



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

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**Commissioner**

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

## TITLE IV (ACID RAIN) PERMIT RENEWAL OFFICE OF AIR QUALITY

**Richmond Power & Light  
Whitewater Valley Generating Station  
2000 US 27 South,  
Richmond, Indiana, 47374**

**ORIS: 1040**

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 177-30093-00009	
Issued by:  Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date:  Expiration Date:

### Title IV Operating Conditions

#### Title IV Source Description:

- (a) One (1) dry bottom, pulverized bituminous coal front-fired boiler, identified as Coal Boiler No. 1, constructed in 1954, rated at 385 million BTU per hour (MMBTU/hour) heat input, used to generate electricity. Coal Boiler No. 1 uses No. 2 fuel oil for start up.

Coal Boiler No. 1 has the following control equipment:

- an electrostatic precipitator, identified as ESP1, for enhanced control of particulate matter emissions with flue gas conditioning used intermittently at the sole discretion of the Source,
- a low NO<sub>x</sub> burner, (Radially Stratified Flame Core (RSFC) burners) identified as LNB001, and MOBOTECH ROFA/Rotamix, for NO<sub>x</sub> control, and
- Pulse air fabric filter (PAFF) Baghouse, for control of particulate matter emissions.

- (b) One (1) dry bottom, pulverized bituminous coal tangentially-fired boiler, identified as Coal Boiler No. 2, constructed before August 17, 1971, rated at 730 million BTU per hour (MMBTU/hour) heat input, used to generate electricity. Coal Boiler No. 2 uses No. 2 fuel oil for start up.

Coal Boiler No. 2 has the following control equipment:

- an electrostatic precipitator, identified as ESP2, for enhanced control of particulate matter emissions with flue gas conditioning used intermittently at the sole discretion of the Source,
- a low NO<sub>x</sub> burner, (Low NO<sub>x</sub> Concentric Firing System (LNCFS)), identified as LNB002, and MOBOTECH ROFA/Rotamix, for NO<sub>x</sub> control,
- Mobotec FSI system for the control of SO<sub>2</sub> emissions, and
- Pulse air fabric filter (PAFF) Baghouse, for control of particulate matter emissions.

Coal Boiler No. 1 and Coal Boiler No. 2 exhaust to a common stack identified as CS001, that has a height of 325 feet and 141-inch exit diameter. Opacity is measured with a continuous opacity monitor (COM). Sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) emissions are measured with a SO<sub>2</sub> continuous emission monitor system (CEMS) and a NO<sub>x</sub> CEMS, respectively.

(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 Coal Boiler No. 1 and Coal Boiler No. 2 in compliance with this permit.

3. Monitoring Requirements [326 IAC 21]

- (a) The Permittee and, to the extent applicable, the designated representative of Coal Boiler No. 1 and Coal Boiler No. 2 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 Coal Boiler No. 1 and Coal Boiler No. 2 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 Coal Boiler No. 1 and Coal Boiler No. 2 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 Coal Boiler No. 1 and Coal Boiler No. 2, after deductions under 40 CFR 73.34(c), not less than the total annual emissions of sulfur dioxide for the previous calendar year from Coal Boiler No. 1 and Coal Boiler No. 2; 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) Coal Boiler No. 1 and Coal Boiler No. 2 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).
- (d) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (e) 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.
- (f) 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.
- (g) An allowance allocated by U.S. EPA under the Acid Rain Program does not constitute a property right.

- (h) 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)]
- (i) 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)]

5. Nitrogen Oxides Requirements [326 IAC 21]

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- (a) The Permittee shall comply with the applicable acid rain emissions limitation of nitrogen oxides (NO<sub>x</sub>) for Coal Boiler No. 1 and Coal Boiler No. 2.

- (b) NO<sub>x</sub> Emission Averaging Plan for Coal Boiler No. 1:

Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a standard NO<sub>x</sub> emission averaging plan for Coal Boiler No. 1, effective from calendar year 2011 through November 30, 2012. Under the plan, the NO<sub>x</sub> emissions from Coal Boiler No. 1 shall not exceed the annual average emission limitation of 0.46 lb/MMBtu lb/MMBtu.

Beginning December 1, 2012, Coal Boiler No. 1 shall not exceed the standard annual average NO<sub>x</sub> emission limitation under 40 CFR 76.7(a)(2), of 0.46 lb/MMBtu for dry bottom wall-fired boilers, unless the designated representative timely submits a different NO<sub>x</sub> compliance plan in the Acid Rain permit renewal application required by 40 CFR 76.9(d) and 72.30(c). As provided by 40 CFR 72.32(c), a complete Acid Rain permit application (including a new or revised NO<sub>x</sub> compliance plan) is binding and shall be enforceable as an Acid Rain permit from the date of submission of the permit application until the issuance or denial of an Acid Rain permit covering the units.

- (c) NO<sub>x</sub> Emission Averaging Plan for Coal Boiler No. 2:

Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a standard NO<sub>x</sub> emission averaging plan for Coal Boiler No. 2, effective from calendar year 2011 through November 30, 2012. Under the plan, the NO<sub>x</sub> emissions from Coal Boiler No. 2 shall not exceed the annual average emission limitation of 0.40 lb/MMBtu.

Beginning December 1, 2012, Coal Boiler No. 2 shall not exceed the standard annual average NO<sub>x</sub> emission limitation under 40 CFR 76.7(a)(1), of 0.40 lb/MMBtu for tangentially fired boilers, unless the designated representative timely submits a different NO<sub>x</sub> compliance plan in the Acid Rain permit renewal application required by 40 CFR 76.9(d) and 72.30(c). As provided by 40 CFR 72.32(c), a complete Acid Rain permit application (including a new or revised NO<sub>x</sub> compliance plan) is binding and shall be enforceable as an Acid Rain permit from the date of submission of the permit application until the issuance or denial of an Acid Rain permit covering the units.

- (d) Permittee must annually demonstrate that Coal Boiler No. 1 and Coal Boiler No. 2 meets the lowest NO<sub>x</sub> emission limit of all the units exhausting their emissions through the common stack, based upon the data from certified continuous emission monitoring systems (CEMS) at the common stack. CEMS certification must be performed in accordance with the requirements and specifications delineated at 40 CFR 75.17.

- (e) In addition to the described NO<sub>x</sub> compliance plan, Coal Boiler No. 1 and Coal Boiler No. 2 shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and requirements covering excess emissions.
- (f) Under either an approved averaging plan or common stack plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for Coal Boiler No. 1 and Coal Boiler No. 2 shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11) is met for a year under the plan, then Coal Boiler No. 1 and Coal Boiler No. 2 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.

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

- (a) If Coal Boiler No. 1 and Coal Boiler No. 2 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 Coal Boiler No. 1 and Coal Boiler No. 2 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 Coal Boiler No. 1 and Coal Boiler No. 2 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 Coal Boiler No. 1 and Coal Boiler No. 2 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 Coal Boiler No. 1 and Coal Boiler No. 2 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, 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 Coal Boiler No. 1 and Coal Boiler No. 2 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 Coal Boiler No. 1 and Coal Boiler No. 2.
- (f) The designated representative of Coal Boiler No. 1 and Coal Boiler No. 2 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]

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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]

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- (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) Coal Boiler No. 1 and Coal Boiler No. 2 shall meet the requirements of the Acid Rain Program.
- (e) Any provision of the Acid Rain Program that applies to Coal Boiler No. 1 and Coal Boiler No. 2, including a provision applicable to the designated representative of Coal Boiler No. 1 and Coal Boiler No. 2 shall also apply to the Permittee.

- (f) Any provision of the Acid Rain Program that applies to Coal Boiler No. 1 and Coal Boiler No. 2, 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<sub>x</sub> 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 Coal Boiler No. 1 and Coal Boiler No. 2, 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 Coal Boiler No. 1 and Coal Boiler No. 2 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.



Facility (Source) Name (from STEP 1) **WHITEWATER VALLEY**

### Permit Requirements

#### STEP 3

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
  - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - (ii) Have an Acid Rain Permit.

### Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

### Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Facility (Source) Name (from STEP 1) WHITEWATER VALLEY

### Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator 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, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

### Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

### Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
- (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

### Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:

- (i) The certificate of representation for the designated representative for the source and each affected unit at the source 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

Facility (Source) Name (from STEP 1) **WHITEWATER VALLEY**

submission of a new certificate of representation changing the designated representative;

STEP 3, Cont'd.

**Recordkeeping and Reporting Requirements, Cont'd.**

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (iv) 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.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

**Liability**

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an 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 pursuant to section 113(c) of the Act.
- (2) 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 Act and 18 U.S.C. 1001.
- (3) 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.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

**Effect on Other Authorities**

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

Facility (Source) Name (from STEP 1) **WHITEWATER VALLEY**

STEP 3, Cont'd.

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

**Effect on Other Authorities, Cont'd.**

- to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) 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;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4  
Read the certification statement, sign, and date.

**Certification**

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. 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.

Name <b>Steve Saum</b>	
Signature 	Date <b>1-3-11</b>



Plant Name (from Step 1) **WHITEWATER VALLEY STATION**

TEP 2, cont'd.

ID#	ID#	ID#	ID#	ID#	ID#
Type	Type	Type	Type	Type	Type
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
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1) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(iii)(B), or (a)(2)(ii)(A)

2) AEL (include Phase II AEL demonstration period, Final AEL certification, or AEL Renewal form as appropriate)

3) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing

4) Repowering extension plan approved or under review

TEP 3

Lead the standard requirements and certification, enter the name of the designated representative, sign &

Standard Requirements

**General.** This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

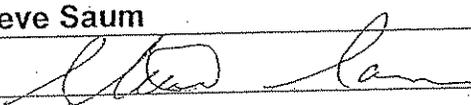
**Nitrogen Oxides.** A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).

**Liability.** The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

**Termination.** An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

Certification

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. 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.

Name <b>Steve Saum</b>	
Signature 	Date <b>1-3-11</b>

## Indiana Department of Environmental Management Office of Air Quality

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

<b>Source Background and Description</b>
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Source Name:	Richmond Power & Light Whitewater Valley Generating Station
Source Location:	2000 US 27 South, Richmond, IN 47374
County:	Wayne
ORIS Code:	1040
Title IV (Acid Rain) Permit No.:	AR177-30093-00009
Permit Reviewer:	Kimberley Malley

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) has reviewed a Title IV (Acid Rain) permit renewal application submitted by Richmond Power & Light - Whitewater Valley Generating Station on January 6, 2011. The application is for the operation of the following affected units at a station located at 2000 US 27 South, Richmond, Indiana.

- (a) One (1) dry bottom, pulverized bituminous coal front-fired boiler, identified as Coal Boiler No. 1, constructed in 1954, rated at 385 million BTU per hour (MMBTU/hour) heat input, used to generate electricity. Coal Boiler No. 1 uses No. 2 fuel oil for start up.

Coal Boiler No. 1 has the following control equipment:

- an electrostatic precipitator, identified as ESP1, for enhanced control of particulate matter emissions with flue gas conditioning used intermittently at the sole discretion of the Source,
- a low NO<sub>x</sub> burner, (Radially Stratified Flame Core (RSFC) burners) identified as LNB001, and MOBOTEC ROFA/Rotamix, for NO<sub>x</sub> control, and
- Pulse air fabric filter (PAFF) Baghouse, for control of particulate matter emissions.

- (b) One (1) dry bottom, pulverized bituminous coal tangentially-fired boiler, identified as Coal Boiler No. 2, constructed before August 17, 1971, rated at 730 million BTU per hour (MMBTU/hour) heat input, used to generate electricity. Coal Boiler No. 2 uses No. 2 fuel oil for start up.

Coal Boiler No. 2 has the following control equipment:

- an electrostatic precipitator, identified as ESP2, for enhanced control of particulate matter emissions with flue gas conditioning used intermittently at the sole discretion of the Source,
- a low NO<sub>x</sub> burner, (Low NO<sub>x</sub> Concentric Firing System (LNCFS)), identified as LNB002, and MOBOTEC ROFA/Rotamix, for NO<sub>x</sub> control,
- Mobotec FSI system for the control of SO<sub>2</sub> emissions, and
- Pulse air fabric filter (PAFF) Baghouse, for control of particulate matter emissions.

Coal Boiler No. 1 and Coal Boiler No. 2 exhaust to a common stack identified as CS001, that has a height of 325 feet and 141-inch exit diameter. Opacity is measured with a continuous opacity monitor (COM). Sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) emissions are measured with a SO<sub>2</sub> continuous emission monitor system (CEMS) and a NO<sub>x</sub> CEMS, respectively.

This Title IV (Acid Rain) permit renewal AR177-30093-00009, 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

AR177-19596-00009.

### Existing Title IV (Acid Rain) Approvals

The source has been operating under the following previous Title IV (Acid Rain) approvals:

AAR 177-19596-00009, issued on July 21, 2006.

Richmond Power & Light was issued a Title IV permit for the Whitewater Valley Generating Station, effective from July 21, 2006 to July 21, 2011.

### 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 (SO<sub>2</sub>) and nitrogen oxide (NO<sub>x</sub>) on lakes, streams, forests, crops and, most important, the health of the public, by a nationwide SO<sub>2</sub> 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 SO<sub>2</sub> and NO<sub>x</sub> 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 SO<sub>2</sub> and NO<sub>x</sub> 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 (SO<sub>2</sub>) 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<sub>x</sub>) Limitations**  
The emission limitations for NO<sub>x</sub> 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 for SO<sub>2</sub>.

### Specific Sulfur Dioxide (SO<sub>2</sub>) Emission Allocations

There are two affected units, identified as Coal Boiler No. 1 and Coal Boiler No. 2, in this generating station. Table 1 below summarizes the SO<sub>2</sub> Allowance Allocations for these units.

Table 1	
SO <sub>2</sub> Allowance Allocations (tons/year) for 2010 and Beyond	
Coal Boiler No. 1	2241
Coal Boiler No. 2	6706

### Specific NO<sub>x</sub> Compliance and Averaging Plan

There are two affected units, identified as Coal Boiler No. 1 and Coal Boiler No. 2, in this generating station. Table 2 below summarize the NO<sub>x</sub> compliance plan for these units.

Table 2			
Calendar Years 2005 to 2012	Emission Limitation per 40 CFR 76.5, 76.6 or 76.7 (lb/MMBTU)	Alternative Limit (lb/MMBTU)	Heat Input Limit (MMBTU)
Coal Boiler No. 1	0.50	0.46	N/A
Coal Boiler No. 2	0.50	0.40	N/A

### Emissions Monitoring Requirements

The Permittee and, to the extent applicable, the designated representative of Coal Boiler No. 1 and Coal Boiler No. 2 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 Kimberley Malley 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) 233-9664 or toll free at 1-800-451-6027 extension 3 or 4-9664.
- (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.access.gpo.gov/nara/cfr/index.html>