



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: June 6, 2008

RE: Alcoa / 173-25840-00002

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot12/03/07



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

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

**PHASE II
and OPT-IN
ACID RAIN PERMIT RENEWAL
OFFICE OF AIR QUALITY**

**ALCOA - Warrick Power Plt, AGC Div. of Alcoa Power Generating Inc.
4700 Darlington Road
Newburgh, IN 47629
ORIS: 6705**

This permit is issued under the provisions of 326 Indiana Administrative Code (IAC) 21 with conditions listed on the attached pages.

Operation Permit No.: AR 173-25840-00002	
Issued by: Original Signed By: Alfred C. Dumauval, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: June 6, 2008 Effective Date: January 1, 2010 Expiration Date: December 31, 2014

Title IV Operating Conditions

Title IV Source Description:

- (a) One (1) dry bottom, pulverized coal wall-fired boiler, identified as Boiler No. 1, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 1,357 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 241. Boiler No. 1 has a continuous opacity monitor (COM). Boiler No. 1 has a natural gas burner for start-up and may be fired in conjunction with the coal-fired capability.
- (b) One (1) dry bottom, pulverized coal wall-fired boiler, identified as Boiler No. 2, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 1,357 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 241 and stack 242. Boiler No. 2 has a continuous opacity monitor (COM). Boiler No. 2 has a natural gas burner for start-up and may be fired in conjunction with the coal-fired capability.
- (c) One (1) dry bottom, pulverized coal wall-fired boiler, identified as Boiler No. 3, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 1,357 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 242. Boiler No. 3 has a continuous opacity monitor (COM). Boiler No. 3 has a natural gas burner for start-up and may be fired in conjunction with the coal-fired capability.
- (d) One (1) dry bottom, pulverized coal cell burner boiler, identified as Boiler No. 4, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 2,958 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 243. Boiler No. 4 was configured with a low NO_x burner in 1998. Boiler No. 4 has a continuous opacity monitor (COM). Boiler No. 4 has a natural gas burner for start-up and may be fired in conjunction with the coal-fired capability.

Boilers 1, 2, and 3 are owned and operated by Alcoa Power Generating, Inc. and are Opt-In units.

Boiler 4 is co-owned by Alcoa Power Generating, Inc. and Vectren and operated by Alcoa Power Generating, Inc.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

1. Statutory and Regulatory Authorities

In accordance with IC 13-17-3-4, IC 13-17-3-11, IC 13-17-8-1 and IC 13-17-8-2 as well as Titles IV and V of the Clean Air Act, the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) issues this permit pursuant to 326 IAC 2 and 326 IAC 21 (incorporates by reference 40 Code of Federal Regulations (CFR) 72 through 78).

2. Standard Permit Requirements [326 IAC 21]

- (a) The designated representative has submitted a complete acid rain permit application and opt-in information, in accordance with the deadlines in 40 CFR 72.30 and 40 CFR 74.
- (b) Alcoa Power Generating, Inc., and Vectren, shall operate Boilers 1, 2, 3, and 4 in compliance with this permit.

3. Monitoring Requirements [326 IAC 21]

- (a) Alcoa Power Generating, Inc., Vectren, and the designated representative of Opt-In Boilers 1, 2, and 3 and Boiler 4 shall comply with the monitoring requirements as provided in 40 CFR 74, 75, and 76.

- (b) The emissions measurements recorded and reported in accordance with 40 CFR 74, 75, and 76 shall be used to determine compliance by Boilers 1, 2, 3 and 4, for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (c) The requirements of 40 CFR 74, 75, and 76 shall not affect the responsibility of Alcoa Power Generating, Inc., and Vectren to monitor emissions of other pollutants or other emissions characteristics at Opt-In Boilers 1, 2, and 3 and Boiler 4 under other applicable requirements of the Clean Air Act and other provisions of the operating permit for the source.

4. Sulfur Dioxide Requirements [326 IAC 21]

- (a) Alcoa Power Generating, Inc. and Vectren shall:
 - (1) Hold allowances, as of the allowance transfer deadline (as defined in 40 CFR 72.2), in the compliance sub account for Opt-In Boilers 1, 2, and 3 and Boiler 4 (after deductions under 40 CFR 73.34), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and,
 - (2) Comply with the applicable acid rain emissions limitations for sulfur dioxide.
- (b) Each ton of sulfur dioxide emitted in excess of the acid rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Clean Air Act.
- (c) Opt-In Boilers 1, 2, and 3, shall be subject to the requirements under paragraph 4(a) of the sulfur dioxide requirements upon the effective date of this permit.
- (d) Boiler 4 shall be subject to the requirements under paragraph 4(a) of the sulfur dioxide requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or,
 - (2) Starting on the latter of January 1, 2000, or the deadline for monitor certification under 40 CFR 75, an affected unit under 40 CFR 72.6(a)(3).
- (e) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (f) An allowance shall not be deducted in order to comply with the requirements under paragraph 4(a)(1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (g) An allowance allocated by the U.S. EPA under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the acid rain permit application, the acid rain permit, the acid rain portion of an operating permit, or the written exemption under 40 CFR 72.7 and 72.8 and 326 IAC 21, and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (h) An allowance allocated by U.S. EPA under the Acid Rain Program does not constitute a property right.
- (i) No permit revision may be required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program, provided that the increases do not require a permit revision under any other applicable requirement. [326 IAC 2-7-5(4)(A)]
- (j) No limit shall be placed on the number of allowances held by Alcoa Power Generating, Inc., and Vectren. Alcoa Power Generating, Inc., and Vectren may not, however, use allowances as a defense to noncompliance with any applicable requirement other than the requirements of the Acid Rain Program. [326 IAC 2-7-5(4)(B)]

- (k) Sulfur dioxide allowances shall be allocated as follows:

Opt-in SO ₂ Allowance Allocations under 40 CFR 74.26 for Boiler 1					
year	2010	2011	2012	2013	2014
Tons	30,372 ⁺	30,372 ⁺	30,372 ⁺	30,372 ⁺	30,372 ⁺

Opt-in SO ₂ Allowance Allocations under 40 CFR 74.26 for Boiler 2					
year	2010	2011	2012	2013	2014
Tons	30,372 ⁺	30,372 ⁺	30,372 ⁺	30,372 ⁺	30,372 ⁺

Opt-in SO ₂ Allowance Allocations under 40 CFR 74.26 for Boiler 3					
year	2010	2011	2012	2013	2014
Tons	27,668 ⁺	27,668 ⁺	27,668 ⁺	27,668 ⁺	27,668 ⁺

SO ₂ Allowance Allocations for Boiler 4					
year	2010	2011	2012	2013	2014
Tons	10,506 [*]	10,506 [*]	10,506 [*]	10,506 [*]	10,506 [*]

⁺ Boilers 1, 2, and 3 are Opt-In units pursuant to 326 IAC 21 and 40 CFR 74.

^{*} The number of allowances allocated to Boiler 4 by U.S. EPA may change in a revision to 40 CFR 73 Tables 2, 3 and 4 and 326 IAC 21. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitates a revision to the SO₂ allowance allocations identified in this permit. (See 40 CFR 72.84)

5. Nitrogen Oxides Requirements [326 IAC 21]

- (a) Alcoa Power Generating, Inc., and Vectren, shall comply with the applicable acid rain emissions limitation for nitrogen oxides (NO_x) for Boiler 4.
- (b) Pursuant to 40 CFR 76, the Indiana Department of Environmental Management, Office of Air Quality approves a NO_x standard emission limitation for Boiler 4. The compliance plan is effective for calendar year 2005 through calendar year 2009. Under the compliance plan, Boiler 4's annual average NO_x emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR.76.6(a)(1), of 0.68 lb/mmBtu for cell burner Boiler 4.
- (c) Pursuant to 40 CFR 74.12(c) Opt-in Boilers 1, 2, and 3, are exempt from the Nitrogen Oxides requirements.

6. Excess Emissions Requirements [40 CFR 77] [326 IAC 21]

- (a) The designated representative of Boilers 1, 2, 3, and 4, if any boiler has excess emissions of sulfur dioxide in any calendar year, shall submit a proposed offset plan to U.S. EPA and IDEM, OAQ as required under 40 CFR 77 and 326 IAC 21.
- (b) The designated representative shall submit required information to:

Indiana Department of Environmental Management
 Air Compliance Section I, Office of Air Quality
 100 North Senate Avenue, MC 61-53
 Indianapolis, Indiana 46204-2251

and

Ms. Cecilia Mijares
Air and Radiation Division
U.S. Environmental Protection Agency, Region V
77 West Jackson Boulevard
Chicago, IL 60604-3590

and

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code (6204N)
Washington, DC 20460

- (c) Alcoa Power Generating, Inc., if Opt-In Boilers 1, 2, or 3, has excess emissions, as defined in 40 CFR 72.2, in any calendar year shall:
 - (1) Pay to U.S. EPA without demand the penalty required, and pay to U.S. EPA upon demand the interest on that penalty, as required by 40 CFR 77 and 326 IAC 21; and,
 - (2) Comply with the terms of an approved sulfur dioxide offset plan, as required by 40 CFR 77 and 326 IAC 21.
- (d) Alcoa Power Generating Inc. and Vectren, if Boiler 4 has excess emissions, as defined in 40 CFR 72.2, in any calendar year shall:
 - (1) Pay to U.S. EPA without demand the penalty required, and pay to U.S. EPA upon demand the interest on that penalty, as required by 40 CFR 77 and 326 IAC 21; and,
 - (2) Comply with the terms of an approved sulfur dioxide offset plan, as required by 40 CFR 77 and 326 IAC 21.

7. Record Keeping and Reporting Requirements [326 IAC 21]

- (a) Unless otherwise provided, Alcoa Power Generating, Inc., for Boilers 1, 2, 3, and 4, and Vectren, for Boiler 4, shall keep on site each of the following documents for a period of 5 years, as required by 40 CFR 72.9(f), from the date the document is created. This period may be extended for cause, at any time prior to the end of the 5 years, in writing by U.S. EPA or IDEM, OAQ:
 - (1) The certificate of representation for the designated representative for Boilers 1, 2, 3, and 4 and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (2) All emissions monitoring information collected in accordance with 40 CFR 75 shall be retained on site for 3 years;
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

- (b) The designated representative of Boilers 1, 2, 3, and 4 shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 72.90 subpart I, 40 CFR 75, and 326 IAC 21. Submit required information to the appropriate authority(ies) as specified in 40 CFR 72.90 subpart I and 40 CFR 75.

8. Submissions [326 IAC 21]

- (a) The designated representative shall submit a certificate of representation, and any superseding certificate of representation, to U.S. EPA and IDEM, OAQ in accordance with 40 CFR 72 and 326 IAC 21.
- (b) The designated representative shall submit required information to:
 - Indiana Department of Environmental Management
Permit Administration Section, Office of Air Quality
100 North Senate Avenue, MC 61-53
Indianapolis, Indiana 46204-2251
 - and
 - U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code (6204N)
Washington, DC 20460
- (c) Each such submission under the Acid Rain Program shall be submitted, signed and certified by the designated representative for all sources on behalf of which the submission is made.
- (d) In each submission under the Acid Rain Program, the designated representative shall certify, by his or her signature, the following statements which shall be included verbatim in the submission:
 - (1) "I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made."; and,
 - (2) "I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- (e) The designated representative of Boilers 1, 2, 3 and 4 shall notify Alcoa Power Generating, Inc., for Boilers 1, 2, 3, and 4, and Vectren, for Boiler 4:
 - (1) By the date of submission, of any Acid Rain Program submissions by the designated representative;
 - (2) Within 10 business days of receipt of any written determination by U.S. EPA or IDEM, OAQ; and,
 - (3) Provided that the submission or determination covers Boiler 1, 2, 3, or 4.
- (f) The designated representative of Boiler 1, 2, 3, and 4 shall provide Alcoa Generating Power, Inc., for Boilers 1, 2, 3, and 4, and Vectren, for Boiler 4, a copy of any submission or determination under condition (e) of this section, unless Alcoa Generating Power, Inc., or Vectren expressly waives the right to receive a copy.

9. Severability [326 IAC 21]

Invalidation of the acid rain portion of an operating permit does not affect the continuing validity of the rest of the operating permit, nor shall invalidation of any other portion of the operating permit affect the continuing validity of the acid rain portion of the permit. [40 CFR 72.72(b), 326 IAC 21, and 326 IAC 2-7-5(5)]

10. Liability [326 IAC 21]

- (a) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement by U.S. EPA pursuant to Section 113(c) of the Clean Air Act and shall be subject to enforcement by IDEM pursuant to 326 IAC 21 and IC 13-30-3.
- (b) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to Section 113(c) of the Clean Air Act, 18 U.S.C. 1001 and IDEM pursuant to 326 IAC 21 and IC 13-30-6-2.
- (c) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (d) Boilers 1, 2, 3 and 4 shall meet the requirements of the Acid Rain Program.
- (e) Any provision of the Acid Rain Program that applies to Boilers 1, 2, 3 or 4, including a provision applicable to the designated representative of Boilers 1, 2, 3, or 4, shall also apply to Alcoa Power Generating, Inc. for Boilers 1, 2, 3, or 4 and Vectren for Boiler 4.
- (f) Any provision of the Acid Rain Program that applies to Boilers 1, 2, 3 or 4, including a provision applicable to the designated representative of Boilers 1, 2, 3 or 4, shall also apply to Alcoa Power Generating, Inc. for Boilers 1, 2, 3, or 4 and Vectren for Boiler 4. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NOx averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR 75, including 40 CFR 75.16, 75.17, and 75.18, Alcoa Power Generating, Inc., and Vectren and the designated representative of Boilers 1, 2, 3 or 4 shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (g) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by Boilers 1, 2, 3, or 4, or by Alcoa Power Generating, Inc. for Boilers 1, 2, 3, or 4 and Vectren for Boiler 4 or the designated representative of Boilers 1, 2, 3, or 4, shall be a separate violation of the Clean Air Act.

11. Effect on Other Authorities [326 IAC 21]

No provision of the Acid Rain Program, an acid rain permit application, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (a) Except as expressly provided in Title IV of the Clean Air Act (42 USC 7651 to 7651(o)), exempting or excluding Alcoa Power Generating, Inc., for Boilers 1, 2, 3, and 4 and Vectren for Boiler 4, and to the extent applicable, the designated representative of Boilers 1, 2, 3 or 4, from compliance with any other provision of the Clean Air Act, including the provisions of Title I of the Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (b) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Clean Air Act;

- (c) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
- (d) Modifying the Federal Power Act (16 USC 791(a) et seq.) or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (e) Interfering with or impairing any program for competitive bidding for power supply in a state in which such a program is established.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document
For a Phase II Acid Rain Permit Renewal

Source Background and Description

Source Name:	ALCOA - Warrick Power Plt., AGC Div. of Alcoa Power Generating Inc.
Source Location:	4700 Darlington Road, Newburgh, Indiana, 47629
County:	Warrick
Operated By:	Alcoa Power Generating Inc.
ORIS Code:	6705
Previous Phase II Permit No.:	173-19650-00002
Phase II Permit Renewal No.:	173-25840-00002
Permit Reviewer:	Anne-Marie C. Hart

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) has reviewed a Phase II Acid Rain permit renewal application submitted by ALCOA - Warrick Power Plt., AGC Div. of Alcoa Generating Inc., and Southern Indiana Gas and Electric Company (SIGECO), on January 4, 2008. The application is for the operation of three opt-in units and one Phase II unit at a site located at 4700 Darlington Road, Newburgh, Indiana.

- (a) One (1) dry bottom, pulverized coal wall-fired boiler, identified as Boiler No. 1, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 1,357 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 241. Boiler No. 1 has a continuous opacity monitor (COM). Boiler No. 1 has a natural gas burner for start-up and may be fired in conjunction with the coal-fired capability.
- (b) One (1) dry bottom, pulverized coal wall-fired boiler, identified as Boiler No. 2, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 1,357 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 241 and stack 242. Boiler No. 2 has a continuous opacity monitor (COM). Boiler No. 2 has a natural gas burner for start-up and may be fired in conjunction with the coal-fired capability.
- (c) One (1) dry bottom, pulverized coal wall-fired boiler, identified as Boiler No. 3, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 1,357 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 242. Boiler No. 3 has a continuous opacity monitor (COM). Boiler No. 3 has a natural gas burner for start-up and may be fired in conjunction with the coal-fired capability.
- (d) One (1) dry bottom, pulverized coal cell burner boiler, identified as Boiler No. 4, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 2,958 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 243. Boiler No. 4 was configured with a low NO_x burner in 1998. Boiler No. 4 has a continuous opacity monitor (COM). Boiler No. 4 has a natural gas burner for start-up and may be fired in conjunction with the coal-fired capability.

Boilers 1, 2, and 3 are owned and operated by Alcoa Power Generating, Inc. and are Opt-In units.

Boiler 4 is co-owned by Alcoa Power Generating, Inc. and Vectren and operated by Alcoa Power Generating, Inc.

This permit renewal, 173-25840-00002 covers calendar years 2010 to 2014 involving the same affected units as indicated in the initial Phase II permit, 173-5155-00002.

Existing Approvals

The source has been operating under the following previous Phase II approvals:

- (a) AR 173-5155-00002, issued on December 31, 1997, effective on January 1, 1999;
- (b) AAR 173-11457-00002, issued on December 29, 1999;
- (c) AR 173-19650-00002, issued on December 28, 2004, effective on January 1, 2005; and
- (d) AAR 173-20771-00002, issued on September 30, 2005.

Program Description

The following information is provided to explain the Acid Rain Program.

(a) Goal of the Program

The goal of the 1990 Clean Air Act (CAA) Amendments, Acid Rain Program is to reduce the impact of man-made emissions of sulfur dioxide (SO₂) and nitrogen oxide (NO_x) on lakes, streams, forests, crops and, most important, the health of the public, by a nationwide SO₂ allocation of emissions from power plants. While it may not seem to be a local problem, the information collected shows a need for this reduction. This is because these emissions can be transported great distances. Results of the SO₂ and NO_x program, along with past, present and future plans, can be found on the Internet at <http://www.epa.gov/airmarkets/arp/>. Additional information in the form of maps showing the results of the SO₂ and NO_x limitations can be found on the Internet at <http://nadp.sws.uiuc.edu/>.

The U.S. EPA has set a limit on the amount of sulfur dioxide emissions and the emission rate of nitrogen oxides for all regulated power plants, for each year from 2000 through 2009. The total sulfur dioxide emissions for all affected power plants in the nation have been limited to 9.4 million tons every year. That amount is 10 million tons less than the total emissions of sulfur dioxide in 1980. In 1993, U.S. EPA allocated a certain amount of sulfur dioxide emissions allowances to each power plant regulated by Phase II of the Acid Rain Program. Emissions of nitrogen oxides are being reduced by at least 2 million tons per year, by setting limits on the emission rate of nitrogen oxides from coal-fired power plant boilers.

(b) Federal Rules

The emission allowances and conditions in this draft Phase II permit were taken from the limits developed by the U.S. EPA for the Acid Rain Program pursuant to Title IV of the Clean Air Act, 42 United States Code 7401, as amended by Public Law 101-5049 (November 15, 1990). Parts 72 through 78 of Title 40 of the Code of Federal Regulations (CFR), 61 Federal Register (FR) 59142, 61 FR 67111, 61 FR 68821, and 62 FR 3463, apply to regulated power plants. The Opt-In Program is to allow units not subject to Acid Rain Program requirements under 40 CFR 72.6 to voluntarily elect to become subject to the Acid Rain program. The Opt-in Permit sets forth the requirements that an opt-in source must comply with, including the requirement to apply for and receive an Opt-in permit, to record and report emissions according to 40 CFR part 74 and 75, and to hold SO₂ allowances to account for all SO₂ emitted at the opt-in source units.

(c) Indiana's Rules

Title 326 of the Indiana Administrative Code (IAC) Article 21, Acid Deposition Control, has adopted the federal rule by referencing 40 CFR 72 through 78, 61 FR 59142, 61 FR 67111, 61 FR 68821, and 62 FR 3463. The rule incorporates the requirements of Title IV, Clean Air Act Acid Rain Program, of the 1990 Clean Air Act (CAA).

(d) Sulfur Dioxide (SO₂) Emission Allocations

The sulfur dioxide allowance allocation rule (40 CFR Part 73) was revised in August 1998. The nation wide allocated sulfur dioxide emissions are 9,480,000 tons per year for 2000

through 2009. The 2010 cap is projected to reduce sulfur dioxide emissions to 8,900,000 tons per year. No allocations were made for new sources. New regulated power plants have to obtain sulfur dioxide emission allocations by purchasing them from pre-existing power plants that have received U.S. EPA allocations. A regulated power plant may have emission allocations to sell because the plant purchased newer, less polluting, equipment. The U.S. EPA keeps track of the transfer of all sulfur dioxide emission allocations in an official accounting system.

- (e) Nitrogen Oxide Emission (NO_x) Limitations
 Pursuant to 40 CFR 76, nitrogen oxide (NO_x) emission limitations are applicable only to coal-fired utility and coal-fired substitution units that are subject to Phase I and Phase II sulfur dioxide (SO₂) reduction requirements.

Specific Sulfur Dioxide (SO₂) Emission Allocations

There are four (4) affected units, identified as Units 1, 2, 3 and 4, in this generating station. Table 1 below summarizes the SO₂ Opt-In or Allowance Allocations for these units.

Table 1					
SO ₂ Allowance Allocations (tons/year)					
	2010	2011	2012	2013	2014
Unit 1	30,372	30,372	30,372	30,372	30,372
Unit 2	30,372	30,372	30,372	30,372	30,372
Unit 3	27,668	27,668	27,668	27,668	27,668
Unit 4	10,506	10,506	10,506	10,506	10,506

Specific NO_x Compliance Plan

There is one (1) affected unit, identified as Unit 4, in this generating station.

Calendar Years 2005 to 2009	Emission Limitation per 40 CFR 76.5, 76.6 or 76.7 (lb/MMBTU)
Unit 4	0.68

Units 1, 2, and 3 are Opt-In units and are exempt from the Nitrogen Oxides requirements.

Emissions Monitoring Requirements

The owners and operators and, to the extent applicable, the designated representative for the source must comply with the monitoring requirements set out in 40 CFR 75 and 72.9(b)(1) and (2). The source must measure and record its emissions of sulfur dioxide. The source must report these measurements to IDEM and U.S. EPA. These records and reports are used to determine if the source is in compliance with the sulfur dioxide allocation program. The requirements of the Phase II permit do not affect the source's responsibility to monitor emissions of other pollutants or other emissions characteristics required by the Clean Air Act and other operating permit provisions. Monitoring requirements outlined in the source's Phase II permit renewal application are considered as part of the Phase II renewal permit.

Other Record Keeping and Reporting Requirements

The source must keep copies of all reports and compliance certifications that it submits to demonstrate compliance with the requirements of the Phase II permit for five years. The source must submit the reports and compliance certifications required by the Phase II permit to the U.S.

EPA and IDEM, OAQ. Record keeping and reporting requirements outlined in the Phase II renewal application are considered part of the Phase II renewal permit.

Submissions

The designated representative for each emissions unit must sign and certify every report or other submission required by the Phase II renewal permit. The designated representative must include the following certification statement in every submission:

"I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

The designated representative must send each owner and operator of the source a notification regarding every submission. The designated representative must also notify each owner and operator of the source within ten (10) business days of the receipt of any written determination made by U.S. EPA or IDEM.

Draft Phase II Permit Renewal

Based on the information IDEM received from the proposed operator, IDEM has preliminarily determined that the source meets the requirement of Indiana Code (IC) 13-17-3-4, IC 13-17-3-11, IC 13-17-8-1, and IC 13-17-8-2, as well as Title IV of the Clean Air Act. IDEM proposes this draft Phase II permit renewal pursuant to 326 IAC 21.

Recommendation

The staff recommends to the IDEM's Commissioner that the Title IV Acid Rain permit renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A Phase II Acid Rain permit renewal application for the purposes of this review was received on January 4, 2008.

IDEM Contact

- (a) **Permit**
Questions regarding the proposed Phase II renewal permit can be directed to Anne-Marie C. Hart at the Indiana Department Environmental Management (IDEM), Office of Air Quality (OAQ), 100 North Senate Avenue, MC 61-53, Indianapolis, Indiana 46206-6015 or by telephone at (317) 234-5401 or toll free at 1-800-451-6027 extension 4-5401.
- (b) **Compliance Inspection**
The source will be inspected by IDEM's compliance inspection staff. Persons seeking to obtain information regarding the source's compliance status or to report any potential violation of any permit condition should contact Dan Hancock at the Office of Air Quality (OAQ) address or by telephone at (317) 232-8429 or toll free at 1-800-451-6027 extension 232-8429.
- (c) **Copies**
Copies of the Code of Federal Regulations (CFR) referenced in the permit may be obtained from:

Indiana Department of Environmental Management
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

or

The Government Printing Office
Washington, D.C. 20402

or

on the Government Printing Office website at
<http://www.access.gpo.gov/nara/cfr/index.html>