



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

June 23, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Barnes & Thornburg (Richmond Power & Light) / 177-19240-00009

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires 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, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from 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-AM.dot 9/16/03



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

Joseph E. Kernan
Governor

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June 23, 2004

Anthony C. Sullivan
BARNES & THORNBURG
11 South Meridian Street
Indianapolis, IN 46204-3535

Re: Review Request 177-19240-00009
Installation of Mobotec Pollution Control Equipment
at Richmond Power & Light (RPL) Facility

Dear Mr. Sullivan:

This letter is in response to your request that the Indiana Department of Environmental Management (IDEM) provide a written determination on whether the installation, operation, and/or removal of the Mobotec DeSOx-SO₂ Reduction (Mobotec) system at the Richmond Power & Light (RPL) facility will trigger New Source Performance Standards (NSPS) or Prevention of Significant Deterioration (PSD) requirements.

1. Mobotec System

On May 11, 2004, RPL informed IDEM of the intention to construct and operate a system, identified as Mobotec DeSOx-SO₂ Reduction (Mobotec), to reduce sulfur dioxide (SO₂) and Mercury (Hg) emissions from Boiler No. 2. The installation of the system involves installing a new air injection system and possibly different sorbent injection ports than the ones currently in place for Boiler No. 2. The operation of the system is not expected to increase the capacity of the boiler.

2. New Source Performance Standards (NSPS)

(A) Installation and Operation of the Mobotec System

IDEM has determined that the provisions of 40 CFR 60.14 and the New Source Performance Standard (NSPS) 40 CFR 60, Subpart Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978) do not apply to the installation and operation of the Mobotec system.

Since Boiler No. 2 is an existing facility, as defined by 40 CFR 60.2, and not currently subject to 40 CFR 60, Subpart Da, the provisions of 40 CFR 60.14 that govern modifications are used to determine the applicability of 40 CFR 60, Subpart Da to the installation and operation of the proposed system. Based on the information submitted by RPL, the installation and operation of



the Mobotec system at the RPL facility will not result in an increase in the emission rate for any regulated pollutant, including sulfur dioxide (SO₂), particulate matter (PM), and nitrogen dioxides (NO_x). The proposed installation, therefore, is not subject to 40 CFR 60, Subpart Da pursuant to 40 CFR 60.14(a) since the change is not expected to result in an increase in the emission rate to the atmosphere of the pollutants to which 40 CFR 60, Subpart Da applies.

The existing and current applicable requirements for Boiler No. 2 are included in the proposed Part 70 Operating permit. Operation of the Mobotec system with Boiler No. 2 is not mandated by the applicable requirements set forth in RPL's proposed Part 70 permit. In addition, after installation, if the system is not operating for a period of time, the emission rate for any pollutant regulated by 40 CFR 60, Subpart Da is not expected to be increased above the current emission rate. Therefore, intermittent operation of the Mobotec system shall not affect this determination as long as there is no increase in the potential emission rate above the pre-installation potential emission rate due to the changes made to the boiler for the installation of the system.

(B) Removal of the Mobotec System

IDEM has also determined that if the Mobotec system is removed in the future the current provisions of 40 CFR 60.14 and 40 CFR 60, Subpart Da will not apply based on the facts as presented by RPL.

However, IDEM cannot anticipate all the factors that may be involved in future actions for which specific information has not been submitted. In addition, IDEM cannot anticipate rule changes that may be made by US EPA or the Indiana Air Pollution Control Board that may affect the current rules governing modifications.

The provisions of 40 CFR 60.14(a) state that,

“...any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification...”

Subsection (b) of 40 CFR 60.14 includes the methods for calculating the emission rate. US EPA has provided an interpretation of these subsections in documents included in the US EPA Applicability Determination Index, a clearinghouse of previous applicability determinations issued by US EPA, copies of which were provided to IDEM by RPL. US EPA stated in a letter dated, July 8, 1996, from Jewell A. Harper, Chief of the Air Enforcement Branch of the Air, Pesticides and Toxics Management Division of US EPA Region 4 to Rhonda Banks of the South Carolina Department of Health and Environmental Control, Bureau of Air Quality:

...When determining whether a modification has occurred, the U.S. Environmental Protection Agency (EPA) compares the potential emission rate at the maximum operating capacity of a facility just prior to and after a physical or operational change. Only physical limitations on capacity are considered when calculating the potential emission rate at maximum capacity. If the potential emission rate of a regulated pollutant from an existing facility increases as the result of a physical or operational change, the change is considered to be a modification unless one of the exemptions in 40 C.F.R. 60.14(e) apply.

The installation of the Mobotec system is a voluntary project to implement a pollution control method that has not been installed for extended periods of time on a unit that burns the type of coal used by Boiler No. 2. Because the control equipment is not required and, therefore, is not required to be operated on a continuous basis, it is not currently a physical limitation for Boiler No. 2. The 1990 draft New Source Review Guidance Manual states:

Any physical or operational limitation on the capacity of the source to emit a pollutant, provided the limitation or its effects on emissions is federally-enforceable, shall be treated as part of its design. Example limitations include:

- (1) Requirements to install and operate air pollution control equipment at prescribed efficiencies...

Therefore, since the operation is voluntary, it is IDEM's opinion that the reductions achieved by operating the system should not be considered when calculating whether or not an increase in the potential emission rate would occur when the Mobotec system is removed. It should be noted, however, that the United States Court of Appeals for the Sixth Circuit upheld a determination by U.S. EPA that turning off wet scrubbers at a source constituted a "modification" of a stationary source within the meaning of the Clean Air Act. *National-Southwire Aluminum Co. v. EPA*, 838 F.2d 835 (6th Cir.), *cert. denied*, 488 U.S. 955 (1988).

The facts in this case can be distinguished from those presented by the installation/removal of the Mobotec system because the National-Southwire plant in Kentucky had been built prior to the passage of the Clean Air Act and the original plant was built with the wet scrubbers. When U.S. EPA approved the SIP for Kentucky in 1982, it required the same level of emission control that the plant had been achieving since 1969 by use of its wet scrubbers. Because operation of the wet scrubbers was necessary to meet a prescribed standard, the removal or non-operation of the wet scrubbers constituted an increase in the potential hourly emissions of the National-Southwire plant.

IDEM would emphasize that if, at any time prior to removal of the Mobotec system, it is determined that operation of the Mobotec system is necessary for the RPL plant to meet a newly promulgated standard or limitation then IDEM would consider removal of the Mobotec system as a modification and the emission unit subject to NSPS requirements.

Additionally, since Boiler No. 2 is an existing electric utility steam generating unit, as defined by 40 CFR 60.2, the provisions of subsection (h) may be applied to physical or operational changes at Boiler No. 2. The provisions of 40 CFR 60.14(h) state that:

No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

It is IDEM's understanding that the Mobotec system may not be operated on a continuous basis because it is a voluntary control measure. If the removal of the Mobotec system will not result in an increase in the maximum hourly emissions of any pollutant regulated under 40 CFR 60.14 above the maximum hourly emissions achievable at that unit during the five years prior to the

change, it may be determined that the removal will not constitute a modification. Because operation of the Mobotec system is not mandated by an applicable requirement, there may be periods of at least an hour where the Mobotec system will not be operated. Under this scenario, the maximum emission rate without using the Mobotec system could be established intermittently at Boiler No. 2 for an hour to ensure there is no emission increase in a five year period before the potential permanent removal of the system. Again, IDEM's current interpretation of 40 CFR 60.14(h) is based on the fact that the operation of the Mobotec system is currently not required in order for the facility to comply with emission standards or limitations.

3. Exempt Construction of the Mobotec System

The addition of the Mobotec system at the RPL facility is considered a minor physical change pursuant to 326 IAC 2-1.1-1(6)(E). Since there are no expected collateral emissions from the operation of the system, the construction of the Mobotec system is exempted from air construction requirements pursuant to 326 IAC 2-1.1-3(h)(2).

If you have any questions on this matter, please contact Ms. Betsy Zlatos at the Indiana Department Environmental Management, Office of Legal Counsel, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015 or by telephone at (317) 233-5645 or toll free at 1-800-451-6027 extension 3-5645

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

cc: File - Wayne County
U.S. EPA, Region V
Wayne County Health Department
Air Compliance Section Inspector - DH
Compliance Branch - KA
Technical Support and Modeling - MB
Richmond Power & Light