



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

To: Interested Parties

Date: October 16, 2014

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

Source Name: Alcoa Power Generating, Inc. – Warrick Power Plant

Permit Level: Title IV (Acid Rain) Permit Renewal

Permit Number: 173-34682-00002

Source Location: 4700 Darlington Road, Newburgh, Indiana

Type of Action Taken: Permit Renewal

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 matter referenced above.

The final decision is available on the IDEM website at: <http://www.in.gov/apps/idem/caats/>
To view the document, select Search option 3, then enter permit 34682.

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

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.

(continues on next page)

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.



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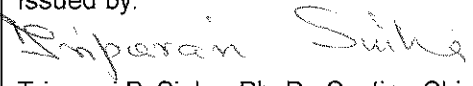
100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

PHASE II and OPT-IN TITLE IV (ACID RAIN) PERMIT RENEWAL OFFICE OF AIR QUALITY

Alcoa Power Generating, Inc. - Warrick Power Plant
4700 Darlington Road, IN
Newburgh, Indiana, 47630

ORIS: 6705

The owners and operators (hereinafter collectively known as the Permittee) of the above source are issued this permit under the provisions of 326 Indiana Administrative Code (IAC) 21 [326 IAC 21] with conditions listed on the attached pages.

Operation Permit No.: AR 173-34682-00002	
Issued by:  Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: October 16, 2014 Expiration Date: October 16, 2019

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.

(The information contained in this box is descriptive information and does not constitute enforceable conditions.)

1. Statutory and Regulatory Authorities

In accordance with IC 13-17-3-4 and IC 13-17-3-11, 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 in accordance with 40 CFR 72.30.
- (b) The Permittee shall operate Boiler No. 1, 2, 3, and 4 in compliance with this permit.

3. Monitoring Requirements [326 IAC 21]

- (a) The Permittee and, to the extent applicable, the designated representative of Boiler No. 1, 2, 3, and 4 shall comply with the monitoring requirements as provided in 40 CFR 75 and 76.

- (b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 76 shall be used to determine compliance by Boiler No. 1, 2, 3, and 4 with the acid rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (c) The requirements of 40 CFR 75 and 76 shall not affect the responsibility of the Permittee to monitor emissions of other pollutants or other emissions characteristics at Boiler No. 1, 2, 3, and 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) The Permittee shall:
 - (1) Hold allowances, as of the allowance transfer deadline (as defined in 40 CFR 72.2), in the compliance subaccount of Boiler No. 1, 2, 3, and 4, after deductions under 40 CFR 73.34(c), not less than the total annual emissions of sulfur dioxide for the previous calendar year from Boiler No. 1, 2, 3, and 4; 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 Boiler No. 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 No. 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) 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 the Permittee. The Permittee 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	2014	2015	2016	2017	2018	2019
Tons	30,372 ⁺	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	2014	2015	2016	2017	2018	2019
Tons	30,732 ⁺	30,732 ⁺	30,732 ⁺	30,732 ⁺	30,732 ⁺	30,732 ⁺

Opt-in SO ₂ Allowance Allocations under 40 CFR 74.26 for Boiler 3						
year	2014	2015	2016	2017	2018	2019
Tons	27,668 ⁺	27,668 ⁺	27,668 ⁺	27,668 ⁺	27,668 ⁺	27,668 ⁺

SO ₂ Allowance Allocations for Boiler 4						
year	2014	2015	2016	2017	2018	2019
Tons	10,527 [*]	10,527 [*]	10,527 [*]	10,527 [*]	10,527 [*]	10,527 [*]

⁺ 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) The Permittee shall comply with the applicable acid rain emissions limitation of nitrogen oxides (NO_x) for Boiler No. 4.
- (b) In addition to the described NO_x compliance plan, Boiler No. 4 shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.
- (c) Pursuant to 40 CFR 74.12(c)(3), Opt-In Boiler No. 1, 2, and 3 are exempt from the Nitrogen Oxides requirements.

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

- (a) If Boiler No. 1, 2, 3, or 4 has excess emissions of sulfur dioxide in any calendar year, the designated representative 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
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53, IGCN 1003
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) If Opt-In Boiler No. 1, 2, or 3 has excess emissions, as defined in 40 CFR 72.2, in any calendar year, the Permittee 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) If Boiler No. 4 has excess emissions, as defined in 40 CFR 72.2, in any calendar year, the Permittee 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, the Permittee 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 of Boiler No. 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 Boiler No. 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. The required information is to be submitted 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 of Boiler No. 1, 2, 3, and 4 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 and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53, IGCN 1003
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 Boiler No. 1, 2, 3, and 4 shall notify the Permittee:
 - (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 No. 1, 2, 3, or 4.
- (f) The designated representative of Boiler No. 1, 2, 3, and 4 shall provide the Permittee a copy of any submission or determination under paragraph (e) of this section, unless the Permittee 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) Boiler No. 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 Boiler No. 1, 2, 3, or 4, including a provision applicable to the designated representative of Boiler No. 1, 2, 3, or 4 shall also apply to the Permittee.
- (f) Any provision of the Acid Rain Program that applies to Boiler No. 1, 2, 3, or 4, including a provision applicable to the designated representative, shall also apply to the Permittee. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x 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, the Permittee and the designated representative of one affected unit 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, 75, 76, 77, and 78 by Boiler No. 1, 2, 3, or 4, or by the Permittee or designated representative, 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 the Permittee and, to the extent applicable, the designated representative of Boiler No. 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**

Addendum to the Technical Support Document (ATSD) for a
Title IV (Acid Rain) Permit

Source Background and Description
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Source Name:	Alcoa Power Generating, Inc - Warrick Power Plant
Source Location:	4700 Darlington Road, Newburgh, Indiana 47630
County:	Warrick
SIC Code:	3334, 4931
Operation Permit No.:	AR 173-34682-00002
Permit Reviewer:	Julie Mendez

On August 18, 2014, the Office of Air Quality (OAQ) had a notice published in Boonville Standard, Boonville, Indiana, stating that Alcoa Power Generating, Inc - Warrick Power Plant had applied for a Title IV (Acid Rain) operating permit. Alcoa Power Generating, Inc was issued a Part 70 Operating Permit on August 31, 2011 for an electric power station source. The notice also stated that the OAQ proposed to issue this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

Upon further review, the OAQ has decided to make the following revisions to the permit

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Change 1: The allowances for the year 2014 have been included.

...

4. Sulfur Dioxide Requirements [326 IAC 21]

(a) - ((j)) ...

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

	Opt-in SO ₂ Allowance Allocations under 40 CFR 74.26 for Boiler 1					
year	2014	2015	2016	2017	2018	2019
Tons	30,372+	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	2014	2015	2016	2017	2018	2019
Tons	30,732+	30,732+	30,732+	30,732+	30,732+	30,732+

	Opt-in SO ₂ Allowance Allocations under 40 CFR 74.26 for Boiler 3					
year	2014	2015	2016	2017	2018	2019
Tons	27,668+	27,668+	27,668+	27,668+	27,668+	27,668+

	SO ₂ Allowance Allocations for Boiler 4					
year	2014	2015	2016	2017	2018	2019
Tons	10,527*	10,527*	10,527*	10,527*	10,527*	10,527*

+ 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)

IDEM Contact

- (a) Questions regarding this proposed Title IV (Acid Rain) Permit can be directed to Julie Mendez at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) (234-1243) or toll free at 1-800-451-6027 extension (4-1243).
- (b) A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

Indiana Department of Environmental Management

Office of Air Quality

Technical Support Document For a Title IV (Acid Rain) Permit Renewal

Source Background and Description	
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Source Name:	Alcoa Power Generating, Inc. - Warrick Power Plant
Source Location:	4700 Darlington Road, Newburgh, IN 47630
County:	Warrick
Operated By:	Alcoa Power Generating Inc.
Designated Representative:	Mike Lynn
ORIS Code:	6705
Previous Title IV (Acid Rain) Permit No.:	AR 173-25840-00002
Title IV (Acid Rain) Renewal Permit No.:	AR 173-34682-00002
Permit Reviewer:	Julie Mendez

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) has reviewed a Title IV (Acid Rain) permit renewal application submitted by Alcoa Power Generating, Inc. - Warrick Power Plant on June 30, 2014. The application is for the operation of the following affected units at a station 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 No. 1, 2, and 3 are owned and operated by Alcoa Power Generating, Inc. and are Opt-In units.

Boiler No. 4 is co-owned by Alcoa Power Generating, Inc. and Vectren and operated by Alcoa Power Generating, Inc.

This Title IV (Acid Rain) permit renewal AR 173-34682-00002, when issued, will have a term of five years and will involve the same affected units as indicated in the initial Title IV (Acid Rain)

permit AR 173-5155-00002.

Existing Title IV (Acid Rain) Approvals

The source has been operating under the following previous Title IV (Acid Rain) 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;
- (d) AAR 173-20771-00002, issued on September 30, 2005; and
- (e) AR 173-25840-00002, issued on June 6, 2008, effective on January 1, 2010.

Alcoa Power Generating, Inc. was issued a Title IV permit for the Warrick Power Plant, effective from January 1, 2010 to December 31, 2014.

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/>. 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/>.
- (b) **Federal Rules**
The emission allowances and conditions in this draft Title IV (Acid Rain) 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.
- (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**
Beginning in 2010, the Clean Air Act has placed a cap at 8.95 million on the number of allowances issued to units each 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**
The emission limitations for NO_x under this part apply to each affected coal-fired utility unit subject to section 404(d) or 409(b) of the Act on the date the unit is required to meet the Acid Rain emissions reduction requirements.

Specific Sulfur Dioxide (SO₂) Emission Allocations

There are four (4) affected units, identified as Boilers No. 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)					
	2015	2016	2017	2018	2019
Boiler No. 1	30,372	30,372	30,372	30,372	30,372
Boiler No. 2	30,732	30,732	30,732	30,732	30,732
Boiler No. 3	27,668	27,668	27,668	27,668	27,668
Boiler No. 4	10,527	10,527	10,527	10,527	10,527

Specific NO_x Compliance Plan

There is one (1) affected unit, identified as Boiler No. 4, in this generating station. Table 2 below summarizes the NO_x compliance plan for this unit.

Table 2	
Calendar Years 2015 to 2019	Emission Limitation per 40 CFR 76.5, 76.6 or 76.7 (lb/MMBTU)
Boiler No. 4	0.68

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

Emissions Monitoring Requirements

The Permittee and, to the extent applicable, the designated representative of Boilers No. 1, 2, 3, and 4 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 Title IV (Acid Rain) 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 Title IV (Acid Rain) permit renewal application are considered as part of the Title IV (Acid Rain) 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 Title IV (Acid Rain) permit for five years. The source must submit the reports and compliance certifications required by the Title IV (Acid Rain) permit to the U.S. EPA and IDEM, OAQ. Record keeping and reporting requirements outlined in the Title IV (Acid Rain) renewal application are considered part of the Title IV (Acid Rain) renewal permit.

Submissions

The designated representative for each emissions unit must sign and certify every report or other submission required by the Title IV (Acid Rain) 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 the Permittee a notification regarding every submission. The designated representative must also notify the Permittee within ten (10) business days of the receipt of any written determination made by U.S. EPA or IDEM.

Draft Title IV (Acid Rain) Permit Renewal

IDEM has preliminarily determined that the source meets the requirements of Indiana Code (IC) 13-17-3-4 and IC 13-17-3-11, as well as Title IV of the Clean Air Act. IDEM proposes this draft Title IV (Acid Rain) permit renewal pursuant to 326 IAC 21.

Recommendation

The staff recommends 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.

IDEM Contacts

- (a) Permit
Questions regarding the proposed Title IV (Acid Rain) renewal permit can be directed to Julie Mendez at the Indiana Department Environmental Management (IDEM), Office of Air Quality (OAQ), 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-1243 or toll free at 1-800-451-6027 extension 4-1243.
- (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 2-8429.
- (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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

or

The Government Printing Office
Washington, D.C. 20402

or

on the Government Printing Office website at
http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl



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

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Sam Bruntz
ALCOA – Warrick Power Plt, AGC Div of Alcoa Generating, Inc.
PO Box 10, Bldg 860E
Newburgh, IN 46729-0010

DATE: October 16, 2014

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

SUBJECT: Final Decision
Title IV (Acid Rain) Permit Renewal
173-34682-00002

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Robert Marrs, Plant Manager
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 6/13/2013



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

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

October 16, 2014

TO: Newburgh Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**


Applicant Name: Alcoa Power Generating, Inc. –
Warrick Power Plant
Permit Number: 173-34682-00002

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 6/13/2013

Mail Code 61-53

IDEM Staff	VHAUN 10/16/2014 173-34682-00002 FINAL		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	 ALCOA - Warrick Power Plt, AGC Div of Alcoa Generating, Inc. Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Sam Bruntz ALCOA - Warrick Power Plt, AGC Div of Alcoa Genera PO Box 10, Bldg 860E Newburgh IN 46729-0010 (Source CAATS)					CONFIRMED DELIVERY				
2		Robert BF Marrs Plant Mgr ALCOA - Warrick Power Plt, AGC Div of Alcoa Genera 4700 Darlington Rd Newburgh IN 47630 (RO CAATS)									
3		Warrick County Board of Commissioners 107 W. Locust Street Suite # 301 Boonville IN 47601-0585 (Local Official)									
4		Warrick County Health Department 107 W Locust, Suite 204 Boonville IN 47601-1701 (Health Department)									
5		Mr. Don Mottley Save Our Rivers 6222 Yankeetown Hwy Boonville IN 47601 (Affected Party)									
6		Newburgh Town Council and Town Manager P.O Box 6 Newburgh IN 47630 (Local Official)									
7		Kim Sherman 3355 Woodview Drive Newburgh IN 47630 (Affected Party)									
8		Mr. Mark Wilson Evansville Courier & Press P.O. Box 268 Evansville IN 47702-0268 (Affected Party)									
9		Joanne Alexandrovich Vanderburgh County Health Dept. 420 Mulberry ST. Evansville IN 47713 (Affected Party)									
10		Mr. Bil Musgrove PO Box 520 Chandler IN 47610 (Affected Party)									
11		Jeff Siddons 22321 Piazza Doria LN., Unit 101 Estero FL 33928 (Affected Party)									
12		Ohio Township Public Library System IN Hwy. 66 & Bell Oaks Rd Newburgh IN 46730 (Library)									
13		David Boggs 216 Western Hills Dr Mt Vernon IN 47620 (Affected Party)									
14		John Blair 800 Adams Ave Evansville IN 47713 (Affected Party)									
15											

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