitoring particulate matter emissions. (Stack)Test results, supplied by the applicant, listed in a summary dated 10-29-91 show results for 3 runs. Because lower opacity of Run #1 versus
> Run #2 is associated with a greater quantity of emissions, Jasper and IDEM are aware that

opacity is not a valid method, for this source, of determining particulate matter emissions.

"The EPA has acknowledged that opacity does not, on a quantitative basis, accurately indicate the magnitude of particulate matter emissions. (Compliance Assurance Monitoring (CAM) Protocol For An Electrostatic Precipitator (ESP) Controlling Particulate Matter (PM) Emissions From a Coal-fired Boiler, p. 3 http://www.epa.gov/ttn/emc/cam/espcam.pdf)

"This source has a history of operating with emissions above its permit limits."

See the settlement papers which resulted in the installation of the ESP. (Application, p. 168 of 175 of the PDF: Findings of Fact, item 7c) It operated well above its PM limit for up to 55 days in 1990, despite any opacity limits and observations.

See further Public Comments,

"Test results of source emissions tests dated 9-15-93 list those of 3 runs. Reported PM emissions for Run # 2 exceed the emissions limits. One third of the time emissions were over the limits established by Jasper's operating permit. This indicates that such emissions may be over limit at least this much of the operating time."

The exceeding of the Source's permit emissions limit occurred despite permit emissions limits and opacity monitoring and opacity limits.

Opacity is not a valid method of determining particulate emissions. IDEM did not adequately nor meaningfully explain its reasoning in responding to comments regarding opacity and its relationship to particulate matter emissions; IDEM merely made unsupported statements.

The Agency's Response to the excessive emissions was to state that it considers the average of three particulate matter test runs to indicate compliance. (Permit, Addendum to TSD, IDEM's Response #2) The Agency stated in its response that EPA Method 5 specifies such averaging, but fails to adequately respond in that IDEM does not state where in the text of the description of Method 5, such as is found at 40 CFR § 60, Appendix A, Method 5, such averaging is required. Petitioner is unable to find a statement in Method 5 text mandating the further averaging of test run averages to determine compliance.

The ESP is not required, as per D.1.2, to be operative at all times during start up and shut down. Start up and shut down emissions are not accounted for in this permit nor in the application for it. Sierra Club v EPA, which was heard in the U.S. Court of Appeals, District of Columbia, No 02-1135, requires start up and shut down emissions be included in source emissions quantities. In its Response #4, IDEM fails to adequately or meaningfully explain its reasoning of its response, diverting focus from the emissions from coal combusting under the less than stoichiometric conditions in startup and shut down to the emissions of natural gas used to assist in igniting the coal fire during startup. IDEM provides no references or proofs of its statements concerning these emissions from

coal combustion.

IDEM did not meaningfully nor adequately respond to the Public Comment that, "In light of the City of Jasper's claim that the controls capture 99% or more of the particulate matter produced by this source, and calculating from information on page 106 of 175 of the application papers, ash handling, alone, has a PTE of 73tons/yr of particulate matter, more when the ash content of the coal is higher than the analysis listed."

IDEM's Response #19 cited Application page 49 of 175 data and the Source's 2009 annual emission statement data without meaningfully explaining its reasoning in choosing that data instead of the data on page 106 of 175.

With respect to another Plant's Title V Permit, EPA has explicitly warned Michigan Department of Environmental Quality, "In a petition situation, if it's not clear why the state chose a certain monitoring method (including frequency), EPA may grant on the basis of insufficient response to comments." (EPA Email, at 12). IDEM did not satisfy this standard in its responses to public comments, not in justifying its decision to require stack testing every two years, nor in its decision to rely upon visual opacity observations as "an indication of boiler being operated properly and also...indication of particulate matter emissions." *See* IDEM Response #3.

For these reasons, the Administrator should grant this petition and object to the permit.

IDEM failed to adequately and/or meaningfully respond to public Comments from Mr. Hicks and Mr. Emmert in that IDEM responded (IDEM Response #2) to the video provided in the comments of a black smoke plume exiting the JMEU stack the day of the stack test in June 2011 by stating, "IDEM, OAQ does not know why smoke was visible during the 1993 *(sic)* test but whatever the reason was, the source did pass the emissions test." The smoke plume calls into question the accuracy of the emissions test if IDEM's statement in its Response #3 that opacity is an indication of proper operation is true. It calls into question the effectiveness, accuracy and completeness of the monitoring specified for JMEU. Yet, IDEM fails to meaningfully explain the existence of this smoke plume, as Commenter Hicks requested.

It should be noted that the Application, page 172, item 7, schedules installation of a Continuous Opacity Monitor at JMEU to be done in 1992. It is important to also note that IDEM did not usually respond directly to the public's submitted Comments. Instead, IDEM edited and conflated the public's Comments to produce those to which IDEM did respond. Some public comment issues were not responded to at all. IDEM's responses in many cases failed to meaningfully or adequately respond to the original Public Comments. For the matters treated in this section of this Petition, IDEM issued the Permit without specifying and requiring adequate monitoring to ensure compliance with emissions limits.

The Administrator should for the reasons above grant this Petition for Objection and object to the issuance of the Title V Operating Permit. The Administrator should further instruct IDEM to

require JMEU to at least install a COMS and particulate matter CEMS, or other equally as effective monitoring, at the Source to ensure continuous compliance with the emissions limits.

D. Jasper, Indiana, air quality has a history of being out of attainment of NAAQS. Emissions from JMEU operating under existing permit limits will likely return Dubois County, Indiana, air quality to nonattainment status.

Argument:

In an article, "EPA Revises NAAQS For Fine Particulate Matter," published February 11, 2013 on law firm Bingham, Greenebaum, Doll's online site (www.bgdlegal.com/news/2013/02/11/air-quality-letter/epa-revises-naaqs-for-fine-particulate-matter), the legal firm representing the City of Jasper, owner of JMEU, posted the statement that Dubois County, wherein Jasper and its JMEU power plant are located, "...would be designated as nonattainment based upon data from existing monitors..." Current Dubois County air quality does not meet current NAAQS standards. Preventing the new standards from applying to JMEU by grandfathering JMEU will not improve the poor air quality.

While it is a ruling of the U.S. Court of Appeals, 2nd Circuit, the Petitioner argues that the following, clearly indicating the damage to health from air pollution from JMEU, should be a consideration in the EPA's actions concerning JMEU:

> "We are persuaded that NYPIRG's members' allegations about the health effects of air pollution and of uncertainty as to whether the EPA's actions expose them to excess air pollution are sufficient to establish injury-in-fact, given that each lives near a facility subject to Title V permitting requirements." (NYPIRG at 34)
>
> 40 CFR § 70.6, Permit Content, includes the following text:
>
> > "(a) Standard permit requirements. Each permit issued under this part shall include the following elements:
> >
> > > (1) Emissions limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance."

The Administrator will be familiar with the current applicable federal air quality requirements.

Indiana regulations include:

326 IAC 2-6.1-5 Operating permit content Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11 Affected: IC 13-15; IC 13-17, Sec. 5,

"(a) Permits or permit revisions issued under this rule shall contain the following:

(1) Emission limitations for any source or emissions unit that assure:

(A) the ambient air quality standards set forth in 326 IAC 1-3 will be attained or maintained, or both;

(B) the applicable prevention of significant deterioration maximum allowable increases set forth in 326 IAC 2-2 will be maintained;

(C) the public health will be protected; and

(D) compliance with the requirements of this title and the requirements of the CAA will be maintained."

The current NAAQS particulate matter standards, finalized December 2012, result from review of information which can be as dated as 2007 if not older. (Fed Reg. Vol 78, No. 10, January 15, 2013, page 3088). Published material older than five years treating health effects of particulate matter, especially of ultrafine particles, is at best of questionable value, according to Dr. William Sammons, Massachusetts pediatrician and nationally recognized opponent of adverse effects of particulate emissions. Further, it is understood that the December 2012 lower NAAQS is not required to be implemented until 2020 ["Overview of EPA's Revisions to the Air Quality Standards for Particle Pollution (Particulate Matter)," p.3, viewable at www.epa.gov/pm/2012/decfsoverview.pdf] Even were the new NAAQS protective of the public health, they are not required to be in place for six and one-half years. Five more permitted years of emissions limits based on NAAQS, when those standards allow the status quo and allow concentrations exceeding the NAAQS, cannot be protective of public health.

While the current running average is below the December 2012 PM2.5 NAAQS of 12 µgm PM2.5 per cubic meter, the average includes readings only into April 2013 and the area's historically worst months for high readings are ahead. The three previous running averages exceeded 12 µgm PM2.5/cubic meter. The City of Jasper has stated that IDEM stated the operation of the Source had no observed effect upon ambient air quality, but it should be noted that the only near IDEM air quality monitoring installation is at the Jasper USPS Post Office, which is usually upwind of the JMEU stack. For most of the past eight years, Jasper air has been out of attainment for particulate matter. The Permit Application, page 19 of 175, lists the locale as being currently in nonattainment for TSP secondary. It is currently under the Indiana SIP, which is understood to be not the same as being in attainment. That the location is momentarily, technically classified as not in nonattainment for some pollutants misleads a person in understanding the impact of this Source's emissions

Because the Application, page 19, misrepresented the attainment status of the JMEU location, and IDEM issued the Permit without acquiring an accurate, complete application, and because the Source's emissions will contribute to ambient air being in noncompliance with NAAQS, placing the locale again into nonattainment status, the Administrator should grant this Petition and object to issuance of the Title V Operating Permit.

E. IDEM issued the Permit based upon an incomplete application containing misleading and/or inaccurate information in violation of C.F.R. and U.S.C..

Argument:

40 CFR § 70.8 (d) [" In any case, the source will not be in violation of the requirement to have submitted a timely and complete application."] prevents Petitioner from claiming JMEU violated the requirement by failing to submit a complete and timely filed application, but does not prevent Petitioner from claiming the Application was not complete and that IDEM failed to obtain a complete application from JMEU.

Congress intended that applicants for permits submit a complete application, including all information required or requested to process the application:

> 42 USC§ 7661(d) Timely and complete applications. "Except for sources required to have a permit before construction or modification under the applicable requirements of this chapter, if an applicant has submitted a timely and complete application for a permit required by this subchapter (including renewals), but final action has not been taken on such application, the source's failure to have a permit shall not be a violation of this chapter, unless the delay in final action was due to the failure of the applicant timely to submit information required or requested to process the application."

42 USC§ 7661 a (b) (1) authorizes and requires the EPA Administrator to define "completeness of applications" for permits:

> 42 USC§ 7661 a (b) (1) Regulations. The Administrator shall promulgate within 12 months after November 15, 1990, regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These elements shall include each of the following:
>
> > (1) Requirements for permit applications, including a standard application form and criteria for determining in a timely fashion the completeness of applications.
> >
> > (2) Monitoring and reporting requirements.

40 CFR§ 70.8 (d) is written in such a way that it doesn't satisfy, in some instances, the intent of Congress in the matter of complete applications. If IDEM fails to notify the applicant of a deficiency in supplied information, as it did JMEU, within 60 days of an application's submission, and if the EPA then, as Region V did in the JMEU Permit matter, does not object to the proposed permit within 45 days of receipt of the proposed permit, the information deficit remains. But the EPA is not required to review a proposed permit. It may review it, but is not required to do so. Defects IDEM accepted can go unnoticed by the EPA. A permit can be issued in the absence of a complete application, although the applicant cannot be claimed to be in violation of the requirement to have submitted a complete application, not because it was complete, but because two governmental agencies did not recognize the incompleteness of submitted information.

Had the EPA reviewed and objected to the Permit, Petitioner would not be precluded from claiming JMEU failed to submit a timely and complete Application. A new, not a renewal, permit would have been required as the 2008-issued permit would expire on October 3, 2013, there being insufficient calendar days to timely file a new application or supplement the existing Application. This forty-six-year-old dinosaur of a coal burner would not be grandfathered, but would be required to meet today's standards of pollution control. Citizens were and the nation is deprived of an opportunity to actually prevent some air pollution and decrease damage to public health.

The U.S. Constitution forbids Congress from passing ex post facto laws, but tax legislation has more than once violated that prohibition. The language of the Constitution does not forbid an agency from promulgating an ex post facto regulation. The Petitioner therefore argues that the Administrator has authority to overturn and replace with new regulation the prohibition effectively precluding claiming JMEU failed to timely file a complete application, making it possible to prevent JMEU from operating under a permit resulting from a less than complete application. Petitioner requests that the Administrator begin the process and do so, and, for the reasons argued in this Petition, object to the issuance of this JMEU Permit.

Petitioner argues as below, relying upon the references cited and included:

1. 40 CFR 70.5 (a) (2): "Complete application. The program shall provide criteria and procedures for determining in a timely fashion when applications are complete. To be deemed complete, an application must provide all information required pursuant to paragraph (c) of this section, except that applications for permit revision need supply such information only if it is related to the proposed change. Information required under paragraph (c) of this section must be sufficient to evaluate the subject source and its application and to determine all applicable requirements.";

2. 40 CFR 70.5 (c): "Standard application form and required information. The State program under this part shall provide for a standard application form or forms. Information as described below for each emissions unit at a part 70 source shall be included in the application.... An application may not omit information needed to determine the applicability of, or to impose, any applicable requirement, or to evaluate the fee amount required under the

schedule approved pursuant to § 70.9 of this part. The permitting authority may use discretion in developing application forms that best meet program needs and administrative efficiency. The forms and attachments chosen, however, shall include the elements specified below:

(1) Identifying information, including company name and address (or plant name and address if different from the company name), owner's name and agent, and telephone number and names of plant site manager/contact.

(2) A description of the source's processes and products (by Standard Industrial Classification (SIC) Code) including those associated with any proposed AOS identified by the source.

(3) The following emission-related information:

(i) All emissions of pollutants for which the source is major, and all emissions of regulated air pollutants. A permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, except where such units are exempted under this paragraph (c) of this section. The permitting authority shall require additional information related to the emissions of air pollutants sufficient to verify which requirements are applicable to the source, and other information necessary to collect any permit fees owed under the fee schedule approved pursuant to § 70.9(b) of this part.

(ii) Identification and description of all points of emissions described in paragraph (c)(3)(i) of this section in sufficient detail to establish the basis for fees and applicability of requirements of the Act.";

3. 40 CFR 70.5 (b): "Duty to supplement or correct application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit."

Also relevant are:

4. 326 IAC 2-7-10 Permit Expiration Authority: IC 13-1-1-4; IC 13-7-10 Affected: IC 13-7, Sec. 10

"A Part 70 permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with sections 3 and 4(a) of this rule. *(Air Pollution Control Division; 326 IAC 2-7-10; filed May 25, 1994, 11:00 a.m.: 17 IR 2261)"*

5. 326 IAC 2-7-8 Permit issuance, renewal, and revision. Sec. 8. "...(c) The commissioner shall promptly provide notice to the applicant of whether the

application is complete in accordance with section 4(a)(2) of this rule. Unless the commissioner requests additional substantive information or otherwise notifies the applicant of incompleteness within sixty (60) days of receipt of an application, the application shall be deemed complete."

6. 326 IAC2-7- 4 (a) (2): "In order for an application to be deemed complete, it must contain the following information: (A) Substantive information required by each subdivision under subsection (c) ."

7. 326 IAC 2-7-4 (c) contains: "(c) An application for a Part 70 permit shall be submitted on the application form or forms prescribed by the commissioner, or in other application formats authorized by the commissioner, and shall include the information specified in this subsection."

8. 326 IAC 2-7-4 (c) (3): "(3) (A) All emissions of pollutants for which the source is major, and all emissions of regulated air pollutants. A Part 70 permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, except where the units are exempted under this subsection. The applicant shall provide such additional information related to the emissions of air pollutants as is sufficient to verify which requirements are applicable to the source and other information necessary to collect any Part 70 permit fees owed under the fee schedule approved under section 19 of this rule.

(B) An identification and a description of all points of emissions described in clause (A) in sufficient detail to establish the basis for fees and applicability of requirements of the CAA.

(C) Emissions rates of all pollutants described in clause (A) in tons per year (tpy) and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method.

(D)The following information to the extent it is needed to determine or regulate emissions:.."

IDEM cited these above 326 IAC portions, directly or by reference as they are operative in cited portions, in section B.14 of both the 2013 and the 2008 renewals of the JMEU operating permit. It is unlikely that the IDEM Commissioner ever saw the most recent JMEU Application, much less reviewed it for completeness within 60 days of acquisition. His subordinates, within the 60 days, are unlikely to have thoroughly reviewed it for completeness. The March 2013 mailing from Mr. Wendell Toby of JMEU to permit writer Khan, in the IDEM file of public Comments on the JMEU draft Permit, available as document # 68437593 in the Virtual File Cabinet at www.in.gov/idem/6551.htm, shows that IDEM, in March 2013 (letter to M. Khan from Wendell Toby) was still gathering information which IDEM should have had the prior summer in order to evaluate the completeness of the Application. If the Application was reviewed, IDEM failed to acquire a complete Application.

Federal regulation requires a complete application be received. IDEM failed to comply with federal regulation. State regulation requires a complete application be received and IDEM failed to adhere to State regulation. The Application as submitted may, by technicality, necessarily be termed complete (40CFR§ 70.8d), but the Application as received by IDEM is not and should not be claimed to be nor viewed to be complete. At the least, IDEM should have requested and obtained further information from JMEU before making its decision.

IDEM took no action to correct the errors, even after public Comments made IDEM aware that the Application was incomplete and even while plenty of time remained until 90 days before the 2008 permit expires, during which time a complete application or supplemental information could have been submitted by JMEU. IDEM, even after again being made aware of unlisted fugitive emissions and an unlisted emissions unit at the Source, failed to request complete, required information from the JMEU. (by Mr. Kalla's September 14, 2012 email to Mr. D. Hancock of IDEM of a copy of the 2011 EPA ER report, 2011 [Final Letter Report, Ben Maradkel to Shelly Lam, Jasper Municipal Utilities Coal Fire Emergency Response Jasper, Dubois County, Indiana, Technical Direction Document No. S05-0001-1108-011, Document Control No.: 1564-2A-ASNH, Contract No.: EP-S5-06-04, hereafter "EPA ER"])

The Petitioner argues that IDEM failed, as required, to obtain a complete application prior to issuing the Permit because:

(1) the Application lacked listings of the coal bin which burned an estimated 200-300 tons of coal in two days in August (EPA ER) and the emissions from that unit;

(2) the Application lacked any listing for dioxins, although IDEM describes such dioxin emissions in IDEM's Response # 8; and

(3) the Application lacked meaningful, accurate, emissions information concerning mercury emissions, as detailed below. Petitioner argues that JMEU failed, as required by 40 CFR 70.5 (b), to timely submit supplemental and accurate information Application. However, 40 CFR§ 70.8 (d) appears to preclude JMEU being considered as having violated requirements to submit a timely filed and complete application.

Yet, NYPIRG, at 42, states: "Ordinarily, the Court noted, a party's "voluntary cessation of allegedly unlawful conduct... does not suffice to moot a case." 528 U.S. at 174, 120 S.Ct. 693. Accordingly, a party "claiming that its voluntary compliance moots a case bears the formidable burden of showing that it is absolutely clear the allegedly wrongful behavior could not reasonably be expected to recur." Id. at 190, 120 S.Ct. 693." Neither IDEM nor JMEU has taken up this burden, or proved or even argued that the coal bin fire is of no consequence and will not recur. In fact, according to the news article about the 2011 fire, this is not the first coal bin fire. The wrongful behavior has already recurred.

If it is not precluded, Petitioner argues that, because the Application, as filed nine months prior to the expiration date of the 2008 issued permit, did not contain complete and accurate information the 2008 renewal of JMEU's operating permit (T037-22741-00002) should expire October 3,2013. At which point, not a renewal, as was issued May 15, 2013, but rather a completely new Title V permit is now required. Petitioner argues that, even if Applicant cannot be claimed to

have failed to have filed a complete application, IDEM issued the Permit without having obtained a required complete application.

The Administrator should for these reasons grant this petition and object to the issuance of the Title V Operating Permit. Petitioner requests that the Administrator rescind the Permit/renewal issued in 2013.

40 CFR § 70.5 requires that all units of emissions be listed in an application, that all emissions be listed, too. The (indoor) coal bin fire of August 2011 and previous such fires are nowhere listed in the Permit nor in the Application. ("This type of fire has occurred in the past at the power plant but the plant was operating and the burning coal was fed into the boiler." *See* article "Wet coal blamed for fire at Jasper Power Plant" in *Dubois County Free Press* 18 August 2011, www.duboiscountyfreepress.com/wet-coal-blamed-for-fire-at-jasper-power-plant/) It/they are not listed on Application papers listing fugitive emission units nor those listing fugitive emissions. Yet, according to page 5 of the EPA ER there were emissions from the fire, fugitive emissions. Many samples were taken from the emissions plume. PM was measured in the plume in samples S4-6 and also as follows:

> "PM On August 16, 2011, a total of 2,593 readings were collected for PM and compared to the NAAQS PM2.5 primary standard of 35 µg/m$_3$. The average reading was 29.3 µg/m$_3$ with a maximum reading of 37.5 µg/m$_3$. A total of 19 readings exceeded the primary standard. No readings exceeded the secondary standard of 150 µg/m$_3$. On August 17, 2011, a total of 13,175 readings were collected for PM and compared to the NAAQS PM2.5 standard of 35 µg/m$_3$. The average reading was 46.7 µg/m$_3$ with a maximum reading of 213.2 µg/m$_3$. A total of 8,536 readings exceeded the primary standard. A total of 21 readings exceeded the secondary standard of 150 µg/m$_3$ over a 135-minute time frame. On August 18, 2011, a total of 3,860 readings were collected for PM and compared to the NAAQS PM2.5 standard of 35 µg/m$_3$. The average reading was 56.2 µg/m$_3$ with a maximum reading of 1,265.7 µg/m$_3$. A total of 3,128 readings exceeded the primary standard. A total of 145 readings exceeded the secondary standard of 150 µg/m$_3$ over a 193-minute timeframe." (EPA ER)

The EPA ER states that 200-300 tons of coal burned during this fire. Emissions of regulated pollutants were significant and yet were disregarded by both the City/Source and by IDEM in this Permit and the process leading to its issuance. IDEM knew about this August 2011 fire as noted in this article: "Indiana Department of Environmental Management, Dubois County Health Department, and the Environmental Protection Agency were called in to make an assessment on the emissions hazard to the residents of Jasper." (*Dubois County Free Press*, article, August 18, 2011) By acting upon JMEU's application, which lacked even mention of this coal bin fire, IDEM failed to require and to obtain a complete application prior to issuing the permit, as is required by:

> 40 CFR 70.5 (c) Standard application form and required information. "The State program under this part shall provide for a standard application form or forms. Information as

described below for each emissions unit at a part 70 source shall be included in the application. The Administrator may approve as part of a State program a list of insignificant activities and emissions levels which need not be included in permit applications. However, for insignificant activities which are exempted because of size or production rate, a list of such insignificant activities must be included in the application. An application may not omit information needed to determine the applicability of, or to impose, any applicable requirement, or to evaluate the fee amount required under the schedule approved pursuant to § 70.9 of this part. The permitting authority may use discretion in developing application forms that best meet program needs and administrative efficiency. The forms and attachments chosen, however, shall include the elements specified below:

(1) Identifying information, including company name and address (or plant name and address if different from the company name), owner's name and agent, and telephone number and names of plant site manager/contact.

(2) A description of the source's processes and products (by Standard Industrial Classification
(SIC) Code) including those associated with any proposed AOS identified by the source.

(3) The following emission-related information:
(i) All emissions of pollutants for which the source is major, and all emissions of regulated air pollutants. A permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, except where such units are exempted under this paragraph (c) of this section. The permitting authority shall require additional information related to the emissions of air pollutants sufficient to verify which requirements are applicable to the source...."

In NYPIRG, at 42, the U.S. Court of Appeals, 2nd Circuit ruled: 'Ordinarily, the Court noted, a party's "voluntary cessation of allegedly unlawful conduct... does not suffice to moot a case." 528 U.S. at 174, 120 S.Ct. 693. Accordingly, a party "claiming that its voluntary compliance moots a case bears the formidable burden of showing that it is absolutely clear the allegedly wrongful behavior could not reasonably be expected to recur." Id. at 190, 120 S.Ct. 693.' IDEM and JMEU have nowhere taken up this formidable burden concerning the coal bin fire. They have not proved that the coal bin fire is of no consequence in this Permit.

IDEM issued this Permit in the absence of a complete application. For this reason, this petition should be granted and the Administrator must object to the Permit.

Page 92 of 175 of the Application is a page dated June 21, 1996 and headed, "Plant Emissions Inventory, *SEGMENT INFORMATION*" and it cites the September 15, 1993 test data. The PM test results in September 1993 were not all 0.035lb/MMBtu, varying from 0.032 to 0.037. Also, results for that test date show the boiler was operated at 252.5MMBtu/hr, well above its rating of

192MMBtu/hr. The 10-29-91 PM test results list the loading on the boiler as 9.4MW, well below the system rating of approx. 14.5 MW. The EPA states, "Boiler load also affects the PM emissions as decreasing load tends to reduce PM emissions." (EPA's *AP 42 Compilation of Air Pollutant Emission Factors*, section 1.1.3.1)

Further, emissions information in the Application are based upon AP-42 emissions factors. These factors are not accurate for estimations or calculations of emissions from specific sources. The EPA, itself, states this:

> "Because emission factors essentially represent an average of a range of emission rates, approximately half of the subject sources will have emission rates greater than the emission factor and the other half will have emission rates less than the factor. As such, a permit limit using an AP-42 emission factor would result in half of the sources being in noncompliance." (*AP 42*, Introduction, page 2);
>
> And,
>
> "As stated, source-specific tests or continuous emission monitors can determine the actual pollutant contribution from an existing source better than can emission factors. Even then, the results will be applicable only to the conditions existing at the time of the testing or monitoring." (*Id.*, page 3. *See also*, article and list of references available online in "Biomass is Dirty Business" at: www.nobiomassburning.org Although the article is about HAP factors for other than coal-fired boilers, much of the criticism of factors will be germane to coal-fired emissions.).

Page 7 of 9 of the TSD, State Rule Applicability, contains false, and therefore incomplete, information and so this permit should be denied. The false information greatly affects which permit requirements apply to JMEU. Page 7 of 9 states:

> "326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
> The operation of Boiler #1 will emit greater than 10 tons per year of a single HAP and 25 tons per year of a combination of HAPs. However, Boiler #1 is not subject to 326 IAC 2-4.1 since it was constructed before the applicability date of July 27, 1997 and has not been modified since it was constructed in 1967."

42 USC 7412 [Title42, ch 85, sub ch I Part A Section 7412] (a) (5) defines modification to be, "The term "modification" means any physical change in, or change in the method of operation of, a major source which increases the actual emissions of any hazardous air pollutant emitted by such source by more than a de minimis amount or which results in the emission of any hazardous air pollutant not previously emitted by more than a de minimis amount."

326 IAC 1-2-42, cited by IDEM in its Response # 6 to define *modification*, similarly states,

"Modification" defined Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11 Affected: IC 13-11
Sec. 42.
"Modification" means one (1) or more of the following activities at an existing source:

(1) A physical change or change in the method of operation of any existing emissions unit that increases the potential to emit any regulated pollutant that could be emitted from the emissions unit, or that results in emissions of any regulated pollutant not previously emitted.

(2) Construction of one (1) or more new emissions units that have the potential to emit regulated air pollutants.

(3) Reconstruction of one (1) or more existing emissions units that increases the potential to emit any regulated air pollutant."

The City of Jasper contracted with a company named Black & Veatch to produce a study which included an investigation and detailed report of the physical condition of the JMEU Source. The Black & Veatch evaluation of the power plant states in its conclusions that, "The generating bank also has significant build-up and several tubes have failed requiring plugs in the headers, both conditions greatly affect efficiency." and also, "The grate has suffered wear hindering proper air flow, this is a normal routine maintenance item." Both of these changes affect emissions as both greatly affected efficiency, and improper air flow, it must be assumed for safety, will alter combustion characteristics and so increase emissions beyond de minimis."

The change(s) in condition of the boiler, which Black & Veatch in its report and IDEM in its Response #7 label routine maintenance has (have) not been corrected by the source. The City has expressed no intent to correct these conditions. So, it/they must be considered permanent alterations of the emissions unit.

Black's Law Dictionary, Fifth Ed., defines repair to be to "...restore it to the condition in which it originally existed, as near as may be." The boiler was not restored to its original condition. Instead, it was changed in a way that matches Black's definition of modification, "A change; an alteration or amendment which introduces new elements into the details, or cancels some of them, but leaves the general purpose and effect of the subject matter intact." Plugs were introduced; tubes were cancelled out, but the boiler remained a boiler, diminished in efficiency, but still a boiler. The changes fit the Black's definition of modification not repair. They fit the §7412 and the 326 IAC definitions of modification.

The boiler has been modified, according to the 326 IAC and the 42 USC definitions of modification and to information in the Black & Veatch study ("Jasper Municipal Electric Utility Plant Condition Assessment Study, Final Report, B & V Project: 166183, " January 2010, section 2.2.2). The efficiency of the boiler has been lessened because of wear of the grate which hinders proper airflow and because several tubes have failed requiring installation of plugs in the headers and because

the generating bank has buildup. The plugs and failed tubes are certainly "modifications," not "repairs," because they altered the source, not restored it to its original configuration. The grate condition, due to its effect and due to the lack of replacement, the Petitioner argues is a "modification," too. Both were made/occurred after 1967. The plugs and other modifications were made, according to Table 1 on page 1 of the above referenced report, after 1997.

Permit Section C.5,"Fugitive Particulate Matter Emission Limitations [326IAC 6-5]," states, "fugitive particulate matter emissions are to be controlled as per plan in Attachment A." Petitioner can locate no Attachment A to the Permit, nor any plan which is located in the Permit text or its appendices and attached texts for control of fugitive particulate matter emissions from coal bin fires. Further, page 1 of 9 of TSD for this Permit, in the section headed, "Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit" states, "This source does not consists *(sic)* of any emission units that were constructed and/or are operating without a permit." This is contrary to the documented history of emissions from coal combustion in the coal bin inside the JMEU building, which bin is not listed as an emission unit in the Permit but whose emissions are to some extent documented by the EPA ER report covering the fire in bin in August 2011. PM sampling, (samples S4-6) at the fire were taken 18 November 2011, the day the fire is reported to have burned itself out. Apparently, no plume PM sampling was done 16 or 17 August while the fire was in full combustion

The Permit and the Application therefore contain false information and incomplete information. IDEM had a duty under 40 CFR 70.5 (a) (2) to request and obtain, and the Source, under 40 CFR 70.5 (b) (b), to provide to IDEM, full information about the Source and did not prior to issuance of the Permit. IDEM failed to adequately and meaningfully respond to public comments and explain its reasoning and justification for calling the changes in the JMEU boiler merely routine maintenance items. IDEM issued the Permit without receiving a complete application because the application contains no mention of the coal bin fires and emissions from these fires, and no listing of dioxin emissions.

For these reasons, this Petition should be granted and the Administrator should object to the issuance of this Title V Operating Permit.

F. IDEM erroneously issued the Permit without providing meaningful responses to significant comments.

Argument:

The EPA Administrator must object to IDEM's issuance of the Title V Permit because the Agency, IDEM, failed to provide adequate and meaningful responses to significant issues raised and

objections made by citizens in their Comments submitted to IDEM during the public comment period for the permit.

EPA was provided copies of some but not all public comments and objections when Mr. Kalla emailed them to Region V's agent Genevieve Damico, on the 7th of November 2012, she having identified herself by telephone as the person in charge of reviews of such permits. It appears from the inadequacy of IDEM Responses attached to/in the Permit that the JMEU proposed Permit was approved by the EPA, Region V, without review and, possibly, even without a reading of the text.

A permitting agency must provide meaningful responses to significant comments submitted during the public comment period. Under 40 CFR §70.7 (h), all Title V permit programs must offer an opportunity for public comment.

It is a general principle of administrative law that an inherent component of any meaningful notice and opportunity for comment is a response by the regulatory authority to significant comments. (in re U.S. Steel Corp-Granite City Works, Order Granting in Part and Denying in Part Petition for Objection to Permit, Pet. No. V-2009-03, at 7 (E.P.A. January 31, 2011) [hereinafter "Granite City Works Decision"]; in re Wisconsin Public Service Corporation's JP Pulliam Power Plant, Order Granting Petition for Objection to Permit, Pet. No. V-2009-01, at 5 (E.P.A. June 28, 2010) (same) [hereinafter "JP Pulliam Decision"])

In practical terms, "the opportunity to comment is meaningless unless the agency responds to significant points raised by the public." (Home Box Office v. FCC, 567 F.2d 9, 35 (D.C. Cir. 1977).

Responses to comments must address the issues raised in a meaningful fashion, and though perhaps brief, must nonetheless be clear and thorough enough to adequately encompass the issues raised by commenters. (*See* "Granite City Works Decision" and "JP Pulliam Decision").

40 CFR § 124.17 (a) (2) requires that in its Response to comments, in an Agency such as IDEM, "...the Director shall issue a response to comments." and this response shall "(2) Briefly describe and respond to all significant comments on the draft permit or the permit application (for section 404 permits only) raised during the public comment period, or during any hearing." Although 40 C.F.R. §124.17(a)(2) may formally apply to water permits, it has routinely been applied by the courts within the context of the Clean Air Act as well. (in re Amerada Hess Corp Port Reading Refinery, PSD Appeal No. 04-03, 12 E.A.D. pp 2, 16-20, (EAB 2005) [hereinafter "Amerada Hess"]; in re Vulcan Construction Materials, LP, ' PSD Appeal No. 10-11, Slip Op at 27 (March 2, 2011) (EAB) [hereinafter "Vulcan"]; in re N Mich Univ Ripley Heating Plant, PSD Appeal No. 08-02, Slip Op at 47, (February18, 2009) (EAB) [hereinafter "NMU"]).

The Administrator has previously granted Title V petitions to object where the permitting agency failed to sufficiently respond to significant comments. (*See*, e.g., JP Pulliam Decision at 5; *see also* Amerada Hess, Slip Op. at 16. For example, in the Granite City Works Decision, the

Administrator granted a petition to object where, in response to significant comments regarding the insufficiency of the permit's monitoring requirements, the permitting agency had simply stated that the relevant requirements were fulfilled without providing any supporting analysis. (Granite City Decision at 5-33). IDEM should have been aware of this standard.

In a communication with Michigan's DEQ regarding its Draft Title V Permit renewal for the River Rouge facility, EPA Region 5 explicitly warned, "it's important that Michigan provide detail regarding its positions, i.e., including the basis for the positions and not just the positions themselves," because "Any missing responses would be problematic if EPA has concerns with the proposed permit or is petitioned." (EPA Email, at 3). In the same email, at 12, Region 5 went on to emphasize, "don't assume the reader knows or agrees with the underlying assumptions" and noted that the "EPA may grant [a petition] on the basis of insufficient response to comments." The same must apply to IDEM in this matter.

All the material and text in Ground for Objection (A) also are entered here by reference. In its Response, prior to issuing this Permit, IDEM failed to adequately and meaningfully address the numerous requests for a public hearing. IDEM did not mention the numerous requests for a public hearing in IDEM's Responses to Comments. For this reason, the Administrator should grant this Petition and object to this Permit.

IDEM failed to meaningfully respond to public Comment because IDEM did not explain its reasoning for its Response to the issue of modifications to the Source. (Response #7). IDEM stated the modifications are considered routine maintenance, stated this with reference to:

> 326 IAC 1-2-42 "Modification" defined Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11, Affected: IC 13-11, Sec. 42.
>
> '"Modification" means one (1) or more of the following activities at an existing source:
>
> > (1) A physical change or change in the method of operation of any existing emissions unit that increases the potential to emit any regulated pollutant that could be emitted from the emissions unit, or that results in emissions of any regulated pollutant not previously emitted.
> >
> > (2) Construction of one (1) or more new emissions units that have the potential to emit regulated air pollutants.
> >
> > (3) Reconstruction of one (1) or more existing emissions units that increases the potential to emit any regulated air pollutant.'
> >
> > (Air Pollution Control Division; 326 IAC 1-2-42; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2373; filed Jul 15, 1993, 5:00 p.m.: 16 IR 2825; filed Nov 25, 1998, 12:13 p.m.: 22 IR 979; errata filed May 12, 1999, 11:23 a.m.: 22 IR 3105)

As cited earlier, the Black & Veatch study states that the changes made and which occurred to the Source decrease its efficiency. "Both of these changes affect emissions as both greatly affected efficiency, and improper air flow, it must be assumed for safety, will alter combustion characteristics and so increase emissions beyond de minimis." (Black & Veatch Study, conclusion). Black & Veatch and IDEM may both have called these changes "routine maintenance," but federal regulation at 42 USC 7412 [Title42, ch 85, sub ch I Part A Section 7412] (a) (5) and 326 IAC 1-2-42 define modification such that these are in fact modifications.

IDEM issued the Permit before meaningfully and adequately responding because IDEM failed to explain its reasoning in its Response to the issues of these modifications and resulting emissions raised in public Comment. For this reason, the Administrator should grant this Petition and Object to the Permit.

IDEM issued this Permit before meaningfully responding to public Comments because it failed to explain its reasoning in making the Other Change, listed on page 9 of 10 of the TSD Addendum, following the IDEM comments and Responses. IDEM, without explanation, changed the Permit requirement for stack testing from every five years to "by December 31 of every second calendar year following the most recent valid compliance demonstration." IDEM's Response #11 states, "This *[every five years]* is consistent with IDEM requirements for this size boiler and this five year period for testing shows reasonable compliance with emission limits." In Other Change, five years is changed to possibly less than two years, if the demonstration were to occur in June or October of a year, and quite conceivably changed to never being required if IDEM decides that something other than a stack test of particulate emissions, such as the visual opacity observations made by or for JMEU, are a valid compliance demonstration.

IDEM did not, before issuing the Permit, adequately explain its reasoning in making this Other Change on an issue raised in public Comment. For this reason, the Administrator should grant this Petition and object to the Permit.

Part of Ground for Objection (C.) is here repeated:

> "The rationale for the monitoring requirements selected by a permitting authority must be clear and documented in the permit record (e.g., in the Statement of Basis). See 40 C.F.R. §70.7(a)(5); see also CITGO Order, Order Responding to Petitioners' Request that the Administrator Object to the Issuance of a Title V Operating Permit, Petition Number VI 2007-01, at 7.)
>
> Also,
>
> "While the permit includes monitoring requirements for opacity at stationary vents, there is no indication in the permit record that TCEQ evaluated whether the frequency and timing requirements of the monitoring for opacity at all stationary vents are sufficient to assure compliance with the terms and conditions in the permit as

> required by section 504(c) of the CAA. Similarly, the permit record does not include an explanation as to how the monitoring requirements for opacity that are included in the permit are 'sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit.' 40 C.F.R. §§70.6(a)(3)(i)(B)" (CITGO Order, pp 5, 6)

IDEM did not explain its rationale. This Petitioner argues that the EPA determinations in the above paragraph apply to IDEM and to the JMEU Permit. IDEM did not show how the opacity monitoring specified in the Permit is adequate to ensure compliance with permit limits. Petitioner has presented evidence that the opacity of JMEU emissions is not sufficiently linearly correlated with particulate matter emissions to provide meaningful indication of compliance with permit limits. IDEM did not adequately or meaningfully respond to Public Comment raising the issue of opacity at JMEU not correlating sufficiently with particulate matter emissions.

IDEM, in its Response #4, responding, apparently, to Mr. Kalla's Comment that emissions from startup and shutdown periods were not included in the draft permit, stated, "During shutdown, the emissions will be less...." and also, "The calculated emissions in the TSD are greater than the emissions would be if taking in to *(sic)* account the lower startup emissions from natural gas fired low NOX burner and the lower emissions at shutdown." Nowhere does IDEM provide startup and shutdown emissions from coal, actual or calculated, nor present any other proof of these statements. However, there is evidence that, for some sizes of PM2.5, startup emissions exceed those of steady state operation, and that shutdown emissions can be orders of magnitude greater than those of steady state combustion. (*Emissions Characterization of Three High Efficiency Wood Boilers*, James Lang, et al, 2011, p 16 of 21, see at www.uvm.edu/~cfcm/symposium/PDFs/Chandrasekaran.pdf)

IDEM provided no proof of its claim that startup and shutdown emissions will be low, and with proof extant that these can, in fact, be higher than those of steady state combustion, IDEM's Response is not adequate nor meaningful nor clear and thorough enough to encompass the issue raised in Kalla's Comments, which was, why the Permit was issued without listing the startup and shutdown emissions as the *Sierra Club v EPA*, U.S. Court of Appeals, District of Columbia, case decision requires.

IDEM issued this Permit without first providing meaningful response to Public Comments and for this reason the Administrator should grant this Petition and object to the issuance of the Operating Permit.

In IDEM's Comment #5 and IDEM's Response to #5, the Agency appears to be responding to Kalla's comment, "In light of the City of Jasper's claim that the controls capture 99% or more of the particulate matter produced by this source, and calculating from information on page 106 of 175 of the application papers, ash handling, alone, has a PTE of 73 tons/yr of particulate matter, more when the ash content of the coal is higher than the analysis listed." Yet, IDEM did not respond by disputing Kalla's calculations, but by disregarding the extremes of variability of ash content of the fuel, as documented in the application, thus cherry-picking data to indicate low emissions, and by

applying an AP-42 emission factor. Such factors are allowed to be used in permitting in the absence of better data. (AP 42, Introduction, page 2). However, for JMEU ash, better data (as per AP 42, Introduction, page 3) exists in the coal ash content data and the capture efficiency of the Controls, i.e., source specific data. For JMEU, coal analyses submitted in the application document ash contents of the fuel and heat values of the fuel. With the boiler rating and historic heat inputs, these should yield the ash quantity. JMEU specified in its application the capture efficiency of its control devices. Kalla applied this efficiency to the analyses worst case for ash to arrive at his figure, which IDEM sidestepped. IDEM's Response was not clear and thorough enough to adequately encompass the issues raised by the Comments.

IDEM's Response includes the statement that 326 IAC 6.5-1-2 limits emissions from ash handling to 3.4 tons per year. That regulation reads,

> "**326 IAC 6.5-1-2 Particulate emission limitations; modification by commissioner**
> Authority: IC 13-14-8; IC 13-17 Affected: IC 13-15 Sec. 2
>
> (a) Particulate matter emissions from facilities constructed after applicable dates in subsections (c) and (d) or not limited by subsection (b), (e), (f), (g), or (h) shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).
>
> (b) Fuel combustion steam generators are limited to the following particulate matter emissions limitations:
>
> (1) For solid fuel-fired generators that have:
>
> (A) greater than sixty-three million (63,000,000) kilocalories (kcal) per hour heat input (two hundred fifty million (250,000,000) Btu), a particulate matter content of not greater than eighteen-hundredths (0.18) gram per million calories (one-tenth (0.10) pound per million Btu);
>
> (B) equal to or greater than six million three hundred thousand (6,300,000) kcal per hour heat input, but less than or equal to sixty-three million (63,000,000) kcal per hour heat input (equal to or greater than twenty-five million (25,000,000) Btu, but less than or equal to two hundred fifty million (250,000,000) Btu), a particulate matter content of not greater than sixty-three hundredths (0.63) gram per million calories (thirty-five hundredths (0.35) pound per million Btu); or
>
> (C) less than six million three hundred thousand (6,300,000) kcal per hour heat input (twenty-five million (25,000,000) Btu), a particulate matter content of not greater than one and eight-hundredths (1.08) grams per million calories (six-tenths (0.6) pound per million Btu).

(2) For all liquid fuel-fired steam generators, a particulate matter content of not greater than twenty-seven hundredths (0.27) gram per million kcal (fifteen-hundredths (0.15) pound per million Btu).

(3) For all gaseous fuel-fired steam generators, a particulate matter content of not greater than one-hundredth (0.01) grain per dry standard cubic foot (dscf).

(c) Asphalt concrete plants are limited to particulate matter emissions of not greater than two hundred thirty (230) mg per dscm (one-tenth (0.1) grain per dscf), if in existence on or before June 11, 1973, and consisting of, but not limited to:

(1) driers;
(2) systems for:

(A) screening, handling, storing, and weighing hot aggregate;
(B) loading, transferring, and storing mineral filler; and
(C) mixing asphalt concrete; and

(3) the loading, transfer, and storage systems associated with emission control systems.

(d) The following are the requirements for grain elevators:
(1) For grain elevators that began construction or modification before January 13, 1977, any grain storage elevator located at any grain processing...."

In the context of this regulation, "facility" obviously refers to the entire source, not just ash handling because ash handling does not involve a heat input Btu/hr rating. JMEU is neither an asphalt plant nor a grain elevator. 326 IAC 6.5-1-2 does not contain separate limits for emissions from individual emissions units within a source. IDEM failed in its Response to Comments to make its reasoning and justification understandable for its statement that ash emissions are limited to 3.4 ton per year. The 326 section cited by IDEM limits a source that is a 252.5 MMBtu/hr input boiler (as IDEM, in its Responses and Permit, unilaterally and without meaningful explanation increased JMEU's boiler rating to be) to hourly particulate matter emissions of 0.1 lb/MMBtu, which, at IDEM's unjustified rating, is 25.2 lb emitted per hour from the facility. The emissions for the entire JMEU source is limited to this 25.2 lbs/hr, which yields a yearly limit of 110.595tons. Petitioner could not comprehend the derivation of IDEM's 3.4 ton per year limit of emissions from ash handling.

The Agency in its response did not adequately make clear and understandable and/or useful for the commenter to verify IDEM's statement of 3.4 ton per year, the figures in Section 2 (a) which are in quantities, g/dscm, not readily comparable to those in Section 2 (b) (1) (A), which are in

lb/MMBtu, and what exhaust gas flow data is provided in the Permit and Application are in actual cubic feet, not dry standard cubic feet. No moisture content of exhaust gas was found listed, making it impossible to convert from acfm to dscfm.

IDEM in its Response cites the calculations on page 8 of 11 of TSD Appendix A to justify its total PTE for ash handling of 0.13 ton. This, page 8 of 11 is based upon a flow rate of 3,000 acfm. Granting for the moment a flow rate of 3,000 acfm, these are not dry standard cubic meters nor are they dry standard cubic feet. This use of acfm introduces confusion not clarity into IDEM's Response, confusion sufficient to prevent the Commenter from understanding IDEM's reasoning. The unsupported introduction of dscf in the lowest box on page 8 of 11 does nothing to lessen this confusion. IDEM's Response is not clear and thorough enough to adequately encompass the issues raised in public Comments.

326 IAC Section 2 (b) (1) (A) is of concern because IDEM, in its Response to its Comment #2, states, "The boiler rating is revised from 192 MMBtu/hr to 252.5 MMBtu/hr." IDEM raised the rating without justification or explanation. The boiler was listed as having a heat input capacity of 192 MMBtu/hr in both the 2008-issued and in the 2012draft permits (section D.1 of each). There is undoubtedly a safety factor in a new boiler's rating, but this boiler is old, worn, and less efficient than when new (Black & Veatch study, conclusion). Exceeding its rating likely is dangerous.

IDEM further states in Response #2 that, "The boiler rating is descriptive information and does not constitute an enforceable condition." Whether that is true or not, 326 IAC Section 2 clearly shows that by increasing the rating, IDEM is changing the particulate emissions PTE allowable under that regulation, which, apparently, since IDEM relied upon it numerous times in the permit, is federally enforceable. This end run around the law, if that is all it is, should not be allowed to stand. IDEM revised upward JMEU's PTEs as a result of the increased rating (see revised page 3 of 10 of TSD Addendum of the issued permit).

Although 326 IAC 6.5-4-18 specifically treats and identifies this source, as the following text shows, the limits on emissions found in section 2 of 326 IAC 6.5-1-2 also apply to JMEU.

326 IAC 6.5-4-18 Jasper Municipal Electric Utility
Authority: IC 13-14-8; IC 13-17-1-1; IC 13-17-3-4; IC 13-17-3-14
Affected: IC 13-15; IC 13-17
Sec. 18. Jasper Municipal Electric Utility in Dubois County shall meet the following emission limits:

Source	Source ID No.	Point Input ID	Process	Emission Limits	tons/yr	lbs/million Btu
Jasper Municipal Electric Utility	00002	28P	Coal Boiler 192 MMBtu/Hr.		265.6	0.350

(Air Pollution Control Division; 326 IAC 6.5-4-18; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3466; filed Jan 23, 2008, 1:44 p.m.: 20080220-IR-326040279FRA),

And,

> Rule 4. Dubois County 326 IAC 6.5-4-1 General provisions, Authority: IC 13-14-8; IC 13-17-1-1; IC 13-17-3-4; IC 13-17-3-14, Affected: IC 13-15; IC 13-17, Sec. 1
> "In addition to the emission limitations contained in 326 IAC 6.5-1-2, sources and facilities:
>
> (1) located in Dubois County; and
>
> (2) listed in this rule;
> shall meet the specified emission limitations." (Air Pollution Control Division; 326 IAC 6.5-4-1; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3462; filed Jan 23, 2008, 1:44 p.m.: 20080220-IR-326040279FRA)

IDEM did not make clear its reasoning and justification for raising the boiler heat input capacity rating and so changing the PTEs. IDEM did not provide adequate nor meaningful responses to Kalla's and other citizens' significant comments prior to issuing the Title V Permit. For these reasons, the Administrator should grant this petition and object to the issuance of this permit.

IDEM failed to respond meaningfully and thoroughly enough to adequately encompass the issues raised by Kalla's submitted Comments concerning mercury emissions. Kalla submitted:

> "The draft permit contains and or is based upon false and incomplete information and should be denied for this reason.
>
> "The list of pollutants shown on p 118 of 175of the PDF is incomplete, e.g., mercury is not shown to be a pollutant. Yet, page 122 lists mercury in the amount of approx 14.5 pounds per year. Were someone to dump 14.5 lbs of mercury on a sidewalk, IDEM would call that a hazmat incident. This is a quantity dangerous to human health and further, a quantity which should have been but was not listed on the ES form, which begins on page 116. This is an example of incomplete information.
>
> "Page 118 of 175 of the PDF of the application shows an x on the line before radionuclides, indicating their release as emissions, yet the page lists no data for the quantity of these. There is no knowledge, then, of how much radioactive material has been and will be released from this source. For this reason alone, this permit should not be renewed.
>
> "No records of mercury emissions from this source are available. The listing in the TSD for mercury is not valid and is false. Page 4 of 11 of TSD App. A, displays emissions factors and PTEs for some metal HAPs and cites AP-42 Tables 1.1-1through 1.1-18 as sources. Tables 1 thru 11 do not mention mercury, nor do Tables 13, 14, 15 nor 16. Table 1.1-12 displays emissions information for dioxins and furans, which groups, erroneously, appear nowhere in this Source's permit, draft permit, and related papers. Footnote (a) to AP-42 Table 1.1-18 would exclude that table from applying to this source. Table 1.1-17 has no data for spreader stokers such as is this source. This shows the TSD contains false information."

IDEM's Responses #8 and 10 are to issues regarding mercury. Response #8 states mercury emissions are less than 7.98 lbs/year. Response #10 states mercury emissions are calculated to be 6.06 lb/year. Utilizing the AP-42 Table 1.1-18, which IDEM cites in its Response #16, that lists a mercury emission factor of 8.35 x 10 to the negative 5th power and applying this factor to the tons/year throughput of coal listed in IDEM's chart on page 6 of 11 of the issued Permit TSD Appendix A, yields yet another quantity: 8.03 lbs/year. As Kalla's Comment states, the Application papers list on page 122 an estimate of 14.5 lbs per year and display no mercury emissions at all on page 118. IDEM has not at all discussed, encompassed nor explained the conflicting data. IDEM has, instead, presented several conflicting quantities for the very same emission.

IDEM, in its Response #16 cited AP-42 Table 1.1-18. IDEM stated the table "can be used for coal fired boilers utilizing an Electrostatic Precipitator (ESP) as a control." AP 42 Table 1.1-18 footnote (a) states, "In addition, the factors apply to boilers using only an ESP, FF, or venturi scrubber. SCCs = pulverized coal-fired, dry bottom boilers, 1-01-002-02/22, 1-02-002-02/22, 1-03-002-06/22; pulverized coal, dry bottom, tangentially-fired boilers, 1-01-002-12/26, 1-02-002-12/26, 1-03-002-16/26; cyclone boilers, 1-01-002-03/23, 1-02-002-03/23, 1-03-002-03/23; and, atmospheric fluidized bed combustors,circulating bed, 1-01-002-18/38, 1-02-002-18, and 1-03-002-18"

While the text of the footnote indicates the table applies to all coal fired boilers with ESP, the listed SCCs do not include the JMEU Source type SCC. Kalla specifically raised the issue that footnote (a) excludes, because of SCC, the use of Table 1.1-18 for JMEU emissions. IDEM did not address the issue of the SCCs. IDEMs Response was not clear and thorough enough to eliminate the confusion of numerous conflicting mercury emissions quantities and of the footnote not including an SCC in which JMEU belongs, nor clear and thorough enough to explain IDEM's reasoning in choosing AP-42 Table 1.1-18.

IDEM cites a JMEU 2011 annual emissions report as containing an emission factor for mercury differing from that AP-42 factor, but neither the Application nor the Permit contain this document. Page 2 of 9 of Appendix A of the TSD attached to the JMEU 2008-issued permit lists yet another different mercury factor of 0.0000698, but no listing of units such as pounds per ton are provided. This same number in the same chart is listed as the yearly emissions, in tons, of mercury.

IDEM failed to adequately and meaningfully respond to Kalla's Comments before issuing the Permit.

IDEM failed to provide adequate and meaningful responses to Kalla's and at least one other citizen's comments about the August 2011fire in the coal bin at the source, about the fugitive emissions from the fire and the history of such fires at the source. The fire is mentioned only in IDEM's version of Comment #1, "There was a fire last August, is not mention *(sic)* in the permit...." IDEM's response to Comment #1 does not mention the fire. It states that the source has no pending enforcement actions, and that, "Past violations or occurrences at a source do not prevent the source

from receiving a renewal permit as long as it is in compliance at the time of permit issuance." IDEM provided no reasoning and no basis for this statement.

Mr. Kalla's Comments concerning the fire include:

> "This draft permit/renewal fails to list and address the fugitive emissions from recurrent uncontrolled combustion of coal in the source's coal bin. This combustion, such as occurred in August 2011, results from wetting of the coal due to leaky windows, which windows the source, the City of Jasper thru its mayor, has failed to repair and failed to give any indication it would repair this change in the source.
>
> "Because this change has resulted in an increase in emissions greater than de minimus, the leaky windows and resultant fires are modification(s) of the source. Using the worse case AP-42 emissions for bituminous coal combustion in a stoker boiler, this modification has a PTE of approximately 1810 tpy of PM and condensible PM. Why are not the emissions from these fires addressed in the draft permit? Why aren't the emissions listed in the draft? Why isn't the combustion of coal in the coal bin listed as a source of emissions in the draft? Why aren't the known fugitive emissions shown and properly limited in the draft? Why, when the City has clearly indicated it intends to take no steps to repair the windows to prevent future emissions from coal hopper/bin fires, and when this is a recurrent source of emissions, would IDEM issue this permit/renewal? Why is the application not a false application and/or one which contains knowingly incomplete and so inaccurate information when it fails to even mention these emissions and their source?
>
> "Again, I object to this permit and/or renewal and ask that you do not issue it."
>
> And:
>
> "Why, in light of the following objections and comments, would IDEM issue this permit/renewal, and why are the objections and comments not valid?
>
> "This draft permit/renewal is based upon the fuel for this source being coal. In the news article in the DC Free Press reporting on the 16 August 2011 coal hopper fire, then Jasper Mayor Schmidtt *(sic)* is quoted as responding to a question of if the City was taking steps to prevent another similar fire. He is quoted as saying, 'Yep, we're going to burn miscanthus.'
>
> "Emissions from miscanthus combustion will be different than from coal. A different portion of AP-42 is applied to treating miscanthus combustion in boilers than is used in treating coal combustion. Jasper has applied for this permit renewal to burn coal knowing it is going to burn a different fuel. This appears to be a case of filing an application knowing that application contains false information."

And:

> "According to the news article, the applicant (City), IDEM, and the EPA are aware of this fire, and this is not the first such fire at the source. If this permit is renewed and coal is stored onsite as it was prior to this fire, another fire and more uncontrolled emissions must be reasonably anticipated.
>
> "This draft permit/renewal should not be issued because the emissions data in it are incomplete and inaccurate because they do not include the uncontrolled emissions from this fire. These emissions can be expected to occur again during the term of the new permit/renewal and so should be included in the PTEs of this source but are not.
>
> "This source is a threat to the public's health and safety as evidenced by its emissions and its history of inadequate and poor maintenance, and uncontrolled emissions."

IDEM's Response is not thorough enough to adequately encompass and meaningfully respond to the issues raised by the Commenters.

40 CFR requires all units of emissions at a Source to be listed in an application, that all emissions be listed, too. The coal bin fire of August 2011 and previous fires are nowhere listed in the Permit nor in the Application. It/they are not listed on application papers listing fugitive emission units nor those listing fugitive emissions. Yet, according to page 5 of the EPA ER there were emissions from the fire, fugitive emissions. Many samples were taken in the emissions plume. PM was measured in the plume in samples S4-6 and also as follows:

> "PM. On August 16, 2011, a total of 2,593 readings were collected for PM and compared to the NAAQS PM2.5 primary standard of 35 µg/m$_3$. The average reading was 29.3 µg/m^3 with a maximum reading of 37.5 µg/m^3. A total of 19 readings exceeded the primary standard. No readings exceeded the secondary standard of 150 µg/m^3. On August 17, 2011, a total of 13,175 readings were collected for PM and compared to the NAAQS PM2.5 standard of 35 µg/m$_3$. The average reading was 46.7 µg/m$_3$ with a maximum reading of 213.2 µg/m^3. A total of 8,536 readings exceeded the primary standard. A total of 21 readings exceeded the secondary standard of 150 µg/m$_3$ over a 135-minute timeframe. On August 18, 2011, a total of 3,860 readings were collected for PM and compared to the NAAQS PM2.5 standard of 35 µg/m$_3$. The average reading was 56.2 µg/m$_3$ with a maximum reading of 1,265.7 µg/m$_3$. A total of 3,128 readings exceeded the primary standard. A total of 145 readings exceeded the secondary standard of 150 µg/m$_3$ over a 193-minute timeframe." (EPA ER)

The EPA ER states that 200-300 tons of coal burned during this fire. Emissions were significant and yet were disregarded by both the City/Source and by IDEM in this Permit and the

process leading to its issuance.

40 CFR 70.5 (b) imposes a duty upon the applicant for a permit to correct incorrect submitted information. JMEU is not documented to have fulfilled this duty concerning emissions from the coal bin fire. By acting upon JMEU's application, which lacked even mention of this coal bin fire, IDEM failed to obtain a complete application prior to issuing the permit, as is required by:

> 40 CFR 70.5 (c) Standard application form and required information. The State program under this part shall provide for a standard application form or forms. Information as described below for each emissions unit at a part 70 source shall be included in the application. The Administrator may approve as part of a State program a list of insignificant activities and emissions levels which need not be included in permit applications. However, for insignificant activities which are exempted because of size or production rate, a list of such insignificant activities must be included in the application. An application may not omit information needed to determine the applicability of, or to impose, any applicable requirement, or to evaluate the fee amount required under the schedule approved pursuant to § 70.9 of this part. The permitting authority may use discretion in developing application forms that best meet program needs and administrative efficiency. The forms and attachments chosen, however, shall include the elements specified below:
>
> (1) Identifying information, including company name and address (or plant name and address if different from the company name), owner's name and agent, and telephone number and names of plant site manager/contact.
>
> (2) A description of the source's processes and products (by Standard Industrial Classification (SIC) Code) including those associated with any proposed AOS identified by the source.
>
> (3) The following emission-related information:
>
> (i) All emissions of pollutants for which the source is major, and all emissions of regulated air pollutants. A permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, except where such units are exempted under this paragraph (c) of this section. The permitting authority shall require additional information related to the emissions of air pollutants sufficient to verify which requirements are applicable to the source...."

By acting upon JMEU's Application, IDEM failed to adequately and meaningfully respond to Comments concerning the fire and its emissions. IDEM failed to adequately and/or meaningfully respond to public Comments from Mr. Hicks and Mr. Emmert in that IDEM responded (IDEM Response #2) to the video, provided in the Comments, of a black smoke plume exiting the JMEU stack the day of the stack test in June 2011 by stating only, "IDEM, OAQ does not know why smoke

was visible during the 1993 *(sic)* test but whatever the reason was, the source did pass the emissions test." The smoke plume calls into question the accuracy of the emissions test, according to IDEM's statement in its Response #3 that opacity is an indication of proper operation. It calls into question the effectiveness, accuracy and completeness of the monitoring specified for JMEU. Yet, IDEM fails to meaningfully explain the existence of this smoke plume, as Commenter Hicks requested. IDEM failed to explain its reasoning in choosing the answer it did regarding the plume instead of investigating the cause and content of the plume.

Again, here, it is important to note that IDEM did not usually respond directly to the public's submitted Comments. Instead, IDEM edited and conflated the public's Comments to produce texts to which IDEM did respond. Some public Comments were not responded to at all. IDEM's responses in many cases failed to meaningfully or adequately respond to the original public Comments. IDEM issued the Permit without providing meaningful responses to significant issues raised in significant public Comments.

For this reason, this Petition should be granted and the Administrator must object to the Permit.

III. CONCLUSION

The Petitioner has effectively forestalled and refuted any reasonable possible argument that all IDEM Responses were meaningful and adequate, that emissions limits in the Permit are protective of public health, that the information in the Application was complete and supplemented as is required, that the locale of the Source is and will remain in attainment, or that the Permit mandates adequate monitoring. The Petitioner has clearly shown that IDEM failed to hold a public hearing prior to issuing this Permit and that IDEM was required to convene such a public hearing and that a public hearing was requested by citizens in Public Comments timely submitted. For the numerous valid Grounds for Objection presented in this Petition and even for just the reason that IDEM arguably intentionally, egregiously violated law and regulations by not holding a public hearing, the Administrator should grant this Petition and object to the Permit, rescinding the Permit finalized May 15, 2013.

If the Administrator will not rescind the Permit, then for the reasons argued in this full Petition, the Administrator should grant this Petition and object to the Jasper Municipal Electric Utility Title V Operating Permit, and also instruct, at a minimum, that

(1) IDEM convene a public hearing that is more than perfunctory on this Permit and correct IDEM's inadequacies in the JMEU and in all other, future, permitting processes;

(2) IDEM must meaningfully respond to the public's significant comments,

(3) Jasper Municipal Electric Utility provide all necessary and pertinent information, including a listing of all emissions from every unit of emissions at the Source, including coal bin fires, to IDEM,

(4) IDEM must include a schedule for Jasper Municipal Electric Utility to come into compliance as part of any Title V Permit for the power plant,

(5) IDEM must require Jasper Municipal Electric Utility to install PM CEMs and a functioning COMS or other, equally effective monitoring, must require adequate monitoring at JMEU to ensure continuous compliance with particulate matter limits, and

(6) IDEM must set emission limits of particulate matter and other regulated pollutants which are truly protective of public health, not merely limits satisfying the IDEM Commissioner's determination of what is protective of human health, nor merely meeting the needs of matching the NAAQS.

Respectfully submitted,

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