

217/782-2113

CONSTRUCTION PERMIT/PSD APPROVAL - REVISED
NSPS SOURCE

PERMITTEE

Archer Daniels Midland Company
Attn: Pat Dennis, Senior Environmental Engineer
4666 Faries Parkway
Decatur, Illinois 62526

Application No.: 97050097 I.D. No.: 115015AAE

Applicant's Designation: BOILER9

Subject: Boilers

Date Permit Initially Issued: December 24, 1998

Date Revision Request Received: April 28, 2003

Date Revision Issued: DRAFT

Location: 4666 Faries Parkway, Decatur

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of one circulating fluid bed boiler (Boiler #9), and limestone rail dump, with associated control equipment as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

In conjunction with this permit, approval for the above activity is given with respect to the federal rules for Prevention of Significant Deterioration of Air Quality Regulations (PSD) 40CFR 52.21 for the above referenced equipment as described in the application, in that the Illinois Environmental Protection Agency (IEPA) finds that the application fulfills all applicable requirements of 40 CFR 52.21. This approval is issued pursuant to the Clean Air Act, as amended, 42 U.S.C. 7401 et. seq., the Federal regulations promulgated thereunder at 40 CFR 52.21 for Prevention of Significant Deterioration of Air Quality (PSD), and a Delegation of Authority agreement between the United States Environmental Protection Agency (USEPA) and the Illinois EPA for the administration of the PSD Program. This approval becomes effective in accordance with the provisions of 40 CFR 124.15 and may be appealed in accordance with the provisions of 40 CFR 124.19. This approval is also based upon and subject to the findings and conditions which follow:

Findings For the Revised Permit

- 1a. Archer Daniels Midland Co. (ADM) operates boilers to supply steam and generate electricity for various grain processing and manufacturing operations at its Decatur complex.
- b. ADM received this permit to construct, among other things, a new circulating fluidized bed (CFB) boiler, Boiler #9, with limestone injection, a selective non-catalytic NOx reduction system, and a baghouse.
- c. ADM has requested that the BACT requirements in the permit for emissions

of NOx and CO from Boiler #9 be revised to more appropriately address startup and shutdown of the boiler.

- 2a. ADM requested that the original BACT limit be revised to exclude periods of startup. For emission of NOx from Boiler #9, the permit originally set a BACT limit, on a 30-day rolling average basis, expressed in lbs/mmBtu, including periods of startup. Compliance with this limit is to be determined using the compliance procedures of the applicable federal New Source Performance Standards (NSPS), 40 CFR 60, Subpart Db.
- b. The daily emission rate of the boiler during startup, determined in lb/mmBtu, is significantly higher than the numerical BACT limit, which applies as a 30-day average. This is a result of the use of separate natural gas fired burners and the transitory conditions during startup, as load is increased and coal is introduced to the boiler, gradually taking over from natural gas. When the higher daily emission rate during a startup is factored into a 30-day average, the 30-day average rate can exceed the numerical BACT limit. Whether this occurs and the extent of excess depended on the number, duration and specific schedule of startups during each individual 30-day compliance period.
- c. BACT for NOx during startup of the boiler can be set in terms of work practices for startup and an alternative numerical limit, which restrict the amount of emissions rather than the rate of emissions.
3. For emission of CO from Boiler #9, the permit originally set a BACT limit of 0.10 lbs/mmBtu, on a 24-hour block average basis. As with emissions of NOx, compliance with this limit cannot be reliably achieved during startup, as well as during shutdown of the boiler, due to the operational constraints during these periods. ADM has requested that the numerical BACT limit not apply during periods of startup or shutdown of the boiler. BACT for CO during startup and shutdown of the boiler can also be set in terms of work practices for startup and shutdown and an alternative numerical limit, which restrict the amount of emissions rather than the rate of emissions.
4. The Illinois EPA has determined that the requested revisions are justified and would comply with the federal PSD rules, 40 CFR 52.21. The revisions do not affect other applicable regulatory requirements for the boiler under either state or federal rules.
5. Since ADM elected to forgo the optimization study for NOx BACT for Boiler #9, the boiler is subject to the lower default BACT limits for NOx. The original permit contained a provision for an optimization study for NOx emissions, to determine if lower NOx limits could be reliably achieved. The provision also set lower default limits in the event that the optimization study was not undertaken or completed in a timely manner. The revised permit sets BACT at the default limits, after a short transition period, and no longer includes provisions for performance of an optimization study.
6. Provisions for other proposed boilers that were addressed by the original construction permit, Boiler #10 and Boiler #11, are not included in this revised permit. This is because a permit becomes invalid if construction is not commenced or carried out in a timely manner. (Refer to Condition 22.) This did not occur for Boilers #10 and #11, which ADM decided not to construct.
7. This permit also includes prior revisions to this permit, which clarified applicable requirements.

8. A copy of ADM's request for revision of the permit, the project summary prepared by the Illinois EPA and a draft of this permit were placed in a location nearby in a public repository, and the public has been given notice and opportunity to examine this material and to submit comments and to request and participate in a public hearing on this matter.

The Illinois EPA is issuing approval subject to the following conditions and consistent with the specifications and data included in the application. Any departure from the conditions of this approval or terms expressed in the application would need to receive prior written authorization of the Illinois EPA.

Conditions

1. Standard conditions for issuance of construction permits, attached hereto and incorporated herein by reference, shall apply to this project, unless superseded by the following conditions.

- 2a. The emissions from Boiler #9 shall not exceed the following limits:

- i. PM - 0.025 lb/mmBtu;
- ii. SO₂ - 0.70 lb/mmBtu, and

8% of the coal's potential SO₂ emission rate, i.e., at least 92% reduction. (This reduction based limit is equivalent to an emission rate of 0.70 lb SO₂/mmBtu when firing a coal supply containing 4.4 lb sulfur (S)/mmBtu. It requires a lower emission rate if the coal supply contains less sulfur, e.g., 0.40 lb SO₂/mmBtu for a coal supply containing 2.5 lb S/mmBtu.)

These limits shall apply on a 30 day rolling average using the compliance procedures of the NSPS, 40 CFR Part 60, Subpart Db, except that emissions during startup and shutdown, as addressed below, shall be excluded and not be considered for purposes of the reduction based limit.

- iii. A. NO_x - 0.10 lb/mmBtu, when firing a coal supply containing more than 2.5 lb S/mmBtu or 0.070 lb/mmBtu when firing a coal supply containing 2.5 lb S/mmBtu or less.

This limit shall apply on a 30 day rolling average basis, using the compliance procedures of the NSPS, 40 CFR Part 60, Subpart Db, excluding startup, provided, however, that if a startup lasts for more than 48 hours, emissions data for only the first 48 hours, beginning with initial firing of fuel during the startup, shall be excluded from determination of compliance with this limit.

For the purpose of these limits, the determination of sulfur content of the coal supply to the boiler shall be made based on the typical sulfur content of the coal on a time period that is at least monthly.

- B. NO_x - 150 lb/hr or 105 lb/hr, depending on whether the boiler is firing a coal supply whose sulfur content is more than 2.5 lb/mmBtu or equal to or less than 2.5 lb/mmBtu.*

This limit shall apply as a 30-day average basis, including periods of startup, with continuous monitoring conducted in

accordance with Condition 10(a).

* This value is the product of the rated capacity of the boiler in Btu/hour, and the generally applicable BACT limit for NOx, i.e., 0.10 or 0.07 lb/mmBtu.

- C. Notwithstanding the above, the following limits shall substitute for the above limits in Condition 2(a)(iii)(A) for the initial 30 operating days of the boiler following the effectiveness of this revised permit:

0.120 lb/mmBtu, when firing a coal supply containing more than 2.5 lb S/mmBtu or 0.090 lb/mmBtu when firing a coal supply containing 2.5 lb S/mmBtu or less.

- iv. A. CO - 0.10 lb/mmBtu

This limit shall apply on a 24-hour block average basis, with continuous monitoring in accordance with Condition 10(a). This limit shall not apply during periods of startup and shutdown.

- B. CO - 150 lb/hr*

This limit shall apply as a 24-hour average basis with continuous monitoring conducted in accordance with Condition 10(a). This limit shall apply during periods of startup and shutdown as also addressed by Condition 2(b). (For a startup event, the 24-hour period shall begin with the startup of the boiler, i.e. initial firing of the fuel. For a shutdown event, the 24-hour period shall end with the shutdown of the boiler, i.e. cessation of fuel flow to the boiler.)

*This value is the product of the rated capacity of the boiler in million Btu/hour, and the generally applicable BACT limit for CO, i.e., 0.10 lb/million Btu.

- v. VOC - 0.032 lb/mmBtu.

- b. The Permittee shall use reasonable practices to minimize emissions during startup and shutdown of Boiler #9, including conducting startup and shutdown of boilers in accordance with written procedures maintained on site that are specifically developed to minimize emissions from both "cold" and "hot" startups and shutdowns, that as a minimum include the following measures:

- i. Review of the operational condition of the boiler prior to initiating startup of the boiler.
- ii. Use of natural gas during startup to heat the boiler prior to initiating firing of coal or other solid fuel.
- iii. Planned startup sequence along with the required time to get the temperature in the cyclone high enough to introduce ammonia
- iii. Review of the operating parameters of the boiler during each startup as necessary to make appropriate adjustments to the startup to minimize emissions of SO₂ and other pollutants.
- iv. Ammonia injection shall begin as soon as the lower combustor

temperature reaches 1,500 °F and the startup period will end at this time.

3. Deleted. (This condition in the original permit set limits for proposed Boiler #11, a natural gas fired boiler that was not constructed.)
- 4a. Emissions of particulate matter from the new limestone unloading rail dump shall be controlled with bag filter designed to emit no more than 0.01 grains/dry standard cubic foot.
- b.
 - i. Emissions of particulate matter from new coal handling and conveying shall be controlled with enclosures and aspiration to bag filters.
 - ii. Emissions from coal storage shall be controlled by an enclosure.

Conditions 2 and 4 represent the application of the Best Available Control Technology (BACT), as required by Section 165 of the Clean Air Act. Limits are to be met on an hourly basis, unless otherwise specified. Compliance shall be demonstrated by emission testing, monitoring and recordkeeping in accordance with Conditions 8, 9, 10, 11, 12, 16 and 17.

- 5a. Boiler #9 is subject to a New Source Performance Standard (NSPS) for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subparts A, and Db. The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement.
- b. The emissions from the boiler shall not exceed the applicable limits pursuant to the NSPS.
- c. At all times, the Permittee shall maintain and operate the boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, as required per NSPS, 40 CFR 60.11(d).
- 6a. Emissions from Boiler #9 shall not exceed the limits in Table I. The limits in Table I are generally based upon the emission rates and the maximum firing rate specified in the permit application and consistent with the air quality analysis submitted by the Permittee to comply with the PSD rules. Compliance with these limits shall be determined as a 3-hour average, consistent with testing and monitoring as required by Conditions 8, 9, 10, and 11.
- b. Emissions of particulate matter from the new limestone unloading rail dump shall not exceed 1.71 pound/hour and 7.51 tons/year.
- 7a. New emission units covered by this Permit may each be operated under this construction permit for a startup/shakedown period of 365 days* after completion of construction. During this period, notwithstanding Condition 2(a)(ii), the SO₂ reduction for the boiler need only comply with the reduction requirement of the NSPS, 40 CFR Part 60, Subpart Db, following initial performance testing to the extent authorized by the Illinois EPA in conjunction with a request from the Permittee to make improvements to boiler equipment and operation to facilitate compliance with the SO₂ reduction requirement.

* For Boiler #9, this period of time may be extended by the Illinois EPA for up to an additional 365 days upon written request by the Permittee as needed to reasonably accommodate unforeseen difficulties in the shakedown of the boiler.

- b. For Boiler #9, the Permittee shall fulfill applicable notification and recordkeeping requirements of the NSPS, 40 CFR 60.7 and 60.49b including:
 - i. Written notification of commencement of construction, no later than 30 days after such date (40 CFR 60.7(a)(1));
 - ii. Written notification of anticipated date of initial startup, at least 30 days but not more than 60 days prior to such date (40 CFR 60.7(a)(2)); and
 - iii. Written notification of the actual date of initial startup, within 15 days after such date (40 CFR 60.7(a)(3) and 40 CFR 60.49b(a)).
 - c. The Permittee shall notify the Illinois EPA in writing at least 30 days prior to initial firing any solid fuel other than coal in Boiler #9.
- 8a.
- i. A. Within 60 days after achieving the maximum production rate at which Boiler #9 will be operated but not later than 180 days* demonstrating sustainable operation, the emissions of PM, SO₂, NO_x, CO, and VOC and opacity from the boiler shall be measured by an approved testing service as follows. The ductwork from the boiler shall include a properly located test port so that the boiler emissions may be tested.

* This period of time may be extended by the Illinois EPA for up to an additional 365 days upon written request by the Permittee as needed to reasonably accommodate unforeseen difficulties in the startup and testing of the boiler, provided that initial performance testing required by the NSPS, 40 CFR Part 60, Subpart Db has been completed for the boiler and the test report submitted to the Illinois EPA.
 - B. The Permittee will also conduct emission tests for SO₂, NO_x, CO, VOC and PM from Boiler #9 within 90 days of a written Illinois EPA request.
 - ii. A. Measurements of emissions of SO₂, PM and NO_x from Boiler #9 shall be conducted and data collected in accordance with the test methods and procedures specified in 40 CFR 60.45b and 60.46b.
 - B. Other emissions measurements shall be made as follows:
 - 1. CO emission measurements shall be made in accordance with 40 CFR 60, Appendix A, Method 10;
 - 2. VOC emission measurements shall be made in accordance with 40 CFR 60, Appendix A, Method 18 or 25; and
 - 3. Opacity of stack emissions shall be determined in accordance with 40 CFR 60, Appendix A, Method 9.
 - C. Where an hourly limit applies, compliance shall be determined as the average of three runs, consistent with relevant provision of the NSPS, 40 CFR 60.8(f).
- b. i. The Permittee shall notify the Illinois EPA prior to each of these tests to enable the Illinois EPA to observe these tests.

Notification for the expected date of testing shall be submitted a minimum of 30 days* prior to the expected date, and shall be accompanied by a detailed plan describing the testing which will be performed. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days* prior to the actual date of the test.

* The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.

- ii. This notification shall also identify the parties that will be performing testing and the set or sets of operating conditions (i.e., boiler load and fuels) under which testing will be performed.
 - iii. Emissions testing shall be conducted under conditions that are representative of maximum emissions.
- c. The Permittee shall submit three copies of the Final Report(s) for each of these tests to the Illinois EPA immediately within 30 days after the test results are compiled and finalized.
9. At a minimum, to confirm compliance with Condition 2(a)(i), the Permittee shall test PM emissions from the Boiler #9 in accordance with Condition 8 at a regular interval that is no greater than 36 months, i.e., PM testing of the boiler at least once every 36 months. Notwithstanding the above, if the results of two of these PM tests in a row for a boiler demonstrate PM emissions of 0.015 lb/mmBtu or less, the maximum interval for testing of such boiler may be doubled, i.e., PM testing at least once every 72 months. Provided however, if a PM test for such a boiler then shows PM emissions above 0.015 lb/mmBtu, the maximum interval between testing shall revert to 36 months until two tests in a row again show PM emissions of 0.015 lb/mmBtu or less.
- 10a. i. The Permittee shall install, evaluate, operate, and maintain continuous opacity, SO₂, NO_x and CO monitoring systems and either an O₂ or CO₂ monitoring system on Boiler #9.
- ii. The type, location, and operating procedures for the monitoring equipment for the boiler shall be approved by the Illinois EPA, prior to installation.
- iii. The Permittee shall fulfill the requirements for monitoring in the NSPS, 40 CFR 60.13, 60.47b, 60.48b, and 40 CFR 60 Appendix B.
- b. i. The Permittee shall sample and analyze the sulfur and heat content of the solid fuel supplied to Boiler #9 in accordance with USEPA Reference Method 19 (40 CFR 60, Appendix A, Method 19).
- ii. This sampling and analysis shall include separate measurements for the sulfur and heat content of the coal supplied to the boiler.
- c. All records with respect to fuel sampling and the operation of the monitors shall be retained for two years and shall be available for inspection and copying by the Illinois EPA.
11. In particular, the performance of the continuous NO_x monitoring systems shall be evaluated using the Performance Specifications of 40 CFR 60,

Appendix B prior to the emission tests required by Condition 6 pursuant to 40 CFR 60.13(c) and operation of the monitor shall be verified on a daily basis in accordance with written procedures, pursuant to 40 CFR 60.13(d).

12. In addition, when NO_x emission data are not obtained from a NO_x monitoring system required by Condition 10(a) and 11 because of continuous monitoring systems breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved methods as necessary to provide emission data for a minimum of 75 percent of the operating hour in steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days, pursuant to 40 CFR 60.40b(f).
13. The Permittee shall install, evaluate, operate, and maintain meters to measure and record fuel consumption by Boiler #9.
- 14a. The fuel feed stream combusted in Boiler #9 shall contain no more than 20 percent by weight, on a calendar quarter basis, of tires, tire derived fuel, and other materials which constitute municipal solid waste as defined in 40 CFR 60.51a.
 - b. The Permittee shall keep records on a calendar quarter basis of the weight of tires, tire derived fuel and other material which constitute municipal solid waste combusted in the boiler and the weight of all other materials, by type, burned in the boiler.
 - c. As a consequence of the above conditions, this permit is issued based on the boiler constituting a co-fired boiler pursuant to 40 CFR 60.50b(g) provided the Permittee notifies the USEPA of this status accompanied by a copy of this permit, with a copy of such notification also sent to the Illinois EPA.
- 15a. This permit allows use of tires and tire derived fuel, as defined in Section 54 of the Act, and clean wood, as defined in 40 CFR 60.51b, as supplemental fuels in Boiler #9.
 - b. Supplemental fuels shall be burned in a blend with coal so as to not exceed 20 percent by weight in the total fuel supply to the boiler, determined on a daily basis.
 - c. The Permittee shall handle supplemental fuels for the boiler in accordance with a written fuel management plan designed to assure that acceptable fuel is received and fuel is safely stored and handled. This plan shall include the specifications for acceptable fuel, anticipated sources of fuel, procedures for qualifying fuel suppliers, procedures for inspection of fuel shipments, procedures for rejection of unacceptable shipments, and procedures for on-site handling and storage of fuel.
 - d. The Permittee shall burn supplemental fuels in the boiler in accordance with written operating procedures designed to assure a uniform and consistent blend of fuel to the boiler and operation of the boiler in compliance with applicable requirements of this permit. This plan shall include the design and maximum amount of the fuel in the total blend, procedures for blending fuels, changes to normal operating procedures for the boiler, if any, and acceptable ranges for boiler and air pollution control equipment operating parameters, if different than normal.

- e. The Permittee shall keep appropriate records to demonstrate that it is complying with Conditions 15 (b), (c), and (d) above.
- f.
 - i. The Permittee shall promptly submit monthly progress reports to the Illinois EPA while it is initially introducing a supplemental fuel into Boiler #9. This report shall include the firing rate(s) being evaluated, a description of the events and findings during the month, and a summary of emission data.
 - ii. At the conclusion of the introduction of a supplemental fuel, the Permittee shall promptly submit a final report to the Illinois EPA stating the maximum rate at which the fuel will be burned and providing a summary of the written fuel management plan and operating procedures prepared for use of the fuel and the range of emission rates expected from operation with such fuel.
- g. Nothing in this condition shall excuse the Permittee from compliance with applicable statutes and rules governing supplemental fuels, including rules governing storage of tires.
- 16a. The Permittee shall not burn wastes that are generated by another person's activities, other than tires and tire derived fuel, in Boiler #9 without first having obtained local approval pursuant to Section 39.2 of the Act, if required, and appropriate permits from the Illinois EPA.
- b. For purposes of this condition, a clean wood material shall be considered a waste if it is a discarded material.

This condition is imposed to address compliance with State requirements under Section 39.2 of the Environmental Protection Act and is not federally enforceable.

- 17a.
 - i. The Permittee shall maintain a record of the output of continuous monitoring systems required pursuant to Conditions 9, 10, and 11.
 - ii. The Permittee shall maintain a record of maintenance, calibration and operational activity associated with continuous monitoring equipment.
- b. For Boiler #9, the Permittee shall maintain records of the following items:
 - i. Records of SO₂ emissions and operation of the boiler as related to SO₂, as specified by the NSPS (40 CFR 60 60.49b(k) and (m)).
 - ii. Records of NO_x emissions and operation of the boiler as related to NO_x as specified by the NSPS (40 CFR 60 60.49b(g)).
 - iii. Records of CO emissions and operation of the boiler as related to CO
 - iv. The amount of fuel combusted in the boiler on a daily basis, by type of fuel.
 - v.
 - A. The sulfur content of coal, lb S/mmBtu, supplied to the boiler, as determined pursuant to Condition 10(b)(ii); and
 - B. The sulfur content of coal supplied to the boiler on a 30-day rolling average, determined from the above data.
 - vi. With respect to the SO₂ reduction based limit in Condition

2(a)(ii), for each 30 day averaging period, the SO₂ emissions in lb/mmBtu and the required SO₂ emission rate as determined by applying the permissible emission fraction to the potential SO₂ emission rate of the coal supply.

- c. The Permittee shall keep inspection and maintenance logs for the PM filters associated with handling and storage of coal and limestone.
 - d. Steam charts and daily records of steam generation from the plant shall be maintained.
18. All records required by this permit shall be kept at a readily accessible location at the boiler plant and be available for inspection and copying by the Illinois EPA. These records shall also be retained for three years unless otherwise specified in a particular provision of this permit.
- 19a. For Boiler #9, the Permittee shall report analyses of the fuel burned in the boiler on a quarterly basis.
- b. For Boiler #9, the Permittee shall fulfill applicable reporting requirements in the NSPS, 40 CFR 60.7(c), and 60.49b. For this purpose, the quarterly reports shall be submitted no later than 30 days after the end of the calendar quarter.
 - c. For Boiler #9, either as part the quarterly NSPS report or accompanying such report, the Permittee shall report to the Illinois EPA any and all opacity, SO₂, NO_x and CO measurements which exceed the applicable emission limits in Condition 2 or 5. These reports shall provide for each such incident, the pollutant emission rate, the date and duration of the incident, and whether it occurred during startup, malfunction, breakdown, or shutdown. If an incident occurred during malfunction or breakdown, all corrective actions taken shall also be reported. These reports shall also specify periods during which the continuous monitoring systems were not in operation.
 - d. The Permittee shall report any other exceedance or violation of the requirements of this permit, not addressed above, to the Illinois EPA within 90 days of the event. This report shall include the date and time of the incident, a description of the incident, the level of emissions on an hourly basis, if or magnitude of the incident, a description of the corrective measures taken and efforts made to prevent future occurrences.
20. Deleted. (This condition in the original permit established certain requirements for proposed Boiler #11, which was not constructed.)
21. Deleted. (This condition in the original permit addressed the Optimization Program for NO_x emissions from Boiler #9 and proposed Boiler #10, which was not constructed.)
- 22a. This permit shall become invalid as follows, pursuant to 40 CFR 52.21(r)(2). This condition supersedes Standard Condition 1.
- This Permit shall become invalid as applied to Boiler #9 if construction of this boiler is not commenced within 18 months after this permit becomes effective, if construction of this boiler is discontinued for a period of 18 months or more, or if construction of these boilers is not completed within a reasonable period of time.
- b. For purposes of the above provisions, the definitions of "construction"

and "commence" at 40 CFR 52.21 (b)(8) and (9) shall apply, which require that a source must enter into a binding agreement for on-site construction or begin actual on-site construction. (Also see the definition of "begin actual construction," 40 CFR 52.21 (b)(11).)

23. This approval to construct does not relieve the Permittee of the responsibility to comply with all local, state and federal Regulations which are part of the applicable Illinois State implementation plan, as well as all other applicable federal, state and local requirements.

If you have any questions on this permit, please call Shashi Shah at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:SRS:jar

cc: Region 3
USEPA Region V

TABLE I

Emission Limits for Boiler #9
Lbs Per Hour/Tons Per Year

SO ₂	NOx ^a	PM ^b	CO ^c	VOC
1050/4600.0	150/657.0	37.5/164.5	150/657.0	48/210.5

Notes:

- a. The NOx limit is based on the BACT limit for NOx that applies with use of a higher sulfur content fuel, i.e., 0.010 pound/million Btu. To the extent that a lower sulfur fuel is used, lower limits would apply for NOx.
- b. All PM shall be considered PM-10 unless emissions are tested by an appropriate USEPA test method for measurement of PM-10, as specified in 35 Ill. Adm. Code 212.110(e).
- c. As an alternative to BACT limit expressed in pound/million Btu, during startup and shutdown, the boiler is subject to a limit expressed in pounds/hour, which is the product of the design capacity of the boiler, in million Btu/hr, and the generally applicable BACT limit, 0.10 pound/million Btu.