



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

Michael R. Pence  
*Governor*

Carol S. Comer  
*Commissioner*

March 31, 2016

Mr. Robert Kaplan  
Acting Regional Administrator  
U.S. Environmental Protection Agency  
Region 5  
77 West Jackson Boulevard  
Chicago, IL 60604-3950

Re: State Implementation Plan Submittal for  
Indiana Regarding 1-Hour SO<sub>2</sub> Attainment  
A.B. Brown Generating Station in Posey  
County, Indiana (Commissioner's Order  
#2016-01) Addendum Documentation of  
the Public Participation Process

Dear Mr. Kaplan:

Pursuant to Section 110 of the Clean Air Act (CAA) and Title 13 of the Indiana Code (IC), the Indiana Department of Environmental Management (IDEM) submits an amendment to the Indiana state implementation plan (SIP) for the A.B. Brown Generating Station accomplished by Commissioner's Order #2016-01. IDEM submitted a request for parallel processing of the amendment to Indiana's SIP on January 27, 2016. The public comment period commenced on January 13, 2016 and concluded on February 16, 2016. IDEM conducted a public hearing concerning the proposed SIP revision on March 23, 2016.

The attached enclosure consists of the following:

- Commissioner's Order #2016-01 issued on January 11, 2016, that establishes permanent and enforceable sulfur dioxide (SO<sub>2</sub>) emission limits for A.B. Brown, located in Posey County, Indiana, in order to ensure continued attainment of the 2010 primary 1-hour SO<sub>2</sub> standard in the area surrounding the facility. The Commissioner's Order contains emission limitations for Units 1 & 2, as well as reporting and recordkeeping requirements and method for compliance. The effective date for the emission limitations in the Commissioner's Order is April 19, 2016. It contains and meets the requirements set forth in 42 U.S.C. § 7407(d)(3)(E)(iii) and the conditions will become applicable requirements as defined in 326 Indiana Administrative Code (IAC) 2-7-1.
- Administrative checklist and modeling summary.

- Documentation of the public participation process including: (1) A transcript of the public hearing and record of all comments. (2) A summary of and response to substantive comments.

This submittal consists of one (1) hard copy of the required documentation. An electronic version of the submittal in PDF format that is identical to the hard copy has been sent to Doug Aburano, Chief of U.S. EPA Region 5's Attainment Planning and Maintenance Section and Chris Panos of U.S. EPA Region 5.

IDEM requests that U.S. EPA proceed with review and approval of this amendment to Indiana's SIP. If you have any questions or need additional information, please contact Brian Callahan, Chief, Air Quality Standards and Implementation Section, Office of Air Quality at (317) 232-8244 or [bcallaha@idem.IN.gov](mailto:bcallaha@idem.IN.gov).

Sincerely,



Keith Baugues  
Assistant Commissioner  
Office of Air Quality

KB/sd/mad/bec/gf

Attachments: Supporting Documents

cc: Doug Aburano, U.S. EPA Region 5 (no enclosures)  
John Mooney, U.S. EPA Region 5 (no enclosures)  
Steve Rosenthal, U.S. EPA Region 5 (no enclosures)  
Pamela Blakley, U.S. EPA Region 5 (no enclosures)  
John Summerhays, U.S. EPA Region 5 (no enclosures)  
Chris Panos, U.S. EPA Region 5 (no enclosures)  
Jennifer Liljegren, U.S. EPA Region 5 (no enclosures)  
Keith Baugues, IDEM-OAQ (no enclosures)  
Scott Deloney, IDEM-OAQ (no enclosures)  
Mark Derf, IDEM-OAQ (no enclosures)  
Brian Callahan, IDEM-OAQ (no enclosures)  
Mike Mosier, IDEM-OAQ (no enclosure)  
Christine Pedersen, IDEM-OAQ (no enclosures)  
Jessica Reiss, IDEM-OAQ (no enclosures)  
File Copy

## Supporting Documents

Attachment A: Administrative Checklist (40 CFR 51, Appendix V)

Attachment B: Commissioner's Order #2016-01

Attachment C: Public Participation Documentation

Attachment D: Modeling Summary

Data, calculations and methodology for determining 24-hour rolling average SO<sub>2</sub> emission limits based on A.B. Brown's continuous emission monitoring data (available upon request).

# **Attachment A**

## **Administrative Checklist**

## ADMINISTRATIVE CHECKLIST (40 CFR 51, Appendix V)

- |   |                              |
|---|------------------------------|
| 1. The submittal is accompanied by a formal letter of submittal from the governor or his designee.  | Enclosed                     |
| 2. Evidence that the State has adopted the plan in the State code or body of regulations; or issued the permit, order, consent agreement (“document”); in final form.   | Attachment B                 |
| a. Date of adoption or final issuance:  | January 11, 2016             |
| b. The effective date of the plan, if different from the adoption/issuance date.  | April 19, 2016               |
| 3. Evidence that the State has the necessary legal authority under state law to adopt and implement the plan.   | IC 13-14-1-9<br>IC 13-14-2-1 |
| 4. A copy of the actual regulation or document submitted for approval and incorporation by reference into the plan, including the following:  | Attachment B                 |
| a. Indication of the changes made to the existing approved plan, where applicable.  |                              |
| b. The submittal shall be a copy of the official State regulation or document signed, stamped, dated by the appropriate state official indicating that it is fully enforceable by the State. Effective date shall be stated in the document itself. |                              |
| 5. Evidence that the State followed all of the procedural requirements of the State’s laws and constitution in conducting and completing the adoption/issuance of the plan.   | Attachment B                 |
| 6. Evidence that public notice was given, including date of proof of publication.   | Attachment C                 |
| 7. Certification that public hearings were held in accordance with information provided in public hearing notice.   | Attachment C                 |
| 8. Compilation of public comments and State’s response.   | Attachment C                 |
| 9. Technical Support Document (if source specific change).  | Attachment D                 |

# **Attachment B**

Commissioner's Order for A.B. Brown  
Generating Station addressing the 1-hour SO<sub>2</sub>  
NAAQS

Posey County



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Governor

Carol S. Comer  
Commissioner

STATE OF INDIANA )  
COUNTY OF MARION )

SS:

BEFORE THE INDIANA DEPARTMENT  
OF ENVIRONMENTAL MANAGEMENT

IN THE MATTER OF: )  
ORDER OF THE COMMISSIONER )  
PURSUANT TO IC 13-14-2-1 )  
FOR A.B. BROWN GENERATING STATION )  
OF INDIANA )

**NOTICE AND ORDER OF THE  
COMMISSIONER OF THE  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

This Notice and Order of the Commissioner of the Department of Environmental Management ("Order") is issued pursuant to Indiana Code ("IC") 13-14-1-9, IC 13-14-2-1, and IC 13-14-2-7. During the Commissioner's review, it was determined that the Petition should be granted according to the terms specified below:

**PETITION**

Petitioner is Southern Indiana Gas and Electric Company (SIGECO) A.B. Brown Generating Station ("Petitioner"), a stationary electric power plant with Source I.D. Number 129-00010, located at 8511 Welborn Road in Mount Vernon, Posey County, Indiana, and permitted under the Part 70 air operating permit program.

On March 2, 2015, the U.S. District Court for the Northern District of California accepted a Consent Decree between the U.S. Environmental Protection Agency ("U.S. EPA"), the Sierra Club, and the Natural Resources Defense Council to resolve litigation concerning deadlines for completing 1-hour sulfur dioxide ("SO<sub>2</sub>") National Ambient Air Quality Standard ("NAAQS") designations. Under the Consent Decree, U.S. EPA must designate certain areas as nonattainment, attainment, or unclassifiable in three phases.

The first Consent Decree phase requires U.S. EPA to designate areas that contain stationary sources that had not been announced for retirement as of March 2, 2015 and either emitted more than 16,000 tons of SO<sub>2</sub> in 2012 or emitted more than 2,600 tons of SO<sub>2</sub> and had an annual average emission rate of more than 0.45 pounds of SO<sub>2</sub> per one million British thermal units ("lb/MMBtu") in 2012, according to U.S. EPA's Air Quality Markets Database.

On March 20, 2015, U.S. EPA identified five (5) sources in Indiana that met the criteria for the first phase of Consent Decree designations. U.S. EPA's list included the Petitioner, A.B. Brown Generating Station.



On September 16, 2015, the Indiana Department of Environmental Management ("IDEM") recommended designation of the area surrounding A.B. Brown Generating Station as attainment. The recommendation was based on modeling that included a permanent and enforceable SO<sub>2</sub> emission limitations and emission rates at A.B. Brown Generating Station.

On December 21, 2015, the Petitioner submitted a request to the Commissioner to impose permanent and enforceable SO<sub>2</sub> emission limitations and emission rates on the Petitioner in order to ensure continued attainment of the SO<sub>2</sub> NAAQS in the area surrounding A.B. Brown Generating Station.

The Petitioner proposed SO<sub>2</sub> emission limitations, expressed in SO<sub>2</sub> lb/MMBtu, and emission rates, expressed in SO<sub>2</sub> pounds per hour ("lb/hr"), applicable to both Unit No. 1 and Unit No. 2, as follows:

- a. 0.363 lb/MMBtu, twenty-four (24) hour rolling average;
- b. 1831.6 lb/hr, twenty-four (24) hour rolling average; and
- c. 2152.2 lb/hr, one (1) hour average.

### FINDINGS

Pursuant to IC 13-14-2-1(b) and IC 13-14-2-7(1), the Commissioner may issue Orders to secure compliance with Indiana's environmental statutes and rules, including the ambient air quality standard for SO<sub>2</sub> at 326 Indiana Administrative Code ("IAC") 1-3-4(b)(1)(A).

Based on the foregoing information, IDEM finds the following:

1. Permanent and enforceable SO<sub>2</sub> emission limitations and emission rates for A.B. Brown Generating Station are required in order to model continued attainment of the 1-hour SO<sub>2</sub> NAAQS in the area surrounding the Petitioner.
2. Adding SO<sub>2</sub> emission limitations and emission rates to the Petitioner's Part 70 Operating Permit is not adequately permanent to assure continued attainment of the SO<sub>2</sub> NAAQS. Instead, a Commissioner's Order is required to ensure SO<sub>2</sub> emission limitations and emission rates remain permanent and enforceable, as required by 42 U.S.C. § 7407(d)(3)(E)(iii).
3. Approval by U.S. EPA of the Commissioner's Order into the Indiana State Implementation Plan ("SIP") is required to make Order requirements federally enforceable. Upon approval into the Indiana SIP, the Order requirements become applicable requirements as defined in 326 IAC 2-7-1(6).
4. Based on modeling conducted by IDEM, the SO<sub>2</sub> emission limitations and emission rates proposed by the Petitioner must be clarified and adjusted in order to assure continued attainment of the SO<sub>2</sub> NAAQS.

**ORDER**

1. This Order approves the Petition submitted by the Petitioner according to the terms specified below. This Order imposes on the Petitioner the SO<sub>2</sub> emission limitations and emission rates described below.
  2. When Unit No. 1 is operating alone, the unit shall not exceed SO<sub>2</sub> emission limitations and emission rates as follows:
    - a. 2152.2 lb/hr, one (1) hour average or emission rate of 0.855 lb/MMBtu, one (1) hour average; and
    - b. 1831.6 lb/hr, twenty-four (24) hour rolling average or emission rate of 0.727 lb/MMBtu, twenty-four (24) hour rolling average.
  3. When both Unit No. 1 and Unit No. 2\* are in operation, both units shall not exceed combined SO<sub>2</sub> emission limitations and emission rates as follows:
    - a. 2152.2 lb/hr, one (1) hour average or emission rate of 0.426 lb/MMBtu, one (1) hour average; and
    - b. 1831.6 lb/hr, twenty-four (24) hour rolling average or emission rate of 0.363 lb/MMBtu, twenty-four (24) hour rolling average.
  4. When Unit No. 2\* is operating alone, the unit shall not exceed SO<sub>2</sub> emission limitations and emission rates as follows:
    - a. 1745.7 lb/hr, one (1) hour average or emission rate of 0.690 lb/MMBtu, one (1) hour average; and
    - b. 1485.59 lb/hr, twenty-four (24) hour rolling average or emission rate of 0.588 lb/MMBtu, twenty-four (24) hour rolling average.
- \*Pursuant to PSD (65) 1355 issued on February 22, 1979, Unit No. 2 shall not exceed an SO<sub>2</sub> emission limitation of 0.69 lb/MMBtu, thirty (30) day rolling average. The SO<sub>2</sub> emission limitation applies to Unit No. 2 whenever Unit No. 2 is operating; this includes when Unit No. 2 is operating alone and when both Unit No. 1 and Unit No. 2 are in operation.
5. The Petitioner shall comply with the SO<sub>2</sub> emission limitations and emission rates beginning April 19, 2016.
  6. As required by 326 IAC 2-7-2(d)(1) and 326 IAC 2-7-5, the Petitioner shall apply to incorporate Order requirements, including reporting and recordkeeping requirements and methods to determine compliance, into its Part 70 Operating Permit within ninety (90) days of U.S. EPA approval of the Commissioner's Order into the Indiana SIP.

7. From April 19, 2016 until IDEM issues a Permit incorporating Order requirements, the Petitioner shall comply with the reporting and recordkeeping requirements and methods to determine compliance specified in this paragraph.

a. Reporting: The Petitioner shall submit to IDEM, on a quarterly basis, a report of the daily maximum twenty-four (24) hour SO<sub>2</sub> rolling average for Unit No. 1, for Unit No. 2, and for Unit No. 1 and Unit No. 2 combined.

b. Recordkeeping: The Petitioner shall maintain records adequate to document compliance with the SO<sub>2</sub> emission limitations and emission rates.

c. Method to determine compliance: Compliance shall be determined by a continuous emission monitoring system in accordance with 326 IAC 3-5.

8. This Order shall apply to and be binding upon the Petitioner, its successors and assigns. No change in ownership, corporate, or partnership status of the Petitioner shall in any way alter its status or responsibilities under this Order.

9. The requirements of this Order supersede any less stringent requirements applicable to the Petitioner.

#### **EFFECTIVE DATE OF ORDER**

Pursuant to IC 13-14-2-1(d), IC 4-21.5-3-1, IC 4-21.5-3-5(a)(6), and 40 Code of Federal Regulations ("CFR") 51.102, IDEM will give notice of this Order to each entity to whom the Order is directed and affected neighbors by mailing and to the general public by web publication.

Pursuant to IC 4-21.5-3-7(a)(3), IC 4-21.5-3-2(e), and IC 4-21.5-3-5, this Order may be appealed by filing a Petition for review within eighteen (18) days after the date affected persons were given notice of the Order by U.S. mail. Information on petitions for review of this Order can be found at IC 4-21.5-3-7.

Pursuant to IC 4-21.5-3-5(f) and IC 4-21.5-3-2(e), the Order is effective eighteen (18) days from mailing of notice unless a Petition for review has been filed before or on the eighteenth (18<sup>th</sup>) day. However, the compliance date for the emission limitations in this Order is April 19, 2016.

Pursuant to 40 CFR 51.103, IDEM will submit this Order to U.S. EPA as a revision to the Indiana SIP. Upon approval by the U.S. EPA, this Order will be part of the Indiana SIP.

Persons seeking judicial review of this Order may do so in accordance with IC 4-21.5-5.

If you have procedural or scheduling questions regarding your request for review, you may contact the Office of Environmental Adjudication at (317) 232-8591. If you have questions regarding this Order, please contact Mark Derf, Office of Air Quality, by telephone at (317) 233-5682 or email at MDERF@idem.IN.gov.

Dated at Indianapolis, Indiana this 11<sup>th</sup> day of January, 2016.

A handwritten signature in black ink, appearing to read "Carol S. Comer", written over a horizontal line.

Carol S. Comer  
Commissioner  
Indiana Department of Environmental Management

# **Attachment C**

Public Participation Documentation



# Indiana Department of Environmental Management

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## **Legal Notice for Public Hearing State Implementation Plan (SIP) Submittal**

### **A.B. Brown Generating Station in Posey County Commissioner's Order No 2016-01**

Notice is hereby given under 40 CFR 51.102 that on March 23, 2016, at 6:00 PM CDT, at the Mount Vernon Fire Station Training Room, located at 311 College Avenue, Mount Vernon, Indiana 47620, the Indiana Department of Environmental Management ("IDEM") will hold a public hearing regarding a revision to the Indiana state implementation plan (SIP) for Southern Indiana Gas and Electric Company, A.B. Brown Generating Station, Source I.D. Number 129-00010, located at 8511 Welborn Road, Mount Vernon, Posey County, Indiana.

The purpose of this hearing is to receive public comment on a proposed revision to the SIP that is accomplished by Commissioner's Order No. 2016-01 for A.B. Brown Generating Station. The Commissioner's Order imposes sulfur dioxide emissions limits and emissions rates upon A.B. Brown Generating Station. This Commissioner's Order will be submitted to the United States Environmental Protection Agency ("U.S. EPA") for approval as a revision to the Indiana SIP. All interested persons are invited and will be given reasonable opportunity to express their views concerning the proposed revision to the SIP to incorporate sulfur dioxide emission limits and emission rates concerning A.B. Brown Generating Station. Oral statements will be heard and transcribed, but, for the accuracy of the record, all comments should be submitted in writing.

Additional information regarding this action may be obtained from Mark Derf, Air Programs Branch, Office of Air Quality, (317) 233-5682.

Individuals requiring reasonable accommodations for participation in this event should contact the Indiana Department of Environmental Management, Americans with Disabilities Act coordinator at:

Attn: ADA Coordinator  
Indiana Department of Environmental Management  
Indiana Government Center North  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

or call (317) 233-1785 (V). Speech and hearing impaired callers may contact IDEM via the Indiana Relay Service (711) or (800) 743-3333. Please provide a minimum of 72 hours notification.

A copy of the Commissioner's Order is available to any person upon request and is available for public inspection at the following locations:

Indiana Department of Environmental Management  
Office of Air Quality  
Indiana Government Center-North  
100 North Senate Avenue  
10th Floor  
Indianapolis, Indiana 46204.

and

Indiana Department of Environmental Management  
Southwest Regional Office  
1120 North Vincennes Avenue  
Petersburg, Indiana 47567.

and

Alexandrian Public Library  
115 West Fifth Street  
Mount Vernon, Indiana 47620.

The Commissioner's Order is also available on the IDEM website at:  
<http://www.in.gov/idem/4686.htm>.

For additional information, please contact Mark Derf at the contact information provided below.

Mark Derf  
Indiana Department of Environmental Management  
Office of Air Quality  
100 North Senate Avenue  
Mail Code 61-50 IGCN 1003  
Indianapolis, Indiana 46204  
Phone: (317) 233-5682  
Fax: (317) 233-2342  
E-mail: MDERF@idem.IN.gov.



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Michael R. Pence  
*Governor*

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*Commissioner*

January 13, 2016

### CERTIFICATE OF PUBLICATION

This is to certify that the Indiana Department of Environmental Management (IDEM) notice of public comment period and opportunity for a Public Hearing regarding the following:

- **Commissioner's Order #2016-01 for A.B. Brown Generating Station of Indiana**

was published on IDEM's web site on January 13, 2016. It is expected that it will remain posted on the site until at least February 16, 2016.

The notice in full was also made available the same day online at the following web address, under "Commissioner's Orders".

<http://www.in.gov/idem/4686.htm>

Web publication of the notice was at the request of Scott Deloney, Branch Chief, Programs Branch, Office of Air Quality, IDEM.

By:

Mike Finklestein  
IDEM Webmaster

Attachments:  
Copy of web page as published.

- Indiana Beach Program
- Land Quality
- Partners for Pollution Prevention
- Pollution Prevention
- Recycle Indiana
- Storm Water Permitting
- Waste Tire Program
- Water Quality
- Watersheds and Nonpoint Source Water Pollution
- Wetlands, Lakes and Streams Regulation

Resources

- Compliance
- Funding
- Monitoring
- Permitting
- Environmental Consultants List
- Environmental Guidance
- Environmental Publications
- Nonrule Policies



- Article 15 [Lead Rules](#) [PDF]
- Article 16 [State Environmental Policy](#) [PDF]
- Article 17 [Public Records \(Repealed\)](#) [PDF]
- Article 17.1 [Public Records; Confidential Information; Confidentiality Agreements](#) [PDF]
- Article 18 [Asbestos Management](#) [PDF]
- Article 19 [Mobile Source Rules](#) [PDF]
- Article 20 [Hazardous Air Pollutants](#) [PDF]
- Article 21 [Acid Deposition Control](#) [PDF]
- Article 22 [Stratospheric Ozone Protection](#) [PDF]
- Article 23 [Lead-based Paint Program](#) [PDF]
- Article 24 [Trading Programs: Nitrogen Oxides \(NOx\) and Sulfur Dioxide \(SO2\)](#) [PDF]
- Article 25 [Voluntary Performance Based Leadership Programs](#) [PDF]
- Article 26 [Regional Haze](#) [PDF]



The [Indiana Administrative Code Title 326 Air Pollution Control Division website](#) provides the most up-to-date listing of these files.

Commissioner's Orders

A Commissioner's Order is a permanent enforceable order specifically authorized by an air rule as an alternative to a rule requirement. Once issued, a Commissioner's Order becomes a condition in an air permit. In most cases, a Commissioner's Order will be submitted to U.S. EPA for approval as an amendment to Indiana's state implementation plan for the Clean Air Act.

- Commissioner's Order #2016-01 for A.B. Brown Generating Station of Indiana:
  - [Notice and Order of the Commissioner of the Department of Environmental Management](#) [PDF]
  - [Legal Notice of Public Hearing](#) [PDF]
- Commissioner's Order #2015-01 for Abengoa Bioenergy of Indiana:
  - [Notice and Order of the Commissioner of the Department of Environmental Management](#) [PDF]
  - [Legal Notice of Public Hearing](#) [PDF]
- Commissioner's Order #2014-01 for Jeffboat LLC:
  - [Notice and Order of the Commissioner of the Department of Environmental Management](#) [PDF]
  - [Legal Notice of Public Hearing](#) [PDF]
- Commissioner's Order #2009-OAQ-01:
  - [Notice of Commissioner's Order](#) [PDF]
- Commissioner's Order #2008-02 and Variance, Indianapolis Power & Light - Harding Street Generating Station:
  - [Notice, Order, and Variance of the Commissioner of the Department of Environmental Management](#) [PDF]
  - [IPL Legal Notice of Comment Period and Opportunity to Request a Public Hearing](#) [DOC]
  - [Notice of Variance Decision](#) [PDF]
- Commissioner's Order #2008-01 and Variance, ALCOA Power Generating, Inc. - ALCOA Warrick Power Plant:

**Date and Time**

Date and Time Additional Clocks



Date: Wednesday, January 13, 2016

Time: 2:26:36 PM

[Change date and time...](#)

Time zone: (UTC-05:00) Eastern Time (US & Canada)

[Change time zone...](#)

Daylight Saving Time begins on Sunday, March 13, 2016 at 2:00 AM. The clock is set to go forward 1 hour at that time.

Notify me when the clock changes

[Get more time zone information online](#)

[How do I set the clock and time zone?](#)

OK Cancel Apply

Nonrule Policies



**Date and Time**

Date and Time Additional Clocks

Date: Wednesday, January 13, 2016  
 Time: 2:24:11 PM  
 Change date and time...

Time zone  
 (UTC-05:00) Eastern Time (US & Canada)  
 Change time zone...

Daylight Saving Time begins on Sunday, March 13, 2016 at 2:00 AM. The clock is set to go forward 1 hour at that time.

Notify me when the clock changes  
[Get more time zone information online](#)  
[How do I set the clock and time zone?](#)

OK Cancel Apply

Martin					
No current public notices.					
Orange					
No current public notices.					
Perry					
Tell City Boat Works, Inc.	<a href="#">Significant Revision to a Federally Enforceable State Operating Permit (FESOP) [PDF]</a>	12/31/2015 - 01/30/2016	Yes	Permit Number: 123-36479-00026	
Waupaca Foundry, Inc. Plant 5	<a href="#">Prevention of Significant Deterioration (PSD)/Significant Source Modification to a Part 70 Operating Permit (35970) [PDF]</a> <a href="#">Significant Permit Modification to a Part 70 Operating Permit (35981) [PDF]</a>	12/21/2015 - 01/20/2016	Yes	Permit Number: 123-35970-00019 and 123-35981-00019	
Warrick Processing Facility	<a href="#">Notice for Public Information Meeting [DOC]</a>	12/02/2015 - 01/01/2016	Yes	Project Manager: John Hale  Applicant Company: Renewable Resources LLC  Permit Number: FP 87-13	
Waupaca Foundry, Inc. RWS II	<a href="#">Solid Waste Permit Public Notice [PDF]</a>	11/23/2015 - 12/16/2015	No	Project Manager: John Hale  Permit Number: FP 62-08	
Pike					
Petersburg (city) WWTP	<a href="#">NPDES Draft Renewal [PDF]</a>	01/13/2016 - 02/15/2016	Yes	Project Manager: Jay Hanko  Permit Number: IN0024325	
Posey					
Commissioner's Order #2016-01 for A. B. Brown Generating Station	<a href="#">Legal Notice and Opportunity for Public Hearing [PDF]</a>	01/17/2016 - 02/16/2016	Yes	Project Manager: Mark Derf  Additional Attainment Designation documents are available on the <a href="#">Sulfur Dioxide (SO2) Nonattainment Designations</a> page	
Consolidated Grain and Barge Co.	<a href="#">Significant Source Modification to a Part 70 Operating Permit (36267) [PDF]</a> <a href="#">Significant Permit Modification to a Part 70 Operating Permit (36269) [PDF]</a>	12/30/2015 - 01/29/2016	Yes	Permit Number: 129-36267-00035 and 129-36269-00035	
Poseyville (town) WWTP	<a href="#">NPDES Draft Renewal [PDF]</a>	12/23/2015 - 01/25/2016	Yes	Project Manager: Jason House  Permit Number: IN0040517	
Valero Renewable Fuels Company, LLC (dba Valero Mount Vernon Plant)	<a href="#">Significant Source Modification to a Part 70 Operating Permit (36200) [PDF]</a> <a href="#">Significant Permit Modification to a Part 70 Operating Permit (36213) [PDF]</a>	12/09/2015 - 01/08/2016	Yes	Permit Number: 129-36200-00051 and 129-36213-00051	
West Franklin Coal Transfer Facility	<a href="#">NPDES Draft Renewal [PDF]</a>	12/02/2015 - 01/04/2016	Yes	Project Manager: Jennifer Carlino  Permit Number: IN0063738	

Spencer



Indiana Department of Environmental Management

Protecting Hoosiers and Our Environment Since 1986



Title of Public Hearing: AB Brown Commissioner's Order

Date: 3/23/16

Public Hearing Location: Mt. Vernon Fire Station

NAME	ORGANIZATION/COMPANY	E-MAIL	PHONE NUMBER	ADDRESS, CITY, ZIP
Maryann Watson	—	pakawats@aol.com	812-838-0546	920 Canal St. Mt. Vernon IN
Natalie Hedde	VVC			
Kurt Gortner	VVC			
Matthew Skuy - Ber	Sierra Club	matt.skuy a, ber@Sierra Club.org	515, 314, 0213	1621 S Donohoe Dr, 47401
Wendy Breahold	Sierra Club	wendy.breahold@sierraclub.org	812-604-1723	3307 E. Chandler Ave 47714
Niles Rosenquist	Self	nilesrosenquist@gmail.com	812-479-7643	742 S. Willow Rd, 47714
Angela Retherford	VVC	amretherford@sierraclub.org	812-491-4218	
BRAD ELLSWORTH	Vectra	bellsouth Directv.com	(812) 491-4201	1 Vectra Sq, Evansville, IN 47712
MARK BRYANT	Valley Watch	MARK@ValleyWatch.net	812 464-5666	800 ADAMS AVE GARRULE IN 47713
Cory Woolsey	MV Democrat	editor@MVdemocrat.com	812-838-4811	132 E 2nd St Mt. Vernon, IN 47620
Marc Schotz	14 WFIE	mschotz@14news.com		
John Taylor	PCEDP	John.Taylor@PCEDP.com	812-838-6566	914 E. 4th Mt. Vernon, IN



# Indiana Department of Environmental Management

Protecting Hoosiers and Our Environment Since 1986



Title of Public Hearing: AB Brown Commissioner's Order Date: 3/27/16

Public Hearing Location: Mt. Vernon Fire Station

NAME	ORGANIZATION/COMPANY	E-MAIL	PHONE NUMBER	ADDRESS, CITY, ZIP
HUNTER BISCH	CONGRESSMAN LARRY BUSCH	hunter.bisch@mail.house.gov	812-593-6250	2015 N. WEINBACH AVE. EVANSVILLE, IN
Gary Creasey	CITIZEN	gary.creasey@spohd.com	812-461-8681	6618 Smith Diamond Rd, Evansville
Jocann Alexandrovidi	Vand Co. Health Dept / ERB	jalexandrovidi@vanderburghcounty.in.gov	812-435-5764	1420 Mulberry St., Evv. 47713
Greg Michael	SABIC	gregory.michael@sabic.com	812-831-4732	1 LEXAN LANE MTV 47620
Larry Willman	Mt. Vernon City Council P152	LGAL614046@rci.com	812-838-6521	1320 OAK MTV IN 47620
JERRY THOMAS	CITIZEN	JLTHOMAS43@AOL	812-838-5785	6511 UPTON RD. MT. VERNON
Marcia Ballard	Sierra Club / Citizen	tommarball@gmail.com	812-853-7125	5733 Fiestra Dr. Newburgh, IN
Tom Ballard	" "	" "	" "	" "
Shelby Heck	Student at USI Citizen	ShelbyHeck@gmail.com	317-440-6030	10320 N 401 E Pendleton IN 46024 4 USI Housing
Bartell Berg	Citizen / USI Faculty	bberg@usi.edu	812-604-9053	6214 Overpass Rd., Mount Vernon, 47620
Steve Johnston Thompson	Citizen		812-643-0019	902 W 5th St 47620



# Indiana Department of Environmental Management

Protecting Hoosiers and Our Environment Since 1986



Title of Public Hearing: AB Brown Commissioner's Order

Date: 3/23/16

Public Hearing Location: Mt. Vernon Fire Station

NAME	ORGANIZATION/COMPANY	E-MAIL	PHONE NUMBER	ADDRESS, CITY, ZIP
Al McMahon	Citizen			701 Sweetwater Way Evansville, IN 47712
Louis M Gray	Posey County News	Grayfam@aol.com	812-457-1063	5500 Red Pulse Drive Mt. Vernon IN 47620
Tom Peterson	Valley Watch	blair@valleywatch.net	812-461-5869	800 Adams Ave EUV 47713
Margie Stone	Citizen	margiestone@gmail.com	319-5677	8745 Meadowood Dr, Newburgh 47630
John Embel	WEN			
Kevin Thompson	Citizen		812-643-0219	902 West Fifth St. Mt. Vernon 47620
Jean Webb	Citizen	jean-m-27@uphoo.com	812-204-8157	201 Montclair Ct Evansville IN 47715
Eric McCloud	Citizen	emccloud1@me.com	812-760-4282	363 Dr Pier Evansville 47712

PLEASE PRINT			
Hearing Location:	Mt. Vernon FD		
Date:	3-23-16		
Name:	Wendy Breakhold		
Organization / Company:	Sierra Club		
E-Mail Address:	wendy.breakhold@sierraclub.org		
Address:	3307 E. Chandler Ave		
City:	Evansville	State:	IN Zip: 47714
Representing what interest?	Clean air.		
Do you wish to present an oral testimony?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Has a written testimony been submitted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Will a written testimony be submitted?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Do you wish to be informed of future or final actions in this matter?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

PLEASE PRINT			
Hearing Location:	Mt. Vernon FD		
Date:	3/29/16		
Name:	Niles Rosengquist		
Organization / Company:	Self		
E-Mail Address:	nilesrosengquist@gmail.com		
Address:	422 S. Willow St.		
City:	Evansville	State:	IN Zip: 47714
Representing what interest?	Self		
Do you wish to present an oral testimony?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Has a written testimony been submitted?	Yes <input checked="" type="checkbox"/>	No <input checked="" type="checkbox"/>	
Will a written testimony be submitted?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Do you wish to be informed of future or final actions in this matter?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

PLEASE PRINT			
Hearing Location:	Mt. Vernon FD		
Date:	MARCH 23, 2016		
Name:	MARK BRYANT		
Organization / Company:	Valley Watch		
E-Mail Address:	MARK@ValleyWatch.net		
Address:	800 ADAMS AVENUE		
City:	Evansville	State:	IN Zip: 47713
Representing what interest?	Posey County RESIDENT & Valley Watch MEMBER		
Do you wish to present an oral testimony?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Has a written testimony been submitted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Will a written testimony be submitted?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Do you wish to be informed of future or final actions in this matter?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

PLEASE PRINT	
Hearing Location:	Mt Vernon
Date:	3-23-16
Name:	Jean Webb
Organization / Company:	
E-Mail Address:	jean.m.webb@yahoo.com
Address:	201 Mantzlake Ct
City:	Evansville
State:	IN
Zip:	47715
Representing what interest?	Mine, My Family
Do you wish to present an oral testimony?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Has a written testimony been submitted?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Will a written testimony be submitted?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Do you wish to be informed of future or final actions in this matter?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

PLEASE PRINT	
Hearing Location:	
Date:	Eric S. McCloud
Name:	3/23/2016
Organization / Company:	
E-Mail Address:	pmcccloud@mp.com
Address:	363 Draper
City:	Evansville
State:	IN
Zip:	47712
Representing what interest?	
Do you wish to present an oral testimony?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Has a written testimony been submitted?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Will a written testimony be submitted?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Do you wish to be informed of future or final actions in this matter?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

PLEASE PRINT	
Hearing Location:	Mt. Vernon
Date:	23 March 2016
Name:	Maryann Watson
Organization / Company:	
E-Mail Address:	pakawatz@aol.com
Address:	920 Canal St.
City:	Mt. Vernon
State:	IN
Zip:	47620
Representing what interest?	My own, personal interests
Do you wish to present an oral testimony?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Has a written testimony been submitted?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Will a written testimony be submitted?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Do you wish to be informed of future or final actions in this matter?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

PLEASE PRINT		
Hearing Location:	MV	
Date:	3/23	
Name:	John Blaw	
Organization / Company:	Valley Watch	
E-Mail Address:	blaw@valleywatch.net	
Address:	800 Adams Ave	
City:	EVU	State: IN Zip: 47717
Representing what interest?	Public Health	
Do you wish to present an oral testimony?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Has a written testimony been submitted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Will a written testimony be submitted?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Do you wish to be informed of future or final actions in this matter?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PLEASE PRINT		
Hearing Location:	Mt Vernon Fire Station	
Date:	3-23-16	
Name:	Shelby Heck	
Organization / Company:	Citizen / USI Student	
E-Mail Address:	Shelbyheck@gmail.com	
Address:	10320 N 400 E	
City:	Pendleton	State: IN Zip:
Representing what interest?	USI Students	
Do you wish to present an oral testimony?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Has a written testimony been submitted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Will a written testimony be submitted?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Do you wish to be informed of future or final actions in this matter?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

PLEASE PRINT		
Hearing Location:	Mt Vernon Fire Station	
Date:	3/23/16	
Name:	Bartell Berg	
Organization / Company:	Citizen / USI	
E-Mail Address:	Amberg@usi.edu	
Address:	6214 Overpass Rd.	
City:	Mt. Vernon	State: IN Zip: 47620
Representing what interest?	Citizens	
Do you wish to present an oral testimony?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Has a written testimony been submitted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Will a written testimony be submitted?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Do you wish to be informed of future or final actions in this matter?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PLEASE PRINT	
Hearing Location: MT. Vernon	
Date: 3/23/16	
Name: Kevin Thompson	
Organization / Company: <del>IA</del> Citizen	
E-Mail Address:	
Address: 902 West Fifth St.	
City: MT. Vernon	State: IN Zip: 47620
Representing what interest? Community	
Do you wish to present an oral testimony?	Yes ___ No <input checked="" type="checkbox"/>
Has a written testimony been submitted?	Yes ___ No <input checked="" type="checkbox"/>
Will a written testimony be submitted?	Yes ___ No ___
Do you wish to be informed of future or final actions in this matter?	Yes <input checked="" type="checkbox"/> No ___

*In the Matter Of:*

A.B. Brown Generating Station of Indiana

PUBLIC HEARING

March 23, 2016



**CONNOR REPORTING**

111 Monument Circle, Suite 4350

Indianapolis, IN 46204

Phone: 317-236-6022

Fax: 317-236-6015

Toll Free: 800-554-3376

Public Hearing  
March 23, 2016

1 STATE OF INDIANA )  
2 COUNTY OF MARION ) SS BEFORE THE INDIANA DEPARTMENT  
OF ENVIRONMENTAL MANAGEMENT

3

4

IN THE MATTER OF: )  
5 ORDER OF THE COMMISSIONER )  
PURSUANT TO 13-14-2-1 )  
6 FOR A.B. BROWN GENERATING )  
STATION OF INDIANA )

7

8

9

10 PUBLIC HEARING

11 Report of proceedings of the public hearing with  
12 regard to the A.B. Brown Generating Station in Posey  
13 County, Commissioner's Order No. 2016-01, held March 23,  
14 2016 at the Mount Vernon Fire Station Training Room, 311  
15 College Avenue, Mount Vernon, Indiana.

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1 START TIME: 6:00 P.M.

2

3 HEARING OFFICER DERF: We have 6 o'clock. If I  
4 could have everybody's attention, we'll go ahead and  
5 get started.

6 This is a public hearing to provide interested  
7 persons an opportunity to provide comments to the  
8 State regarding the proposed revision to the Indiana  
9 State Implementation Plan for Vectren's A.B. Brown  
10 Generating Station, Source ID Number 129-00010. It's  
11 located at 8511 Welborn Road, Mount Vernon, Posey  
12 County, Indiana. This hearing is being held to  
13 conform to the provisions of 40 Code of Federal  
14 Regulations Part 51.102 regarding public hearings for  
15 State Implementation Plan submittals. This hearing is  
16 not an opportunity to revise previously-adopted rules.

17 My name is Mark Derf. I'm a Section Chief in the  
18 Technical Support and Modeling Section of the Indiana  
19 Department of Environmental Management, Office of Air  
20 Quality. I've been appointed to act as Hearing  
21 Officer for this public hearing.

22 I would like to introduce Scott Deloney of IDEM's  
23 Office of Air Quality; Jessica Reiss of the Office of  
24 Legal Counsel; and Courtney Arango, our Communication  
25 Director of the Office of Program Support. They are

1 here to help with these proceedings.

2 As you came in, a sign-in sheet was located in  
3 the back of the room for interested parties to be  
4 recognized for participating in the hearing. For  
5 those interested in providing comments today, please  
6 fill out the appearance cards that have been  
7 distributed in the room. If you have not already  
8 filled out a card, please do so, as Scott is showing,  
9 and indicate if you're appearing for yourself or on  
10 behalf of a group or organization and identify such  
11 group or organization; also note the capacity in which  
12 you appear, whether you're appearing as an attorney,  
13 an officer, or an authorized spokesperson.

14 Any person who is heard or represented at this  
15 hearing or who requests notice may be given written  
16 notice of the final action taken on this State  
17 Implementation Plan revision. Please indicate on the  
18 appearance card if you wish to receive this  
19 notification.

20 When appearance cards have been completed, they  
21 should be handed to me or Scott, and I will include  
22 them with the official record for this proceeding.

23 Oral statements will be heard. Written  
24 statements may be handed to us. Due to the potential  
25 high volume of commenters, a time limit on oral

1 comments of five minutes will be applied, in order to  
2 ensure that all commenters are afforded an opportunity  
3 to be heard. I request that each commenter be mindful  
4 and respectful of this time limit. Scott will provide  
5 notification to each commenter when one minute of the  
6 allotted time remains, as well as when the allotted  
7 time has elapsed. If time allows at the end of the  
8 hearing, commenters who submitted appearance cards and  
9 wish to add to their previous oral statements may be  
10 able to submit additional comments.

11 A written transcript of this hearing is being  
12 made. The transcript will be open for public  
13 inspection, and a copy of the transcript will be made  
14 available to any person upon payment of the copying  
15 cost.

16 At this time, I would like to introduce the  
17 following documents into the record: First, we have  
18 the Notice of Public Hearing. Second, we have the  
19 Commissioner's Order. It's No. 2016-01 for A.B. Brown  
20 Generating Station, imposing sulfur dioxide emission  
21 limits and emission rates, addressing area  
22 designations under the 2010 one-hour sulfur dioxide  
23 standard.

24 And finally, I would like to briefly go over  
25 IDEM's proposed revision to the State Implementation

1 Plan. On June 2nd, 2010, the United States  
2 Environmental Protection Agency, the US EPA, revised  
3 the primary National Ambient Air Quality Standard for  
4 sulfur dioxide, better known as SO2. The US EPA  
5 revoked both the previous 24-hour and annual primary  
6 SO2 standards and established a new one-hour SO2  
7 standard at a level of 75 parts per billion, based on  
8 the three-year average of the annual 99th percentile  
9 of the one-hour daily maximum concentration. The US  
10 EPA studies have linked shorter-term exposure to SO2  
11 to respiratory impacts in humans.

12 On August 5th, 2013, the US EPA published a  
13 notice, announcing designations of 29 areas in 16  
14 states as not attaining -- we'll refer to those as  
15 nonattainment) -- the 2010 primary one-hour SO2  
16 National Ambient Air Quality Standard, based on  
17 ambient air quality monitoring data for the years 2009  
18 through 2011 that showed that these areas were  
19 violating that standard. The US EPA designated four  
20 areas in Indiana as nonattainment of the 2010 primary  
21 one-hour SO2 National Ambient Air Quality Standard.  
22 IDEM addressed those four areas through revision of  
23 SO2 emission limitations in the Indiana Rules at 326  
24 Indiana Administrative Code Article 7. IDEM has  
25 requested the US EPA approve these rule revisions into

1 the Indiana State Implementation Plan and provided an  
2 attainment demonstration, showing that after the  
3 effective date of the Indiana Rules, the areas will  
4 meet the 2010 one-hour SO<sub>2</sub> standard. The US EPA is  
5 currently reviewing the State Implementation Plan  
6 revision and attainment demonstration.

7 On March 2nd, 2015, the US District Court of the  
8 Northern District of California accepted, as an  
9 enforceable order, an agreement between the US EPA  
10 Sierra Club and the Natural Resources Defense Council  
11 to resolve litigation concerning the deadline for  
12 completing air quality designations for the remainder  
13 of the country. The court's order directed the US EPA  
14 to complete remaining designations in three additional  
15 rounds: Round 2 by August 2nd, 2016; Round 3 by  
16 December 31st, 2017; and Round 4 by December 31st,  
17 2020. The US EPA will complete these designations by  
18 designating areas as either nonattainment, attainment,  
19 or unclassifiable.

20 The court order directed the US EPA to designate  
21 two groups of areas under Round 2 of the air quality  
22 designations: First, areas that have newly-monitored  
23 violations of the 2010 primary SO<sub>2</sub> National Ambient  
24 Air Quality Standard during the years 2012 through  
25 2014; and second, areas that contain any stationary

1 sources that, according to the US EPA Air Quality  
2 Markets Database, either emitted more than 16,000 tons  
3 of SO2 in 2012 or emitted more than 2,600 tons of SO2  
4 and had an annual average emission rate of at least  
5 0.45 pounds of SO2 per million British Thermal Units  
6 in 2012 and that had not been announced as of March  
7 2nd, 2015 for retirement. In response to the court's  
8 order, the US EPA identified five coal-fired, electric  
9 generating power plants in Indiana on March 20th of  
10 2015 as meeting Round 2 criteria established in the  
11 court's order. One of the electric power plants  
12 identified was A.B. Brown Generating Station of Posey  
13 County.

14 As a result of the court order, states were given  
15 until September 18th, 2015 to submit updated  
16 recommendations and supporting information for area  
17 designations to the US EPA. IDEM conducted air  
18 dispersion modeling to evaluate A.B. Brown's 2012  
19 through 2014 actual emissions, in order to  
20 characterize the air quality surrounding the source.  
21 Initial modeling was conducted based on US EPA's SO2  
22 National Ambient Air Quality Standard Designations  
23 Modeling Technical Assistance Document and other US  
24 EPA modeling guidance, and took into account A.B.  
25 Brown's SO2 continuous emission monitoring data from

1 Units 1 and 2, as well as emissions from nearby SO2  
2 sources. Temporally-varying seasonal SO2 background  
3 concentrations taken from a nearby SO2 monitor were  
4 included in the model runs to accurately characterize  
5 air quality in the area. The US EPA guidance  
6 recommends that sources not causing significant  
7 concentration gradients in a vicinity of the source of  
8 interest would be included in the model via monitored  
9 background concentrations.

10 On September 16, 2015, IDEM supplemented to the  
11 US EPA designation recommendations for all five years  
12 mentioned in the court order, meeting the  
13 court-ordered deadline. IDEM's recommendation was to  
14 designate the area surrounding A.B. Brown Generating  
15 Station as attainment. The recommendation was based  
16 on the air dispersion modeling that included proposed  
17 enforceable SO2 emission limitations and emission  
18 rates on Units 1 and 2 at A.B. Brown Generating  
19 Station. The US EPA reviewed Indiana's designation  
20 recommendations and commented that the one-hour SO2  
21 emission limits did indeed show attainment; however,  
22 the emission limits were not considered permanent and  
23 federally enforceable at that point in time and must  
24 first be incorporated into the Indiana State  
25 Implementation Plan.

1           On December 21st, 2015, A.B. Brown voluntarily  
2 submitted a request to the Commissioner of IDEM to  
3 impose SO2 emission limitations and emission rates  
4 through a Commissioner's Order that would be permanent  
5 and federally enforceable once the limits were  
6 incorporated into the Indiana State Implementation  
7 Plan. This action would ensure continued attainment  
8 of the one-hour SO2 National Ambient Air Quality  
9 Standard in the area surrounding A.B. Brown Generating  
10 Station.

11           IDEM reviewed this request and issued a  
12 Commissioner's Order on January 11, 2016 to establish  
13 permanent and enforceable SO2 emission limits for A.B.  
14 Brown. The Commissioner's Order contains the  
15 following emission limitations in pounds of SO2 per  
16 million British Thermal Units and emission rates in  
17 pounds of SO2 per hour for A.B. Brown's Units 1 and 2,  
18 which are reduced slightly from the limits requested.

19           First, when Unit 1 is operating alone, the unit  
20 shall not exceed SO2 emission limitations and emission  
21 rates as follows: "A" is 2,152.2 pounds per hour,  
22 based on a one-hour averaging period, or emission rate  
23 of 0.855 pounds per million British Thermal Units  
24 based on a one-hour averaging time; and "B", 1,831.6  
25 pounds per hour based on a 24-hour rolling average

1 period, or emission rate of 0.727 pounds per million  
2 British Thermal Units based on a 24-hour rolling  
3 average.

4 When both Units 1 and 2 are in operation, both  
5 units shall not exceed combined SO2 emission  
6 limitations and emission rates as follows: "A",  
7 2,152.2 pounds per hour, based on a one-hour average  
8 period, or emission rate of 0.426 pounds per million  
9 British Thermal Units based on a one-hour averaging  
10 period. And "B", 1,831.6 pounds per hour based on a  
11 24-hour rolling average period, or emission rate of  
12 0.363 pounds per million British Thermal Units based  
13 on a 24-hour rolling average.

14 3: When Unit No. 2 is operating alone, the unit  
15 shall not exceed SO2 emission limits and emission  
16 rates as follows: "A", 1,745.7 pounds per hour on a  
17 one-hour averaging period, or emission rate of 0.69  
18 pounds per million British Thermal Units based on a  
19 one-hour average. And "B", we have 1,485.59 pounds  
20 per hour based on a 24-hour rolling average period, or  
21 emission rate of 0.588 pounds per million British  
22 Thermal Units based on a 24-hour rolling average.

23 In addition, the order incorporates reporting and  
24 recordkeeping requirements and methods of compliance  
25 for the SO2 emission limitations. The effective date

1 for the emission limitations in the Commissioner's  
2 Order is April 19th, 2016. In order to make the  
3 emission limitations and emission rates federally  
4 enforceable, they must be incorporated into the  
5 Indiana State Implementation Plan, which is what IDEM  
6 has proposed to do.

7 On February 16th, 2016, in accordance with the  
8 Round 2 consent decree timeline, the US EPA submitted  
9 letters and technical support documents to the states,  
10 detailing its intentions on designating areas under  
11 the one-hour SO2 standard based on the states'  
12 recommendations. The US EPA valued IDEM's modeling  
13 approach, found it to be acceptable to establish  
14 emission limitations that would provide for  
15 attainment. While the US EPA has preliminarily  
16 recommended the area surrounding A.B. Brown as  
17 nonattainment, the US EPA does acknowledge the efforts  
18 made by IDEM and A.B. Brown to establish permanent and  
19 federally-enforceable SO2 limits that will reduce the  
20 amount of SO2 emissions emitted from A.B. Brown and  
21 characterize air quality in the surrounding area as  
22 continuing to attain the one-hour SO2 National Ambient  
23 Air Quality Standard. Incorporation of the emission  
24 limitations established in the Commissioner's Order  
25 into the Indiana State Implementation Plan will make

1 the SO2 limits federally-enforceable and permanent.  
2 This will ensure SO2 emissions from A.B. Brown will be  
3 lower and provide assurance that air quality  
4 surrounding A.B. Brown Generating Station will  
5 continue to attain the one-hour SO2 standard. The US  
6 EPA will promulgate its final SO2 area designation and  
7 designate the area surrounding A.B. Brown as  
8 attainment no later than July 2nd, 2016.

9 The sole purpose of this public hearing is to  
10 collect public comment on the incorporation of the  
11 emission limits contained in the Commissioner's Order  
12 No. 2016-01 into Indiana's State Implementation Plan  
13 in order for those limits to become permanent and  
14 enforceable. It is worth noting that the  
15 Commissioner's Order itself is a final agency action.  
16 IDEM is not accepting comment on that action or the  
17 limits contained therein; rather, the incorporation of  
18 those limits in the Indiana State Implementation Plan.

19 This concludes my comments regarding the proposed  
20 revision to the Indiana State Implementation Plan for  
21 A.B. Brown Generating Station, located in Mount  
22 Vernon, Posey County, Indiana.

23 Before opening this hearing for public comment,  
24 may I once again remind you that this hearing pertains  
25 to this proposed revision to the Indiana State

1 Implementation Plan and only comments germane to this  
2 matter will be considered as part of the public record  
3 and addressed within the agency's final action.

4       Upon submission, the US EPA will be responsible  
5 for reviewing Indiana's request for a State  
6 Implementation Plan revision. The Clean Air Act  
7 provides the standard for approval of State  
8 Implementation Plan revisions in Section 110(L). A  
9 revision to the State Implementation Plan is  
10 approvable unless it will interfere with attainment of  
11 any National Ambient Air Quality Standard or any other  
12 requirement of the Clean Air Act. Comments concerning  
13 whether the imposition of new, additional sulfur  
14 dioxide emission limits and the emission rates upon  
15 A.B. Brown Generating Station does or does not  
16 interfere with any National Ambient Air Quality  
17 Standard or any other requirement of the Clean Air Act  
18 would be germane to the US EPA's designation process  
19 and consideration of Indiana's State Implementation  
20 Plan revision.

21       Those interested in commenting on whether these  
22 limits are adequate to demonstrate attainment of the  
23 one-hour SO<sub>2</sub> standard are advised to comment on the US  
24 EPA's Responses to Designation Recommendations  
25 published in the Federal Register at 81 Federal

1 Register page 10563 on March 1st, 2016. Comments are  
2 due on that action by March 31st, 2016. The US EPA  
3 also will publish a separate Federal Register notice,  
4 soliciting comment on Indiana's request to revise the  
5 State Implementation Plan to incorporate the emission  
6 limits within Commissioner's Order No. 2016-01 upon  
7 Indiana's final submission.

8 Okay. We will be available following this  
9 hearing to address any questions you may have that do  
10 not pertain this specific matter. I would say this  
11 hearing is now open for public comment. We've  
12 received comments and a list of folks who would like  
13 to provide oral statements.

14 MR. DELONEY: Again, my name is Scott Deloney,  
15 and I'll be calling on individuals that have submitted  
16 a card to speak. One thing I do ask is, we want to  
17 make sure that the official record for this hearing  
18 properly reflects your name as well as the comments  
19 that you share this evening. So I would request, if  
20 you wouldn't mind coming to this corner of the room so  
21 our court reporter is able to properly reflect your  
22 statement for this evening.

23 The first comment card that I have is for miss  
24 Wendy Bredhold.

25 MS. BREDHOLD: Thank you for being here today.

1 My name is Wendy Bredhold. I'm an Evansville  
2 resident, and though I am now employed by the Sierra  
3 Club, which called for this hearing, I came to this  
4 issue 10 years ago when I learned that I live in a  
5 heavily-polluted region of the country; and now as a  
6 mother whose daughter attends daycare near Vectren's  
7 A.B. Brown plant, I am particularly concerned about  
8 its dangerous levels of sulfur dioxide pollution.

9 Sulfur dioxide can trigger an asthma attack in as  
10 little as five minutes. And if you picked up an  
11 Evansville Courier & Press today, you saw that the  
12 annual Not-A-Gonna-Wheeze asthma camp was on the front  
13 page. Too many children and adults in our region  
14 struggle with asthma and other respiratory and  
15 cardiovascular diseases exacerbated by pollution; and  
16 sulfur dioxide needs to be adequately addressed to  
17 protect public health.

18 Sierra Club's analysis shows that the plan that  
19 IDEM and Vectren have come up with to control for  
20 sulfur dioxide for A.B. Brown does not go far enough.  
21 The sulfur dioxide limits are based on flawed modeling  
22 that will not ensure that the concentration of air  
23 pollution stays below the health standard. It is  
24 assumed that the plant will never exceed the emissions  
25 limit -- an unrealistic assumption given that A.B.

1 Brown has violated its current sulfur dioxide limit in  
2 recent years.

3 The plan does not take into account other major  
4 producers of sulfur dioxide in the area, such as  
5 Alcoa's Warrick and Vectren's E.B. Culley plants in  
6 Warrick County, Duke Energy's plant in Gibson County,  
7 and Big Rivers' Robert D. Green plant in Webster  
8 County, Kentucky. And the proposed limits allow A.B.  
9 Brown to emit sulfur dioxide pollution right up to the  
10 standard; so any errors in their analysis could tip  
11 the area into unhealthy air. The plan should have a  
12 reasonable margin of error, given that public health  
13 is at stake.

14 And as a Vectren rate payer, I don't understand  
15 why I'm paying the highest electric rates in the  
16 state, a premium rate, for a product that threatens my  
17 family's health. And the costs of these plants will  
18 continue to increase if Vectren must comply with  
19 additional safeguards intended to protect our health  
20 and environment. Vectren makes it very clear, when  
21 addressing its shareholders, that it will seek to pass  
22 all of those costs -- potentially hundreds of  
23 millions -- on to us the, rate payers.

24 And this isn't reflected in my written testimony,  
25 but I also question -- our rate payer money was

1 invested in scrubbers that have been installed on  
2 those units at A.B. Brown. Why are they not  
3 protecting us from this pollution? Why aren't those  
4 scrubbers that have been installed reducing the  
5 pollution and keeping it at a place that's not too  
6 harmful to our house?

7 In conclusion, for years Vectren rate payers have  
8 been told that the reason that we pay the highest  
9 rates in Indiana is that Vectren has invested our  
10 money in processes that reduce pollution. But as this  
11 hearing clearly demonstrates, we can't put enough of  
12 our money into these plants to prevent them from  
13 harming our health in one way or another.

14 HEARING OFFICER DERF: Thank you.

15 MR. DELONEY: The next commenter I have is Niles  
16 Rosenquist.

17 MR. ROSENQUIST: I have written comments. Some  
18 of what I have to say is going to be redundant. I'm  
19 here mostly to support the Sierra Club's comments that  
20 Wendy has referred to already.

21 Sierra Club had two -- from reading their  
22 comments, they had two primary areas of complaint  
23 against this plant. One was the modeling; and, as  
24 Wendy mentioned, the fact that major sources of SO2  
25 pollution from nearby counties, the big power plants

1 up in Gibson County and in Warrick County, were not  
2 included in the modeling. There's no particular  
3 reason I can see why they weren't included. Maybe,  
4 you know -- common sense argument here is that, you  
5 know, you may be thinking they're just negligible  
6 contributors to Posey County's air quality. A lot of  
7 people find -- they're very skeptical of that, and I  
8 would just cut to the quick and say I think the IDEM  
9 should redo their modeling study and include those  
10 sources, just to prove one way or another. You can  
11 prove it's wrong. We're skeptical that that sulfur  
12 dioxide isn't crossing the county line. You could  
13 prove us wrong and redo the modeling and show us it  
14 didn't make any difference or, alternatively, if in  
15 fact that sulfur dioxide is impacting Posey County's  
16 air, of course that affects substantially the baseline  
17 that's used when you start calculating the new  
18 emission limits for the Vectren plant.

19 The other big point that Sierra Club made was  
20 that the assumption seems to be that the Vectren plant  
21 always runs under stable operating conditions. Of  
22 course, that's not true for any industrial plant. You  
23 have maintenance issues, you have equipment failure,  
24 you have start-up and shut-down conditions. These  
25 need to be taken into consideration.

1 My simple-minded suggestion here is that Vectren  
2 should supply historical data, maybe two or three  
3 years worth, of their emissions data -- just a  
4 thought -- pounds of sulfur dioxide per million BTU on  
5 a 24-hour basis; and just an average person could look  
6 at those numbers and see how Vectren has been doing  
7 both in terms of variability due to all of these  
8 operation variables and, of course, they could also  
9 always pick out the specific numbers where Vectren has  
10 exceeded its current requirements.

11 And going forward -- I think maybe this is too  
12 simple, but you could just do statistics on that day,  
13 a standard deviation and mean, and get a pretty good  
14 estimate of the variability going forward and  
15 Vectren's capability, and that estimate could be  
16 figured into a new requirement to be protective not  
17 only during stable operations but would be protective  
18 enough so that even when these inevitable incidents of  
19 unstable operations and variability in the SO<sub>2</sub>  
20 emissions come into play, the air quality would still  
21 be protected.

22 I guess that's what I have to say.

23 HEARING OFFICER DERF: Thank you.

24 MR. DELONEY: Next up we have Mr. Mark Bryant.

25 MR. BRYANT: Good evening. Hello everyone. My

1 name is Mark, Bryant and I am making these comments  
2 representing two groups. First of all and foremost,  
3 I'm a resident of Posey County. Also, I am a member  
4 of ValleyWatch based in Evansville, Indiana, whose  
5 mission is to protect the health and environment of  
6 those who live in the lower Ohio Valley.

7 Vectren charges its rate payers the highest rates  
8 anywhere in the state, while they continue to dump an  
9 excessive amount of toxic and unhealthy pollutants  
10 into the surrounding community. The amount of  
11 respiratory and cardiovascular disease in Posey County  
12 bears testament to the increased level of pollution  
13 residents suffer.

14 The Indiana Department of Environmental  
15 Management is failing to live up to its mission to  
16 implement federal and state regulations to protect  
17 human health by allowing a clearly weaker  
18 environmental standard than one required to adequately  
19 protect human health in the area around the Posey  
20 County A.B. Brown Power Generating Station. IDEM  
21 recently issued an order, designating Posey County as  
22 in attainment for sulfur dioxide emissions, even  
23 though this area has historically exceeded EPA sulfur  
24 dioxide emission standards.

25 IDEM'S order fails to protect human health due to

1 the basis that the order uses to set sulfur dioxide  
2 emission limits from the A.B. Brown Power Generating  
3 Station. As a resident of Posey County, I must remind  
4 this panel that designating the geographic area around  
5 the A.B. Brown Posey County facility as in attainment  
6 will condemn members of my family to a greater and  
7 needless health risk than what a stricter sulfur  
8 dioxide emissions limit would allow.

9 One cannot assume IDEM's modeling is accurate,  
10 since IDEM failed to disclose any information in the  
11 final order about their modeling effort. There are  
12 many methods IDEM could have used to set a realistic  
13 sulfur dioxide emissions threshold rather than the  
14 modeling method it chose. At the very least, IDEM  
15 could have ordered an audit of the procedures and  
16 equipment at the A.B. Brown facility to independently  
17 verify if the installed scrubber technology could meet  
18 a stricter sulfur dioxide standard by scrubbing the  
19 emitted effluent harder.

20 This is the same captured regulation story that  
21 causes so much devastation in the health of our  
22 communities and to our most vulnerable populations.  
23 The cozy relationship that has developed between  
24 utilities and those that are required to act in the  
25 public interest is responsible for ongoing tragedies

1 such as the poisoning of water supplied in Flint,  
2 Michigan. Vectren officials even admit that Indiana  
3 has a very favorable regulatory environment.

4 Vectren has known for many years that its A.B.  
5 Brown power plant would exceed the newer EPA sulfur  
6 dioxide emissions threshold, and even though they  
7 charge some of the highest residential electric rates  
8 in the country, they chose to offer only one solution  
9 for their sulfur dioxide emission discharge action.  
10 Vectren chose to solve their sulfur dioxide discharge  
11 problem by petitioning a user-friendly IDEM to simply  
12 issue a sulfur dioxide discharge threshold they could  
13 easily meet, without regard for the health of those  
14 that live in the surrounding community.

15 Since Vectren has repeatedly failed to provide a  
16 reasonable sulfur dioxide emissions solution on its  
17 own, it is IDEM's duty and responsibility to work with  
18 Vectren and other organizations to develop and  
19 initiate a plan to protect the public health.

20 Thank you for letting me submit these comments.

21 HEARING OFFICER DERF: Thank you.

22 MR. DELONEY: Thank you very much.

23 We've been very fortunate that, this evening so  
24 far, we've all been able to stick within our time  
25 limit. I will give you a notification if there is

1 only one minute remaining, just so you are aware.

2 Next up we have Mr. John Blair.

3 MR. BLAIR: Again, thank you for having this  
4 hearing. I think that you know it would probably have  
5 gone under the radar had Sierra Club not requested a  
6 hearing.

7 ValleyWatch -- I'm here representing ValleyWatch.  
8 ValleyWatch's purpose is to protect the public health  
9 and environment of the lower Ohio river valley, and  
10 sometimes we win, sometimes we lose. This isn't a  
11 healthy place to live, and I think people understand  
12 that.

13 The SO2 standard that we're dealing with here --  
14 I'm proud to say ValleyWatch was a part of suing the  
15 EPA to get them to do the standard again, because they  
16 hadn't done it for 25 years when we sued them in --  
17 actually, it was about 2008, I think we sued them, and  
18 it was finalized around 2010. We were with the Center  
19 for Biological Diversity, which is an excellent group  
20 based in California, too.

21 I am submitting the Earth Justice Sierra Club's  
22 comments as ValleyWatches comments here too. I want  
23 to make sure that that's done, as well as a Media  
24 Advisory from April 16th, 1999, because frankly, I'm  
25 really concerned with IDEM's credibility on this

1 modeling. In 1999, Mr. Derf was caught with his pants  
2 down, literally -- well, not literally -- by  
3 manipulating data in order to grant a permit for  
4 ConAgra to build a large soybean processing facility  
5 just west of the A.B. Brown plant; and when that data  
6 was looked at into the point of the Source Code and  
7 everything, it was found that they had changed some  
8 figures in the Source Code. Well, I'm not a modeling  
9 expert, so I'm not capable of going into that, but I'm  
10 certainly going to notify the EPA to look into the  
11 Source Code of the modeling Mr. Derf has done, because  
12 our experience in southwestern Indiana -- and  
13 particularly in that particular area -- shows that he  
14 was willing to -- I would call it fraud --  
15 fraudulently manipulate the data in order to  
16 accomplish his goal, which at that time was issuing a  
17 permit to ConAgra. In this case, I think it's he's  
18 willing to manipulate the data in order to show that  
19 that area should be attainment under the sulfur  
20 dioxide standards. And there's not much other  
21 evidence besides his modeling that would indicate  
22 that.

23 So that's part of the comments which we just  
24 filed, is a -- particularly a letter which was  
25 addressed to Janet McCabe, who is now the Assistant

1 EPA person for Air, and it talks all about it, and I  
2 think that it's pretty self-explanatory. I have one  
3 more copy of it, if somebody would like to see that  
4 letter.

5 We feel that -- we're happy that there's lower  
6 SO2 emission limits put on this facility. It's about  
7 time. That plant was built -- the first one came on  
8 line, I believe, in 1979; the second one maybe a  
9 couple years later, and at the time, it was  
10 state-of-the-art. But it's not 1980 anymore. It's 35  
11 years later and not much has been done to improve the  
12 scrubber technology there. So, we're in a situation  
13 where most new facilities or newer facilities are  
14 being required to meet a much lower limitation than  
15 these emission rates allow. Even at the best, it's --  
16 these are 50 percent higher than the ones that Sierra  
17 Club's modeling finds should be.

18 MR. DELONEY: One minute, Mr. Blair, just to give  
19 you a heads up.

20 MR. BLAIR: Okay. If I quit being interrupted,  
21 I'll be able to do that.

22 So, these emission rates are too high, and  
23 through conversations I've had with a variety of  
24 people, I also found that all this has been pretty  
25 much initiated by IDEM, and I suspect the reason for

1 that is because they want to continue to brag  
2 worldwide that they meet all the emissions limits, all  
3 the National Air Quality Standards all over the  
4 country, they meet them in Indiana, every one of them.  
5 And it just isn't so.

6 Was that within the time limit, Mr. Deloney?

7 MR. DELONEY: You had eight seconds left.

8 We do have two more speakers, and it looks like  
9 we may end up having additional time if anyone wishes  
10 more time for the floor.

11 Shelby Heck.

12 MS. HECK: My name is Shelby Heck. I've been a  
13 student at USI for the past three years. I've been  
14 living on campus every year.

15 Growing up, I was always taught to respect nature  
16 and love its beauty that it has; and coming to USI and  
17 coming to Evansville, I really found it a beautiful  
18 place, like seeing the dogwoods in the spring and the  
19 tulips also. I mean, I just really fell in love with  
20 the campus and also the people of the Evansville  
21 community. I found myself going to Tin Man Trivia and  
22 Bar Louie dollar burger nights on a regular basis with  
23 all of my friends, and I always talked to the people  
24 still in high school I knew and I told them how much I  
25 loved USI and loved Evansville and loved being a

1 student here.

2 But as I got a little older, I started taking  
3 more classes in ethics and participating in Ethics  
4 Bowl every year and also getting involved with the  
5 Sierra Club and environmental movements, and I learned  
6 that Evansville is not as rosy as it looks. It's  
7 actually very polluted, and the pollutants that we're  
8 breathing are actually very dangerous to us.

9 I didn't realize this when I first started going  
10 to USI. I didn't know. What I saw was, you know,  
11 beautiful and wonderful, and then I just get shocked  
12 in my third year -- technically my senior year of  
13 college. I get shocked with this information that the  
14 air I have been breathing for the past three years  
15 hasn't even met EPA standards? I was just floored.  
16 The danger was invisible to me and invisible to  
17 everyone else.

18 As a student leader on campus, I felt for the  
19 students that are coming after me. I felt for those  
20 who have asthma and breathing-related illnesses. I  
21 wondered, like, what their experiences would be like  
22 living on campus for four, five maybe even six  
23 years -- if they're taking it easy -- and breathing  
24 this air with these emission levels that were so high,  
25 these pollution levels that were so high. I feel for

1 those students coming after me.

2 While at one time I could say I had no  
3 reservations about coming to USI, I now look back and  
4 I wish I would have known. I wish I would have known  
5 senior year that the air that I would be breathing for  
6 the next three to four to five years was this  
7 polluted. And it makes me mad. It makes me angry  
8 that I did not know that and that all of the students  
9 at USI do not know that.

10 So, I think it's time for Vectren to take some  
11 responsibility for their actions and some  
12 responsibility for the role that they have played in  
13 these SO2 levels being so high and to mitigate this  
14 problem they have created and added to.

15 Thank you.

16 HEARING OFFICER DERF: Thank you.

17 MR. DELONEY: The next comment card I have is for  
18 Bartell Berg.

19 MR. BERG: Thank you to Sierra Club for  
20 requesting this hearing.

21 So, my name is Dr. Bartell Berg. I am a parent  
22 of two beautiful daughters, and my wife and I searched  
23 long and hard for a new home with some property so  
24 that our daughters could play outside safely, so they  
25 could explore the forest, so they could learn from

1 their natural environment. Last summer we found a  
2 home on a small lake with some wooded property, and it  
3 was close to USI where I work, four miles. I checked  
4 on line to make sure that the area was safe for my  
5 children, including checking the emissions from A.B.  
6 Brown.

7 Learning this year of the dangerous emission  
8 levels of SO2 from A.B. Brown was so upsetting. Is it  
9 safe to let me -- for me to let my children play  
10 outside? Are we putting their health at risk? And  
11 what about the health of our neighbor's children? Is  
12 it safe for them to even have recess at Marrs  
13 Elementary?

14 I note that what Shelby said about USI -- they  
15 have a Children's Learning Center, a child care  
16 facility there, and I spoke with a parent who sends  
17 her child there who didn't even know of the SO2  
18 emissions, and her child has extreme asthma problems.  
19 Vectren is prioritizing their profits over the health  
20 concerns of the most vulnerable of their neighbors,  
21 especially children. And that is wrong.

22 While my wife and I have a relatively secure  
23 financial situation, our energy bills consume an  
24 inordinate amount of our budget. We pay the highest  
25 energy rates in Indiana and, indeed, from my

1 experience of having lived in two other states in this  
2 area, we pay some of the highest in the Midwest. My  
3 wife and I use LED light bulbs, we keep the thermostat  
4 set to miserly levels, colder than this in the winter.  
5 We have an energy-efficient, berm-style home; and our  
6 bills are still quite high.

7 If Vectren is allowed to merely add more filters  
8 and scrubbers, they will merely pass on the cost to  
9 the consumer, as they have done in the past. Moving  
10 away from highly polluting, coal-burning energy  
11 towards nearly any alternative would be a step toward  
12 the better future for the tri-state, for our children  
13 and for our families.

14 Should we believe Vectren and IDEM that their new  
15 proposal will keep emissions below threshold levels?  
16 Their proposal allows Vectren to submit sulfur dioxide  
17 right up to the limit. Can we believe that Vectren as  
18 a corporation will not exceed these limits, when  
19 they've done so in the past in blatant disregard for  
20 the health of their neighbors. And who pays the cost?  
21 Vectren doesn't. Those of us in the Marrs community,  
22 and my home is right in it. And those of us at USI  
23 are the ones who are paying the hospital bills. We  
24 are the ones paying the high electric rates that  
25 subsidize the dirty energy production. And I ask

1 IDEM, Vectren and the EPA to work with us to find a  
2 better solution.

3 Thank you.

4 MR. DELONEY: Thank you.

5 The next comment card is from Jean Webb.

6 MS. WEBB: My name is Jean Webb, and I'm a  
7 resident of Evansville, and I'm here because I am  
8 concerned about the health effects of the sulfur  
9 dioxide levels.

10 Any of the polls you see where Evansville is  
11 rated the most miserable place to live, or close, one  
12 of the reasons is because of the poor health of our  
13 community, and I'm sure the hospitals can back this up  
14 with data. We have poor health here.

15 And that sulfur dioxide, it's going to affect  
16 people's asthma, and the particulate pollution it  
17 contracts to also affects people with heart disease,  
18 because it passes into the blood. But the other big  
19 category of people that it affects is anyone with  
20 autoimmune disease, such as myself. That extra  
21 inflammation in the body triggers and makes any  
22 autoimmune disease more difficult. Also anyone  
23 fighting cancer; you've got that constant onslaught of  
24 inflammation. It keeps our entire area unhealthy, and  
25 if we're going to have a productive community, we need

1 a healthy community, and we need to replace that SO2  
2 and that coal burning with more renewables.

3 Thank you.

4 MR. DELONEY: Thank you.

5 Next we have Eric McCloud.

6 MR. McCLOUD: Okay. Well, hi. My name is Eric  
7 McCloud. I'm an Associate Professor of Biology at the  
8 University of Southern Indiana, and I live a few miles  
9 downwind of the A.B. Brown facility. So I'm here  
10 today to voice my concern about sulfur dioxide release  
11 at the plant.

12 The Sierra Club contends that the models that are  
13 offered by IDEM and Vectren regarding the new sulfur  
14 dioxide standards are overly optimistic. As a person  
15 likely to be affected, I would hope that my local  
16 power utility would go beyond mere attainment rather  
17 than use potentially-flawed models to claim just  
18 barely meeting the standard. I want my utility to be  
19 a good neighbor and a good corporate citizen.

20 As we know, sulfur dioxide and related SOX gasses  
21 are pollutants that contribute to acidic deposition as  
22 well as causing direct and indirect human health  
23 effects. While Vectren claims to scrub emissions from  
24 the A.B. Brown plant, continuing problems with air  
25 quality in our area suggest that the measures that are

1 employed so far have not been effective. Accordingly,  
2 I support efforts to minimize sulfur dioxide  
3 emissions.

4 Here in Evansville our electrical service rates  
5 are among the highest in the state and the nation.  
6 While other utilities that produce coal-fired  
7 electricity can hold down both pollution and rates, my  
8 utility dithers and makes excuses. As a result, we  
9 pay high rates for dirty energy whose emissions  
10 degrade ecosystem services and contribute to plant,  
11 animal, and human health damage.

12 Thanks.

13 HEARING OFFICER DERF: Thank you.

14 MR. DELONEY: Next we have Maryann Watson.

15 MS. WATSON: My runny nose and cough is not a  
16 commentary on the conditions. It's more of an allergy  
17 right now, I think.

18 I just want to echo one of the comments that was  
19 just made about just being satisfied with attainment.  
20 I don't understand why there's not more stress put on  
21 exceeding or going beyond. I am a former school  
22 teacher, and I know parents that would not have been  
23 accepting of C grades when they knew that their  
24 students were capable of doing much better than that.  
25 And I don't understand that mentality at all. Why

1 should we not strive to go beyond what is considered  
2 perhaps average?

3 And then there were some adequate questions I  
4 think raised about how those averages are calculated  
5 anyway, and I'd be kind of curious to find out where  
6 various Vectren executives and employees work. I  
7 doubt that many of them live out near, but I don't  
8 know. I don't know that as a fact.

9 But anyway, why are we satisfied with a C grade,  
10 perhaps, when even a B or B-minus would be, perhaps,  
11 better?

12 Thank you.

13 MR. DELONEY: Thank you, Ms. Watson.

14 No other comment cards?

15 (Pause)

16 MR. DELONEY: With that, is there anybody else  
17 that wishes to come forward to provide testimony for  
18 the record?

19 (Pause)

20 MR. DELONEY: If not, those that have already  
21 spoken that may wish to have additional time, you have  
22 the floor now before the hearing is closed, if you  
23 wish to take advantage of that opportunity.

24 (Pause)

25 MS. GRAY: Hi. I'm Lois Gray with the Posey

1 County News. Can I just ask an information question?

2 MR. DELONEY: Sure.

3 MS. GRAY: All of the numbers have next to them  
4 "based on a 24-hour rolling average". What is a  
5 "24-hour rolling average"?

6 MR. DELONEY: We'd be more than happy to answer  
7 questions like that once the hearing itself has been  
8 closed. Mark and I will remain after the meeting  
9 however long it will take to answer any questions that  
10 you might have.

11 Are there any other comments germane to the  
12 record?

13 MR. BERG: I actually have a question, because it  
14 came to mind today after speaking to my colleague with  
15 a son who has extreme asthma problems. He doesn't get  
16 colds; he has to go to the hospital. Has -- have  
17 there been efforts to inform parents at Marrs  
18 Elementary and parents of children at USI's Children's  
19 Learning Center of the SO2 emissions levels that are  
20 currently not in compliance?

21 MR. DELONEY: Okay. Again, we'd be happy to  
22 address any questions after the public hearing itself  
23 has been closed, but the hearing itself is simply to  
24 reflect public comments that are offered for the  
25 official record. That discussion wouldn't be part of

1 that official record. But we'd be more than happy to  
2 make ourselves available to share what information we  
3 can.

4 Is there anything else for the official record  
5 for this evening?

6 (Pause)

7 MR. DELONEY: If not, we can close the hearing  
8 and make ourselves available for any types of  
9 questions that you might have.

10 HEARING OFFICER DERF: All right. This hearing  
11 is adjourned. Thank you very much.

12

13 END TIME: 6:54 P.M.

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CERTIFICATE OF REPORTER.

I, KAREN K. KEIM, CRR, RPR, a Certified Court Reporter in the States of Illinois and Missouri, do hereby certify that the proceedings in the above-entitled cause were taken by me to the best of my ability and thereafter reduced to writing; that I am neither counsel for, related to, nor employed by any of the parties to the action, and further that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.

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Illinois CSR No. 84-1577  
Missouri CCR No. 1328

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COMMENT SHEET

Title of Public Hearing: A B Brown Commissioners Order Date: 3/23/16  
Public Hearing Location: Mt. Vernon Fire STA.

YOUR NAME	ORGANIZATION/COMPANY	E-MAIL	PHONE NUMBER	ADDRESS, CITY, ZIP
Gary L. Creahey	CITIZEN	gary.creahey@johnc.com	8124618681	6618 Smith Diamond Rd EVANSVILLE

YOUR COMMENTS:

I live approx. 1 mile east of A. B. Brown PP.

I support IDEM's vegetation plan and feel these environmental groups are wrong in their claims & just want to cause a ruckus with authority. Personally I get sick of John Blair's rudeness. These people just want someone to blame for an imperfect world. Perfection is not possible. We should be happy with the clean air that we have.

My name is Dr. Mary Lyn Stoll and I have lived and worked in the area since 2005. I have always struggled with allergies and mild asthma, but I have experienced more frequent and severe upper respiratory infections since moving here than ever before. Several of my close friends have noticed and many have told me to consider giving up my job just to live somewhere that might be healthier. I cannot help but to think that the excessive and harmful levels of sulfur dioxide in the air where I work and near where I live are a key part of the problem. It is well known that that sulfur dioxide causes serious respiratory problems. It is also clear that sulfur dioxide affects cardiovascular health and can make heart disease worse. The lives of Hoosiers may literally be on the line.

I know that the EPA says that local air quality fails to meet and attain safe levels of sulfur dioxide. Protection from air pollution is a legal right to which every American citizen is entitled. The citizens of this area have every right to expect--to demand--that the air they breath meets government standards. The fact that our air quality has not and does not meet the minimum standards put in place by law is unacceptable and unjust.

But it is not simply a matter of government failing to protect the basic rights of the citizenry here. Knowing that part of why I find it difficult to do something so basic as breathing, because the government is failing to protect my basic rights, is bad enough. But knowing that Vectren's coal fired power plant emissions are part of why I can't breath, that I am also paying some of the highest utility rates in the nation—all because of the supposedly high environmental standards that Vectren ostensibly meets—is a kick in the teeth. Vectren insists that rates are high because of the cost of cleaning up their plants, and yet despite paying so much more than my friends and family in other states, Vectren's plants are dumping unsafe levels of sulfur dioxide into my lungs, the lungs of the students at USI, and the small vulnerable bodies of the kids at the Marris Elementary School so close to A. B. Brown. Why are we paying so much to keep outdated dirty plants open in the first place? As consumers, we are being ripped off—paying extra for clean air protection that we simply are not getting.

It is also disconcerting to see that Vectren plans to pollute up to the maximum allowable levels. This amounts to planning for failure. No measurement or human endeavor is ever perfect, so it is always wise to build in some wiggle room. When my students beg for excuses because they faced a hurdle before a deadline, I can't help but to fault them for not planning a little room to deal with challenges that arise in the middle of a project. Building in wiggle room for mistakes, oversights, or unforeseen challenges is simply wise planning. If IDEM & Vectren really put human health first, they would not be planning to pollute to the maximum allowable amount. As the largest sulfur dioxide emitter in the area, they set the tone for the entire area. Knowing that other companies will also be damaging local air quality with emissions, they should strive to be more responsible corporate citizens rather than trying to get away with dumping as much toxicity on the local population as is legally permitted.

In sum, this plan does not adequately protect the people of this area. It is unjust and harmful. The moral value of the health of local population as citizens of this nation and as stakeholders impacted by Vectren's business decisions should be given far greater weight.



## MEDIA ADVISORY APRIL 16, 1999

### **FOR IMMEDIATE RELEASE**

Below is a copy of a letter sent to Ms. Janet McCabe of IDEM demanding that the permit for the ConAgra facility be rescinded due to incorrect information being used in the Model used to justify the plant in the first place. Valley Watch concurs with ChemQuery in making this demand. It is imperative that scientific process be used in determining the efficacy of plants like ConAgra. In this instance, IDEM seriously failed in their analysis of the impact ConAgra would have on downwind environs, resulting in underestimating the impact by 7X.

If IDEM refuses to revisit the permit, Valley Watch is prepared to increase the level of protest over this failure of our government and direct it toward Governor Frank O'Bannon who is ultimately responsible for the decisions made by the IDEM.

15 April 1999

Ms. Janet McCabe  
Assistant Commissioner, Office of Air Management  
Indiana Dept. of Environmental Management  
100 North Senate Ave.  
PO Box 6015  
Indianapolis, IN 46206-6015

Dear Ms. McCabe:

ChemQuery would like to thank you for the invitation to meet in your office in Indianapolis on Tuesday, April 13, 1999. This is to confirm and summarize the meeting held with members of your staff to discuss the RPM-IV modeling and air quality issues in southwest Indiana pertaining to the ConAgra permit.

In attendance at this meeting were Dr. Joanne Alexandrovich, Vanderburgh County Ozone Officer, and ChemQuery's Dr. Howard Dunn, Dr. Jeff Seyler, and Dr. Tom Pickett. Members of your staff present were Mr. Mark Derf, Mr. Ken Ritter, and Mr. John Welch. Additionally, you and Mr. Tim Method were present intermittently.

We appreciate the changes that you made at our request in the input parameters for the RPM-IV model program. These included

- \* use of meteorological conditions for the day in question (July 12, 1995)
- \* use of the actual measured NOX values for Vanderburgh County
- \* use of corrected NO to NO2 emission ratio (95:5 rather than 5:95)
- \* use of correct molecular weight input for the PAR parameter (14 g/mole rather than 86.2 g/mole) as per the RPM-IV operator's manual.

When Mark Derf entered the corrected parameters on IDEM's computer, the new output predicted an ozone impact of 7 ppb for the proposed ConAgra plant (as opposed to the 1 ppb predicted in earlier runs). In view of this 7-fold increase in ozone impact, we believe that the ConAgra permit should be reexamined and denied. An ozone increase of this magnitude cannot help but cause or contribute to a violation of the ambient air standard.

ChemQuery is convinced that southwest Indiana will be in violation of the ozone ambient air standard by the end of this summer. Additional major sources of hydrocarbons will only exacerbate the situation and put undue financial burden on our existing industry. If the ConAgra permit is not reexamined and denied, the inevitable ozone exceedences in southwest Indiana will be a direct result of IDEM's misassessment of ConAgra's impact.

Sincerely,

Dr. Howard E. Dunn  
ChemQuery



**EARTHJUSTICE**  
*Because the earth needs a good lawyer*



**SIERRA  
CLUB**  
FOUNDED 1892

February 16, 2016

*Via e-mail to [MDERF@idem.IN.gov](mailto:MDERF@idem.IN.gov)*

Mark Derf  
Indiana Department of Environmental Management  
Office of Air Quality  
100 North Senate Avenue  
Mail Code 61-50 IGCN 1003  
Indianapolis, Indiana 46204

**Re: Commissioner's Order 2016-01, A.B. Brown Generating Station**

Dear Mr. Derf:

On behalf of Sierra Club and Earthjustice, we submit the following comments on Commissioner's Order 2016-01, which sets SO<sub>2</sub> emission limitations and emission rates for the A.B. Brown Generating Station ("Brown") owned and operated by Southern Indiana Gas and Electric Company ("SIGECO"). The Order states that SIGECO requested that the new emission limits be incorporated into the Indiana State Implementation Plan ("SIP") after the Indiana Department of Environmental Management ("IDEM") concluded that such limits would result in Posey County being in attainment for the primary 1-hour SO<sub>2</sub> National Ambient Air Quality Standards ("NAAQS"). Order at 2. IDEM had previously found that under Brown's current emission limits, Brown's emissions would cause Posey County to be in nonattainment of the 1-hour SO<sub>2</sub> NAAQS. Letter from Carol S. Comer, Commissioner, Indiana Department of Environmental Management to Susan Hedman, Regional Administrator, EPA Region 5 (Sept. 16, 2015), Enclosure 3, at 22 [hereinafter *Enclosure 3*].

We fully support incorporating lower SO<sub>2</sub> emissions limits for Brown Units 1 and 2 into the Indiana SIP. However, IDEM has not supported its conclusion that the new limits will result in Posey County being in attainment for the 1-hour SO<sub>2</sub> NAAQS. IDEM has failed to follow EPA guidance regarding calculation of SO<sub>2</sub> concentrations and determination of the sources to include in the background concentration. IDEM's modeling also used an unrealistic and unreasonable assumption that the Brown units would never exceed their permit limits. In order to determine whether Brown causes or contributes to nonattainment of the 1-hour SO<sub>2</sub> NAAQS, IDEM should update its modeling to address these three issues.

## **I. LOWER SO<sub>2</sub> LIMITS FOR BROWN ARE URGENTLY NEEDED.**

As noted above, we fully support promptly incorporating lower SO<sub>2</sub> emissions limits for Brown Units 1 and 2 into the Indiana SIP. IDEM's modeling of actual emissions over 2012-2014 indicates that Brown's actual SO<sub>2</sub> emissions have been causing violations of the 2010 standard. *Enclosure 3* at 22. These violations threaten public health in southern Indiana.

As IDEM is aware, exposure to SO<sub>2</sub> causes serious health problems and thus preventing any violation of the SO<sub>2</sub> NAAQS anywhere in Indiana is of utmost importance for public health. Exposure to high levels of SO<sub>2</sub> for even very short time periods—such as five minutes—has significant health impacts, including decreased lung function, aggravation of asthma, and premature death. *See Primary National Ambient Air Quality Standard for Sulfur Dioxide Final Rule*, 75 Fed. Reg. 35,520, 35,525 (June 22, 2010).

In order to protect against these serious harms, we urge IDEM to promptly approve the new limits for Brown.

## **II. IDEM'S CONCLUSION THAT THE NEW LIMITS WILL RESULT IN ATTAINMENT IS NOT SUPPORTED BY THE RECORD.**

IDEM finds that the SO<sub>2</sub> emission limitations and emission rates in the order are necessary "in order to assure continued attainment of the SO<sub>2</sub> NAAQS." Order at 2. This finding is not supported by the record. IDEM relied on modeling to conclude that the new limits will result in attainment. IDEM did not provide the actual modeling files to Sierra Club until today, so we have not been able to fully evaluate the reasonableness and accuracy of that modeling. However, it is clear that IDEM's modeling suffers from at least three flaws that render it unreliable for determining whether Brown causes or contributes to attainment of the 1-hour SO<sub>2</sub> NAAQS. As explained below, IDEM should redo the modeling and should make the full modeling report and all modeling files publicly available.

### **A. IDEM Excluded Major Sources of SO<sub>2</sub> From the Background Concentration of SO<sub>2</sub>.**

One of the most important inputs to the model is the background concentration of SO<sub>2</sub>. IDEM modeled only two major sources of SO<sub>2</sub> as part of the background: the SABIC and Countrymark facilities. *Enclosure 3* at 21, Table 11. It is unclear what methodology IDEM used for excluding background sources, because IDEM says in one place that it evaluated background sources within 30 km of Brown, *id.*, but in another place says it focused only on background sources within 10 km. *Id.* at 7 ("Indiana focused on areas within 10 km for each of the modeled Consent Decree sources,").

IDEM's modeling excluded several major sources of SO<sub>2</sub> emissions close to Brown, most notably the four-unit Warrick power plant and the Alcoa industrial operations at the Warrick site. Warrick is approximately 35 km east of Brown. IDEM also excluded the Culley power plant, a two-unit, coal-fired power plant. Culley is approximately 35 km east of Brown. Finally, IDEM excluded the large Gibson power plant, which is approximately 50 km north of Brown.

IDEM has not adequately supported its decision to exclude emissions from Warrick, Culley, and Gibson from the background concentration used in the modeling. In particular, IDEM has not followed EPA guidance on identifying nearby sources to include in the modeled inventory of emissions. EPA has emphasized that “the factors that need to be considered are very case-specific in nature” and “cautioned against the literal and uncritical application of very prescriptive procedures for identifying which background sources should be included in the modeled emission inventory for NAAQS compliance demonstrations.” EPA, Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO<sub>2</sub> National Ambient Air Quality Standard (Mar. 1, 2011) at 12-13. In other words, EPA guidance recommends that states make source-specific determinations of which background sources to model, rather than rely on across-the-board thresholds. By automatically excluding any background source more than 30 km away from Brown, IDEM appears to have done exactly what the guidance cautions against doing.

EPA suggests that three initial steps be taken in order to characterize the factors to be considered in deciding which background sources to model: (1) contour plots of modeled concentrations should be prepared and overlaid on a map showing features likely to affect dispersion patterns; (2) the controlling meteorological conditions should be identified; and (3) the location of the monitoring station used in the modeling should be included on the plot of source impacts, as well as a wind rose depicting general flow patterns. *Id.* at 13. We have not seen any indication that IDEM followed these three steps. If IDEM followed these three steps, IDEM should make the documentation publicly available.

EPA not only recommends that states make source-specific determinations, but EPA notes that the determination of which background sources to include becomes more complex as the averaging time decreases. “[T]he factors affecting which sources should be included in the modeled inventory and the method for combining modeled with monitored concentrations are more complex for the 1-hour NO<sub>2</sub> standard than for the annual standard.” *Id.* at 16. Here, the Order establishes one set of limits based on a one-hour averaging time. Given EPA’s guidance stating that background determinations are more complex with shorter averaging times, IDEM should have taken a close look at whether, under the particular circumstances of the Brown plant, sources such as Warrick, Culley, and Gibson should be included in the background concentration of SO<sub>2</sub>. Instead, IDEM appears to have ignored this guidance and used a simplistic rule of thumb to exclude all background sources more than 30 km (or 10 km) from Brown.

If IDEM had included Warrick, Culley, or Gibson, or any combination of those plants, the modeling results would almost certainly show that Posey County is in nonattainment, because without these sources, the modeling results are equal to the NAAQS limit of 75 ppb. Given that the decision regarding which major sources to include in the background is dispositive, IDEM’s exclusion of emissions from Warrick, Culley, and Gibson is unsupported by the record and unexplained. IDEM should redo the modeling so as to include at least the emissions from the Warrick power plant and Alcoa operations as well as the Culley power plant in the background concentration of SO<sub>2</sub>.

B. IDEM's Reliance on Projected Emissions Under the New Permit Limits Does Not Account for Exceedances of Permit Limits

It is our understanding that IDEM modeled five scenarios, all based on projected emissions under the new, proposed emission limits for Brown 1 and 2. *See Enclosure 3* at 22. In doing so, IDEM seems to have assumed that both Brown units will comply with the new emission limits in every hour of every day. In other words, IDEM assumes that in 8,760 hours of the year, neither Brown 1 nor Brown 2 will exceed the 1-hour average SO<sub>2</sub> limits for even an hour.

This assumption is unrealistic, for two reasons. First, IDEM's modeling assumption ignores the real-world operations of coal-fired units, which occasionally and often regularly, exceed their permit limits during normal operations and during startup, shutdown, and malfunction ("SSM") events. IDEM is well-aware that the Brown plant has in fact violated its SO<sub>2</sub> permit limits in recent years because IDEM has sent several letters to SIGECO informing the company that Brown has violated its SO<sub>2</sub> permit limits. *See, e.g.*, Letter from Lynne J. Sullivan, IDEM to Allen Rose, Vectren Corporation (May 27, 2015) (finding violations of sulfur dioxide permit requirements at Brown); Letter from Lynne J. Sullivan, IDEM to Allen Rose, Vectren Corporation (Apr. 8, 2014) (same); Letter from Lynne J. Sullivan, IDEM to Allen Rose, Vectren Corporation (Nov. 19, 2013) (same); Letter from Lynne J. Sullivan, IDEM to Allen Rose, Vectren Corporation (Feb. 24, 2012) (same); *see also* Letter from Lynne J. Sullivan, IDEM to Allen Rose, Vectren Corporation (Mar. 26, 2015) (finding that the Brown plant had failed to operate its scrubber in accordance with permit requirements, and providing notice that the violations will be processed as an enforcement case).

Second, Indiana law expressly authorizes power plants to exceed their emission limits during malfunction events. 326 Ind. Admin. Code 1-6-4(a).<sup>1</sup> While this provision is contrary to Indiana law and must be rescinded, it has not been to date. At least until that provision is rescinded, it is unrealistic and unreasonable for IDEM to assume 100% compliance with the new permit limits when the Indiana SIP expressly provides that facilities such as Brown can exceed their emission limits under certain circumstances and not be in violation of the emission limits.

As a result of this discrepancy between IDEM's modeling assumption of 100% compliance and actual operation of the units, IDEM's modeling overstates the emission reductions that will occur from the new permit limits. IDEM should redo the modeling to account for both Brown units exceeding their permit limits, particularly during SSM events. IDEM could do this by examining historical exceedance reports from Brown and calculating the 3-year average of the percentage of operating hours during which Brown exceeded its permit limits and the percentage by which emissions exceeded the relevant limits. IDEM could then apply that exceedance rate to the new permit limits in its modeling. Regardless of what method

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<sup>1</sup> EPA recently concluded that this provision of the Indiana SIP violates the Clean Air Act, and issued a SIP call requiring Indiana to revise this provision. 80 Fed. Reg. 33,840, 33,846, 33,966 (June 12, 2015). However, our understanding is that this provision of the Indiana SIP has not yet been revised and instead remains in force.

it uses, IDEM's modeling assumption that the Brown units will comply 100% of the time with new permit limits is neither realistic nor reasonable.

C. IDEM Failed to Follow EPA Regulations Governing the Calculation of SO<sub>2</sub> Concentrations, and, As a Result, IDEM Misrepresents Its Modeling Results.

IDEM reports that its modeling of the new SO<sub>2</sub> limits for the Brown plant resulted in a 1-hour SO<sub>2</sub> concentration of 196.08 µg/m<sup>3</sup>, just barely below the 1-hour SO<sub>2</sub> NAAQS limit of 196.2 µg/m<sup>3</sup>. *Enclosure 3* at 23, Table 12. IDEM thus projects that Posey County will be 0.12 µg/m<sup>3</sup> below nonattainment. *Id.*

IDEM has not addressed several issues arising from the modeled SO<sub>2</sub> concentration being so close to the NAAQS limit. First, it is unclear whether the AERMOD software that IDEM used generates results accurate to the tenth of a microgram per meter cubed. The margin by which IDEM claims that Posey County is in attainment may fall well within the margin of error of the model.

Second, IDEM's calculations are inconsistent with EPA regulations on how to calculate 1-hr SO<sub>2</sub> concentrations for purposes of compliance with the 2010 1-hr SO<sub>2</sub> NAAQS. IDEM has converted a NAAQS expressed to two significant figures, 75 parts per billion, into a number with four significant figures, 196.2 µg/m<sup>3</sup>. IDEM then reports its modeling results to five significant figures, 196.08 µg/m<sup>3</sup>, and claims that this value is "below the 1-hour SO<sub>2</sub> NAAQS." *Enclosure 3* at 22.

The SO<sub>2</sub> concentration (which EPA calls the "1-hour primary standard design value") "is calculated pursuant to section 5 and then rounded to the nearest whole number or 1 ppb (decimals 0.5 and greater are rounded up to the nearest whole number, and any decimal lower than 0.5 is rounded down to the nearest whole number)." 75 Fed. Reg. 35,596 (June 22, 2010), codified at 40 C.F.R. pt 50, App. T, § 4. Put simply, EPA requires that the SO<sub>2</sub> concentration be expressed in parts per billion and rounded to the nearest whole number. *Id.*

Accordingly, IDEM should have presented its modeling results as 75 ppb, which is equal to the NAAQS limit of 75 ppb. IDEM's claim that its modeled concentrations "are below the 1-hour SO<sub>2</sub> NAAQS," *Enclosure 3* at 22, misrepresents IDEM's results and is based on calculations that do not comply with EPA's regulations.

\* \* \*

Thank you for your consideration of these comments. Please do not hesitate to contact us if you have any questions.

Sincerely,

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*Via electronic mail and facsimile*

February 16, 2016



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mderf@idem.IN.gov

**Re: Sierra Club's Request for Public Hearing for Commissioner's Order No. 2016-01, A.B. Brown Generating Station**

Dear Mr. Derf:

On behalf of Sierra Club, I hereby request a public hearing for Commissioner's Order No. 2016-01, A.B. Brown Generating Station. Through Order No. 2016-01, the Department seeks to revise the sulfur dioxide air emission limits and rates in the Indiana State Implementation Plan that apply to the A.B. Brown Generation Station, located in Posey County.

Pursuant to 40 C.F.R. § 51.102, the Department is required to hold the requested public hearing after providing "reasonable notice" which must include, at a minimum, at least 30 days' advance notice of the date, place, and time of the public hearing. In addition, in order to maximize the opportunity for public participation, Sierra Club respectfully requests that this public hearing be held on a weekday in the evening in Mount Vernon, Indiana, which is near the A.B Brown Generation Station.

Thank you for your attention to this matter.

Sincerely,



Wendy Bredhold  
Campaign Representative, Ohio River Valley

Sierra Club Beyond Coal Campaign  
Telephone: (812) 604-1723  
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Cc: Scott Deloney, [sdeloney@idem.in.gov](mailto:sdeloney@idem.in.gov)  
(Via electronic mail)

**A.B. Brown Public Participation for Revision to Indiana State  
Implementation Plan for 1-hour Sulfur Dioxide  
National Ambient Air Quality Standard**

**Summary and Response to Written Comments and Comments Received at Public Hearing**

IDEM requested public comment on the revision to the Indiana State Implementation plan (SIP) for Vectren (formerly Southern Indiana Gas and Electric Company) A.B. Brown Generating Station from January 13, 2008 through February 16, 2016. A public hearing was also held on March 23, 2016. IDEM received comments from the following parties:

Tony Mendoza, Sierra Club (written comments)	Mendoza
Matthew Gerhart, Earthjustice (written comments)	Gerhart
Wendy Bredhold, Sierra Club	Bredhold
Niles Rosenquist, Concerned Citizen/Sierra Club	Rosenquist
Mark Bryant, Concerned Citizen/Valley Watch, Inc.	Bryant
John Blair, Valley Watch, Inc.	Blair
Shelby Heck, University of Southern Indiana student	Heck
Bartell Berg, University of Southern Indiana professor	Berg
Jean Webb, Concerned Citizen	Webb
Eric McCloud, University of Southern Indiana professor	McCloud
Mary Ann Watson, Concerned Citizen	Watson
Lois Gray, Posey County News	Gray
Gary Creasey, Concerned Citizen (written comments)	Creasey
Dr. Mary Lyn Stoll, Concerned Citizen (written comments)	Stoll

**The following is a summary of the comments received and IDEM's responses thereto:**

**Comment:** Lower sulfur dioxide (SO<sub>2</sub>) limits for A.B. Brown Generating Station are urgently needed. The commenters fully support promptly incorporating lower SO<sub>2</sub> emission limits for A.B. Brown Units 1 and 2 into the Indiana SIP. The commenters state that in order to protect against health impacts from exposure to SO<sub>2</sub> above the Primary National Ambient Air Quality Standard (NAAQS) for SO<sub>2</sub> final rule, 75 FR 35520, 35525 (June 22, 2010), the commenters urge IDEM to promptly approve the new limits. (Mendoza) (Gerhart) (Bredhold) (Rosenquist) (Blair)

**Response:** IDEM appreciates the support and has already approved the new limits through the applicable Commissioner's Order. IDEM worked with A.B. Brown Generating Station to establish limits for Units 1 and 2 within the applicable Commissioner's Order that are acceptable to the U.S. EPA to demonstrate attainment of the Primary 1-hour SO<sub>2</sub> NAAQS of 75 parts per billion (ppb). IDEM will be requesting these limits to become federally enforceable within Indiana's SIP. The limitations will be

effective on April 19, 2016, and are expected to be federally enforceable before Round 2 designations are effective.

**Comment:** IDEM's conclusion that the new limits will result in attainment is not supported by the record. Sierra Club states at least three flaws that render's IDEM's modeling unreliable for determining whether A.B. Brown causes or contributes to attainment of the 1-hour SO<sub>2</sub> NAAQS. The commenters feel that the SO<sub>2</sub> emission limitations and emission rates in the order which are necessary "in order to assure continued attainment of the SO<sub>2</sub> NAAQS" are not supported by the record. IDEM did not provide actual modeling files to Sierra Club until February 16; therefore Sierra Club was not able to fully evaluate the reasonableness and accuracy of IDEM's modeling. (Mendoza) (Gerhart) (Bredhold) (Rosenquist) (Blair) (Bryant)

**Response:** IDEM provided contact information in the public comment and public hearing notices for interested parties to request additional information or technical details associated with the modeling conducted for the A.B. Brown Commissioner's Order and proposed SIP revision. IDEM was responsive to Sierra Club's Public Records request; the request was made Wednesday, February 10, 2016, within the final days of the public comment period, ending Tuesday, February 16, 2016. There are specific public record procedures that must be followed to provide additional information upon request. The A.B. Brown SO<sub>2</sub> modeling files were made available to Sierra Club once the request was received and processed. IDEM followed applicable U.S. EPA guidance and modeling procedures, and continually consulted with U.S. EPA to ensure the proposed limits can secure federal approval.

**Comment:** IDEM excluded major sources of SO<sub>2</sub> from the background concentration of SO<sub>2</sub>. IDEM did not clearly identify its methodology for excluding sources. Commenters request the air dispersion modeling be remodeled to account for these sources. (Mendoza) (Gerhart) (Bredhold) (Rosenquist)

**Response:** IDEM relied on guidance found in the "SO<sub>2</sub> NAAQS Designations Modeling Technical Assistance Document" which provides specific assistance to state air agencies in the characterization of ambient air quality in areas proximate to or impacted by significant SO<sub>2</sub> emission sources. The technical assistance document (TAD) provides guidance on how to model large SO<sub>2</sub> sources and assess compliance with the 1-hour SO<sub>2</sub> NAAQS. 40 CFR Part 51, Appendix W, Section 8.2.3.b states sources that are expected to cause a significant concentration gradient in the vicinity of the source of interest should be modeled and that number of sources is expected to be small. Sources located further from the source of interest will be captured in the background concentrations that are measured at nearby monitoring sites.

In the case of A.B. Brown, the Buena Vista SO<sub>2</sub> monitoring site in Evansville was deemed representative, if not conservative, for 1-hour SO<sub>2</sub> background concentrations. In addition to modeling large SO<sub>2</sub> sources within 30 kilometers (SABIC Innovative Plastics and Countrymark Refining and Logistics), SO<sub>2</sub> impacts from sources in Warrick and Gibson Counties as well as sources in Kentucky would be measured at the Evansville SO<sub>2</sub> monitor and therefore would be accounted for and included in the seasonal hourly

background concentrations. These seasonal hourly background values are added directly into the modeling and are instrumental in characterizing the air quality in the area.

IDEM feels the 30 kilometer distance used for evaluating whether sources should be included in the area designation modeling, where actual emissions are modeled using actual stack heights, as per U.S. EPA guidance, is more than adequate. It should be noted that the U.S. EPA references a general “rule of thumb” for estimating the distance to maximum 1-hour impact and the region of significant concentration gradients that may apply in relatively flat terrain is approximately 10 times the source release height. Therefore, maximum impacts from large SO<sub>2</sub> sources would not be expected to occur more than a few kilometers from its location. Therefore, for designation modeling, IDEM used a 10 kilometer modeling receptor grid surrounding A.B. Brown and looked within a 30 kilometer radius to determine if SO<sub>2</sub> sources should be included in the modeling analysis or would be captured by a nearby SO<sub>2</sub> monitoring site. Sources located more than 30 kilometers would not have large modeled impacts in the vicinity of the source of interest and would be best characterized by SO<sub>2</sub> monitoring data.

This analysis was made with air dispersion modeling of the proposed A.B. Brown’s SO<sub>2</sub> emission limits, in accordance with U.S. EPA modeling guidance specific to 1-hour SO<sub>2</sub> designations, and supports designation of the area surrounding A.B. Brown Generating Station in Posey County as attainment. IDEM will not conduct additional modeling for the A.B. Brown SIP revision. It should be noted the U.S. EPA provided a review of Indiana’s recommendations concerning the Round 2 Consent Decree modeling on February 16, 2016. The U.S. EPA agreed with IDEM’s assessment for A.B. Brown and the determination that sources beyond 30 kilometers will not cause a significant concentration gradient within the 10 kilometer modeling receptor grid for A.B. Brown.

**Comment:** IDEM’s reliance on the projected emissions under the new permit limits (Commissioner’s Order) does not account for exceedances of the limits. IDEM’s modeling assumes A.B. Brown operates under stable conditions and ignores the real-world operations of coal-fired units. Indiana law expressly authorizes power plants to exceed their emission limits during malfunction events (326 IAC 1-6-4(a)). (Mendoza) (Gerhart) (Bredhold) (Rosenquist) (Blair)

**Comment:** The commenter suggested looking at the historical emissions data to show variability of operations to show exceedance of current requirements. A statistical analysis (including standard deviations and mean) for estimate of variability for new SO<sub>2</sub> limits could be conducted. (Rosenquist)

**Response to both comments above:** Each source in Indiana must demonstrate compliance with its Title V operating permit by collecting emissions information consistent with its reporting and recordkeeping conditions specified in the permit or conduct periodic stack testing to confirm control efficiencies of emission control equipment. Among the collected emissions data is the hourly SO<sub>2</sub> emissions from both Units 1 and 2 at A.B. Brown. Variability in emission data is recorded and inspected by IDEM and the U.S. EPA and data values that exceed specific permit conditions are addressed through IDEM’s Compliance and Enforcement sections.

Initial air dispersion modeling accounted for the actual continuous emissions monitoring data from Units 1 and 2. Lower emission limitations were established based on maximum capacities of Units 1 and 2 and those limitations modeled attainment of the 1-hour SO<sub>2</sub> standard. This is considered a conservative approach to determining emission limitations that are protective of the NAAQS with an ample margin of safety. The A.B. Brown facility will be responsible for demonstrating compliance with the applicable SO<sub>2</sub> limits on an ongoing basis. Work practices and other compliance measures are in place to ensure against repeated exceedances of any emission limits as well.

IDEM has completed a first notice of comment period (LSA Document #15-326) pertaining to 326 IAC 1-6. The U.S. EPA published findings in the Federal Register (FR) on June 12, 2015 (80 FR 33839) concerning inadequacies to startup, shutdown, and malfunction provisions in state rules. However, 326 IAC 1-6 does not apply to A.B. Brown. The conditions listed in 326 IAC 1-6-1 only apply to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 (exemptions) or 326 IAC 2-6.1 (minor source). A.B. Brown is a Title V source and is governed by Part 70 permitting requirements.

**Comment:** IDEM failed to follow EPA regulations governing the calculation of SO<sub>2</sub> concentrations and as a result, IDEM misrepresents its modeling results. The commenters question the accuracy of the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) software. The commenters question the inconsistency of IDEM's calculations of the 1-hour SO<sub>2</sub> concentrations with EPA regulations for purposes of compliance with the 2010 1-hour SO<sub>2</sub> NAAQS. (Mendoza) (Gerhart) (Bredhold) (Rosenquist) (Blair)

**Response:** The AERMOD is the preferred model by the U.S. EPA for near-field dispersion modeling for a wide range of regulatory applications in all types of terrain. The air dispersion modeling used for establishing SO<sub>2</sub> emission limits for A.B. Brown follows U.S. EPA guidance for the 1-hour SO<sub>2</sub> designations and has been accepted by the U.S. EPA. Appendix W to 40 CFR Part 51, Section 9.0 addresses the accuracy and uncertainty of air dispersion models. The Model Clearinghouse, as part of U.S. EPA's Support Center for Regulatory Atmospheric Modeling (SCRAM) contains additional information concerning the accuracy of AERMOD and the issue of rounding modeled results. The Model Clearinghouse response (#01-III-02) recommends to not round modeled results to compare to significant increment levels and NAAQS. 40 CFR 50.4 has specified rounding for the **monitoring** of several pollutants, including SO<sub>2</sub>, but rounding has not been applied to modeled results since modeling guidance has consistently recommended to not round. In addition, IDEM has relied on the Federal Register notice (76 FR 69058, November 7, 2011) in which a footnote correlates the 1-hour SO<sub>2</sub> NAAQS of 75 ppb to 196.2 micrograms per cubic meter (µg/m<sup>3</sup>) for air dispersion modeling purposes. The modeling results from AERMOD are expressed in micrograms per cubic meter; therefore, IDEM uses the 1-hour SO<sub>2</sub> standard expressed in micrograms per cubic meter.

**Comment:** Commenters claim the area has historically exceeded EPA SO<sub>2</sub> emission standards. (Bryant) (Heck) (Berg) (McCloud) (Stoll)

**Response:** Overall air quality in the Evansville/Southwest Indiana area has attained the 1-hour SO<sub>2</sub> NAAQS of 75 ppb since the standard was finalized in 2010 and was below the standard for the past ten years. The Evansville SO<sub>2</sub> monitoring site, located at 1110 West Buena Vista Road has recorded 1-hour SO<sub>2</sub> monitored values well below the 75 ppb threshold with the three-year 1-hour SO<sub>2</sub> design values ranging from 18 to 26 ppb over the past six years. Further benefits from the Data Requirements Rule and other national rulemakings will result in even lower regional and national SO<sub>2</sub> emissions which will help to further reduce monitored SO<sub>2</sub> concentrations throughout the region.

Furthermore, the historical monitoring data measured at the Evansville – Buena Vista and Roth Road SO<sub>2</sub> monitors attained the NAAQS applicable at that time, with monitored values well below the 24-hour and annual SO<sub>2</sub> NAAQS of 140 ppb and 30 ppb respectively, before those standards were revoked and replaced by the more stringent 1-hour SO<sub>2</sub> standard in 2010. The Roth Road SO<sub>2</sub> monitor was a source-oriented monitor located approximately 4 kilometers east of A.B. Brown. It recorded consistently lower hourly SO<sub>2</sub> values than the Evansville – Buena Vista monitor and was eventually discontinued in 2013.

**Comment:** Commenters question why the emission limitations established by A.B. Brown run right up to the standard and do not exceed or go beyond attainment? (Berg) (Watson) (Stoll)

**Response:** The U.S. EPA establishes the NAAQS based on health studies, as mandated by Sections 108 and 109 of the Clean Air Act. The mandate requires each NAAQS be periodically reviewed to determine if the existing standard is adequate to protect human health and welfare. The Clean Air Scientific Advisory Committee (CASAC) peer reviews all health studies/reports to determine if a standard needs to be revised. Rulemaking for new NAAQS for all criteria pollutants are developed with opportunity for public participation before the rule is finalized. The final NAAQS are developed based on impacts for the most sensitive groups of people, typically children and the elderly, therefore, the standards are considered conservative in nature. In the case of the 2010 1-hour SO<sub>2</sub> NAAQS, this standard represents a much stricter threshold at a lower time-averaging period to account for shorter-term health impacts. Therefore, attainment of this standard is protective of public health and welfare, with an adequate margin of safety of all groups of people, especially sensitive groups.

# **Attachment D**

A.B. Brown Generating Station:

Modeling Summary

Posey County

# A.B. Brown Generating Station Modeling Summary for Commissioner's Order #2016-01

## Background

Initial modeling, using hourly continuous emissions monitoring (CEM) data from 2012-2014, showed higher modeled 1-hour sulfur dioxide (SO<sub>2</sub>) concentrations. Modeling for A.B. Brown, using Mercury and Air Toxics Standard (MATS) SO<sub>2</sub> compliance emission rates, was then provided in Indiana's Preliminary Recommendations Concerning Round 2 Air Quality Designations for the 2010 Primary 1-hour SO<sub>2</sub> Standard submitted to United States Environmental Protection Agency for review/consideration on September 16, 2015.<sup>1</sup> Since A.B. Brown decided to use the hydrochloric acid (HCl) emission limit to comply with the MATS instead of the SO<sub>2</sub> emission limits, those rates could not be used and would not satisfy the Consent Decree. As requested by A.B. Brown, IDEM issued a Commissioner's Order on January 11, 2016, to establish permanent and enforceable sulfur dioxide (SO<sub>2</sub>) emission limits for A.B. Brown in order to ensure continued attainment of the 2010 primary 1-hour SO<sub>2</sub> standard in the area surrounding the facility. The Commissioner's Order contains emission limitations and emission rates for Units 1 & 2, as well as reporting and recordkeeping requirements and method for compliance.

## Modeled Limits

The Commissioner's Order limits A.B. Brown's SO<sub>2</sub> emissions to 0.855 lbs SO<sub>2</sub>/MMBtu (pounds per one million British thermal units) for Unit 1 and 0.69 lbs SO<sub>2</sub>/MMBtu limit for Unit 2 when operating alone based on a 1-hour SO<sub>2</sub> averaging time. Both units can never exceed 2,152.2 lbs SO<sub>2</sub>/hr. (0.426 lbs SO<sub>2</sub>/MMBtu) when operating together. Therefore, Indiana modeled the SO<sub>2</sub> proposed emission limitations recommended by A.B. Brown. Five scenarios were modeled. Modeled concentrations for all five of A.B. Brown's operating scenarios were added to the temporally varying seasonal SO<sub>2</sub> background concentrations, as well as the emission limitations and emission rates for all five scenarios as outlined in Table 1. The worst case operating scenario was Scenario 5: Unit 2 operating at 0.69 lbs SO<sub>2</sub>/MMBtu and Unit 1 operating at 0.161 lbs SO<sub>2</sub>/MMBtu. Again, both units, when operating, cannot exceed 2,152.2 lbs SO<sub>2</sub>/hr. Since that is the case, Unit 1 cannot operate at full capacity when Unit 2 is running at 0.69 lbs SO<sub>2</sub>/MMBtu. Also, when Unit 1 is operating at 0.855 lbs SO<sub>2</sub>/MMBtu, Unit 2 cannot be operating.

**Table 1**

Group ID	Emission Rate	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
		B1_86All	B1_60All	43_All	B2_60All	B2_69All
Boiler1	lb/MMBtu	0.854725973	0.6	0.4275	0.256417792	0.161437649
Boiler2	lb/MMBtu	-	0.253517787	0.4275	0.595470356	0.69
Boiler1	Modeled lb/hr	2152.2	1510.8	1076.445	645.66	406.5
Boiler2	Modeled lb/hr		641.4	1081.575	1506.54	1745.7
<b>Total</b>	<b>lb/hr</b>	<b>2152.2</b>	<b>2152.2</b>	<b>2152.2</b>	<b>2152.2</b>	<b>2152.2</b>
<b>Concentration ug/m3</b>		<b>188.64213</b>	<b>190.57711</b>	<b>193.45872</b>	<b>194.71424</b>	<b>195.51998</b>

<sup>1</sup> <http://www.in.gov/idem/airquality/2432.htm>

All other modeling parameters for A.B. Brown were maintained from the Consent Decree modeling included on Pages 19 – 23 of Enclosure 3 of Indiana's Preliminary Recommendations Concerning Round 2 Air Quality Designations for the 2010 Primary 1-hour SO<sub>2</sub> Standard.

