PART 70 OPERATING PERMIT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
CITY OF INDIANAPOLIS
OFFICE OF ENVIRONMENTAL SERVICES

Citizens Thermal Energy
C.C. Perry K Steam Plant
366 Kentucky Avenue
Indianapolis, Indiana 46225

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15, IC 13-17 and the Code of Indianapolis and Marion County, Chapter 4.

Operation Permit No.: T097-6567-00034	
Issued by: Original Signed by Janet G. McCabe Janet G. McCabe, Assistant Commissioner Office of Air Quality Original Signed by John B. Chavez John B. Chavez, Administrator Office of Environmental Services	Issuance Date: 6-10-04 Expiration Date: 6-10-09

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and The Indianapolis Office of Environmental Services (OES). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary steam generation and supply source consisting of boilers that combust coal, distillate oil, natural gas and/or coke oven gas.

Responsible Official:	Director of Steam Operations
Source Address:	366 Kentucky Avenue, Indianapolis, Indiana, 46225
Mailing Address:	366 Kentucky Avenue, Indianapolis, Indiana, 46225
SIC Code:	4961
County Location:	Marion
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

(1) This stationary source consists of the following emission units and pollution control devices:

(a) One (1) Foster Wheeler boiler, identified as Emission Unit ID 11, with a nominal heat input capacity of 368 million Btu per hour when firing natural gas and 382 million Btu per hour when firing coke oven gas, with a burner system designed to allow the co-firing of both fuels simultaneously or the firing of each fuel separately, exhausting to one (1) stack, identified as Stack/Vent ID 3 (shared with Emission Unit ID 12), installed in 1938, modified to fire coke oven gas and natural gas in 1998, and with a continuous emissions monitoring system for SO_2, NO_x, and CO on Stack/Vent ID 3.

(b) One (1) Foster Wheeler pulverized coal boiler, identified as Emission Unit ID 12,which is dry bottom and wall fired, with a nominal heat input capacity of 352 million Btu per hour, with natural gas fired on boiler startup and for flame stabilization, with emissions directed to one (1) hot side electrostatic precipitator, identified as Control Equipment ID CE 12, exhausting at Stack/Vent ID 3 (shared with Emission Unit ID 11), installed in 1938, with a continuous opacity monitor, and with a continuous emissions monitoring system for SO_2 and NO_x on Stack/Vent ID 3. $S0_3$ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning.

(c) One (1) Babcock and Wilcox boiler, identified as Emission Unit ID 13, with a nominal heat input capacity of 403 million Btu per hour when firing natural gas and 411 million Btu per hour when firing coke oven gas, with a burner system designed to allow for the co-firing of both fuels simultaneously or the firing of each fuel separately, exhausting to one (1) stack, identified as Stack/Vent ID 4 (shared with Emission Unit ID 14), installed in 1946, modified to fire natural gas and coke oven gas in 1998, and with a continuous emissions

monitoring system for SO_2, NO_x, and CO.

(d) One (1) Babcock and Wilcox boiler, identified as Emission Unit ID 14, with a nominal heat input capacity of 403 million Btu per hour when firing natural gas and 411 million Btu per hour when firing coke oven gas, with a burner system designed to allow for the co-firing of both fuels simultaneously or the firing of each fuel separately, exhausting to one (1) stack, identified as Stack/Vent ID 4 (shared with Emission Unit ID 13), installed in 1946, modified to fire natural gas and coke oven gas in 1998, and with a continuous emissions monitoring system for SO_2, NO_x, and CO.

(e) One (1) Babcock & Wilcox coal fired spreader stoker boiler, identified as Emission Unit ID 15, with a nominal heat input capacity of 324 million Btu per hour, with natural gas fired on boiler startup and for flame stabilization, with emissions directed to one (1) hot side electrostatic precipitator, identified as Control Equipment ID CE 1516 (shared with Emission Unit ID 16), exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 16, 17 and 18), installed in 1953, with a continuous opacity monitor, and with a continuous emissions monitoring system for SO_2 and NO_x on Stack/Vent ID 1.

(f) One (1) Babcock & Wilcox coal fired spreader stoker boiler, identified as Emission Unit ID 16, with a nominal heat input capacity of 324 million Btu per hour, with natural gas fired on boiler startup and for flame stabilization, with emissions directed to one (1) hot side electrostatic precipitator, identified as Control Equipment ID CE 1516 (shared with Emission Unit ID 15), exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 15, 17 and 18), installed in 1953, with a continuous opacity monitor, and with a continuous emissions monitoring system for SO_2 and No_x on Stack/Vent ID 1.

(g) One (1) Combustion Engineering boiler, identified as Emission Unit ID 17, firing distillate oil, with a nominal heat input capacity of 228 million Btu per hour, exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 15, 16 and 18), and installed in 1974.

(h) One (1) Combustion Engineering boiler, identified as Emission Unit ID 18, firing distillate oil, with the capability to fire natural gas on boiler startup, with a nominal heat input capacity of 228 million Btu per hour, exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 15, 16 and 17), and installed in 1972.

(i) Load out of ash from the source, identified as Emission Unit ID Ash, to trucks with a nominal throughput of 45 tons of ash per hour. Conditioned bottom ash is gravity fed to one (1) truck load out enclosure station constructed in 1983-84, with movable doors that create an enclosure. Conditioned fly ash is unloaded to trucks utilizing either a telescopic chute under vacuum or gravity feeding. Emissions from the enclosure are exhausted to an electrostatic precipitator, identified as CE 12 and/or CE 1516.

(j) One (1) enclosed coal crusher with a nominal throughput of 400 tons of coal per hour, constructed in 1945.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities, which are specifically regulated, as defined in 326 IAC 2-7-1 (21):

(1) Degreasing operations that do not exceed 145 gallons per twelve (12) months, except if subject to 326 IAC 20-6. [326 IAC 8-3-5]

(2) Railcar receiving of coal with a nominal throughput of 419,000 tons per year. [326 IAC 6-1-2] [326 IAC 6-4]

(3) Pneumatic loading of fly ash and bottom ash to storage silos with a nominal throughput of 5.04 tons of ash per hour. [326 IAC 6-1-2] [326 IAC 6-4]

(4) Outside coal storage and handling and enclosed coal conveying with a nominal throughput of 419,000 tons per year. [326 IAC 6-1-2] [326 IAC 6-4]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f), IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

B.3 Enforceability [326 IAC 2-7-7]

(a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, OES, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

(b) The Indianapolis Air Pollution Control Board (IAPCB) has adopted by reference state rules listed in Attachment A of this permit. The version adopted by reference includes all amendments, additions and repeals filed with the Secretary of State through August 10, 1997 and published in the Indiana Register September 1, 1997, unless otherwise indicated in the adoption by reference. For the purposes of this permit, all state rules adopted by reference by the IAPCB are enforceable by OES using local enforcement procedures. Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by OES.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ and OES within a reasonable time, any information that IDEM, OAQ and OES may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ and OES copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ or OES, the Permittee may include a

claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form or its equivalent, with each submittal requiring certification. One (1) certification can cover multiple documents in one (1) submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

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

and

Office of Environmental Services
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent; and

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s), by title or classification, responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

and

Office of Environmental Services
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the Preventive Maintenance Plans, including any required record

keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and OES. IDEM, OAQ and OES may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) To the extent the Permittee is required by 40 CFR 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and OES within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

OES
Telephone No.: 317-327-2234 (ask for Data Compliance)
Facsimile No.: 317-327-2274

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Office of Environmental Services
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, and OES may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, and OES by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any

applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ and OES have made the following determinations regarding this source:

None of the facilities listed in Section A, Emission Units and Pollution Control Equipment Summary are subject to the requirements of:

(1) 40 CFR 68.215 because this source does not have a regulated substance, subject to 40 CFR 68, present in more than the threshold quantity. The provision may be applicable if the Permittee does meet the threshold at some time in the future.

(2) 40 CFR 60, Subpart Db, because the boilers predate the rule. The fuel conversion of boilers 11, 13 and 14 in 1998 did not meet the definition of modification or reconstruction under 40 CFR 60. If a modification or reconstruction of the boilers takes place, this rule may become applicable to the modified or reconstructed boiler(s).

(3) Boilers 12, 15, 16, 17 and 18 are not subject to 40 CFR 60, Subpart Da, Subpart Db, or Subpart Dc because all were constructed prior to September 18, 1978, June 19, 1984, and June 9, 1989, respectively. In addition, Subpart Da does not apply since no boilers at this source are electric utility steam generating units and Subpart Dc does not apply because the design heat input of the boilers is not between ten (10) MMBtu/hr and one hundred (100) MMBtu/hr.

(4) The fuel oil storage tanks are not subject to 40 CFR 60, Subpart K, or Subpart Ka because the capacity of each storage tank is less than 40,000 gallons. The fuel oil storage tanks are not subject to 40 CFR 60, Subpart Kb because they were constructed prior to July 23, 1984.

(5) The degreasing operations are not subject to the requirements of 40 CFR 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning because the degreasers do not use any of the solvents listed in 40 CFR 63.460.

(6) Load out of ash from the source commenced operation prior to Prevention of Significant Deterioration rules (40 CFR Part 52) and the modification in 1983-1984 was not significant with respect to PSD. Therefore, pursuant to 40 CFR Part 52.21 and 326 IAC 2-2, the PSD requirements (or 326 IAC 2-3, the Emissions Offset requirements) do not apply.

(c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, and OES shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, and OES has issued the modifications. [326 IAC 2-7-12(c)(7)]

(h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, and OES has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

and

Office of Environmental Services
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, and OES determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ, and OES to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, and OES at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, and OES may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and OES and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.

(2) If IDEM, OAQ, and OES, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, and OES, take final

action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, and OES**,** any additional information identified as being needed to process the application. [326 IAC 2-7-4(a)(2)(D) and (E)]

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, and OES fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.17 Source Modification [326 IAC 1-2-42] [326 IAC 2-7-10.5]

(a) The Permittee shall obtain approval as required by 326 IAC 2-7-10.5 from the OAQ and OES prior to making any modification to the source.

(b) Any application requesting a source modification shall be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee shall also comply with the applicable provisions of 326 IAC 2-7-11 (Administrative Permit Amendments) or 326 IAC 2-7-12 (Permit Modification) prior to operating the approved modification.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]

(c) Any application requesting an amendment or modification of this permit shall be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section, Permits
2700 South Belmont Avenue
Indianapolis, Indiana 46221

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

(e) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

Office of Environmental Services
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.
Such records shall consist of all information required to be submitted to IDEM, OAQ, and OES in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, OES, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, OES and U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-1-6] [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for

an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, and OES, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ or OES the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314]

Notwithstanding the Conditions of this Permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or Condition of this Permit.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), visible emissions shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.3 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

The source consists of Stack/Vent ID 1, 3 and 4 each constructed prior to December 31, 1970. Therefore pursuant to 326 IAC 1-7-5(b), the source is specifically exempted from the ambient air quality modeling demonstration of 326 IAC 1-7-4 (Stack Height Provisions: Ambient Air Quality Modeling).

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and OES, if the source submits to IDEM, OAQ and OES a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period. This reasonable written explanation does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required

monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.10 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) The Permittee shall calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. For a boiler, the COM shall be in operation at all times that fuel is being combusted in the boiler.

(b) All continuous opacity monitoring systems shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.

(c) In the event that a breakdown of a continuous opacity monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(d) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of two (2) hours or more, compliance with the applicable opacity limits shall be demonstrated by the following:

(1) Visible emission (VE) notations shall be performed once per hour during daylight operations following the shutdown or malfunction of the primary COM. A trained employee shall record whether emissions are normal or abnormal for the state of operation of the emission unit(s) at the time of the reading.

(A) A trained employee is an employee who has worked at the plant at least one

(1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(B) If abnormal emissions are noted during two consecutive emission notations, the Permittee shall begin Method 9 opacity observations within four hours of the second abnormal notation.

(C) VE notations may be discontinued once a COM is online or formal Method 9 readings have been implemented.

(2) If a COM is not online within twenty-four (24) hours of shutdown or malfunction of the primary COM, the Permittee shall provide certified opacity reader(s), who may be employees of the Permittee or independent contractors, to self-monitor the emissions from the emission unit stack.

(A) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.

(B) Method 9 opacity readings shall be repeated for a minimum five (5) consecutive six (6) minute averaging periods at least once every four (4) hours during daylight operations, until such time that a COM is in operation.

(C) Method 9 readings may be discontinued once a COM is online.

(D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

(3) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(e) Nothing in this permit, shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5.

C.11 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)]

(a) The Permittee shall calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.

(b) All continuous emission monitoring systems shall meet all applicable performance specifications of 40 CFR 60 or any other performance specification, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.

(c) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(d) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or is down for maintenance or repairs, the following shall be used as an alternative to continuous data

collection:

(1) Whenever the SO_2 continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the relevant requirements of 40 CFR 75 - Missing Data Substitution Procedures shall be used to provide substitute data except when demonstrating compliance of the coal fired boilers with 326 IAC 7.

(2) Whenever the Nox continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the Permittee shall use the relevant requirements of 40 CFR 75 - Missing Data Substitution Procedures to provide substitute data.

(3) Whenever the CO continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the Permittee shall use a data substitution procedure for the CO CEMs that is consistent with the requirements of 40 CFR 75 - Missing Data Substitution Procedures.

(e) Nothing in this permit, shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 10-4, 40 CFR 75 and CP 097-0034-01.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60 Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, 40 CFR 75, or other approved methods as specified in this permit.

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a temperature or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading. Whenever a condition in this permit requires the measurement of voltage or current the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus five percent (±5%) of full scale reading. If an instrument is used for compliance with 40 CFR 75, then the instrument specifications in 40 CFR 75 shall take precedence and the Permittee shall only be subject to the instrument specifications in 40 CFR 75 for that instrument.

(c) The Permittee may request that IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on March 29, 1993.

(b) Upon direct notification by IDEM, OAQ, and OES, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than the threshold quantity, the source must comply with the applicable requirements at 40 CFR 68.

C.16 Compliance Response Plan - Preparation, Implementation, Records and Reports [326 IAC 2-7-5][326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have a Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ and OES upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

The Parametric Monitoring Plan and SSM Plan shall be submitted within the time frames specified by the applicable 40 CFR 60/63 requirement.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken as required in this permit. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ and OES, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that

retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of other regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

The statement must be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or OES makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or OES within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(d) Pursuant to 40 CFR 82, Subpart E, (The Labeling of Products Using Ozone-Depleting Substances), all containers in which a Class I or Class II substance is stored or transported and all products containing a Class I substance shall be lableled as required under 40 CFR Part 82.

Part 2 MACT Application Submittal Requirement

C.22 Application Requirements for Section 112(j) of the Clean Air Act [40 CFR 63.52(e)] [40 CFR 63.56(a)] [40 CFR 63.9(b)] [326 IAC 2-7-12]

(a) The Permittee shall submit a Part 2 MACT Application in accordance with 40 CFR 63.52(e)(1). The Part 2 MACT Application shall meet the requirements of 40 CFR 63.53(b).

(b) Notwithstanding paragraph (a), the Permittee is not required to submit a Part 2 MACT Application if the Permittee no longer meets the applicability criteria of 40 CFR 63.50 by the application deadline in 40 CFR 63.52(e)(1). For example, the Permittee would not have to submit a Part 2 MACT Application if, by the application deadline:

(1) The source is no longer a major source of hazardous air pollutants, as defined in 40 CFR 63.2;

(2) The source no longer includes one or more units in an affected source category for which the U.S. EPA failed to promulgate an emission standard by May 15, 2002; or

(3) The MACT standard or standards for the affected source categories included at the source are promulgated.

(c) Notwithstanding paragraph (a), pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit with a case-by-case Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The initial notification shall be submitted to:

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

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Emission Unit ID 11 One (1) Foster Wheeler boiler, identified as Emission Unit ID 11, with a nominal heat input capacity of 368 million Btu per hour when firing natural gas and 382 million Btu per hour when firing coke oven gas, with a burner system designed to allow the co-firing of both fuels simultaneously or the firing of each fuel separately, exhausting to one (1) stack, identified as Stack/Vent ID 3 (shared with Emission Unit ID 12), installed in 1938, modified to fire coke oven gas and natural gas in 1998, and with a continuous emissions monitoring system for SO_2, NO_x, and CO on Stack/Vent ID 3.

Emission Unit ID 13 One (1) Babcock and Wilcox boiler, identified as Emission Unit ID 13, with a nominal heat input capacity of 403 million Btu per hour when firing natural gas and 411 million Btu per hour when firing coke oven gas, with a burner system designed to allow for the co-firing of both fuels simultaneously or the firing of each fuel separately, exhausting to one (1) stack, identified as Stack/Vent ID 4 (shared with Emission Unit ID 14), installed in 1946, modified to fire natural gas and coke oven gas in 1998, and with a continuous emissions monitoring system for SO_2, NO_x, and CO.

Emission Unit ID 14 One (1) Babcock and Wilcox boiler, identified as Emission Unit ID 14, with a nominal heat input capacity of 403 million Btu per hour when firing natural gas and 411 million Btu per hour when firing coke oven gas, with a burner system designed to allow for the co-firing of both fuels simultaneously or the firing of each fuel separately, exhausting to one (1) stack, identified as Stack/Vent ID 4 (shared with Emission Unit ID 13), installed in 1946, modified to fire natural gas and coke oven gas in 1998, and with a continuous emissions monitoring system for SO_2, NO_x, and CO.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Prevention of Significant Deterioration Minor Limit [326 IAC 2-2][40 CFR 52.21]

Pursuant to CP-097-0034-01, issued March 6, 1998, emissions from boilers 11, 13 and 14 shall be limited as follows:

(a) Carbon Monoxide (CO) emissions shall be restricted to less than 143.04 tons per twelve (12) consecutive month period with compliance determined at the end of each month, such that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) shall not apply;

(b) Particulate Matter less than 10 microns (PM-10) shall be restricted to less than 65.43 tons per twelve (12) consecutive month period with compliance determined at the end of each month, such that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) shall not apply;

(c) Sulfur Dioxide (SO_2) shall be restricted to less than 2954.76 tons, per twelve (12) consecutive month period with compliance determined at the end of each month, such that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) shall not apply;

(d) Oxides of Nitrogen (NO_x) shall be restricted to less than 1537.07 tons per twelve (12) consecutive month period with compliance determined at the end of each month, such that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) shall not apply;

(e) Volatile Organic Compounds (VOC) emissions shall be restricted to less than 44.04 tons per 12 consecutive month period with compliance determined at the end of each month, such that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) shall not apply;

(f) Sulfuric Acid Mist (SAM) emissions shall be restricted to less than 31.67 tons per 12 consecutive month period with compliance determined at the end of each month, such that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) shall not apply.

D.1.2 New Source Performance Standards Nonapplicability [326 IAC 12] [40 CFR 60, Subpart Db]

Pursuant to CP097-0034-01, issued March 6, 1998, Oxides of Nitrogen (NO_x) emissions shall be restricted to less than the pound per hour limits in the following table such that the requirements of 326 IAC 12 and 40 CFR 60, Subpart Db, New Source Performance Standards for Industrial - Commercial - Institutional Steam Generating Units shall not apply:

Boiler	NO_x lbs per hour
11	341.0
13	381.7
14	381.7

D.1.3 Sulfur Dioxide (SO_2) [326 IAC 7-4-2]

(a) Pursuant to 326 IAC 7-4-2 (Sulfur Dioxide Emission Limitations: Marion County), the Permittee shall comply with the following emission limitations in pounds per million Btu:

Emission Unit ID (Boiler Number)	**pounds of SO_2 per million Btu**
11, 12, 13, 14, 15 and 16	2.1

(b) As an alternative to the emission limitations listed above, pursuant to 326 IAC 7-4-2, Emission Unit ID (Boiler Number) 11, 12, 13, 14, 15 and 16 may comply with any one (1) of the sets of alternative emission limitations in pounds per million Btu as follows:

Alternative Scenario #	**Emission Unit ID (Boiler Number)**	**pounds of SO_2 per million Btu**
1	Boiler # 13, # 14, # 15 and # 16	0.0
	Boiler # 11 and # 12	4.4

2	Boiler # 11, # 12, # 15 and # 16	0.0
	Boiler # 13 and # 14	4.4
3	Boiler # 11, # 12, #13 and # 14	0.0
	Boiler # 15 and # 16	4.4
4	Boiler # 11, # 12, # 15 and # 16	3.0
	Boiler # 13 and # 14	0.3
5	Boiler # 11 and # 12	0.3
	Boiler # 13, # 14, # 15 and # 16	3.0

(c) IDEM, OAQ and OES shall be notified prior to the reliance by the Permittee on any one (1) of the sets of alternative emission limitations as listed in the Table above.

(d) A log of hourly operating status for each boiler shall be maintained and made available to IDEM, OAQ and OES upon request. A daily summary indicating which boilers were in service during the day shall be submitted to IDEM, OAQ and OES quarterly. In addition, records of the daily average sulfur content, heat content, and sulfur dioxide emission rate for each day in which an alternative set of emission limitations is used shall be submitted to IDEM, OAQ and OES quarterly.

(e) Pursuant to 326 IAC 7-4-2, for the purposes of 326 IAC 7-2-1(c)(1), during thirty (30) day periods in which the Permittee relies on more than one (1) set of alternative emission limitations, a separate thirty (30) day rolling weighted average for each set of limitations shall be determined. Each thirty (30) day rolling average shall be based on data from the previous thirty (30) operational days within the last ninety (90) days for that set of limitations. If the Permittee does not operate thirty (30) days under any one (1) set of limitations within the last ninety (90) days, the rolling weighted average shall be based on all operational days within the last ninety (90) days for that set of limitations.

D.1.4 Particulate Matter (PM) [326 IAC 6-1-12][326 IAC 2-7-5]

(a) Pursuant to 326 IAC 6-1-12(a) (Nonattainment Area Particulate Limitations: Marion County), the Permittee shall comply with the following emission limitations for Particulate Matter (PM):

Emission Unit ID (Boiler Number)	**pounds PM per million Btu**	**tons PM per year**
Boiler 11	0.125	484.4
Boiler 12	0.175	
Boiler 13	0.082	
Boiler 14	0.082	
Boiler 15	0.106	
Boiler 16	0.106	

Boiler 17	0.015	
Boiler 18	0.015	

(b) Pursuant to 326 IAC 6-1-12 (b) (Nonattainment Area Particulate Limitations: Marion County), the Permittee shall be considered in compliance with the tons per year emission limits in the table above if emissions are within five percent (5%) of the emission limit established pursuant to 326 IAC 6-1-12(a).

D.1.5 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

(a) Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the following applies:

(1) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period during the start up or shut down period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]

(2) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

(b) If this facility cannot meet the opacity limitations in 326 IAC 5-1-3(a) or (b), the Permittee may submit a written request to IDEM, OAQ, for a temporary alternative opacity limitation in accordance with 326 IAC 5-1-3(d). The Permittee must demonstrate that the alternative limit is needed and justifiable.

D.1.6 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

(a) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in these facilities. Any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any binding agent or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.

(b) Any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler rinses.

D.1.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan of this Permit, is required for Emission Unit IDs 11, 13, and 14.

Compliance Determination Requirements

D.1.8 Continuous Emission Monitoring [326 IAC 3]

Pursuant to CP 097-0034-01, the Permittee shall install, calibrate, maintain and operate continuous emission monitoring systems (CEMS) including diluent, fuel flow and coke oven gas calorimetric value monitoring for SO_2, NO_x, and CO in accordance with 326 IAC 3-5, Continuous Monitoring of Emissions, for

Boilers 11, 13 and 14.

(a) Any CEMS installed by the Permittee shall be operated continuously except during calibration checks, audits, zero and span adjustments (not including certifications) or periods of repair or when the boiler is not in operation. The Permittee shall conduct maintenance or repair in a manner that will minimize downtime.

(b) The CEMS for determining compliance with SO_2 pursuant to Operating Conditions D.1.1 and D.1.3, shall include a SO_2 monitoring system capable of recording emissions in pounds per million Btu and tons per day.

(c) The CEMS for determining compliance with NO_x pursuant to Operating Conditions D.1.1 and D.1.2, shall include a NO_x monitoring system capable of recording emissions in pounds per hour.

(d) The CEMS for determining compliance with CO pursuant to Operating Condition D.1.1 shall include a CO monitoring system capable of recording emissions in tons per day.

D.1.9 Carbon Monoxide (CO), Particulate Matter less than 10 microns (PM-10), Sulfur Dioxide (SO2), Oxides of Nitrogen (NOx), Volatile Organic Compounds (VOC) and Sulfuric Acid Mist (SAM)

Compliance with the emissions limitations in Condition D.1.1 shall be demonstrated as follows:

(a) The Permittee shall document compliance with the PM-10 emissions limitations based on daily emissions calculations using the following formula:

$$PM10 = A + [B * (SO_2)] + [C * (NO_x)]$$

Where: A = -0.02718
B = 0.02284
C = 0.15
SO_2 and NO_x are from CEM data obtained pursuant to Condition D.1.8

A, B, and C are constants derived from stack testing required by CP097-0034-01 issued on March 6, 1988. The stack tests were completed in 1999.

The daily emissions calculations shall be used to calculate the twelve (12) month rolling sum and shall be rolled on a monthly basis.

(b) The Permittee shall demonstrate compliance with the NO_x ,SO_2 and CO emission limitations based on CEM data obtained pursuant to Condition D.1.8. An alternative sampling and analysis methodology may be used to document compliance with SO_2 emissions limitations with prior approval from IDEM and OES. The daily emissions shall be used to calculate the 12 month rolling sum and shall be rolled on a monthly basis.

(c) The Permittee shall demonstrate compliance with SAM based on surrogate compliance with the SO_2 limit.

(d) The Permittee shall demonstrate compliance with VOC emission limitations using the following emission factors:

Boiler 11 VOC Emission Factor:	0.0013 pound per million Btu
Boilers 13 and 14 VOC Emission Factor	0.0027 pound per million Btu

The daily emissions calculations and heat content, determined by the calorimetric monitoring required in D.1.8, shall be used to calculate the twelve (12) month rolling sum and shall be rolled on a monthly basis.

(e) Compliance with CO, PM-10, SO_2, NO_x, SAM and VOC will insure compliance for PM.

D.1.10 Particulate Matter (PM) [326 IAC 2-7-5]

Pursuant to 326 IAC 6-1-12, 326 IAC 2-7-5 and Section D.1.4 of this Permit, compliance with the PM tons per year limit shall be demonstrated by multiplying the volumetric fuel consumption of coke oven gas by the heat value of the coke oven gas and the emission factor from the most recent stack test.

D.1.11 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

The Permittee shall use appropriate methodology as identified in 40 CFR Part 261 and/or 40 CFR Part 262 to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.

D.1.12 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]

The Permittee shall record, report, and quality assure the data from the monitoring systems for the NOx budget units on and after May 1, 2003 in accordance with 326 IAC 10-4-12 and 40 CFR 75.

D.1.13 SO_2 Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the SO_2 continuous emission monitoring (CEM) system is malfunctioning or down for repairs or adjustments, the relevant data substitution requirements of 40 CFR 75 - Missing Data Substitution Procedures shall be used to provide substitute data.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.14 Record Keeping Requirements

(a) To document compliance with Section C - Opacity and Conditions D.1.1, D.1.2, D.1.3, D.1.8, D.1.9, and D.1.10, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.1.1, D.1.2, and D.1.3.

(1) Data and results from the most recent stack test; and

(2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5, Construction Permit CP097-0034-01, and 326 IAC 7-2-1(g). During CEMS downtime, the Permittee shall maintain records of mass emission rates determined in accordance with Condition D.1.13 and C.11;

(3) All preventive maintenance measures taken.

(b) To document compliance with Condition D.1.4 and D.1.10, the Permittee shall maintain records of the amount of coke oven gas consumed and total PM emissions per twelve (12) consecutive month period .

(c) To document compliance with Condition D.1.3, the Permittee shall maintain a log of hourly operating status for each boiler. The log must be made available to IDEM and/or OES upon request.

(d) To document compliance with D.1.7, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.15 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Condition D.1.1, D.1.2, D.1.3, D.1.4, D.1.8, D.1.9, and D.1.10 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:

(1) Date of downtime.

(2) Time of commencement.

(3) Duration of each downtime.

(4) Reasons for each downtime.

(5) Nature of system repairs and adjustments.

The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Emission Unit ID 12 One (1) Foster Wheeler pulverized coal boiler, identified as Emission Unit ID 12, which is dry bottom and wall fired, with a nominal heat input capacity of 352 million Btu per hour, with natural gas fired on boiler startup and for flame stabilization, with emissions directed to one (1) hot side electrostatic precipitator, identified as Control Equipment ID CE 12, exhausting at Stack/Vent ID 3 (shared with Emission Unit ID 11), installed in 1938, with a continuous opacity monitor, and with a continuous emissions monitoring system for SO_2 and NO_x. $S0_3$ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning.

Emission Unit ID 15 One (1) Babcock & Wilcox coal fired spreader stoker boiler, identified as Emission Unit ID 15, with a nominal heat input capacity of 324 million Btu per hour, with natural gas fired on boiler startup and for flame stabilization, with emissions directed to one (1) hot side electrostatic precipitator, identified as Control Equipment ID CE 1516 (shared with Emission Unit ID 16), exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 16, 17 and 18), installed in 1953, with a continuous opacity monitor, and with a continuous emissions monitoring system for SO_2 and NO_x.

Emission Unit ID 16 One (1) Babcock & Wilcox coal fired spreader stoker boiler, identified as Emission Unit ID 16, with a nominal heat input capacity of 324 million Btu per hour, with natural gas fired on boiler startup and for flame stabilization, with emissions directed to one (1) hot side electrostatic precipitator, identified as Control Equipment ID CE 1516 (shared with Emission Unit ID 15), exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 15, 17 and 18), installed in 1953, with a continuous opacity monitor, and with a continuous emissions monitoring system for SO_2 and NO_x.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Sulfur Dioxide (SO_2) [326 IAC 7-4-2]

(a) Pursuant to 326 IAC 7-4-2 (Sulfur Dioxide Emission Limitations: Marion County), the Permittee shall comply with the following emission limitations in pounds per million Btu:

Emission Unit ID (Boiler Number)	pounds of SO_2 per million Btu

11, 12, 13, 14, 15 and 16	2.1

(b) As an alternative to the emission limitations listed above, pursuant to 326 IAC 7-4-2, Emission Unit ID (Boiler Number) 11, 12, 13, 14, 15 and 16 may comply with any one (1) of the sets of alternative emission limitations in pounds per million Btu as follows:

Alternative Scenario #	Emission Unit ID (Boiler Number)	pounds of SO_2 per million Btu
1	Boiler # 13, # 14, # 15 and # 16	0.0
	Boiler # 11 and # 12	4.4
2	Boiler # 11, # 12, # 15 and # 16	0.0
	Boiler # 13 and # 14	4.4
3	Boiler # 11, # 12, #13 and # 14	0.0
	Boiler # 15 and # 16	4.4
4	Boiler # 11, # 12, # 15 and # 16	3.0
	Boiler # 13 and # 14	0.3
5	Boiler # 11 and # 12	0.3
	Boiler # 13, # 14, # 15 and # 16	3.0

(c) IDEM, OAQ and OES shall be notified prior to the reliance by the Permittee on any one (1) of the sets of alternative emission limitations as listed in the Table above,

(d) Pursuant to 326 IAC 7-4-2, for the purposes of 326 IAC 7-2-1(c)(1), during thirty (30) day periods in which the Permittee relies on more than one (1) set of alternative emission limitations, a separate thirty (30) day rolling weighted average for each set of limitations shall be determined. Each thirty (30) day rolling average shall be based on data from the previous thirty (30) operational days within the last ninety (90) days for that set of limitations. If the Permittee does not operate thirty (30) days under any one (1) set of limitations within the last ninety (90) days, the rolling weighted average shall be based on all operational days within the last ninety (90) days for that set of limitations.

D.2.2 Particulate Matter (PM) [326 IAC 6-1-12][326 IAC 2-7-5]

(a) Pursuant to 326 IAC 6-1-12(a) (Nonattainment Area Particulate Limitations: Marion County), the

Permittee shall comply with the following emission limitations for Particulate Matter (PM):

Emission Unit ID (Boiler Number)	pounds PM per million Btu	tons per year
Boiler 11	0.125	484.4
Boiler 12	0.175	
Boiler 13	0.082	
Boiler 14	0.082	
Boiler 15	0.106	
Boiler 16	0.106	
Boiler 17	0.015	
Boiler 18	0.015	

(b) Pursuant to 326 IAC 6-1-12 (b) (Nonattainment Area Particulate Limitations: Marion County), the Permittee shall be considered in compliance with the tons per year emission limits in the table above if emissions are within five percent (5%) of the emission limit established pursuant to 326 IAC 6-1-12(a).

D.2.3 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

(a) Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the following applies for Boiler 12:

(1) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period during the start up or shut down period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]

Operation of the electrostatic precipitator is not required during these times unless necessary to comply with these limits.

(2) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging periods in any sixty (60) minute period. The averaging periods in excess of the opacity limit shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

(b) If this facility cannot meet the opacity limitations in 326 IAC 5-1-3(a) or (b), the Permittee may

submit a written request to IDEM, OAQ, for a temporary alternative opacity limitation in accordance with 326 IAC 5-1-3(d). The Permittee must demonstrate that the alternative limit is needed and justifiable.

D.2.4 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

(a) Pursuant to 326 IAC 5-1-3(e) (Temporary Alternative Opacity Limitations), the following applies for Boilers 15 and 16:

(1) When building a new fire in a boiler, opacity may exceed the 30% opacity limitation for a period not to exceed a total of one half (0.5) hour (five (5) six (6)-minute averaging periods) during the start up period or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first.

(2) When shutting down a boiler, opacity may exceed the 30% opacity limitation for a period not to exceed a total of two tenths (0.2) hours (two (2) six (6)-minute averaging periods) during the shut down period.

(3) Operation of the electrostatic precipitator is not required during these times unless necessary to comply with these limits.

(b) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging periods in any sixty (60) minute period. The averaging periods in excess of the opacity limit shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

D.2.5 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

(a) All coal burned, including coal treated with any additive, shall meet ASTM specifications for classification as coal (ASTM D388).

(b) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in these facilities. Any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any binding agent or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.

(c) Any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and no more than two full volume boiler rinses.

D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

(a) A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan of this Permit, is required for Emission Unit IDs 12, 15, and 16 and their control devices.

(b) The PMP for an electrostatic precipitator shall include the following inspections, performed according to the indicated schedules:

(1) Plate and electrode alignment, every major maintenance outage, but no less than every 2 years;

(2) ESP TR set components, performed at least once per calendar year. At a minimum, the following inspections shall be performed:

(A) Internal inspection of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).

(B) Effectiveness of rapping (including but not limited to buildup of dust on discharge electrodes and plates).

(C) Gas distribution (including but not limited to buildup of dust on distribution plates and turning vanes).

(D) Dust accumulation (including but not limited to buildup of dust on shell and support members that could result in grounds or promote advanced corrosion).

(E) Major misalignment of plates (including but not limited to a visual check of plate alignment).

(F) Rapper, vibrator and TR set control cabinets (including but not limited to motors and lubrication).

(G) Rapper assembly (including but not limited to loose bolts, ground wires, water in air lines, and solenoids).

(H) Vibrator and rapper seals (including but not limited to air in-leakage, wear, and deterioration).

(I) TR set controllers (including but not limited to low voltage trip point, over current trip point, and spark rate).

(3) Air and water infiltration, once per month. The recommended method for this inspection is for audible checks around ash hoppers/hatches, duct expansion joints, and areas of corrosion.

Compliance Determination Requirements

D.2.7 Testing Requirements [326 IAC 2-7-6(1) and (6)] [326 IAC 2-1.1-11]

(a) Compliance with the PM limitation in Condition D.2.2 shall be determined for Emission Units 15 and 16 by a performance stack test conducted utilizing Method 5 or other methods as approved by the Commissioner. This test shall be performed at least once during each of the following calendar years: 2004, 2005, 2007. Following this testing schedule, performance stack tests shall be repeated by December 31 of every second calendar year following the valid compliance demonstration performed in 2007. Testing shall be conducted in accordance with Section C-Performance Testing.

(b) Within 180 days of the issuance date of this Part 70 permit, compliance with the PM limitation in Condition D.2.2 shall be determined for Emission Unit 12 by a performance stack test conducted utilizing Method 5 or other methods approved by the Commissioner. This testing shall be repeated by December 31 of every second calendar year following this valid compliance demonstration.

Testing shall be conducted in accordance with Section C - Performance Testing.

For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

D.2.8 Sulfur Dioxide Emissions [326 IAC 7-2-1][326 IAC 3][326 IAC 3-7]

(a) Compliance with the SO_2 limit in Section D.2.1 shall be demonstrated for emission units 12, 15 and 16 by conducting continuous emission monitoring of SO_2 emissions pursuant to 326 IAC 3-5.

(b) Upon written notification to IDEM by the Permittee, coal sampling and analysis data may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7, coal sampling and analysis data shall be collected as follows:

(1) Coal sampling shall be performed using the methods specified in 326 IAC 3-7-2(a), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2(c), (d), and (e); or

(2) Pursuant to 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring.

D.2.9 Particulate Matter (PM) [326 IAC 2-7-5]

Pursuant to 326 IAC 6-1-12, 326 IAC 2-7-5 and Section D.2.2 of this Permit, compliance with the PM tons per year limit shall be demonstrated by recording on a daily basis the weight amount of coal in tons bunkered per rolling twelve (12) consecutive month period and using the emission factor from the most recent PM stack test.

D.2.10 Continuous Emissions Monitoring - Opacity [326 IAC 3-5][326 IAC 5-1-2(2)]

For Emission Unit ID 12, 15 and 16, pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), continuous emission monitoring systems shall be calibrated, maintained, and operated for measuring opacity which meets the performance specifications of 40 CFR 60, Appendix B, Performance Specification 1 and 326 IAC 3-5-2.

D.2.11 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitators (ESPs) shall be operated at all times that the boilers vented to the ESPs are in operation and combusting coal.

D.2.12 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]

The Permittee shall record, report, and quality assure the data from the monitoring systems for the NOx budget units on and after May 1, 2003 in accordance with 326 IAC 10-4-12 and 40 CFR 75.

D.2.13 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

The Permittee shall use appropriate methodology as identified in 40 CFR Part 261 and/or 40 CFR Part 262 to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.

D.2.14 SO_2 Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the SO_2 continuous emission monitoring (CEM) system is malfunctioning or down for repairs or adjustments, the following shall be used to demonstrate compliance with 326 IAC 7-4-2 and Condition D.2.1 of this permit:

(a) If the CEM system is down for less than eight (8) hours, the Permittee shall utilize the relevant requirements of 40 CFR 75 - Missing Data Substitution Procedures to calculate emissions data for each hour of missing data.

(b) If the CEM system is down for eight (8) hours or more, fuel sampling shall be conducted. Personnel shall collect coal samples, at least once per shift, from the surge hoppers of the appropriate in-service coal-fired boilers. The composite weight of all samples for the day should be approximately ten (10) pounds. All incremental samples collected from the feeders should be as close to the same weight as possible. Coal collected by each shift shall be stored and sealed between collections to prevent moisture loss.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.15 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

For Emission Units 15 and 16:

(a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit(s) is (are) in operation, by monitoring and recording the number of T-R sets in service and the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.

(b) Whenever the percentage of T-R sets in service falls to 75 percent (75%), the Permittee must take response steps to restore all T-R sets to service within 60 calendar days. Failure to take response steps and bring all T-R sets back into service within 60 calendar days shall be considered a deviation from this permit.

(c) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below 75 percent (75%). T-R set failure resulting in less than 75 percent availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.2.16 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

For Emission Unit 12:

(a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is in operation, by monitoring and recording the number of T-R sets in service and the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.

(b) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below 90 percent (90%). T-R set failure resulting in less than 90 percent (90%) availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.2.17 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the opacity exceeds twenty percent (20%) for three (3) consecutive six (6) minute averaging periods. In the event of opacity exceeding twenty percent, response steps will be taken such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty percent). Examples of expected response steps include, but are not limited to, boiler loads being reduced, adjustment of flue gas conditioning rate, and ESP T-R sets being returned to service.

(b) Opacity readings in excess of twenty percent (20%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.18 Record Keeping Requirements

(a) To document compliance with Section C - Opacity and Conditions D.2.1, D.2.2, D.2.3, D.2.4, D.2.7, D.2.8, D.2.9, D.2.10, D.2.12, D.2.14, D.2.15, and D.2.16, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.2.2, D.2.3, D.2.4, and D.2.7.

(1) Data and results from the most recent stack test;

(2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5 and 326 IAC 326 IAC 7-2-1(g). During CEMS downtime, the Permittee shall maintain records of mass emission rates determined in accordance with Condition D.2.14 and C.11;

(3) All parametric monitoring readings;

(b) To document compliance with Condition D.2.1 and D.2.8, the Permittee shall maintain records of all continuous emissions monitoring data, pursuant to 326 IAC 3-5 and 326 IAC 7-2-1(g);

(c) To document compliance with Condition D.2.2 and D.2.9, the Permittee shall record on a daily basis the weight amount of coal in tons bunkered and the total PM emissions per rolling twelve (12) consecutive month period.

(d) To document compliance with Condition D.2.6, the Permittee shall maintain records of the results of all boiler and emission control equipment inspections, any additional inspections prescribed by the Preventive Maintenance Plan.

(e) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In

addition, any revision to the SOP shall be submitted to IDEM, OAQ and OES.

(f) A log of hourly operating status for each boiler shall be maintained and made available to IDEM, OAQ and OES upon request. A daily summary indicating which boilers were in service during the day shall be submitted to IDEM, OAQ and OES quarterly. In addition, records of the daily average sulfur content, heat content, and sulfur dioxide emission rate for each day in which an alternative set of emission limitations is used shall be submitted to IDEM, OAQ and OES quarterly.

(g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.19 Reporting Requirements

(a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Section D.2.1, D.2.2, and D.2.10 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:

(1) Date of downtime.
(2) Time of commencement.
(3) Duration of each downtime.
(4) Reasons for each downtime.
(5) Nature of system repairs and adjustments.

The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Emission Unit ID 17 One (1) Combustion Engineering boiler, identified as Emission Unit ID 17, firing distillate oil, with a nominal heat input capacity of 228 million Btu per hour, exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 15, 16 and 18), and installed in 1974.

Emission Unit ID 18 One (1) Combustion Engineering boiler, identified as Emission Unit ID 18, firing distillate oil, with the capability to fire natural gas on boiler startup, with a nominal heat input capacity of 228 million Btu per hour, exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 15, 16 and 17), and installed in 1972.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Sulfur Dioxide (SO_2) [326 IAC 7-4-2]

(a) Pursuant to 326 IAC 7-4-2 (Sulfur Dioxide Emission Limitations: Marion County), the Permittee shall comply with the following emission limitations in pounds per million Btu:

Emission Unit ID (Boiler Number)	pounds of SO_2 per million Btu
17 and 18	0.3

(b) A log of hourly operating status for each boiler shall be maintained and made available to IDEM, OAQ and OES upon request. A daily summary indicating which boilers were in service during the day shall be submitted to IDEM, OAQ and OES quarterly.

D.3.2 Particulate Matter (PM) [326 IAC 6-1-12][326 IAC 2-7-5]

(a) Pursuant to 326 IAC 6-1-12(a) (Nonattainment Area Particulate Limitations: Marion County), the Permittee shall comply with the following emission limitations for Particulate Matter (PM):

Emission Unit ID (Boiler Number)	pounds PM per million Btu	tons per year
Boiler 11	0.125	484.4
Boiler 12	0.175	
Boiler 13	0.082	
Boiler 14	0.082	
Boiler 15	0.106	
Boiler 16	0.106	
Boiler 17	0.015	
Boiler 18	0.015	

(b) Pursuant to 326 IAC 6-1-12 (b) (Nonattainment Area Particulate Limitations: Marion County), the Permittee shall be considered in compliance with the tons per year emission limits in the table above if emissions are within five percent (5%) of the emission limit established pursuant to 326 IAC 6-1-12(a).

D.3.3 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

(a) Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the following applies:

(1) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period during the start up or shut down period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]

(2) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

(b) If this facility cannot meet the opacity limitations in 326 IAC 5-1-3(a) or (b) of this condition, the Permittee may submit a written request to IDEM, OAQ, for a temporary alternative opacity limitation in accordance with 326 IAC 5-1-3(d). The Permittee must demonstrate that the

alternative limit is needed and justifiable.

D.3.4 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

(a) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in these facilities. Any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any binding agent or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.

(b) Any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and no more than two full volume boiler rinses.

D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan of this Permit, is required for Emission Unit IDs 17 and 18.

Compliance Determination Requirements

D.3.6 Testing Requirements [326 IAC 2-7-6(1) and (6)] [326 IAC 2-1.1-11]

If either emission unit 17 or 18 operates at least one thousand (1000) hours in each of two (2) consecutive calendar years, compliance with the PM limitation in Condition D.3.2 shall be determined by a performance stack test conducted utilizing Method 5 or other methods as approved by the Commissioner and completed within 180 days of the end of the second calendar year. Testing shall be conducted in accordance with Section C- Performance Testing.

For the purposes of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

D.3.7 Sulfur Dioxide Emissions [326 IAC 7-2-1][326 IAC 3-6][326 IAC 3-7]

(a) Pursuant to 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the limit in Condition D.3.1 using a calendar month average.

(b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7-4, fuel sampling and analysis data shall be collected as follows:

(1) The Permittee may rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; or,

(2) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with 326 IAC 3-7-4(a).

(A) Oil samples may be collected from the tanker truck load prior to transferring fuel to the storage tank; or

(B) Oil samples shall be collected from the storage tank immediately after each addition of fuel to the tank.

(c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other

requirements of 326 IAC 7 shall not apply. [326 IAC 7-2-1(g)]

D.3.8 Particulate Matter (PM) [326 IAC 2-7-5]

Pursuant to 326 IAC 6-1-12, 326 IAC 2-7-5 and Section D.3.2 of this Permit, compliance with the PM tons per year limit shall be demonstrated by recording on a daily basis the amount of distillate oil in gallons consumed per rolling twelve (12) consecutive month period and using the emission factor from the most recent stack test. In the absence of stack test data for a given emission unit, the Permittee shall use the emission factors from AP-42.

D.3.9 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

The Permittee shall use appropriate methodology as identified in 40 CFR Part 261 and/or 40 CFR Part 262 to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.10 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) Visible emission notations of Stack #1 exhaust shall be performed once per shift during normal daylight operations while combusting fuel oil in either Boiler 17, Boiler 18 or both boiler 17 and 18. A trained employee shall record whether emissions are normal or abnormal. Continuous opacity monitor data collected in accordance with 326 IAC 3-5 (Continuous Monitoring of Emissions) may be used in place of the visible emission notations. If continuous opacity monitors are used in place of the visible emission notations, the continuous emission monitoring systems shall be calibrated, maintained, and operated for measuring opacity which meets the performance specifications of 40 CFR 60, Appendix B, Performance Specification 1 and 326 IAC 3-5-2.

(b) If abnormal emissions are observed at Stack #1 exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(c) “Normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that boiler.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.11 Record Keeping Requirements

(a) To document compliance with Section C - Opacity and Conditions D.3.6 and D.3.10, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.3.6 and D.3.7.

(1) Data and results from the most recent stack test; and

(2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5, when using continuous emissions monitoring data in place of visible emissions notations; and

(3) Records of visible emission notations of the stack exhaust when not using continuous emission monitoring in place of visible emissions notations.

(b) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be sufficient to demonstrate compliance using a calendar month average and shall be complete and sufficient to establish compliance with the SO_2 limits established in Condition D.3.1.

(1) Calendar dates covered in the compliance determination period;

(2) Actual oil usage since last compliance determination period, monthly average sulfur content, heat content, and equivalent sulfur dioxide emissions;

(3) To document compliance with Condition D.3.1, the Permittee shall maintain a log of hourly operating status for each boiler. The log must be made available to IDEM and/or OES upon request.

(c) To document compliance with Condition D.3.2 and D.3.8, the Permittee shall maintain records on a daily basis of the amount of distillate oil in gallons consumed and the total PM emissions per rolling twelve (12) consecutive month period.

(d) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ and OES.

(e) To document compliance with Condition D.3.5, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.12 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Section D.3.1, D.3.2, and D.3.8 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) Upon the request of IDEM, OAQ and/or OES, the Permittee shall submit records of actual fuel usage, the monthly average sulfur content, heat content , equivalent sulfur dioxide emission rate and the log of hourly boiler operating status.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:	
Emission Unit ID Ash 12	Load out of ash from the source, identified as Emission Unit ID Ash, to trucks with a nominal throughput of 45 tons of ash per hour. Conditioned bottom ash is gravity fed to one (1) truck load out enclosure station, constructed in 1983-84, with movable doors that create an enclosure. Conditioned fly ash is unloaded to trucks utilizing either a telescopic chute under vacuum or gravity feeding. Emissions from the enclosure are exhausted to an electrostatic precipitator, identified as CE 12 and/or CE 1516.
Coal Crushing	One (1) enclosed coal crusher with a nominal throughput of 400 tons of coal per hour, constructed in 1945.
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)	

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-1-2]

(a) Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the ash load out enclosure identified as CE Ash 12-2 each shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

(b) Pursuant to 326 IAC 6-1-12(a) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from coal crushing shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.4.2 Particulate Matter [326 IAC 2-7-6(1)

The movable doors must be closed and creating an enclosure at all times that fly ash is being unloaded to trucks.

D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan of this Permit, is required for ash unloading.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.4 Record Keeping Requirements

(a) To document compliance with Condition D.4.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities

Degreasing operations that do not exceed 145 gallons per twelve (12) months, except if subject to 326 IAC 20-6.

Railcar receiving of coal with a nominal throughput of 419,000 tons per year.

Pneumatic loading of fly ash and bottom ash to storage silos with a nominal throughput of 5.04 tons of ash per hour.

Outside coal storage and handling and enclosed coal conveying with a nominal throughput of 419,000 tons per year.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-5(a) and (b)]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs existing as of July 1, 1990, located in Clark, Elkhart, Floyd, Lake, Marion, Porter or St. Joseph counties, the Permittee shall ensure that the following requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a

pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.5.2 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from railcar receiving of coal, pneumatic loading of fly ash and bottom ash to storage silos, and enclosed coal conveying each shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan of this Permit, is required for enclosed coal conveying.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.4 Record Keeping Requirements

(a) To document compliance with Condition D.5.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION E TITLE IV CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

One (1) Foster Wheeler boiler, identified as Emission Unit ID 11, with a design heat input capacity of 368 million Btu per hour when firing natural gas and 382 million Btu per hour when firing coke oven gas, with a burner system designed to allow the co-firing of both fuels simultaneously or the firing of each fuel separately, exhausting to one (1) stack, identified as Stack/Vent ID 3 (shared with Emission Unit ID 12), installed in 1938, modified to fire coke oven gas and natural gas in 1998 and with a continuous emissions monitoring system for SO_2, NO_x, and CO.

Acid Rain Program

E.1 Acid Rain Permit [326 IAC 2-7-5(1)(C)] [326 IAC 21] [40 CFR 72 through 40 CFR 78]

Pursuant to 326 IAC 21 (Acid Deposition Control), the Permittee shall comply with all provisions of the Acid Rain permit issued for this source, and any other applicable requirements contained in 40 CFR 72 through 40 CFR 78. The Acid Rain permit for this source is attached to this permit as Attachment B, and is incorporated by reference.

E.2 Title IV Emissions Allowances [326 IAC 2-7-5(4)] [326 IAC 21]

Emissions exceeding any allowances that the Permittee lawfully holds under the Title IV Acid Rain Program of the Clean Air Act are prohibited, subject to the following limitations:

(a) No revision of this permit shall be required for increases in emissions that are authorized by allowances acquired under the Title IV Acid Rain Program, provided that such increases do not require a permit revision under any other applicable requirement.

(b) No limit shall be placed on the number of allowances held by the Permittee. The Permittee may not use allowances as a defense to noncompliance with any other applicable requirement.

(c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Citizens Thermal (Perry K Steam Plant)
Source Address: 366 Kentucky Avenue, Indianapolis, IN 46225
Mailing Address: 366 Kentucky Avenue, Indianapolis, IN 46225
Part 70 Permit No.: T097-6567-00034

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Telephone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION
2700 South Belmont Ave.
Indianapolis Indiana 46221
Phone: 317-327-2234
Fax: 317-327-2274

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Citizens Thermal (Perry K Steam Plant)
Source Address: 366 Kentucky Avenue, Indianapolis, Indiana 46225
Mailing Address: 366 Kentucky Avenue, Indianapolis, Indiana 46225
Part 70 Permit No.: T097-6567-00034

This form consists of 2 pages **Page 1 of 2**

9 1.This is an emergency as defined in 326 IAC 2-7-1(12)
- C The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) daytime business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- C The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION DATA COMPLIANCE

PART 70 OPERATING PERMIT - LOG of DAILY BOILER OPERATING STATUS

Source Name: Citizens Thermal (Perry K Steam Plant)
Source Address: 366 Kentucky Avenue, Indianapolis, Indiana 46225
Mailing Address: 366 Kentucky Avenue, Indianapolis, Indiana 46225
Part 70 Permit No.: T097-6567-00034

Month: _____ Year: _____

	Boiler Number (* X denotes boiler was in service)							
Day	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
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16								
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20								

21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION DATA COMPLIANCE

PART 70 OPERATING PERMIT - EMISSION MONITORING REPORT - CONTINUOUS OPACITY MONITORING EXCEEDANCE SUMMARY

Source Name: Citizens Thermal (Perry K Steam Plant)
Source Address: 366 Kentucky Avenue, Indianapolis, Indiana 46225
Mailing Address: 366 Kentucky Avenue, Indianapolis, Indiana 46225
Part 70 Permit No.: T097-6567-00034

Quarter: _____ Year: _____ Boiler #: _____

Day	Time Period	Opacity % Magnitude	Malfunction (X denotes)		Remarks
			Monitor	Equipment	

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

(Repeat Form as necessary per boiler / COM)

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

and

INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE

Part 70 Usage Report -- Sulfur Dioxide
(Submit Monthly)

Source Name: Citizens Thermal (Perry K Steam Plant)
Source Address: 336 Kentucky Avenue, Indianapolis, Indiana 46225
Mailing Address: 366 Kentucky Avenue, Indianapolis, Indiana 46225
Part 70 Permit No.: T097-6567-00034
Facility: Emission Unit ID 11, 12, 13, 14, 15, 16, 17 and 18
Parameter: SO_2
Limit: SO_2: 2.1 lbs/MMBtu boilers 11-16 and 0.3 lbs/MMBtu boilers 17 and 18; or alternative as described in Condition D.1.3(b) and D.2.1(b);

FUEL OIL SULFUR ANALYSIS **MONTH:** _____ **YEAR:** _____

Shipment Date	Gallons Received	Btu per gallon	% Sulfur	lbs SO_2/MMBtu

Total gallons consumed this month:	
Rolling twelve month fuel consumption:	
Monthly weighted average lbs SO_2/MMBtu:	
Monthly weighted average percent sulfur:	

9 No deviation occurred in this month.
9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Citizens Thermal (Perry K Steam Plant)
Source Address: 366 Kentucky Avenue, Indianapolis, Indiana 46225
Mailing Address: 366 Kentucky Avenue, Indianapolis, Indiana 46225
Part 70 Permit No.: T097-6567-00034

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: ______________________________

Title/Position: ______________________________

Date: ______________________________

Telephone: ______________________________

Attach a signed certification to complete this report.

Send Original to :

City of Indianapolis
OES
Air Quality Management Section
2700 S. Belmont Ave.
Indianapolis, Indiana 46221-2097
Phone 317 / 327-2234 Fax: 317 / 327- 2274

Send copy to :

Indiana Dept. Of Environmental Management
Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

Company Name: Citizens Thermal
Location: 366 Kentucky Avenue, Indianapolis, IN 46225
Permit No.: T097-6567-00034
Source/Facility: Boilers 11,13 and 14 combined
Pollutant: NO_x
Limit: 1537.07 tons per 12 consecutive month period, rolled on a monthly basis.

Month: _____ **Year:** _____

Month	NO_x Emissions this month (ton/month)	NO_x Emissions for the last 12 month period (tons/12 months)

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Send Original to :
City of Indianapolis
OES
Air Quality Management Section
2700 S. Belmont Ave.
Indianapolis, Indiana 46221-2097
Phone 317 / 327-2234 Fax: 317 / 327- 2274

Send copy to :
Indiana Dept. Of Environmental Management
Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

Company Name: Citizens Thermal (Perry K Steam Plant)
Location: 336 Kentucky Avenue, Indianapolis, IN 46225
Permit No.: T097-6567-00034
Source/Facility: Boilers 11, 13 and 14 combined
Pollutant: SO_2 and SAM
Limit: 2954.76 tons SO_2 per 12 consecutive month period, rolled on a monthly basis.
31.67 tons SAM per 12 consecutive month period, rolled on a monthly basis (SAM compliance determination is based on SO_2 compliance)

Month: _____ **Year:** _____

Month	SO_2 Emissions this month (ton/month)	SO_2 Emissions for the last 12 month period (tons/12 months)

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Send original to:
City of Indianapolis
OES
Air Quality Management Section
2700 S. Belmont Ave.
Indianapolis, Indiana 46221-2097
Phone 317 / 327-2234 Fax: 317 / 327- 2274

Send copy to:
Indiana Dept. Of Environmental Management
Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

Company Name: Citizens Thermal (Perry K Steam Plant)
Location: 366 Kentucky Avenue, Indianapolis, IN 46225
Permit No.: T097-6567-00034
Source/Facility: Boilers 11, 13 and 14 combined
Pollutant: PM10
Limit: 65.43 tons per 12 consecutive month period, rolled on a monthly basis.

Month: _____ **Year:** _____

Month	PM10 Emissions this month (ton/month)	PM10 Emissions for the last 12 month period (tons/12 months)

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Send Original to :
City of Indianapolis
OES
Air Quality Management Section
2700 S. Belmont Ave.
Indianapolis, Indiana 46221-2097
Phone 317 / 327-2234 Fax: 317 / 327- 2274

Send copy to :
Indiana Dept. Of Environmental Management
Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

Company Name: Citizens Thermal
Location: 366 Kentucky Avenue, Indianapolis, IN 46225
Permit No.: T097-6567-00034
Source/Facility: Boilers 11, 13 and 14 combined
Pollutant: CO
Limit: 143.04 tons per 12 consecutive month period, rolled on a monthly basis.

Month: _____ Year: _____

Month	CO Emissions this month (ton/month)	CO Emissions for the last 12 month period (tons/12 months)

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Send Original to :
City of Indianapolis
OES
Air Quality Management Section
2700 S. Belmont Ave.
Indianapolis, Indiana 46221-2097
Phone 317 / 327-2234 Fax: 317 / 327- 2274

Send copy to :
Indiana Dept. Of Environmental Management
Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

Company Name: Citizens Thermal
Location: 366 Kentucky Avenue, Indianapolis, IN 46225
Permit No.: T097-6567-00034
Source/Facility: Boilers 11, 13 and 14 combined
Pollutant: VOC
Limit: 44.04 tons per 12 consecutive month period, rolled on a monthly basis.

Month: _____ **Year:** _____

Month	VOC Emissions this month (ton/month)	VOC Emissions for the last 12 month period (tons/12 months)

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Attachment A

The following state rule have been adopted by reference by the Indianapolis Air Pollutant Control Board and are enforceable by Indianapolis Office of Environmental Services (OES) using local enforcement procedures.

(1) 326 IAC 1-1-1 through 1-1-3 and 1-1-5;
(2) 326 IAC 1-2-1 through 1-2-91 (In addition, the IAPCB has adopted several local definitions);
(3) 326 IAC 1-3-1 through 1-3-4;
(4) 326 IAC 1-4-1 (The IAPCB added to the adoption by reference a citation to 61 FR 58482 (November 15, 1996));
(5) 326 IAC 1-5-1 through 1-5-5;
(6) 326 IAC 1-6-1 through 1-6-6;
(7) 326 IAC 1-7-1 through 1-7-5
(8) 326 IAC 2-3-1 through 2-3-5;
(9) 326 IAC 2-4-1 through 2-4-6;
(10) 326 IAC 2-6-1 through 2-6-4;
(11) 326 IAC 2-7-1 through 2-7-18, 2-7-20 through 2-7-25;
(12) 326 IAC 2-8-1 through 2-8-15, 2-8-17 through 2-8-10;
(13) 326 IAC 2-9-1 through 2-9-14;
(14) 326 IAC 2-10-1 through 2-10-5 (The IAPCB adoption adds the language “state or local” immediately after the word “federal” in 326 IAC 2-10-1);
(15) 326 IAC 2-11-1, 2-11-3 and 2-11-4 (The IAPCB adoption adds the language “federal, state or local” immediately after the word “by” in 326 IAC 2-11-1);
(16) 326 IAC 3-1.1-1 through 3-1.1-5;
(17) 326 IAC 3-2.1-1 through 3-2.1-5;
(18) 326 IAC 3-3-1 through 3-3-5;
(19) 326 IAC 4-2-1 through 4-2-2;
(20) 326 IAC 5-1-1 (a), (b) and c) (5), 5-1-2 (1), (2)(A), (2)c) (4), 5-1-3 through 5-1-5, 5-1-7;
(21) 326 IAC 7-1.1-1 and 7-1.1-2;
(22) 326 IAC 7-2-1;
(23) 326 IAC 7-3-1 and 7-3-2;
(24) 326 IAC 7-4-2(28) through (31) (Instead of adopting by reference 7-4-2(1) through (27), the IAPCB regulation substitutes the same requirements listed in a format in which the companies are alphabetized and emission points known to no longer exist have been deleted);
(25) 326 IAC 8-1-0.5 except (b), 8-1-1 through 8-1-2, 8-1-3 except c), (g) and (l), 8-1-5 through 8-1-12;
(26) 326 IAC 8-2-1 through 8-2-12 (The IAPCB adoption by reference of 8-2- 5 adds additional language specific to Zimmer Paper Products, Incorporated as subpart c);
(27) 326 IAC 8-3-1 through 8-3-7;
(28) 326 IAC 8-4-1 through 8-4-5, 8-4-6 (a)(6), (a)(8) and (a)(14) and 8-4-6(b)(1), (b)(3) and 8-4-6c) (In place of 8-4-6(b)(2), which was not adopted, the IAPCB adopted language requiring a pressure relief valve set to release at no less than four and eight-tenths (4.8) Kilo Pascals (seven-tenths (0.7) pounds per square inch)), 8-4-7 except (e), 8-4-8 and 8-4-9;
(29) 326 IAC 8-5-1 through 8-5-4, 8-5-5 except (a)(3) and (d)(3);
(30) 326 IAC 8-6-1 and 8-6-2;
(31) 326 IAC 9-1-1 and 9-1-2;
(32) 326 IAC 11-1-1 through 11-1-2;
(33) 326 IAC 11-2-1 through 11-2-3;
(34) 326 IAC 11-3-1 through 11-3-6;
(35) 326 IAC 14-1-1 through 14-1-4;

Attachment A continued

(36) 326 IAC 14-2-1 except 40 CFR 61.145;
(37) 326 IAC 14-3-1;
(38) 326 IAC 14-4-1;
(39) 326 IAC 14-5-1;
(40) 326 IAC 14-6-1;
(41) 326 IAC 14-7-1;
(42) 326 IAC 14-8-1 through 14-8-5;
(43) 326 IAC 15-1-1, 15-1-2(a)(1), (a)(2) and (a)(8), 15-1-3 and 15-1-4;
(44) 326 IAC 20-1-1 through 20-1-4 (In 20-1-3(b)(2) the adoption states that "permitting authority" means the commissioner of IDEM or the administrator of OES, whichever is applicable);
(45) 326 IAC 20-2-1;
(46) 326 IAC 20-3-1;
(47) 326 IAC 20-4-1;
(48) 326 IAC 20-5-1;
(49) 326 IAC 20-6-1;
(50) 326 IAC 20-7-1;
(51) 326 IAC 20-8-1;
(52) 326 IAC 20-9-1;
(53) 326 IAC 20-14-1;
(54) 326 IAC 20-15-1;
(55) 326 IAC 20-16-1;
(56) 326 IAC 20-17-1;
(57) 326 IAC 20-18-1;
(58) 326 IAC 20-19-1;
(59) 326 IAC 20-20-1;
(60) 326 IAC 20-21-1;
(61) 326 IAC 21-1-1 (The adoption states that "or the administrator of OES" is added in (b));
(62) 326 IAC 22-1-1 (The adoption states that "or the administrator of OES" is added in (b)).

Attachment B

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

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

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

Opt-in
Acid Rain Permit

Office of Air Quality

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Source: **C.C. Perry K Steam Plant**
Address: **366 Kentucky Avenue, Indianapolis, Indiana 46204**
Operated by: **Citizens Thermal Energy**
Owned by: **Citizens Thermal Energy**
County: **Marion**
ORIS Code: 0992

The above corporation is hereby authorized to operate the following facilities subject to the conditions contained herein: coke-oven gas and/or natural gas boiler, unit PK 11, producing steam.

This permit is issued to the above mentioned company under the provisions of 326 Indiana Administrative Code (IAC) 21 and 40 Code of Federal Regulations (CFR) 72 through 40 CFR 78, with conditions listed on the attached pages.

Operation Permit No.: AR 097-11658-00034	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: September 9, 2000 Expiration Date: December 31, 2004

Revised Operation Permit No.: AAR 097-15578-00034	

Issued by:	Issuance Date: July 29, 2003
Janet G. McCabe, Assistant Commissioner Office of Air Quality	Expiration Date: December 31, 2004

Opt-In Permit

Facility Description: coke-oven gas and/or natural gas boiler, unit PK 11, producing steam.

1. Statement of Basis

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

2. Standard Permit Requirements [326 IAC 21]

(a) The designated representative of each opt-in source under 40 CFR 74 and 326 IAC 21 shall:

(1) Submit a complete opt-in permit application (including a compliance plan); and

(2) Submit in a timely manner any supplemental information that the EPA Administrator or IDEM, OAQ determines is necessary to review an opt-in permit application and issue or deny an opt-in permit.

(b) The owners or operators of each combustion source under 40 CFR 74 and 326 IAC 21 shall:

(1) Have an opt-in permit; and

(2) Operate the opt-in source in compliance with the opt-in permit.

(c) The participation by this source in the Acid Rain Program may be terminated only in accordance with 40 CFR 74.18 (withdrawal), 40 CFR 74.46 (shutdown, reconstruction, or change in affected status), and 40 CFR 74.50 (deducting allowances).

(d) This opt-in source, if operated in accordance with this opt-in permit that governs unit PK 11, shall be deemed to be operating in compliance with the Acid Rain Program, except as provided by 40 CFR 72.9(g)(6).

3. Monitoring Requirements [326 IAC 21]

(a) The owners and operators and, to the extent applicable, the designated representative of each combustion source and each opt-in source shall comply with the monitoring requirements as provided in 40 CFR 74 and 75.

(b) The emissions measurements recorded and reported in accordance with 40 CFR 75 shall be used to determine compliance by the opt-in source with the Acid Rain emissions

limitations and emissions reduction requirements for sulfur dioxide under the Acid Rain Program.

(c) The requirements of 40 CFR 74 and 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the opt-in source 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 owners and operators of each opt-in source shall:

(1) Hold allowances, as of the allowance transfer deadline, in the opt-in source's compliance subaccount (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 opt-in source; 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) An opt-in source shall be subject to the requirements under paragraph (a) of the sulfur dioxide requirements upon the effective date of the opt-in source's opt-in permit.

(d) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program, including 40 CFR 73 and 74.

(e) An allowance shall not be deducted in order to comply with the requirements under paragraph (a)(1) and (2) 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 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, opt-in permit application, or the opt-in permit, and no provisions of the 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 Administrator under the Acid Rain Program does not constitute a property right.

(h) Sulfur dioxide allowances shall be allocated to the following unit at the source as follows:

Opt-in SO_2 allowances Allocation Under 40 CFR 74.26 for Perry K Unit 11					
year	2000	2001	2002	2003	2004
Tons	434	1,796	1,796	1,796	1,796

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

(a) The designated representative of any affected unit that has excess emissions in any calendar year shall submit a proposed offset plan to U.S. EPA and IDEM, OAQ as required under 40 CFR 77 and 326 IAC 21.

(b) The designated representative shall submit required information to:

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

and

Indianapolis Office of Environmental Services
Administration Building
2700 South Belmont Ave.
Indianapolis, IN 46221

and

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

and

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

(c) The owners and operators of an affected unit that has excess emissions in any calendar year shall:

(1) Pay without demand the penalty required, and upon demand the interest on that penalty to U.S. EPA, 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.

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

(a) Unless otherwise provided, the owners and operators of the opt-in source shall keep on site at the opt-in 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 U.S. EPA Administrator or IDEM, OAQ:

(1) The certificate of representation for the designated representative for the opt-in 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 opt-in 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;

(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 opt-in 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 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 72 Subpart I, 40 CFR 75, and 326 IAC 21.

7. Liability [326 IAC 21]

(a) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program or an opt-in permit, 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 and 18 USC 1001 and shall be subject to criminal enforcement by 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) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

(e) 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.

(f) 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 affected unit. 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 owners and operators 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, 74, 75, 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 Clean Air Act.

8. Effect on Other Authorities [326 IAC 21]

No provision of the Acid Rain Program, an opt-in permit application, or an opt-in permit shall be construed as:

(a) Except as expressly provided in Title IV of the Clean Air 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 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 791a 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
and
Indianapolis Office of Environmental Services

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name (Owner):	**Citizens Thermal Energy**
Plant Name:	**C.C. Perry K Steam Plant**
Source Location:	**366 Kentucky Avenue, Indianapolis, Indiana 46225**
County:	**Marion**
SIC Code:	**4961**
Operation Permit No.:	**T097-6567-00034**
Permit Reviewer:	**A. Hennessy**

The Indiana Department of Environmental Management, Office of Air Quality (IDEM, OAQ) and the City of Indianapolis Office of Environmental Services (OES) have reviewed a Part 70 permit application from Citizens Thermal Energy relating to the operation of the Perry K Steam Plant for steam generation.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) Foster Wheeler boiler, identified as Emission Unit ID 11, with a design heat input capacity of 368 million Btu per hour when firing natural gas and 382 million Btu per hour when firing coke oven gas, with a burner system designed to allow the co-firing of both fuels simultaneously or the firing of each fuel separately, exhausting to one (1) stack, identified as Stack/Vent ID 3 (shared with Emission Unit ID 12), installed in 1938, modified to fire coke oven gas and natural gas in 1998, and with a continuous emissions monitoring system for SO_2, NO_x, and CO on Stack/Vent ID 3.

(b) One (1) Foster Wheeler pulverized coal boiler, identified as Emission Unit ID 12,which is dry bottom and wall fired, with a maximum design heat input capacity of 352 million Btu per hour, with natural gas fired on boiler startup and for flame stabilization, with emissions directed to one (1) hot side electrostatic precipitator, identified as Control Equipment ID CE 12, exhausting at Stack/Vent ID 3 (shared with Emission Unit ID 11), installed in 1938, with a continuous opacity monitor, and with a continuous emissions monitoring system for SO_2 and NO_x on Stack/Vent ID 3. $S0_3$ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning.

(c) One (1) Babcock and Wilcox boiler, identified as Emission Unit ID 13, with a design heat input capacity of 403 million Btu per hour when firing natural gas and 411 million Btu per hour when firing coke oven gas, with a burner system designed to allow for the co-firing of both fuels simultaneously or the firing of each fuel separately, exhausting to one (1) stack, identified as Stack/Vent ID 4 (shared with Emission Unit ID 14), installed in 1946, modified to fire natural gas and coke oven gas in 1998, and with a continuous emissions monitoring system for SO_2, NO_x, and CO.

(d) One (1) Babcock and Wilcox boiler, identified as Emission Unit ID 14, with a design heat input capacity of 403 million Btu per hour when firing natural gas and 411 million Btu per hour when firing coke oven gas, with a burner system designed to allow for the co-firing of both fuels simultaneously or the firing of each fuel separately, exhausting to one (1) stack,

identified as Stack/Vent ID 4 (shared with Emission Unit ID 13), installed in 1946, modified to fire natural gas and coke oven gas in 1998, and with a continuous emissions monitoring system for SO_2, NO_x, and CO.

(e) One (1) Babcock & Wilcox coal fired spreader stoker boiler, identified as Emission Unit ID 15, with a maximum design heat input capacity of 324 million Btu per hour, with natural gas fired on boiler startup and for flame stabilization, with emissions directed to one (1) hot side electrostatic precipitator, identified as Control Equipment ID CE 1516 (shared with Emission Unit ID 16), exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 16, 17 and 18), installed in 1953, with a continuous opacity monitor, and with a continuous emissions monitoring system for SO_2 and NO_x on Stack/Vent ID 1.

(f) One (1) Babcock & Wilcox coal fired spreader stoker boiler, identified as Emission Unit ID 16, with a maximum design heat input capacity of 324 million Btu per hour, with natural gas fired on boiler startup and for flame stabilization, with emissions directed to one (1) hot side electrostatic precipitator, identified as Control Equipment ID CE 1516 (shared with Emission Unit ID 15), exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 15, 17 and 18), installed in 1953, with a continuous opacity monitor, and with a continuous emissions monitoring system for SO_2 and NO_x on Stack/Vent ID 1.

(g) One (1) Combustion Engineering boiler, identified as Emission Unit ID 17, firing distillate oil, with a maximum design heat input capacity of 228 million Btu per hour, exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 15, 16 and 18), and installed in 1974.

(h) One (1) Combustion Engineering boiler, identified as Emission Unit ID 18, firing distillate oil, with the capability to fire natural gas on boiler startup, with a maximum design heat input capacity of 228 million Btu per hour, exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 15, 16 and 17), and installed in 1972.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

(a) Load out of ash from the source, identified as Emission Unit ID Ash, to trucks with a throughput of 5.04 tons of ash per hour. Conditioned bottom ash is gravity fed to one (1) truck load out enclosure station, constructed in 1983-4, with movable doors that create an enclosure. Conditioned fly ash is unloaded to trucks utilizing either a telescopic chute under vacuum or gravity feeding. Emissions from the enclosure are exhausted to an electrostatic precipitator, identified as CE 12 and/or CE 1516.

Note: Prior to the truck load out enclosure station, ash loadout took place in an open drive.

(b) One (1) enclosed coal crusher with a maximum throughput of 400 tons of coal per hour, constructed in 1945.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Fuel oil fired combustion sources with heat input equal to or less than two (2) million Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
(b) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity of less than or equal to 10,500 gallons and dispensing less than or equal to 230,000 gallons per month.
(c) Storage tanks with capacity less than or equal to 1000 gallons and annual throughputs of less than 12,000 gallons.

(d) Vessels storing lubricating oils, hydraulic oils, machining oils and machining fluids.
(e) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
(f) Machining where an aqueous cutting coolant continuously floods the machining interface.
(g) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-5]
(h) Cleaners and solvents characterized as follows:
A) having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100^{o}F) or;
B) having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20^{o}C (68^{o}F);
the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
(i) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
(j) Closed loop heating and cooling systems.
(k) Any of the following structural steel and bridge fabrication activities:
A) Cutting of 200,000 linear feet or less of one inch (1.0") plate or equivalent.
B) Using eighty (80) tons or less of welding consumables.
(l) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
(m) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
(n) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.
(o) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
(p) Heat exchanger cleaning and repair.
(q) Process vessel degassing and cleaning to prepare for internal repairs.
(r) Coal bunker and coal scale exhausts and associated dust collector vents.
(s) Asbestos abatement projects regulated by 326 IAC 14-10.
(t) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
(u) Flue gas conditioning systems and associated chemicals such as the following: sodium sulfate; ammonia; and sulfur trioxide.
(v) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
(w) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
(x) On site fire and emergency response training approved by the Department.
(y) Stationary fire pumps.
(z) Paved and unpaved roads. [326 IAC 6-4]
(aa) Purge double block and bleed valves.
(bb) Filter or coalescer media changeout.
(cc) Vents from ash transport systems not operated at positive pressure.
(dd) A laboratory as defined by 326 IAC 2-7-1(21)(D).
(ee) Emission Units or activities with emissions of VOC at a level less than 3 pounds per hour or 15 pounds per day:
(1) Eight (8) fuel oil storage tanks each at 30,000 gallons storage capacity (PTE VOC emissions are 0.011 lb/hr and 0.264 lb/day per EPA TANKS program).
(ff) VOC and HAP storage containers: Storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs equal to or less than twelve thousand (12,000) gallons.
(gg) An emission unit or activity with potential uncontrolled emissions of PM-10 at a level less than 5 pounds per hour or 25 pounds per day:
(1) Railcar receiving of coal with a maximum throughput of 419,000 tons per year.

(2) Pneumatic loading of fly ash and bottom ash to storage silos with a maximum throughput of 5.04 tons of ash per hour.
(3) Outside coal storage and handling and enclosed coal conveying.
[326 IAC 6-1-2] [326 IAC 6-4]

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Certificates Of Operation 0034-1, 0034-2, 0034-3, 0034-4, 0034-5, 0034-6, 0034-7 and 0034-8 issued on August 3, 1989 for, respectively, Emission Unit ID 11 through 18.

(b) Construction Permit CP-097-0034-01 issued on March 6, 1998 for Emission Unit ID 11, 13 and 14 modification to convert to coke oven gas and/or natural gas firing, Affidavits of Construction were filed on October 13, 1998 for Emission Unit ID 11and on January 8, 1999 for Emission Unit ID's 13 and 14, validation letters for these units were issued by OES for these units on, respectively, October 22, 1998 and February 26, 1999.

Limited Potential to Emit from the conversion of Emission Unit ID 11, 13 and 14 to coke oven gas and/or natural gas firing is listed below. Potential emissions for these criteria pollutants and PM and Sulfuric Acid Mist, exceed 326 IAC 2-2 (Prevention of Significant Deterioration) major modification thresholds (see TSD Appendix A page 8 of 8). However, a netting analysis netted the conversion out of PSD review such that 326 IAC 2-2 does not apply. The resultant tons from the conversion are listed such that 326 IAC 2-2 does not apply. A Construction Permit was issued March 6, 1998 for the conversion and Affidavits of Construction have been filed as of this writing.

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO_2 (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO_x (ton/yr)	Sulfuric Acid Mist (ton/yr)
Modification Boiler # 11, # 13 & # 14	143.39	65.43	2954.76	44.04	143.04	1537.07	31.67
Contemporaneous Increases	0	0	0	0	0	0	0
Contemporaneous Decreases	119.6	51.57	2915.95	4.96	44.32	1498.42	31.26
Net Emissions	23.79	13.86	38.8	39	98.72	38.65	0.41
PSD or Offset Significant Level	25	15	40	40	100	40	7

This modification to an existing major source was not major because the emissions increases of PM, PM-10, SO_2 , VOC, CO and NO_x after netting are less than PSD and Emissions Offset Regulations significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements and 326 IAC 2-3, the Emission Offset requirements do not apply.

(c) Administrative Amendment # A0980034-1 issued October 1, 1998, to modify the Operation Conditions 10 and 10(e) of the March 6, 1998 Construction Permit CP-097-0034-01.

(d) Administrative Amendment # A0990034-2 issued March 25, 1999 to modify Operation Condition 6 of the March 6, 1998 Construction Permit CP-097-0034-01.

(e) Administrative Amendment 097-15403-00034 issued March 19, 2002 to change the source's name from Indianapolis Power and Light Company to Citizens Thermal Energy and to remove the requirement to operate the COMS (Continuous Opacity Monitoring Systems) on the Boilers #11, #13, #14 from the March 1998 Construction Permit CP-097-0034-01 Condition 10.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

(a) All pound per hour emission limitations for PM, SO_2, NO_x, CO and VOC from Certificates of Operation 0034-1 through 0034-8 have not been carried through.

Reason: 326 IAC 6-1-12 and 326 IAC 7-4-2 contain SIP limitations for these facilities in lbs/mmBtu and tons per year for PM and in lbs/mmBtu for SO_2. These emission limitations are the only applicable emission limits that should be included in this Title V Permit for existing units. There are no applicable Federal, State or Local rules regarding short term or long term emission limitations for NO_x, CO or VOC for the previously existing facilities identified in Certificate of Operation 0034-2 and 0034-5 through 8. Facilities identified in Certificate of Operation 0034-1, 0034-3 and 0034-4 were modified and new limits were established in CP097-0034-01.

(b) All ton per year limitations for SO_2, NO_x, CO and VOC from Certificates of Operation 0034-1 through 0034-8 have not been carried through.

Reason: See (a) above.

(c) All references to ASME Power Test Procedure from Certificates of Operation 0034-1 through 0034-8 have been removed.

Reason: 326 IAC 6-1-12 contains PM SIP emission limitations. Before final adoption of a PM SIP revision to 326 IAC 6-1-12 by the Air Pollution Control Board in February 1999 to remove reference to the ASME Power Test Code Procedure, the SIP had direct reference to the ASME Power Test Code Procedure as the method to demonstrate or verify compliance with the SIP limit(s). Due to the SIP revision, which removed this reference, CTE (then IPL) has requested that reference to ASME Power Test Procedure be removed from the Title V Permit.

Air Pollution Control Justification as an Integral Part of the Process

On January 2, 1997, CTE (then IPL) submitted the following justification that the rotary and secondary separators and the steam jet air washer(s) for ash handling systems to silos 1, 2, 3 and 4 are to be considered as an integral part of the ash handling process:

(a) Bottom ash and fly ash are pulled from hoppers by steam jet vacuum. The ash laden air stream is directed through a rotary separator with no emission point. The air stream is then directed through a secondary separator where additional ash is removed. All recovered ash is then fed to one of four storage silos each equipped with a bag filter. The flyash is passed through a bag filter(s) and then through to the steam jet washer and a muffler. Bottom ash is passed through the steam jet washer and a muffler.

(b) With the exception of the bag filters, the equipment utilized in this phase of the ash handling process is claimed by CTE (then IPL) to be integral to the system because an air handling system is necessary to remove ash from the source and there are no vents to the outside air for the rotary and secondary separators which serve to provide an efficiency to ash

recovery.

IDEM, OAQ and OES have evaluated the justification and agree that the separators and the steam jet air washers are an integral part of the ash handling system. Therefore, the permitting level will be determined using the potential emissions including control equipment deemed integral.

Enforcement Issue

(a) In its Part 70 Permit application, CTE (then IPL) notified IDEM and OES that it may have been required to obtain a permit for the construction of its coal handling and ash handling facilities. The equipment associated with those operations is listed in this Technical Support Document under the condition entitled **Unpermitted Emission Units and Pollution Control Equipment.**

(b) OES has reviewed the matter and Limited Liability has been granted for these facilities. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit 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.

An administratively complete Part 70 Permit application for the purposes of this review was received on September 13, 1996. However, additional technical information on ash handling was received on January 3, 1997 and November 14, 2002 and the coke oven gas/natural gas modification application and technical information used to issue a Construction Permit March 6, 1998 were resubmitted on June 2, 1998 to amend the initial Part 70 Permit application. Validation letters for the converted units were issued by OES in October 1998 and February 1999. Stack testing results and relative accuracy testing results were submitted to IDEM and OES on March 15, 1999 and March 22, 1999.

A notice of completeness letter was mailed to the source on November 25, 1996.

Emission Calculations

CTE (then IPL) was not required to provide potential to emit calculations for criteria or hazardous air pollutants (HAPs) nor was CTE required to provide calculations on potential fugitive emissions. A determination of major source status can be made using the actual emissions estimates provided. See Appendix A of this Technical Support Document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical

or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	greater than 100
PM-10	greater than 100
SO_2	greater than 100
VOC	greater than 100
CO	greater than 100
NO_x	greater than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Arsenic	2.7
Beryllium	0.1
Cadmium	0.3
Chromium	7.2
Lead	2.4
Manganese	11.2
Mercury	0.6
Nickel	6.0
Polycyclic Organic Matter	0.0
Formaldehyde	0.0
Hydrogen Chloride	greater than 47.9 *
Hydrogen Fluoride	greater than 13.2 *
Total	greater than 91.6

*The source provided actual emissions estimates only for these HAPs with no emission factor listing.

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10, SO_2, CO, and NO_x are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and at least one regulated pollutant is emitted at a rate of 100 tons per year or more, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table lists the actual emissions from the source. This information reflects the 2000 OAQ emission data. HAPs emissions are from Form GSD-08 of the initial Part 70 Permit Application received September 13, 1996 which reflect the 1995 HAP emission total.

Pollutant	Actual Emissions (tons/year)
PM	73.55
PM-10	21.78
SO_2	1716.27
VOC	6.55
CO	122.96
NO_x	1061.84
HAP (total)	89.9

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all ton per year emission limitations of the significant emission units.

	Limited Potential to Emit (tons/year)									
Process/facility	Short Term PM	Annual PM	PM-10	SO_2	SO_2	VOC	CO	NO_X	NO_X	HAP
Emission Unit ID 11 Boiler # 11	0.125 lb/MMBtu	484.4	65.4	2.1 lb/MMBtu*	2954.7	44.0	143.0	341 lb/hr	1537.1	
Emission Unit ID 13 Boiler # 13	0.082 lb/MMBtu							381.7 lb/hr		
Emission Unit ID 14 Boiler # 14	0.082 lb/MMBtu							381.7 lb/hr		
Emission Unit ID 12 Boiler # 12	0.175 lb/MMBtu									
Emission Unit ID 15 Boiler # 15	0.106 lb/MMBtu									
Emission Unit ID 16 Boiler # 16	0.106 lb/MMBtu									
Emission Unit ID 17 Boiler # 17	0.015 lb/MMBtu			0.3 lb/MMBtu						
Emission Unit ID 18 Boiler # 18	0.015 lb/MMBtu									
Emission Unit ID Ash-12 Ash Unloading	0.03 gr/dscfm									

* SO2 is limited to 2.1 lb/MMbtu or to the alternative scenario under 326 IAC 7-4-2.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	unclassifiable

SO_2	maintenance attainment
NO_2	attainment
Ozone	maintenance attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone.

(b) Marion County has been classified as attainment or unclassifiable for PM10, NO_x, SO_2 and CO. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and at least one regulated pollutant is emitted at a rate of 100 tons per year or more, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Federal Rule Applicability

(a) There are no New Source Performance Standards (40 CFR Part 60 and 326 IAC 12) with applicable requirements for this source.

The Construction Permit issued March 6, 1998 for the conversion of coal fired boilers 11, 13 and 14 has had the following New Source Performance Standards for Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subpart Db applicability determination: Boilers 11, 13 and 14 are not subject to this Subpart. Comparing potential to emit before and after the fuel conversion, no increase in hourly emissions exists.

A letter from the US EPA, dated April 9, 1998, states that the conversion would not meet the definition of a modification under 40 CFR 60.14 if a limit is taken such that there is no increase in the hourly emission rate. Therefore, the conversion does not meet the definition of a modification because NO_x emissions are limited to below current baseline potential emissions and PM and SO_2 emissions during coke oven gas (COG) firing at worse case conditions are below current baseline potential emissions. Therefore, the conversion does not trigger NSPS applicability.

Pursuant to the April 9, 1998 letter, a source may restrict potential emissions to avoid triggering the NSPS definition of a modification. However, in order to preserve the definition of modification, any restriction must be verifiable and federally enforceable on a short-term basis. Therefore, the following baseline emissions, outlined in the Construction Permit issued March 6, 1998, shall not be exceeded based on hourly emission rates such that no change in the hourly emission rate occurs and therefore, the requirements of 40 CFR 60, Subpart Db do not apply:

Boiler #	NO_x emissions (pounds per hour)
11	341.0
13	381.7
14	381.7

NO_x emission rates are based on a NO_x emission factor of 21.7 lbs of NO_x per ton of coal burned, 11,200 btu/lb for coal and heat input capacity of 352, 394, and 394 mmbtu/hr respectively. Since post project emission rates were calculated using contract limits (EPA has indicated that contract limits are not federally enforceable for permit purposes) the limits were incorporated into the CP as enforceable. Post-project PM and SO2 emissions were determined to be less than pre-project emissions based on SIP limits and stack test results. Since there is no increase in the hourly emission rate, the NSPS definition of modification was not triggered by this conversion. See Appendix A page 10 of 10.

Compliance with NO_x emission rates will be based on Continuous Emission Monitor (CEM) data.

(b) Coal processing, storage, loading and transfer systems are subject to 40 CFR 60.250 (Subpart Y). However, because this source commenced construction before October 24, 1974, this source is not subject to the requirements of the Subpart.

(c) Boilers 12, 15, 16, 17 and 18 are not subject to 40 CFR 60, Subpart Da, Subpart Db, or Subpart Dc because all were constructed prior to September 18, 1978, June 19, 1984, and June 9, 1989, respectively. In addition, Subpart Da does not apply since no boilers at this source are electric utility steam generating units and Subpart Dc does not apply because the design heat input of the boilers is not between ten (10) MMBtu/hr and one hundred (100) MMBtu/hr.

(d) The fuel oil storage tanks are not subject to 40 CFR 60, Subpart K, or Subpart Ka because the capacity of each storage tank is less than 40,000 gallons. The fuel oil storage tanks are not subject to 40 CFR 60, Subpart Kb because they were constructed prior to July 23, 1984.

(e) The degreasing operations are not subject to the requirements of 40 CFR 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning because the degreasers do not use any of the solvents listed in 40 CFR 63.460.

(f) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are applicable to this source because the source is a major source of HAPs (i.e., the source has the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs) and the source includes one or more units that belong to one or more source categories affected by the Section 112(j) Maximum Achievable Control Technology (MACT) Hammer date of May 15, 2002.

(1) This rule requires the source to:

(A) Submit a Part 1 MACT Application by May 15, 2002; and

(B) Submit a Part 2 MACT Application for each affected source category in accordance with the appropriate Part 2 MACT Application deadline listed in Table 1 to 40 CFR 63, Subpart B for the affected source category..

(2) The Permittee submitted a Part 1 MACT Application on April 25, 2002.

(3) Pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit with a case-by-case Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions

requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The MACT and the General Provisions of 40 CFR 63, Subpart A will become new applicable requirements, as defined by 326 IAC 2-7-1(6), that must be incorporated into the Part 70 permit. After IDEM, OAQ receives the initial notification, any of the following will occur:

(A) If three or more years remain on the Part 70 permit term at the time the MACT is promulgated, IDEM, OAQ will notify the source that IDEM, OAQ and OES will reopen the permit to include the MACT requirements pursuant to 326 IAC 2-7-9; or

(B) If less than three years remain on the Part 70 permit term at the time the MACT is promulgated, the Permittee must include information regarding the MACT in the renewal application, including the information required in 326 IAC 2-7-4(c); or

(C) The Permittee may submit an application for a significant permit modification under 326 IAC 2-7-12 to incorporate the MACT requirements. The application may include information regarding which portions of the MACT are applicable to the emission units at the source and which compliance options will be followed.

(g) The source is not subject to the Acid Rain Program provisions of Title IV of the 1990 Clean Air Act Amendments because no units at this source meet the applicability criteria pursuant to 40 CFR 72.6. The source is not a listed source in Table 1 or 2 of 40 CFR 73.10 (Sulfur Dioxide Allowance System-Subpart B Allowance Allocations).

The source voluntarily opted in to the Acid Rain Program for Unit 11.

(h) Load out of ash from the source commenced operation prior to Prevention of Significant Deterioration rules (40 CFR Part 52) and the modification in 1983-1984 was not significant with respect to PSD. Therefore, pursuant to 40 CFR Part 52.21 and 326 IAC 2-2, the PSD requirements (or 326 IAC 2-3, the Emissions Offset requirements) do not apply.

State Rule Applicability - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)

The source has resubmitted an Emergency Reduction Plan (ERP) on July 1, 1998. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 1-6-3 (Preventive Maintenance Plan)

Pursuant to 326 IAC 2-7-5(13)(A), Part 70 permits must require that the source maintain preventive maintenance plans (PMPs) as described in 326 IAC 1-6-3. PMPs are required for the following emission units and any (non-voluntary) control equipment required by OES and IDEM, OAQ in the permit.

(a) A PMP is required for Boilers 11,13, and 14.
(b) A PMP is required for Boilers 12, 15, and 16.
(c) A PMP is required for Boilers 17 and 18.
(d) A PMP is required for ash unloading because of the requirement to maintain an enclosure at all times.
(e) A PMP is required for the coal conveying.
(f) A PMP is not required for pneumatic loading of ash to silos, railcar receiving of coal, or

enclosed coal crushing because IDEM and OES have determined that emissions from these units to not warrant requiring a PMP and that a PMP would not add environmental benefit.

326 IAC 1-7 (Stack Height Provisions)

The source is subject to 326 IAC 1-7 because potential and actual PM and SO_2 emissions exceed 25 tons per year. The source consists of Stack/Vent ID 1, 3 and 4 each constructed prior to December 31, 1970. Therefore pursuant to 326 IAC 1-7-5(b), the source is specifically exempted from the ambient air quality modeling demonstration of 326 IAC 1-7-4 (Stack Height Provisions: Ambient Air Quality Modeling).

326 IAC 2-2 (Prevention of Significant Deterioration)

The source is one of the listed source types and has the potential to emit greater than 100 tons per year of PM, SO_2, NO_x and CO, therefore it is a major source for PSD purposes. All modifications and unpermitted emission units have been reviewed pursuant to 326 IAC 2-2. See State Applicability - individual facilities for emission units 11, 13, and 14.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

The source has not constructed or reconstructed a major source of hazardous air pollutants (HAP) as defined in 40 CFR 63.41, after July 27, 1997, therefore, 326 IAC 2-4.1 is not applicable.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in Marion County and has the potential to emit more than ten (10) tons per year of NO_x and VOC and more than one hundred (100) tons per year of PM10, SO_2 and CO. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

The source has fugitive emissions from coal storage and handling that were not previously permitted or accounted for (see **Unpermitted Units and Pollution Control Equipment**). Calculated potential fugitive emissions do not exceed 25 tons per year (for calculations see TSD Appendix A).

326 IAC 7-3 (Sulfur Dioxide Ambient Monitoring)

This source does not have actual emissions of sulfur dioxide greater than ten thousand (10,000) tons per year. Therefore, the requirements of 326 IAC 7-3 are not applicable to this source.

State Rule Applicability - Individual Facilities

Emission Unit ID 11, 12, 13, 14, 15, 16, 17 and 18

326 IAC 6-1-12 (Nonattainment Area Particulate Limitations: Marion County)

Pursuant to 326 IAC 6-1-12, PM is limited to the following (along with a listing of the most recent stack test for compliance demonstration with short term limits in pounds per million Btu):

Emission Unit ID	tons per year	lbs/mmBtu	Stack test	
			Date	lbs/mmBtu
Boiler # 11	484.4	0.125	2/10/98	0.099 *
			4/30/99	0.006 **
Boiler # 12		0.175	01/09/2001	0.062
Boiler # 13		0.082	10/26/94	0.061 *
			4/29/99	0.054 **
Boiler # 14		0.082	10/27/94	0.073 *
			4/28/99	0.008 **
Boiler # 15		0.106	01/19/2001	0.025
Boiler # 16		0.106	01/16/2001	0.024
Boiler # 17		0.015	none	none
Boiler # 18		0.015	none	none

* = PM emissions from coal combustion prior to conversion to coke oven/natural gas firing.
** = PM stack test emissions from converted units at worst case coke oven gas (H2S scrubber out of service and NH3 scrubber operating at a level such that the NOx limits pursuant to Operation Condition 14 are not exceeded).

Emission Unit ID # 17 and # 18 are distillate oil fired boilers that have not been stack tested. Refer to TSD Appendix A for a compliance determination for PM from these units (at an uncontrolled AP-42 emission factor for PM of 2.0 lbs/kgal, potential PM emissions equate to 0.014 pounds per million Btu).

CTE (then IPL) had initiated, on June 1, 1995, a SIP revision to revise the short term PM SIP limits for the units listed in the table above, to delete reference that compliance be demonstrated by using the ASME Power Test Code Procedure(s), and to combine all long term ton per year limits to a single source wide ton per year limit. The SIP Revision was final adopted by the Indiana Air Pollution Control Board in February 1999 and was approved by the U.S. EPA on February 23, 2000. The PM limits listed above are the revised final adopted limits.

326 IAC 7-4-2 (Sulfur Dioxide Emission Limitations: Marion County)

Pursuant to 326 IAC 7-4-2, SO_2 emissions are limited to the following:

Emission Unit ID	lbs/mmBtu
Boiler # 11, # 12, # 13, # 14, #15 and # 16	2.1
Boiler # 17 and # 18	0.3

As an alternative to the emission limitations listed in the table above, sulfur dioxide emissions from boilers # 11 through # 16 may comply with any one of the sets of emission limitations in pounds per million Btu as follows:

Alternative Scenario #	Emission Unit ID	lbs/mmBtu

1	Boiler # 13, # 14, # 15 and # 16	0.0
	Boiler # 11 and # 12	4.4
2	Boiler # 11, # 12, # 15 and # 16	0.0
	Boiler # 13 and # 14	4.4
3	Boiler # 11, # 12, #13 and # 14	0.0
	Boiler # 15 and # 16	4.4
4	Boiler # 11, # 12, # 15 and # 16	3.0
	Boiler # 13 and # 14	0.3
5	Boiler # 11 and # 12	0.3
	Boiler # 13, # 14, # 15 and # 16	3.0

Pursuant to 326 IAC 7-4-2:

(a) IDEM, OAQ and OES shall be notified prior to the reliance by CTE on any one (1) of the sets of alternative emission limitations as specified in the Table above, and

(b) A log of hourly operating status for each boiler shall be maintained and made available to IDEM, OAQ and OES upon request. A daily summary indicating which boilers were in service during the day shall be submitted to IDEM, OAQ and OES on a quarterly basis. In addition for Emission units 12, 15, 16, 17 and 18, records of the daily average sulfur content, heat content, and sulfur dioxide emission rate for each day in which an alternative set of emission limitations is used shall be submitted to IDEM, OAQ and OES on a quarterly basis. Emission Units 11, 13 and 14 have SO_2 continuous emission monitor record keeping , therefore records of the daily average sulfur content and sulfur dioxide emission rate are not required to be kept.

(c) For the purposes of IAC 7-2-1(c)(1), during thirty (30) day periods in which CTE relies on more than one (1) set of alternative emission limitations, a separate thirty (30) day rolling weighted average for each set of limitations shall be determined. Each thirty (30) day rolling average shall be based on data from the previous thirty (30) operational days within the last ninety (90) days for that set of limitations. If CTE does not operate thirty (30) days under any one (1) set of limitations within the last ninety (90) days, the rolling weighted average shall be based on all operational days within the last ninety (90) days for that set of limitations.

326 IAC 7-2-1 (Sulfur Dioxide Compliance: Reporting and Methods to Determine Compliance)

Pursuant to 326 IAC 7-2-1:

(a) For emission units 12, 15 and 16, continuous emission monitoring data collected and reported in accordance with 326 IAC 3-5 may be used as the means for determining compliance with the sulfur dioxide emission limits. Pursuant to 326 IAC 7-2-1(g), no other requirements under 326 IAC 7-2 shall apply to these units.

(b) For emission units 17 and 18, records of the monthly average sulfur content, heat content, fuel consumption and sulfur dioxide emission rate in pounds per million Btus shall be submitted to IDEM, OAQ and/or OES upon request.

(c) Fuel sampling and analysis data for emission units 17 and 18 shall be collected pursuant to the

procedures specified in 326 IAC 3-7 (Fuel Sampling and Analysis Procedures) and these data can be used to determine compliance or noncompliance with 326 IAC 7-4-2. Computation of calculated sulfur dioxide emission rates from fuel sampling and analysis data shall be based on the emission factor(s) contained in AP-42 unless other emission factors based on site specific are approved by IDEM, OAQ and OES.

(d) For emission units 11, 13 and 14, continuous emission monitoring data collected and reported in accordance with 326 IAC 3-5 may be used as the means for determining compliance with the sulfur dioxide emission limits. Pursuant to 326 IAC 7-2-1(g), no other requirements under 326 IAC 7-2 shall apply to these units.

(e) Upon written notification to IDEM and OES, continuous emission monitoring data collected and reported in accordance with 326 IAC 3-5 may be used as the means for determining compliance with the sulfur dioxide emission limits for emission units 17 and/or 18.

(f) Compliance or noncompliance shall be determined using a thirty (30) day rolling weighted average sulfur dioxide emission rate in pounds per million Btu.

For Emission Unit ID 11, 12, 13, 14, 15, 16, 17 and 18, CTE submits quarterly reports, pursuant to 326 IAC 7-2-1 and 326 IAC 3-5, of the information necessary to document compliance with 326 IAC 7-2-1. A check of the quarterly reports for the second quarter of 2002 reveals no exceedances of the short term limit of 2.1 pounds per million Btu for Boilers 11, 12, 13, 14,15 and 16 or 0.3 pounds per million Btu for Boilers 17 and 18.

Emission Unit ID 12, 15 and 16

326 IAC 2-7-6(1) and (6) (Testing Requirements)

NO_x: These units do not have an applicable requirement for NO_x. Therefore stack testing for NO_x is not required for these units.

Opacity: These units do have an applicable requirement for opacity, however, these units have COMs, therefore stack testing will not be required.

PM: These units do have an applicable requirement for PM that requires stack testing. The source will be required to stack test Emission Units 12, 15 and 16.

SO_2: These units do have an applicable requirement for SO_2 and actual emissions are greater than 100 tons per year. The source has continuous emission monitors for SO_2 on Emission Units 12, 15 and 16, therefore stack testing will not be required for SO_2.

326 IAC 3-5 (Continuous Monitoring of Emissions)

326 IAC 3-5 applies to all fossil fuel fired steam generators of greater than one hundred million (100,000,000) Btu per hour heat input capacity. Emission Unit ID 12, 15 and 16 each are fossil fuel fired units and each has maximum heat input capacity in excess of one hundred million (100,000,000) Btu per hour. 326 IAC 3-5 requires the source to install and operate a continuous opacity monitor (COM) for each of these units.

These existing units do not have add on SO_2 or NO_x pollution control equipment and a monitor is not required to determine compliance with 326 IAC 12 (326 IAC 12 is not applicable to Emission Units ID 12, 15 or 16) or a construction permit issued under 326 IAC 2. Therefore, the source is not required to install SO_2 or NO_x continuous emission monitors.

Pursuant to 326 IAC 7-2-1(g), the source has submitted written notification that continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 will be used to determine compliance

with 326 IAC 7.

326 IAC 5-1-3(e) (Temporary Alternative Opacity Limit) - Emission Units 15 and 16

Pursuant to 326 IAC 5-1-3(e), when building a new fire in boilers 15 or 16, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity for a period not to exceed one half hour (five (5) six (6)-minute averaging periods) or until the flue gas temperature entering the electrostatic precipitator reaches 250 degrees F whichever occurs first. When shutting down boiler 15 or 16, opacity may exceed the applicable limit established in 326 IAC 5-1-2 for a period not to exceed two tenths hours (two (2) six (6)-minute averaging periods).

326 IAC 5-1-3(a) (Temporary Alternative Opacity Limit) - Emission Unit 12

Pursuant to 326 IAC 5-1-3(a), when building a new fire in Emission Unit 12 or shutting down Emission Unit 12, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity; however, opacity levels shall not exceed sixty percent (60%) for any six (6) minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for Emission Unit ID 12 for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period.

326 IAC 5-1-3(b) (Temporary Alternative Opacity Limit) - Ash Removal Emission Units 12, 15 and 16

Pursuant to 326 IAC 5-1-3(b), when removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period.

326 IAC 10-4 (NO_x Budget Trading Program)

Pursuant to 326 IAC 10-4-2(27) the units 12, 15 and 16 are considered “large affected units” because they commenced operation before January 1, 1997, have a maximum design heat input greater than two hundred fifty million (250,000,000) Btus per hour, and did not serve, during 1995 or 1996, a generator producing electricity for sale under a firm contract to the electric grid. Pursuant to 326 IAC 10-4-1(a)(2), a “large affected unit” is a NO_x budget unit. Because this source meets the criteria of having one (1) or more NO_x budget units, it is a NO_x budget source. The Permittee shall be subject to the requirements of this rule.

Pursuant to 326 IAC 10-4-12(c), the Permittee shall install the appropriate monitoring systems and complete all certification tests as required by 326 IAC 10-4-12(b)(1) through (3) on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003. Gas analyzer certification tests and flow certification tests took place in March and April of 2003. The Permittee submitted the NOx Budget Permit Application on May 23, 2003.

Emission Unit ID 11, 13 and 14

326 IAC 2-2 (Prevention of Significant Deterioration (PSD)

Pursuant to Construction Permit CP-097-0034-01, issued on March 6, 1998, for Emission Unit ID 11, 13 and 14 modification to convert to coke oven gas and/or natural gas firing, the Carbon Monoxide (CO), Particulate Matter less than 10 microns (PM-10), Sulfur Dioxide (SO_2), Oxides of Nitrogen (NO_x), Volatile Organic Compounds (VOC) and Sulfuric Acid Mist (SAM) emissions for boilers 11, 13 and 14 combined shall be restricted to less than 143.04, 65.43, 2954.76, 1537.07, 44.04 and 31.67 tons per year, respectively, rolled on a monthly basis, such that the requirements of the Prevention of Significant Deterioration Regulation 326 IAC 2-2 shall not apply. Compliance with the aforementioned emissions limitations shall be demonstrated as follows:

(a) The Permittee shall document compliance with the PM-10 emissions limitations based on daily emissions calculations using the following formula (units in pound per million Btu):

$PM10 = A + [B * (SO_2)] + [C * (NO_x)]$

Where: A = -0.02718
B = 0.02284
C = 0.15
SO_2 and NO_x are from CEM data obtained pursuant to Condition D.1.8

A, B, and C are constants derived from stack testing required by CP097-0034-01 issued on March 6, 1988. The stack tests were completed in 1999.

The daily emissions calculations shall be used to calculate the twelve (12) month rolling sum and shall be rolled on a monthly basis.

(b) The Permittee shall demonstrate compliance with the NO_x ,SO_2 and CO emission limitations based on CEM data. An alternative sampling and analysis methodology may be used to document compliance with SO_2 emissions limitations with prior approval from IDEM and OES. The daily emissions shall be used to calculate the 12 month rolling sum and shall be rolled on a monthly basis.

(c) The Permittee shall demonstrate compliance with SAM based on surrogate compliance with the SO_2 limit.

(d) The Permittee shall demonstrate compliance with VOC emission limitations using the following emission factors:

Boiler 11 VOC Emission Factor:	0.0013 pound per million Btu
Boilers 13 and 14 VOC Emission Factor	0.0027 pound per million Btu

The daily emissions calculations and heat content, determined by the calorimetric monitoring, shall be used to calculate the twelve (12) month rolling sum and shall be rolled on a monthly basis.

(e) Compliance with CO, PM-10, SO_2, NO_x, SAM and VOC will insure compliance for PM.

326 IAC 2-7-6(1) and (6) (Testing Requirements)

Units 11, 13 and 14 have a heat input capacity greater than 100 MMBtu and an applicable requirement regarding NO_x. However, stack testing is not being required because CEM is required for NO_x on these units.

Stack testing will not be required for SO_2 or for CO for emission units 11, 13, and 14 because these units are burning coke oven gas and natural gas and these units also have continuous emission monitors for SO_2 and CO.

326 IAC 3-5 (Continuous Monitoring of Emissions)

Pursuant to Construction Permit (CP-097-0034-01) issued March 1998 for the conversion of Emission Unit ID 11, 13 and 14 to coke oven gas and/or natural gas firing, Administrative Amendment # A0980034-1, issued October 1, 1998, and Administrative Amendment 097-15403-00034, issued March 19, 2002, the Permittee shall install, calibrate, maintain and operate continuous emission monitoring systems (CEMS) including diluent, fuel flow and calorimetric monitoring for SO_2, NO_x, and CO in accordance with 326 IAC 3-5, Continuous Monitoring of Emissions, for Boilers # 11, # 13 and # 14.

(a) Any CEMS installed by the Permittee shall be operated continuously except during calibration checks, zero and span adjustments (not including certifications) or periods of repair or when the boiler is not in operation. The Permittee shall conduct maintenance or repair in a manner that will minimize downtime.

(b) The CEMS for determining compliance with SO_2 pursuant to Operating Conditions 11 (Sulfur Dioxide limit pursuant to 326 IAC 7-4) and 13 (Sulfur Dioxide limit such that 326 IAC 2-2 is not applicable), shall include an SO_2 monitoring system capable of recording emissions in pounds per million Btu and tons per day.

(c) The CEMS for determining compliance with NO_x pursuant to Operating Conditions 13 (NO_x limit such that 326 IAC 2-2 is not applicable) and 14 (short term NO_x limit such that NSPS is not applicable), shall include a NO_x monitoring system capable of recording emissions in pounds per hour.

(d) The CEMS for determining compliance with CO pursuant to Operating Conditions 13 (CO limit such that 326 IAC 2-2 is not applicable) shall include a CO monitoring system capable of recording emissions in tons per day.

326 IAC 5-1-3 (Temporary Alternative Opacity Limit) - Emissions Units 11, 13, 14 and Ash removal

When building a new fire in emission unit 11, 13, or 14, or shutting down emission unit 11, 13 or 14, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]

No ash is expected to be generated from burning coke oven gas or natural gas, however, if ash should be generated in Emission Units 11, 13 and/or 14 for any reason, the temporary alternative opacity limit pursuant to 326 IAC 5-1-3(b) would be applicable to these units. Pursuant to 326 IAC 5-1-3(b), when removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period.

326 IAC 7-2-1(g) (Sulfur Dioxide Compliance: Reporting and Methods to Determine Compliance)

Pursuant to 326 IAC 7-2-1(g), continuous emission monitoring (CEM) data collected and reported pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), may be used as the means for determining compliance with the limitations of 326 IAC 7 (Sulfur Dioxide Rules). On March 7, 2003, the Permittee submitted written notification that continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 will be used for determining compliance with the limitations in 326 IAC 7.

326 IAC 10-4 (NO_x Budget Trading Program)

Pursuant to 326 IAC 10-4-2(27) the units 11, 13 and 14 are considered “large affected units” because they commenced operation before January 1, 1997, has a maximum design heat input greater than two hundred fifty million (250,000,000) Btus per hour and did not serve during 1995 or 1996 a generator producing electricity for sale under a firm contract to the electric grid. Pursuant to 326 IAC 10-4-1(a)(2), a “large affected unit” is a NO_x budget unit. Because this source meets the criteria of having one(1) or more NO_x budget units, it is a NO_x budget source. The Permittee shall be subject to the requirements of this rule.

Pursuant to 326 IAC 10-4-12(c), the Permittee shall install the appropriate monitoring systems and complete all certification tests as required by 326 IAC 10-4-12(b)(1) through (3) on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003. The Permittee already has CEMS installed for Units 11,13 and 14 (pursuant to CP-097-0034-01) therefore, these tests have been completed for these units. The Permittee submitted the NOx Budget Permit Application on May 23, 2003.

326 IAC 12 (New Source Performance Standards) and 40 CFR Part 60

Oxides of Nitrogen (NO_x) emissions shall be restricted to less than the pound per hour limits in the

following table such that the requirements of 326 IAC 12 and New Source Performance Standards, Subpart Db, shall not apply:

Boiler #	NO_x emissions (pounds per hour)
11	341.0
13	381.7
14	381.7

Emission Unit ID 17 and 18

326 IAC 5-1-3 (Temporary Alternative Opacity Limit)

When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]

When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable opacity limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging periods in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

326 IAC 10-4 (NO_x Budget Trading Program)

Units 17 and 18 are not subject to 326 IAC 10-4-1 because they are not "Electricity Generating Units" or "EGUs" as defined in 326 IAC 10-4-2(16) and they are not "large affected units" as defined in 326 IAC 10-4-2(27). The units are not EGUs because they do not serve generators with a nameplate capacity greater than twenty-five (25) megawatts and that produce electricity for sale under a firm contract to the electric grid. The units are not large affected units because they do not have a maximum design heat input greater than two hundred fifty million (250,000,000) Btus per hour.

Emission Unit ID Ash-12

326 IAC 2-2 (Prevention of Significant Deterioration)

Load out of ash from the source commenced operation prior to Prevention of Significant Deterioration rules and the modification in 1983-1984 was not significant with respect to PSD. Therefore, pursuant to 326 IAC 2-2, the PSD requirements (or 326 IAC 2-3, the Emissions Offset requirements) do not apply.

326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations: Specified)

Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) from the steam jet exhauster(s), ash silo Control Equipment ID CE Ash 1-1, 2-1, 3-1 and 4-1 and the ash loadout enclosure identified as Control Equipment ID CE Ash 12-2 each shall not exceed 0.03 gr/dscf.

Compliance Determination for the ash loadout enclosure:
(0.45+0.09)lb PM/hr (fly and bottom ash) * min/4500 cf air flow * 7000 gr/lb * 1 hr/60 m = 0.014 gr/dscf
Emissions from this process are less than the limit, therefore, no controls are required by this permit.

Insignificant Activities

326 IAC 6-1-2 (Nonattainment Area Limitations)

This source has the potential to emit one hundred (100) tons and has actual emissions greater than ten (10) tons of particulate matter per year, therefore the coal crushing, railcar receiving of coal, pneumatic loading of fly ash and bottom ash to storage silos and enclosed coal conveying shall not exceed 0.03 grains per dry standard cubic foot.

326 IAC 8-3-2 (Cold Cleaner Operations)

The degreasers are not subject to the requirements of 326 IAC 8-3-2 because they were existing as of January 1, 1980 and the source, which is located in Marion County, has potential VOC emissions of less than 100 tons per year.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

The degreasers are subject to the requirements of 326 IAC 8-3-5 because they are cold cleaner degreasers at a source located in Marion County and existing as of July 1, 1990.

(a) Pursuant to 326 IAC 8-3-5(a), the Permittee shall ensure the following control equipment requirements are met for units 16 1, 48 / B, 78 / ground, 32 / 1, and 15 / 1:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the Permittee shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(a) Emission Unit ID 12, 15 and 16 have applicable compliance monitoring conditions for the electrostatic precipitators as specified below:

(1) The following inspections shall be performed according to the indicated schedules, in accordance with the Preventive Maintenance Plan prepared in accordance with Section B – Preventive Maintenance Plan:

(A) Plate and electrode alignment, every major maintenance outage, but no less than every 2 years;

(B) ESP TR set components, performed whenever there is an outage of any nature lasting more than three days, unless such inspections have been performed within the last six months. At a minimum, the following inspections shall be performed:

(i) Internal inspection of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).

(ii) Effectiveness of rapping (including but not limited to buildup of dust on

discharge electrodes and plates).

(iii) Gas distribution (including but not limited to buildup of dust on distribution plates and turning vanes).

(iv) Dust accumulation (including but not limited to buildup of dust on shell and support members that could result in grounds or promote advanced corrosion).

(v) Major misalignment of plates (including but not limited to a visual check of plate alignment).

(vi) Rapper, vibrator and TR set control cabinets (including but not limited to motors and lubrication).

(vii) Rapper assembly (including but not limited to loose bolts, ground wires, water in air lines, and solenoids).

(viii) Vibrator and rapper seals (including but not limited to air in-leakage, wear, and deterioration).

(ix) TR set controllers (including but not limited to low voltage trip point, over current trip point, and spark rate).

(x) Vibrator air pressure settings.

(C) Air and water infiltration, once per month. The recommended method for this inspection is for audible checks around ash hoppers/hatches, duct expansion joints, and areas of corrosion.

(D) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports for any improper or abnormal conditions found during an inspection. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(2) Transformer-Rectifier (T-R) Sets for Emission Units 15 and 16

(a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is in operation, by measuring and recording the number of T-R sets in service and the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.

(b) Whenever the percentage of T-R sets in service falls to 75%, the Permittee must take response steps to restore all T-R sets to service within 60 calendar days. Failure to take response steps and bring all T-R sets back into service within 60 calendar days shall be considered a violation of this permit.

(c) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below 75 percent. T-R set failure resulting in less than 75 percent availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(3) Electrostatic Precipitator Parametric Monitoring for Emission Unit 12

(a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is in operation, by measuring and recording the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.

(b) When for any one reading, operation is outside one of the normal ranges shown below, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A voltage or current reading outside the normal range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(i) Primary voltage: 133 - 310 V AC
(ii) Secondary voltage: 28 - 41 kV DC
(iii) T-R set primary current: 12 - 71 Amps AC

(b) Emission Unit ID 12, 15, 16 have applicable compliance monitoring conditions for opacity as specified below:

(1) Pursuant to 326 IAC 3-5-1 (Continuous Monitoring of Emissions; Minimum Performance and Operating Specifications), the opacity from any combination of operating boilers identified as Emission Unit ID 12, 15 and/or 16 shall be performed on a continuous basis using continuous opacity monitoring (COM) device(s) installed, calibrated, maintained and operated in compliance with all applicable requirements of 326 IAC 3-5.

(2) In the event of opacity exceeding twenty percent (20%) average opacity for three (3) consecutive six (6) minute averaging periods, appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty percent (20%). Examples of expected response steps include, but are not limited to, boiler loads being reduced, adjustment of flue gas conditioning rate, and ESP T-R sets being returned to service.

(3) Opacity readings in excess of twenty percent (20%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(c) Emission Unit ID 12, 15 and 16 have applicable compliance monitoring for sulfur dioxide pursuant to 326 IAC 7-2-1(g). The Permittee shall collect and report continuous emission monitoring data for SO_2 pursuant to 326 IAC 3-5.

(d) Emission Unit ID 11, 13 and 14 have applicable compliance monitoring conditions for SO_2, NO_x, and CO. Pursuant to CP 097-0034-01 and 326 IAC 7-2-1(g), the Permittee shall collect and report continuous emission monitoring data for SO_2, NO_x, and CO pursuant to 326 IAC 3-5.

(e) Emission Unit ID 17 and 18 have applicable compliance monitoring conditions for opacity as specified below:

(1) Visible emission notations of the auxiliary boiler stack exhausts shall be performed once per shift during normal daylight operations while combusting fuel oil in either Emission Unit ID 17 and/or 18. A trained employee shall record whether emissions are normal or abnormal. Continuous opacity monitor data collected in accordance with 326 IAC 3-5 (Continuous Monitoring of Emissions) may be used in place of the visible emission notations.

(2) "Normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(3) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(4) If abnormal emissions are observed at any boiler exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(f) Compliance Monitoring is not required for pneumatic loading of ash to silos, railcar receiving of coal, enclosed coal crushing, ash unloading to trucks, and enclosed coal conveying because IDEM and OES have determined that emissions from these facilities do not warrant compliance monitoring requirements.

Conclusion

The operation of this steam generation source shall be subject to the conditions of the attached proposed **Part 70 Permit No. T097-6567-00034.**

APPENDIX A

Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Office of Environmental Services

Addendum to the
Technical Support Document for Part 70 Operating Permit

Source Name:	**Citizens Thermal Energy, C.C. Perry K Steam Plant**
Source Location:	**366 Kentucky Avenue, Indianapolis, IN 46225**
County:	**Marion**
SIC Code:	**4961**
Operation Permit No.:	**T097-6567-00034**
Permit Reviewer:	**Amanda Hennessy**

On October 18, 2003, the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that Citizens Thermal Energy, C.C. Perry K Steam Plant had applied for a Part 70 Operating Permit to operate a steam generation source. The notice also stated that OAQ and OES proposed to issue a permit for 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.

On November 17, 2003, Citizens Thermal Energy submitted comments on the proposed Part 70 permit. The summary of the comments and any changes made as a result of the comments follows.

Comment 1:

A.1: Please change the designation of Responsible Official from the name of the specific individual to the position title. In this case, the title is Director of Steam Operations.

Response to Comment 1:

The Responsible Official designation has been changed from Robert R. Purdue to Director of Steam Operations.

Comment 2:

A.2(1)(i): Please identify the throughput as "nominal" throughput. Additionally, Citizens Thermal Energy requests that the throughput identified for the process be the same as that used for emissions calculations, specifically 45 tons per hour.

Response to Comment 2:

Condition A.2(1)(i) has been changed as follows:

(i) Load out of ash from the source, identified as Emission Unit ID Ash, to trucks with a **nominal** throughput of ~~5.04~~ **45** tons of ash per hour. Conditioned bottom ash is gravity fed to one (1) truck load out enclosure station constructed in 1983-84, with movable doors that create an enclosure. Conditioned fly ash is unloaded to trucks utilizing either a telescopic chute under vacuum or gravity feeding. Emissions from the enclosure are exhausted to an electrostatic precipitator, identified as CE 12 and/or CE 1516.

Comment 3:

A.2(1)(j): Please identify the throughput as “nominal” throughput.

Response to Comment 3:

The description in A.2(1)(j) has been changed as follows:

(j) One (1) enclosed coal crusher with a **nominal** throughput of 400 tons of coal per hour, constructed in 1945.

Comment 4:

A.3(1): We request that this be clarified to read “...that do not exceed 145 gallons evaporative loss per twelve (12) months...”

Response to Comment 4:

The description of this insignificant activity reads exactly as the description in 326 IAC 2-7-1(21)(G)(vi)(CC). No change has been made.

Comment 5:

A.3(2), (3), and (4): Please identify the throughput as “nominal.”

Response to Comment 5:

The descriptions in A.3(2), (3) and (4) has been changed as follows:

(2) Railcar receiving of coal with a **nominal** throughput of 419,000 tons per year. [326 IAC 6-1-2] [326 IAC 6-4]

(3) Pneumatic loading of fly ash and bottom ash to storage silos with a **nominal** throughput of 5.04 tons of ash per hour. [326 IAC 6-1-2] [326 IAC 6-4]

(4) Outside coal storage and handling and enclosed coal conveying with a **nominal** throughput of 419,000 tons per year. [326 IAC 6-1-2] [326 IAC 6-4]

Comment 6:

B.7(a): Please correct the typographical error at the end of this condition, “IDEAM.”

Response to Comment 6:

The typographical error in B.7(a) has been corrected.

Comment 7:

B.10(a) Please amend the requirement for the completion of the PMP to be required ninety (90) days after the effective date of the Title V permit.

Response to Comment 7:

Pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. There has been no change made to this condition as a result of Comment 7.

Comment 8:

B.10(a)(1): Please amend this specific requirement to require the identification of the position responsible for inspection and maintenance activities, not the individual.

Response to Comment 8:

This condition already states identification by title or classification. To be more clear, the phrase "by title or classification" will be moved. Condition B.10(a)(1) has been changed as follows:

(1) Identification of the individual(s)**, by title or classification,** responsible for inspecting, maintaining, and repairing emission control devices ~~by title or classification~~;

Comment 9:

B.12(a) Please clarify that the permit shield extends to the Technical Support Document (TSD) and any Addendum to the TSD, as there are numerous supersession issues addressed in the TSD that are not contained in the body of the Title V permit. B.12(b) We believe that this should refer to the nonapplicability determinations set forth in the TSD and Addendum to the TSD in addition to those set forth in the permit sections.

Response to Comment 9:

Pursuant to 326 IAC 2-7-15, compliance with the conditions of a Part 70 Permit shall be deemed compliance with any applicable requirements..., provided either of the following: (1) The applicable requirements are included and are specifically identified in a Part 70 permit. (2) The commissioner, in acting on the Part 70 permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 permit includes the determination or a concise summary thereof. Therefore, the permit shield under 326 IAC 2-7-15 only applies to requirements that are included in or identified in a Part 70 permit. The following non-applicability determinations have been added to Condition B.12:

B.12 Permit Shield [326 IAC 2-7-15]

(b) (2) 40 CFR 60, Subpart Db, because the boilers predate the rule**.** ~~and no changes meeting~~ **The fuel conversion of boilers 11, 13 and 14 in 1998 did not** meet the definition of modification or reconstruction ~~have taken place as of the date of the issuance of this permit~~ **under 40 CFR 60**. If a modification or reconstruction of the boilers takes place, this rule may become applicable to the modified or reconstructed boiler(s).

(3) Boilers 12, 15, 16, 17 and 18 are not subject to 40 CFR 60, Subpart Da, Subpart Db, or Subpart Dc because all were constructed prior to September 18, 1978, June 19, 1984, and June 9, 1989, respectively. In addition, Subpart Da does not apply since no boilers at this source are electric utility steam generating units and Subpart Dc does not apply because the design heat input of the boilers is not between ten (10) MMBtu/hr and one hundred (100) MMBtu/hr.

(4) The fuel oil storage tanks are not subject to 40 CFR 60, Subpart K, or Subpart Ka because the capacity of each storage tank is less than 40,000 gallons. The fuel oil storage tanks are not subject to 40 CFR 60, Subpart Kb because they were constructed prior to July 23, 1984.

(5) The degreasing operations are not subject to the requirements of 40 CFR 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning because the degreasers do not use any of the solvents listed in 40 CFR 63.460.

(6) Load out of ash from the source commenced operation prior to Prevention

of Significant Deterioration rules (40 CFR Part 52) and the modification in 1983-1984 was not significant with respect to PSD. Therefore, pursuant to 40 CFR Part 52.21 and 326 IAC 2-2, the PSD requirements (or 326 IAC 2-3, the Emissions Offset requirements) do not apply.

Comment 10:

B.13(b) Please correct the typographical error in the reference to the Acid Deposition Control rules "326."

Response to Comment 10:

The typographical error has been corrected.

Comment 11:

B.19 Emissions Trading -this condition should apply to emissions credits transferred in an NSR offset market as well as the concept of emissions trading, including allowances allocated to a source under a market based program. Please clarify the language accordingly.

Response to Comment 11:

The language in Condition B.19(a) is written exactly as the language is stated in 326 IAC 2-7-5(8). No change will be made to this condition.

Comment 12:

B.20(c) Please clarify this condition to exempt transactions which occur in market based emissions programs administered by the IDEM and the U.S. EPA, such as the Acid Rain Program and the NOx Budget Trading Program.

Response to Comment 12:
Condition B.20(c) does not apply to either the Acid Rain Program or the NOx Budget Trading Program. E.2 covers the former and B.19(a) covers the latter. No change has been made to Condition B.20(c).

Comment 13:

B.21(a): Please amend this condition to read "...and subject to any legal privilege and the Permittee's right under ..."

Response to Comment 13:

IDEM and OES made every attempt to identify every possible rule or statute that governs the issue of inspection and entry. Beyond rules and statutes, case law can be considered in rule interpretation. However, IDEM and OES do not have to specifically cite case law in permits because case law is used to interpret rule applicability regardless of whether we cite it. Therefore, no change has been made to Condition B.21(a) as a result of this comment.

Comment 14:

C.2 Citizens Thermal Energy requests that IDEM and the OES include approval for annual OSHA required fire extinguisher training activities in the text of this condition.

Response to Comment 14:

IDEM grants variances to sources for this type of activity. These approvals are available through the Compliance Section of the Indiana Department of Environmental Management's Office of Air Quality

under 326 IAC 4-1-4.1 and not through the permitting process under 326 IAC 2. Therefore, the source will need to apply for a separate approval for fire extinguish training activities. Fire training approvals are generally only valid for one (1) year while the term of this permit is five (5) years. No change has been made to Condition C.2.

Comment 15:

C.6 Please add clarifying language to carry forward the non-applicability determination made in the TSD.

Response to Comment 15:

326 IAC 1-7-5(b) exempts stacks in existence prior to December 31, 1970 from the requirements of 326 IAC 1-7-4. In addition, a clarification has been made to Condition C.6 to list the provisions of 326 IAC 1-7 that have not been approved into the Indiana State Implementation Plan and are not federally enforceable: The following changes have been made to Condition C.6:

C.~~6~~**5** Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of **326 IAC 1-7-1(3),** 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4~~(d), (e), and (f)~~, and 326 IAC 1-7-5**(a), (b), and** (d) are not federally enforceable.

The source consists of Stack/Vent ID 1, 3 and 4 each constructed prior to December 31, 1970. Therefore pursuant to 326 IAC 1-7-5(b), the source is specifically exempted from the ambient air quality modeling demonstration of 326 IAC 1-7-4 (Stack Height Provisions: Ambient Air Quality Modeling).

Comment 16:

C.8(c) Please add the following language to the end of this condition: "The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34)."

Response to Comment 16:

The written explanation submitted by the Permittee does not require certification by the responsible official. Therefore, Condition C.8(c) (now C.7(c)) has been changed as follows:

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and OES, if the source submits to IDEM, OAQ and OES a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period. **This reasonable written explanation does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**

Comment 17:

C.10 Please amend the requirement for the implementation of all monitoring and record keeping requirements not already in place to be required ninety (90) days after the effective date of the Title V permit.

Response to Comment 17:

As noted in Response to Comment 7, pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. There has been no change made to this condition as a result of Comment 17.

Comment 18:

C.11(d)(1) With respect to the requirement to implement visible emission notations in the event of COM downtime, Citizens Thermal Energy respectfully requests that the IDEM and OES not require supplemental visible emissions notations until the downtime has extended for more than eight (8) hours. QA/QC activities that are required by applicable regulations may take longer than one (1) hour to perform. Staff that would be utilized to conduct the VE notations are typically the staff with the skills and training to conduct the required audit and maintenance activities. Because the requirement to conduct VE notations is independent of other compliance monitoring requirements contained in this permit the IDEM and the OES can be assured of continued compliance with applicable standards.

Response to Comment 18:

The visible emission notations required in this condition are taken in response to COM downtime and, therefore, are required to assure continuous compliance pursuant to 326 IAC 2-7-5(3). The visible emission notations required by Condition C.11(d) (now C.10(d)) are only normal / abnormal observations made by a trained employee rather than Method 9 visible emission readings required to be taken by a certified opacity reader. A trained employee for the purposes of this condition is defined as follows: "A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process." IDEM and OES do not feel that it is a burden to the source to train an employee who is not involved in the continuous opacity monitor audit and maintenance activities on the appearance and characteristics of normal visible emissions.
After further communication with Citizens Thermal Energy, it was determined that a time period of two (2) hours would enable the source to perform most, if not all, of these QA/QC activities. In addition, if Citizens Thermal begins visible emission notations after two (2) hours of COM downtime, IDEM and OES can reasonably be assured of continuous compliance. Therefore, Condition C.11(d) (now C.10(d)) will be changed as follows:

C.10 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(d) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of ~~one~~**two** (~~1~~**2**) hour**s** or more, compliance with the applicable opacity limits shall be demonstrated by the following:

Comment 19:

C.14 Citizens Thermal Energy believes that the 2% calibration tolerance outlined in paragraphs (a) and (b) of this condition is arbitrary and not consistent with manufacturers design specifications. Specifically with respect to (b), automatic controllers are maintained on the electrostatic precipitators installed on the coal-fired boilers at Perry K. The automatic controllers allow the ESP to respond to changes in ash loading field to field, without operator intervention. The calculations that take place inside the controllers are non-linear.
In addition, (b) applies the +/- 2% calibration tolerance to devices measuring flow rate, which may be interpreted to include instruments measuring stack gas volumetric flow rate for compliance with continuous monitoring requirements of the NOx Budget Trading Program. This calibration tolerance is not found in the applicable performance specifications outlined in 40 CFR 75, Appendix A for flow monitoring systems. 40 CFR 75, Appendix A, Section 3.1 establishes a calibration error requirement (for certification testing) of 3.0% of the calibration span value of the instrument and Section 3.3 establishes a 10% relative accuracy tolerance.
Given these facts, we request the IDEM and the OES delete this condition from the Title V permit prior to issuance.
Citizens Thermal Energy subsequently provided information indicating that a +/- 5% calibration tolerance

was more appropriate for the voltage and current reading instruments.

Response to Comment 19:

Condition C.14(c) (now C.13(c)) enables the source to request that an alternative instrument specification be approved. The source must show that the alternative specification will adequately ensure that the instrument being used is appropriate and accurate.
IDEM and OES did not intend for the requirements in Condition C.14(b) to conflict with other applicable regulation instrument specifications. Therefore, a statement has been added to Condition C.14(b) clarifying that, if a specific instrument is used for compliance with 40 CFR 75, then the instrument specifications in 40 CFR 75 shall take precedence.
In addition, IDEM and OES inspectors have agreed that the instruments employed to measure voltage and current can be accurate within plus or minus five percent (±5%) (rather than ±2%) and still be a sufficient indicator.
Condition C.14(b) (now C.13(b)) has been changed as follows:

C.1~~4~~**3** Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(b) Whenever a condition in this permit requires the measurement of a ~~voltage, current,~~ temperature or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading. **Whenever a condition in this permit requires the measurement of voltage or current the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus five percent (±5%) of full scale reading. If an instrument is used for compliance with 40 CFR 75, then the instrument specifications in 40 CFR 75 shall take precedence and the Permittee shall only be subject to the instrument specifications in 40 CFR 75 for that instrument.**

Comment 20(Part 1):

C.17(a): IDEM has recognized that, if there is a Part 63 requirement that a Start-up, Shutdown, and Malfunction Plan and Parametric Monitoring Plan are required, these plans meet the Compliance Response Plan requirement, and a separate compliance response plan is not required. The proposed Industrial Boiler MACT standard requires an SSM plan from affected sources. Please amend this condition to read as follows:

"The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition set forth in Section D of this permit. If a Permittee is required to have an Operating, Monitoring, and Maintenance Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction Plan under 40 CFR 63, such plans shall be deemed to satisfy the requirements for a CRP. A CRP shall be submitted to IDEM, OAQ and OES upon request. The CRP shall be prepared within ninety (90) days after the effective date of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:..."

Comment 20(Part 2):

C.17(b)(3): Citizens Thermal Energy requests that we not be required to notify IDEM and the OES unless it will be thirty (30) or more days before a unit or control device is taken out of service to respond to deviations detected through compliance monitoring. In many instances, especially with monitoring of electrostatic precipitators, it could be that the deviation is the result of a signal deficiency or other similar

minor problem. The experience of the owner / operator should be paramount in the determination of whether or not equipment is taken out of service. Citizens Thermal Energy recognizes its obligation to comply with applicable air pollution standards, as well as prudent operation necessary to protect personnel safety and equipment integrity. However, imposing an obligation to notify IDEM as proposed is arbitrary and is not consistent with boiler operation practices.

Response to Comment 20 (Parts 1 and 2):

IDEM and OES agree with Comment 20 Part 1. If the Permittee is required to have a Start-up, Shutdown, and Malfunction Plan and Parametric Monitoring Plan under 40 CFR 60/63, these plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions.
As indicated in Response to Comment 7, pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore, the effective date of the permit and the issuance date of the permit are the same. Therefore, the language in C.17 (now C.16) will not be changed with respect to the date by which the CRP shall be prepared.
IDEM and OES disagree with Comment 20 Part 2. The notification requirement already applies only to situations where the emissions unit will continue to operate for an extended period of time while the compliance monitoring parameter is out of range. It is intended to provide IDEM and OES an opportunity to assess the situation and determine whether any additional actions are necessary to demonstrate compliance with any applicable requirements. IDEM and OES feel that ten (10) days is an appropriate time frame.
Condition C.17 (now C.16) has been changed as follows:

C.1~~7~~**6** Compliance Response Plan - Preparation, Implementation, Records and Reports [326 IAC 2-7-5][326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. **If a Permittee is required to have a Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions.** A CRP shall be submitted to IDEM, OAQ and OES upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan **or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan** and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

The Parametric Monitoring Plan and SSM Plan shall be submitted within the time frames specified by the applicable 40 CFR 60/63 requirement.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan **or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan**; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan **or Parametric Monitoring Plan and Start-up, Shutdown, and**

Malfunction (SSM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered **a** deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken as required in this permit. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

Comment 21:

C.19(a): The emission statement rule (326 IAC 2-6) is anticipated to change significantly at the December 2003 APCB meeting. This permit condition should be edited to refer generally to the rule, in order that the source may comply with the new rule once it’s effective. For example, the revised rule which will be presented to the APCB extends the reporting deadline to July 1, and covers the calendar

year January 1 - December 31, with the month of December reported with January and February as the "winter quarter." Please delete the requirement in C.19(a)(2), as it exceeds the authority provided in the underlying regulations.

Response to Comment 21:

The condition will be revised so that the Permittee is required to follow the requirements of the rule, as revised**.** Condition C.19 (now C.18) has been changed as follows:

C.1~~9~~**8** Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) ~~The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6., that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:~~ **Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:**

(1) Indicate estimated actual emissions of ~~criteria~~ **all** pollutants ~~from the source,~~ **listed** in ~~compliance with~~ 326 IAC 2-6-4(a) ~~(Emission Reporting)~~;

(2) Indicate estimated actual emissions of other regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

~~(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30.~~ The ~~annual emission~~ statement must be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(~~c~~**b**) The ~~annual~~ emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.

Comment 22:

C.20(b) Please amend the requirement for the implementation of new record keeping requirements in this permit to be required ninety (90) days after the effective date of the Title V permit.

Response to Comment 22:

As noted in Response to Comment 7, pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. There has been no change made to this condition as a result of Comment 22.

Comment 23:

C.21(d) and (e): Please delete the last sentence of this condition [C.21(d)], as not all reports submitted under this permit require the certification by the "responsible official." Please amend the requirement related to the submittal of the required Quarterly Deviation and Compliance Monitoring Report to be required ninety (90) days after the effective date of the Title V permit.

Response to Comment 23:

Pursuant to 326 IAC 2-7-5(3)(C)(i), all required reports must be certified by a responsible official consistent with 326 IAC 2-7-4(f). Pursuant to 326 IAC 2-7-4(f), any application form, report, or compliance certification shall contain certification by a responsible official of truth, accuracy, and completeness. Therefore, any report required by the permit would be required to be certified by the responsible official.
Condition C.21(a) (now C.20(a)) states that the Quarterly Deviation and Compliance Monitoring Report shall be submitted within thirty (30) days of the end of the reporting period and Condition C.21(e) (now C.20(e)) states that the first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period and that reporting periods are based on the calendar year. Therefore, the number of days after the issuance of this Title V permit that this report is due will depend on when in the reporting quarter this Title V permit is issued. For example, if this permit is issued during the month of February, the first Quarterly Deviation and Compliance Monitoring Report will be due 30 days after the end of the first calendar quarter.
As noted in Response to Comment 7, pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. No changes to Condition C.21 (now C.20) have been made in the permit.

Comment 24:

C.22 Citizens Thermal Energy requests that IDEM and OES use the "short form" version of this condition which requires the Permittee to comply with 40 CFR 82, as we believe that the proposed permit term is not entirely consistent with the requirements of 40 CFR 82.

Response to Comment 24:

The U.S. EPA has requested that this condition be in every Title V permit. 40 CFR 82 regulates the handling of ozone-depleting substances, such as Freon, in a variety of processes and products including domestic and commercial refrigeration and air-conditioning units and portable fire extinguishers. Most sources include one or more subject units. Maintenance or repair of such units has the potential to release substances controlled under these rules. IDEM and OES are unaware of any acceptable "short form" for this condition. If the Permittee has suggested alternative language, the Permittee should submit the suggested language. At that time IDEM and OES will make a determination on whether the submitted language is sufficient to satisfy federal and state rules. The condition remains unchanged.

Comment 25:

D.1.6 Citizens Thermal Energy requests that IDEM and the OES clarify the references to the hazardous waste determination requirements contained in this condition. Specifically, 40 CFR 262.11, Hazardous Waste Determination, allows the generator to determine whether or not the waste is a hazardous waste by applying generator knowledge (refer to §262.11(c)(2)). Citizens Thermal Energy objects to any

condition which limits our ability to do this waste determination in accordance with the applicable RCRA rules.

Response to Comment 25:

As indicated in Condition D.1.6, 40 CFR 261 provides the definition of hazardous waste. 40 CFR 262 sets forth the generator's responsibility to determine whether the waste exhibits one or more of the characteristics identified in the definition of hazardous waste. Therefore, the citing of the definition in 40 CFR 261 does not limit the source's ability, or responsibility, to do waste determinations. No change has been made to Condition D.1.6.

Comment 26:

D.1.9 This condition is not a PSD limit, and should not be referred to as such, nor should it cite 40 CFR 52.21 as authority for the limitations.

Response to Comment 26:

Condition D.1.9 is a compliance determination condition for the Prevention of Significant Deterioration Minor Limit. The Condition has been renamed as follows:

D.1.9 ~~Prevention of Significant Deterioration Limit [326 IAC 2-2][40 CFR 52.21]~~ **Carbon Monoxide (CO), Particulate Matter less than 10 microns (PM-10), Sulfur Dioxide (SO2), Oxides of Nitrogen (NOx), Volatile Organic Compounds (VOC) and Sulfuric Acid Mist (SAM)**

Comment 27:

D.1.10 The fuel flow meters installed on the gas-fired boilers do not measure the "weight amount" of COG combusted. Volumetric (scfh) fuel flow and gas calorific value are measured, recorded and reported by the DAHS system. Please amend this condition to require the measurement of volumetric fuel consumption, not the weight amount of fuel consumed.

Response to Comment 27:

IDEM and OES agree with the proposed change. The condition has been changed as follows:

D.1.10 Particulate Matter (PM) [326 IAC 2-7-5]

Pursuant to 326 IAC 6-1-12, 326 IAC 2-7-5 and Section D.1.4 of this Permit, compliance with the PM tons per year limit shall be demonstrated by multiplying the ~~weight amount~~ **volumetric fuel consumption** of coke oven gas by the heat value of the coke oven gas and the emission factor from the most recent stack test.

Comment 28

D.1.11 Please refer to comment on Condition D.1.6 as it pertains to waste determinations.

Response to Comment 28

Condition D.1.11 does refer to hazardous waste determination methods which are outlined in 40 CFR 262.11. Therefore, this condition has changed as follows:

D.1.11 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

The Permittee shall use appropriate methodology as identified in 40 CFR Part 261 **and/or 40 CFR Part 262** to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.

Comment 29:

D.1.12 Please delete the first sentence of this condition, as the deadline for installation of the CEMS has passed.

Response to Comment 29:

IDEM and OES agree with the proposed change. Condition D.1.12 has been changed as follows:

D.1.12 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]

~~The Permittee shall meet the monitoring requirements of 326 IAC 10-4-12(b)(1) through (b)(3) that are applicable to their monitoring systems for the NO_x budget units on or before May 1, 2003.~~ The Permittee shall record, report, and quality assure the data from the monitoring systems **for the NOx budget units** on and after May 1, 2003 in accordance with 326 IAC 10-4-12 and 40 CFR 75.

Comment 30:

D.1.13 This condition is awkwardly written. Citizens Thermal Energy recommends that this condition be rewritten as follows: "Whenever the SO2 continuous emission monitoring (CEM) system is malfunctioning or down for repairs or adjustments, the relevant substitution requirements of 40 CFR 75 - Missing Data Substitution Procedures shall be used to provide substitute data.

Response to Comment 30:

IDEM and OES agree with the proposed change. For boilers 11, 13 and 14, the relevant requirements of 40 CFR 75 - Missing Data Substitution Procedures shall be used to demonstrate compliance with 326 IAC 7, Condition D.1.3 and the Prevention of Significant Deterioration Minor Limit in Condition D.1.1 when the continuous emission monitoring (CEM) system is malfunctioning or down for repairs or adjustments. Therefore, Condition D.1.13 has been changed as follows:

D.1.13 SO_2 Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the SO_2 continuous emission monitoring (CEM) system is malfunctioning or down for repairs or adjustments, ~~the following shall be used to demonstrate compliance with 326 IAC 7-4-2 and Condition D.1.3 of this permit:~~

~~(a) Whenever the SO_2 continuous emission monitoring system is malfunctioning or down for repairs or adjustments,~~ the relevant **data substitution** requirements of 40 CFR 75 - Missing Data Substitution Procedures shall be used to provide substitute data.

Comment 31:

D.1.14(c) and (e) There is no fuel sampling in Section D that requires a standard operating procedure per 326 IAC 3-7-5. VE notations are not required for gas-fired boilers. This condition should be deleted.

Response to Comment 31:

IDEM and OES agree with the proposed change. The boilers in Section D.1 have no visible emission notation requirements and no fuel sampling that requires a standard operating procedure per 326 IAC 3-7-5. Therefore, Condition D.1.14 (c) through (g) has been changed as follows:

D.1.14 Record Keeping Requirements

(a) To document compliance with Section C - Opacity and Conditions D.1.1, D.1.2, D.1.3, D.1.8, D.1.9, and D.1.10, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.1.1, D.1.2, and D.1.3.

(1) Data and results from the most recent stack test; and

(2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5, Construction Permit CP097-0034-01, and 326 IAC 7-2-1(g). During CEMS downtime, the Permittee shall maintain records of mass emission rates determined in accordance with Condition D.1.13 and C.1~~2~~**1**;

(5) All preventive maintenance measures taken.

(b) To document compliance with Condition D.1.4 and D.1.10, the Permittee shall maintain records of the amount of coke oven gas consumed and total PM emissions per twelve (12) consecutive month period.

~~(c) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ and OES.~~

(~~d~~**c**) To document compliance with Condition D.1.3, the Permittee shall maintain a log of hourly operating status for each boiler. The log must be made available to IDEM and/or OES upon request.

~~(e) To document compliance with Condition D.1.13, the Permittee shall maintain records of visible emission notations of the stack exhaust once per shift.~~

(~~f~~**d**) To document compliance with D.1.7, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(~~g~~**e**) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comment 32:

D.2.3(a)(1) and D.2.4(a)(3) Please delete the phrase "...unless necessary to comply with these limits."

Response to Comment 32:

This phrase is necessary. Conditions D.2.3 and D.2.4 provide temporary alternative opacity limitations under specific conditions. Although these limits are less stringent than the limitations that apply during other operating conditions, they are still limitations. Therefore, Citizens Thermal would be required to

operate the electrostatic precipitator, if necessary, such that those limitations are not exceeded. Therefore, no change has been made to these conditions.

Comment 33:

D.2.6 326 IAC 2-7-5(13) does not give IDEM the authority to dictate the very specific list of items that must be inspected on the ESP in the implementation of the preventative maintenance plan (PMP). Citizens Thermal Energy understands the requirement to prepare and maintain the required PMP and the obligation to maintain the particulate control devices in good operating condition. However, we believe that this condition unreasonably restricts the flexibility that should be provided to the operator in determining what constitutes good maintenance practices for the control devices.
Therefore, we respectfully request that (b) of this condition be deleted in its entirety, leaving only a restatement of the requirement to develop, implement and maintain a PMP for the ESPs.

Response to Comment 33:

The detailed requirements for inspecting the ESPs in Condition D.2.6 are taken from a US EPA Publication titled "Operation and Maintenance Manual for Electrostatic Precipitators", which is document number EPA/625/1-85/017 and was developed by the US EPA in coordination with EPRI and utility industry input. The schedule for the inspections strikes a balance between providing the source with the flexibility to perform the inspections and ensuring that the ESPs are in an operating condition sufficient to assure continuous compliance with applicable requirements. A Part 70 permit is required to include requirements sufficient to ensure continuous compliance with the applicable requirements. However, due to the nature of Citizen Thermal Energy's steam generation unique operations, D.2.6(b)(2) will be revised to require ESP TR set components to be inspected annually. This change achieves the goal of clarifying how often the inspections are required and enables the source to plan for these inspections accordingly. The Permittee has brought to IDEM and OES's attention that D.2.4(b)(2)(J) is not applicable to this source. IDEM and OES did not intend for the Permittee to be required to perform an inspection on equipment that the emission unit did not contain. Therefore, (J) has been removed. The following changes have been made to Condition D.2.6:

D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

(b) The PMP for an electrostatic precipitator shall include the following inspections, performed according to the indicated schedules:

(2) ESP TR set components, performed ~~whenever there is an outage of any nature lasting more than three days, unless such inspections have been performed within the last six months~~ **at least once per calendar year**. At a minimum, the following inspections shall be performed:

~~(J) Vibrator air pressure settings.~~

Comment 34:

D.2.7(b) The last demonstration of compliance with the applicable particulate limitations from boiler #12 occurred more than two (2) years ago. This condition must be rewritten to avoid immediate non-compliance on the effective date of this permit.

Response to Comment 34:

IDEM and OES did not intend for the Permittee to be in noncompliance upon issuance of this permit. Since the last demonstration of compliance with the applicable particulate limitations from boiler #12 took place more than two years ago, IDEM and OES will require that a demonstration of compliance take place within 180 days of the issuance of this permit. This will ensure that compliance is demonstrated while also providing the Permittee with ample time to develop and submit the appropriate testing protocol. In addition, IDEM and OES have changed the wording in regards to testing methods and to further clarify the term calendar year. Therefore, Condition D.2.7 has been changed as follows:

D.2.7 Testing Requirements [326 IAC 2-7-6(1) and (6)] [326 IAC 2-1.1-11]

(a) Compliance with the PM limitation in Condition D.2.2 shall be determined for Emission Units 15 and 16 by a performance stack test conducted utilizing **Method 5 or other** methods as approved by the Commissioner. This test shall be performed at least once during each of the following calendar years: 2004, 2005, 2007. Following this testing schedule, performance stack tests shall be repeated ~~once~~ **by December 31 of** every ~~two (2)~~ **second** calendar year~~s~~ following the valid compliance demonstration performed in 2007. Testing shall be conducted in accordance with Section C- Performance Testing.

(b) Within ~~two~~ **180** ~~(2) calendar years~~ **days** ~~following~~ **of** the ~~most recent stack test~~ **issuance date of this Part 70 permit**, compliance with the PM limitation in Condition D.2.2 shall be determined for Emission Unit 12 by a performance stack test conducted utilizing **Method 5 or other** methods approved by the Commissioner. This test**ing** shall be repeated ~~at least once~~ **by December 31 of** every ~~two (2)~~ **second** calendar year~~s~~ following this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Comment 35:

D.2.9 Compliance with the tons per year limits at 326 IAC 6-1-12(a) is based on a calendar year. This condition should be amended to reflect the requirement to comply on a calendar year basis rather than on a twelve month rolling average.

Response to Comment 35:

The applicable emission limits in 326 IAC 6-1-12(a) do not specify calendar year. The limits are in "tons per year" and 326 IAC 6-1-12(a) does not define "year." Since 326 IAC 6-1 states the limit as tons per year, IDEM and OES treat compliance with this rule as we do with other rules that do not specify calendar year and base compliance on each twelve (12) month period. Therefore, the limit in 326 IAC 6-1-12(a) applies to each twelve (12) month period.

Comment 36:

D.2.12 Please delete the first sentence of this condition, as the deadline for installation of the CEMs has passed.

Response to Comment 36:

As with Comment 29, IDEM and OES agree. Condition D.2.12 has been changed as follows:

D.2.12 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]

~~The Permittee shall meet the monitoring requirements of 326 IAC 10-4-12(b)(1) through (b)(3) that are applicable to their monitoring systems for the NO_x budget units on or before May 1, 2003.~~ The Permittee shall record, report, and quality assure the data from the monitoring systems **for the NOx budget units** on and after May 1, 2003 in accordance with 326 IAC 10-4-12 and 40 CFR 75.

Comment 37:

D.2.13 Please refer to earlier comments concerning hazardous waste determination requirements.

Response to Comment 37:

As indicated in Response to Comment 28, Condition D.2.13 does refer to hazardous waste determination methods which are outlined in 40 CFR 262.11. Therefore, this condition has changed as follows:

D.2.13 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

The Permittee shall use appropriate methodology as identified in 40 CFR Part 261 **and/or 40 CFR Part 262** to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.

Comment 38:

D.2.14(a) Citizens Thermal Energy requests that this condition be written to require implementation of 40 CFR 75, Subpart D, as written. The missing data substitution provisions are more punitive as the missing data period increases, and as the percent monitor availability decreases. The DAHS is configured to implement Subpart D as it is written. Because of the punitive nature of Subpart D, CTE believes that allowing missing data substitution for all periods of CEM downtime is more conservative than a limited applicability of missing data substitution.

Response to Comment 38:

IDEM and OES have determined that for SO_2 emissions, which are prone to variability based on coal sulfur values, the Part 75 data substitution procedures may not be as representative as coal sampling for short term limits over a long period of time due to the variability of coal sulfur values. However, IDEM and OES understand that for shorter periods of CEM downtime, it may not be feasible to institute coal sampling. Therefore, in an effort to enable sources to return the CEMS to working conditions and to coordinate the process of coal sampling, IDEM and OES are accepting data substitution for the first eight (8) hours of CEM downtime. The data substitution from (a) of Condition D.2.14 was based on Part 75 data substitution procedures for monitor data availability above 90%. Therefore, IDEM and OES will modify this condition such that Citizens Thermal Energy does not have to perform two different types of data substitution if data availability falls to levels less than 90%. Condition D.2.14(a) has been changed as follows:

D.2.14 SO_2 Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

(a) If the CEM system is down for less than eight (8) hours, the Permittee shall **utilize the relevant requirements of 40 CFR 75 - Missing Data Substitution Procedures** ~~substitute an average of the quality-assured data from the hour immediately before and the hour immediately after the missing data period~~ **to calculate emissions data** for each hour of missing data.

Comment 39:

D.2.14(b) Citizens Thermal Energy requests that this condition be deleted. However, if the IDEM and OES are unwilling to allow full implementation of missing data substitution, we request that manual sampling of coal be permitted. Implementation of automatic coal sampling at the surge hoppers (the sampling location “after the bunker”) would be a very expensive undertaking with no real environmental benefit. Manual sampling can be implemented at this location in such a way to provide coal samples that are representative of the coal combusted in the boiler(s) during the CEM missing data period.

Response to Comment 39:

IDEM and OES have determined that for SO_2 emissions, which are prone to variability based on coal sulfur values, the Part 75 data substitution procedures may not, over a long period of time, be as representative as coal sampling. For NO_X and CO, which tend to be more stable over time, the Part 75

data substitution procedures provide adequate emission estimates. Therefore, for SO_2 CEM downtime, IDEM and OES require, after eight (8) hours of CEM downtime, sources to perform coal sampling to determine compliance with 326 IAC 7-4-2. This condition allows sources to conduct other manual coal sampling procedures "upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring." After further communication with Citizens Thermal Energy, Citizens Thermal Energy provided a demonstration that manually sampling after the bunker provides representative sulfur dioxide emission estimates. Citizens Thermal Energy submitted an alternative sampling procedure on February 2, 2004. This procedure was approved for coal sampling during periods of CEM downtime greater than eight (8) hours. Therefore, the following changes have been made to Condition D.2.14(b):

D.2.14 SO_2 Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

(b) If the CEM system is down for eight (8) hours or more, fuel sampling shall be conducted ~~as specified in 326 IAC 3-7-2 (a) or (b), except that all samples shall be collected after the bunker. Fuel sample preparation and analysis shall be conducted as specified in 326 IAC 3-7-2(c), 326 IAC 3-7-2(d), and 326 IAC 3-7-2(e). Pursuant to 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring.~~ **Personnel shall collect coal samples, at least once per shift, from the surge hoppers of the appropriate in-service coal-fired boilers. The composite weight of all samples for the day should be approximately ten (10) pounds. All incremental samples collected from the feeders should be as close to the same weight as possible. Coal collected by each shift shall be stored and sealed between collections to prevent moisture loss.**

Comment 40:

D.2.15(a) Please delete the last clause of this condition, "...and the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets." Citizens Thermal Energy has agreed to monitor the number of T-R sets in service, and to take appropriate action when the number of T-R sets in service falls below 75%.

Response to Comment 40:

IDEM and OES disagree with the proposed change. The condition to which CTE agreed required monitoring and recording the number of T-R sets in service, the primary and secondary voltages, and the currents of the T-R sets. Corrective action is only required in response to the number of T-R sets in service, however, a T-R sets operational condition remains a concern to IDEM and OES. The T-R sets operational conditions (primary and secondary voltages) provide an IDEM and/or OES with the assurance that the units are not only operating, but that they are operating at an effective level. No change has been made to this condition.

Comment 41:

D.2.15(b) Please amend this condition to require response steps when the number of T-R sets in service falls *below* 75%.

Response to Comment 41:

This condition normally requires corrective action when the number of T-R sets in service falls below 95%. However, IDEM and OES understand that sources are all unique and may be able to remain in continuous compliance while operating with a lower percentage of T-R sets in service. Therefore, if a

source can demonstrate compliance with a lower number of T-R sets in service and IDEM and OES have no concerns about the emission unit of concern's ability to remain in continuous compliance, IDEM and OES have provided sources with an opportunity to perform stack tests and develop a source specific condition that ensures continuous compliance while providing some operational flexibility to the source. Citizens Thermal Energy (CTE) performed stack tests to demonstrate compliance when the number of T-R sets in service was below 95%. Two stack tests were performed. During one of the stack tests, a boiler upset occurred and CTE could not demonstrate compliance at 75% of the T-R sets in service. During the second stack test, CTE demonstrated compliance at 75% of the T-R sets in service. Therefore, IDEM and OES are concerned about the ability of CTE to remain in continuous compliance, as required by 326 IAC 2-7, when the number of T-R sets in service remains at 75% for an extended period of time. In addition, the ESP of concern for this condition only has four (4) T-R sets. Therefore, if corrective actions were not taken until the number of T-R sets in service was *below* 75%, that would mean that corrective actions would not be required until the number of T-R sets in service fell to 2. However, IDEM and OES do recognize that CTE demonstrated, during the second stack test, compliance while operating at 75% of the T-R sets in service. In order to generate a fair condition that ensures compliance while providing CTE with the operational flexibility that this condition was intended to provide, IDEM and OES generated a source specific condition that addressed these concerns. IDEM, OES and CTE agreed that immediate response actions would be required when the number of T-R sets in service falls below 75% and that response actions would be required within sixty (60) days when the number of T-R sets in service falls and remains at 75%. This was the agreed upon condition and, therefore, this condition has not been changed as a result of this comment.

Comment 42:

D.2.16(b) Citizens Thermal Energy recommends that corrective action be required when two (2) consecutive readings are outside the range. One reading outside the range is not necessarily indicative of improper operation of the ESP, but may be the result of automatic corrections made by the ESP controllers.

During phone conversations on February 4th and 5th and confirmed in writing on February 26, Citizens Thermal Energy subsequently requested that Condition D.2.16 be changed from requiring monitoring and recording the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets to monitoring and recording the number of T-R sets in service.

Response to Comment 42:

IDEM and OES understand that the voltage and current readings fluctuate. We also understand that readings on the meter are updated every few seconds. IDEM and OES believe that when staff take a reading from the voltage and current meters, they will see changes in the reading as they glance at the meters. Therefore, IDEM and OES feel that the recorded reading should be an average result of that observation. If IDEM and OES were to change this condition to require response steps only after two consecutive readings were outside the range, the equipment could be operating outside the range for an entire shift since readings are only required to be taken once per shift. IDEM and OES feel the statement in Condition C.17 stating "The Permittee is not required to take any further response steps [if] the process has already returned or is returning to operating within "normal" parameters and no response steps are required." is sufficient to ensure that the source is not required to take response steps when none are needed. In response to Citizens Thermal Energy's subsequent request to change this condition, IDEM and OES have changed D.2.16 as follows:

D.2.16 ~~Electrostatic Precipitator Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]~~
Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

For Emission Unit 12:

(a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is in operation, by monitoring and recording the **number of T-R sets in**

service and the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.

(b) ~~When for any one reading, operation is outside one of the normal ranges shown below, or a range established during the latest stack test, the Permittee shall take reasonable response steps~~ **Reasonable response steps shall be taken** in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports **whenever the percentage of T-R sets in service falls below 90 percent (90%)**. ~~A voltage or current reading outside the normal range~~ **T-R set failure resulting in less than 90 percent (90%) availability** is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

~~(1) Primary voltage: 133 - 310 V AC~~
~~(2) Secondary voltage: 28 - 41 kV DC~~
~~(3) T-R set primary current: 12 - 71 Amps AC~~

Comment 43:

D.2.17(a) Citizens Thermal Energy objects to the opacity limit that is established by this condition. 326 IAC 5-1 limits opacity from sources located in Marion County to thirty percent (30%) unless a more stringent limit is established by other applicable rules.
In this case, because corrective action is required to maintain opacity levels below twenty percent (20%), we believe that this effectively constitutes a 20% opacity limit. The Part 70 permit is intended to compile applicable requirements and previous permit determinations into a single document, but not to create new emission limits. Sufficient compliance monitoring for the particulate matter limit is provided for by this permit through the requirement to conduct monitoring of the electrostatic precipitators, through the quarterly reporting of PM emissions (in tons per year) for compliance with 326 IAC 6-1-12(a) and through the requirement to conduct particulate matter stack tests to demonstrate compliance with the applicable short-term emissions limit.

Response to Comment 43:

IDEM and OES disagree with the commenter. As stated in the Technical Support Document, permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements. Compliance Determination Requirements are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period. Therefore, exceedance of the trigger opacity value is not a violation. Failing to take response steps is a violation. This condition is a compliance monitoring condition to ensure continuous compliance and, therefore, the 20% opacity trigger is not an opacity limit.
This condition, along with ESP parameters, are surrogates for assuring the determination of continuous compliance with a boiler's PM limit. IDEM and OES do not feel that stack tests, as required in this permit, are sufficient to demonstrate continuous compliance. The particulate matter emission limits and the

opacity limit were established completely independent of one another. Therefore, compliance with a 30% opacity limit does not indicate compliance with the applicable particulate matter emissions limit. As evidenced by the results of IDEM approved stack testing, during normal operations, opacity from the boilers is less than 20% when demonstrating compliance with the applicable PM emission limit. Since the stack testing demonstrated compliance with the PM emissions at opacity levels below the trigger level of 20%, it is appropriate for Citizens Thermal Energy to take response steps when the observed opacity is above the levels demonstrated during a compliant stack test.
IDEM and OES would be receptive to a reassessment of the actual trigger values if there is compelling evidence to do so. IDEM and OES's position is that it is not a goal to have the source responding to trigger alarms on a frequent basis. In addition, it is not necessary to take response steps unless three consecutive trigger excursions are recorded. This should further lessen the need for frequent responses and would allow for short term problems to work themselves out prior to any response steps being required to be taken.

Comment 44:

D.2.18(e) Please delete "shall develop" from this condition. In accordance with existing rules, Citizens Thermal Energy has standard operating procedures in place for coal sampling, including procedures to insure the quality of the data generated by the sampling. Further, this condition appears to require the submittal of *any* revisions to the SOP. However, we would request that this condition require submittal only when substantive revisions are made to the plan, and not for changes that clarify procedures in response to employee questions, or that change organization charts, for example.

Response to Comment 44:

Pursuant to 326 IAC 3-7-5, the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance and data reporting and shall submit "any revision to the SOP" to the department. Therefore, there has been no change to this condition.

Comment 45:

D.3 Facility Description: Citizens Thermal requests that the capacity of the boilers be designated as "nominal" to ensure consistency with the descriptions in Section A.

Response to Comment 45:

IDEM and OES agree with the proposed change. The Facility Description has been changed as follows:

Facility Description [326 IAC 2-7-5(15)]:	
Emission Unit ID 17	One (1) Combustion Engineering boiler, identified as Emission Unit ID 17, firing distillate oil, with a ~~maximum design~~ **nominal** heat input capacity of 228 million Btu per hour, exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 15, 16 and 18), and installed in 1974.
Emission Unit ID 18	One (1) Combustion Engineering boiler, identified as Emission Unit ID 18, firing distillate oil, with the capability to fire natural gas on boiler startup, with a ~~maximum design~~ **nominal** heat input capacity of 228 million Btu per hour, exhausting at Stack/Vent ID 1 (shared with Emission Unit ID 15, 16 and 17), and installed in 1972.

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

Comment 46:

D.3.4 Citizens Thermal Energy requests that IDEM and the OES clarify the references to the hazardous waste determination requirements contained in this condition. Specifically, 40 CFR 262.11, Hazardous Waste Determination, allows the generator to determine whether or not the waste is a hazardous waste by applying generator knowledge (refer to §262.11(c)(2)). Citizens Thermal Energy objects to any condition which limits our ability to do this waste determination in accordance with the applicable RCRA rules.

Response to Comment 46:

As stated in Response to Comment 25, 40 CFR 261 provides the definition of hazardous waste. 40 CFR 262 sets forth the generator's responsibility to determine whether the waste exhibits one or more of the characteristics identified in the definition of hazardous waste. Therefore, the citing of the definition in 40 CFR 261 does not limit the source's ability, or responsibility, to do waste determinations. No change has been made to Condition D.3.4 as a result of this comment.

Comment 47:

D.3.6 This condition should be clarified to require testing if the cumulative hours of operation for *each* boiler exceeds 1,000 hours in each of two (2) consecutive calendar years. Please amend this condition as follows: "If either emission unit 17 or 18 operates at least one thousand (1000) hours in <u>each of</u> two (2) consecutive calendar years..."

Response to Comment 47:

IDEM and OES agree with the proposed change. The intent was to only require that stack testing be performed when the emission unit is operated at least one thousand hours in each of two consecutive calendar years. In addition, IDEM and OES have changed the wording in regards to testing methods and to further clarify the term calendar year. Condition D.3.6 has been changed as follows:

D.3.6 Testing Requirements [326 IAC 2-7-6(1) and (6)] [326 IAC 2-1.1-11]

If either emission unit 17 or 18 operates at least one thousand (1000) hours in **each of** two (2) consecutive calendar years, compliance with the PM limitation in Condition D.3.2 shall be determined by a performance stack test conducted utilizing **Method 5 or other** methods as approved by the Commissioner and completed within 180 days of the end of the second **calendar** year. Testing shall be conducted in accordance with Section C- Performance Testing.

For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Comment 48:

D.3.8 Citizens Thermal Energy requests that this condition be amended as follows: "... and using the emission factor from AP-42 or the most recent stack test."

Response to Comment 48:

AP-42 emission factors are developed by examining emissions from many units of many various types of many different situations. Stack test data provide emissions from that specific emissions unit. Therefore, IDEM and OES feel that stack test data would be a much more accurate reflection of that specific emission unit's emissions. However, IDEM and OES realize that stack test data is not available for every emission unit. Therefore, the condition has been changed as follows:

D.3.8 Particulate Matter (PM) [326 IAC 2-7-5]

Pursuant to 326 IAC 6-1-12, 326 IAC 2-7-5 and Section D.3.2 of this Permit, compliance with the PM tons per year limit shall be demonstrated by recording on a daily basis the amount of distillate oil in gallons consumed per rolling twelve (12) consecutive month period and using the emission factor from the most recent stack test. **In the absence of stack test data for a given emission unit, the Permittee shall use the emission factors from AP-42.**

Comment 49:

D.3.10(a) Citizens Thermal Energy requests that references to the "auxiliary boiler stack exhausts" be deleted from this condition. Oil-fired boilers 17 and 18 exhaust to Stack #1, shared with boilers 15 and 16.
D.3.10(b) While Citizens Thermal Energy plans to satisfy the requirement to conduct visible emission notations with the COMs that is installed on Stack #1, we request that the reference to "abnormal emissions...at any boiler exhaust" in this condition be deleted. If visible emissions notations are made of the emissions from the oil-fired boilers, corrective action on the oil-fired boilers will only be implemented if the emissions from Stack #1 are abnormal, and not based on a notation of abnormal emissions from other stacks.

Response to Comment 49:

IDEM and OES agree with the proposed changes. Oil-fired boilers 17 and 18 exhaust to Stack #1. Response steps on boilers 17 and 18 would not be required based on notation of abnormal emissions from other stacks. In addition, "violation of" in D.3.10(b) has been changed to "deviation from" to be more accurate. Therefore, condition D.3.10(a) and (b) have been changed as follows:

D.3.10 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) Visible emission notations of ~~the auxiliary boiler stack~~ **Stack #1** exhaust~~s~~ shall be performed once per shift during normal daylight operations while combusting fuel oil **in either Boiler 17, Boiler 18 or both boiler 17 and 18**. A trained employee shall record whether emissions are normal or abnormal. Continuous opacity monitor data collected in accordance with 326 IAC 3-5 (Continuous Monitoring of Emissions) may be used in place of the visible emission notations. If continuous opacity monitors are used in place of the visible emission notations, the continuous emission monitoring systems shall be calibrated, maintained, and operated for measuring opacity which meets the performance specifications of 40 CFR 60, Appendix B, Performance Specification 1 and 326 IAC 3-5-2.

(b) If abnormal emissions are observed at ~~any boiler~~ **Stack #1** exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a ~~violation of~~ **deviation from** this permit.

Comment 50:

D.3.11(a) Items (2) and (3) in this list are "either/or". To make this clear, the condition should require (1) and (2) or (3).

Response to Comment 50:

IDEM and OES agree with the commenter. The Permittee only has to maintain continuous emissions monitoring data when using continuous emission monitoring in place of visible emission notations. However, if the Permittee switches back and forth between the options, the Permittee would be required to maintain both types of records. Therefore, the condition has been changed as follows:

D.3.11 Record Keeping Requirements

(a) To document compliance with Section C - Opacity and Conditions D.3.6 and D.3.10, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.3.6 and D.3.7.

(1) Data and results from the most recent stack test; and

(2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5**, when using continuous emissions monitoring data in place of visible emissions notations**; **and**

(3) Records of visible emission notations of the stack exhaust**, when not using continuous emission monitoring in place of visible emissions notations**.

Comment 51:

D.3.11(d) Citizens Thermal Energy requests that the language be amended as follows: "If Permittee demonstrates compliance using the provisions of D.3.7(b)(2), pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure..."

Response to Comment 51:

326 IAC 3-7-5(a) states that the source shall "develop a standard operating procedure (SOP) to be followed for...of the information collected pursuant to [326 IAC 3-7-2 through 326 IAC 3-7-4] of this rule. 326 IAC 3-7-4 includes the option for sources to rely upon equivalent sampling and analysis procedures performed by the vendor prior to delivery of the fuel oil to the source. Therefore, pursuant to the rule, the source is still required to develop a standard operating procedure when relying upon the vendor to perform fuel sampling and analysis. IDEM and OES understand that the standard operating procedure (SOP) in this case might simply state that the source is relying on the vendor sampling and analysis as allowed by this rule. Other options the source might pursue include: asking the vendor to submit a copy of their SOP for fuel oil sampling and analysis or developing an SOP for handling of the vendor analysis data and certification documents.

Comment 52:

D.4 Facility Description: Please identify the throughput from the load out of ash and the coal crusher and "nominal" throughput. Additionally, Citizens Thermal Energy requests that the throughput for the load out of ash be the same as that used for emissions calculations, specifically 45 tons per hour.

Response to Comment 52:

The Facility Description in Section D.4 has been changed as follows in response to Comment 52 and to be consistent with Comment 2 and 3:

Facility Description [326 IAC 2-7-5(15)]:	
Emission Unit ID Ash 12	Load out of ash from the source, identified as Emission Unit ID Ash, to trucks with a **nominal** throughput of ~~5.04~~ **45** tons of ash per hour. Conditioned bottom ash is gravity fed to one (1) truck load out enclosure station, constructed in 1983-84, with movable doors that create an enclosure. Conditioned fly ash is unloaded to trucks utilizing either a telescopic chute under vacuum or gravity feeding. Emissions from the enclosure are exhausted to an electrostatic precipitator, identified as CE 12 and/or CE 1516.
Coal Crushing	One (1) enclosed coal crusher with ~~maximum~~ **a nominal** throughput of 400 tons of coal per hour, constructed in 1945.
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)	

Comment 53:

D.5 Facility Description: Please identify the capacity of the equipment identified as “nominal” capacity.

Response to Comment 53:

In response to Comment 53 and to be consistent with response to comment 5, the Facility Description in Section D.5 has been changed as follows:

Facility Description [326 IAC 2-7-5(15)]: **Insignificant Activities**
Degreasing operations that do not exceed 145 gallons per twelve (12) months, except if subject to 326 IAC 20-6. Railcar receiving of coal with a ~~maximum~~ **nominal** throughput of 419,000 tons per year. Pneumatic loading of fly ash and bottom ash to storage silos with a ~~maximum~~ **nominal** throughput of 5.04 tons of ash per hour. Outside coal storage and handling and enclosed coal conveying with a ~~maximum~~ **nominal** throughput of 419,000 tons per year.
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Comment 54:

D.5.2 Citizens Thermal Energy questions the applicability of 326 IAC 6-1-2 to the railcar receiving of coal. Railcar receiving does not have a discrete emission point from which to determine compliance with the 0.03 gr/dscf emission limit contained in the permit. This also presents a compliance certification problem, as the permittee has no way to determine the compliance status of the facility. This facility is an insignificant activity with no applicable requirements and should be removed from Section D.5.

Response to Comment 54:

326 IAC 6-1-2 applies to facilities located in Marion County that are not listed in 326 IAC 6-1-8.1 through 6-1-18, and the source or facility has the potential to emit one hundred (100) tons or more or has actual emissions of ten (10) tons or more of particulate matter per year. The facility of concern, railcar receiving of coal, is located in Marion County, is not listed in 326 IAC 6-1-8.1 through 6-1-18 and is located at a source with the potential to emit one hundred (100) tons or more per year of particulate matter. The rule does not limit applicability to facilities with discrete emission points. No change has been made as a result of this comment.

Comment 55:

Forms Included With the Permit Please amend the language on the form captioned "Part 70 Operating Permit Emergency Occurrence Report" to correctly capture the requirements of the rule regarding notification. Specifically, the permittee is required to notify the OAQ of a reportable incident within four (4) daytime business hours of discovery.

Response to Comment 55:

IDEM and OES agree with the comment. The bullet point of concern has been corrected as follows:

The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) **daytime** business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and

Comment 56:

Citizens Thermal Energy subsequently requested that D.2.8 be changed to reflect that the source can choose to conduct fuel sampling to show compliance with 326 IAC 7-2-1.

Response to Comment 56:

Fuel Sampling is one method used to determine compliance with 326 IAC 7-2-1. Pursuant to 326 IAC 7-2-1(g), a source can, upon submittal of written notification to IDEM, OAQ, use CEM data, collected and reported pursuant to 326 IAC 3-5, to determine compliance with 326 IAC 7. Citizens Thermal notified IDEM, OAQ that they intended to use CEM data to determine compliance with 326 IAC 7. The rule, 326 IAC 7-2-1 is silent on procedures for a source going back to using fuel sampling after using CEMS to determine compliance. IDEM and OES feel that the procedure would be the same as switching from fuel sampling to CEM data. Therefore, Condition D.2.8 has been changed as follows:

D.2.8 Sulfur Dioxide Emissions [326 IAC 7-2-1][326 IAC 3][326 IAC 3-7]

(a) Compliance with the SO_2 limit in Section D.2.1 shall be demonstrated for emission units 12, 15 and 16 by conducting continuous emission monitoring of SO_2 emissions pursuant to 326 IAC 3-5.

(b) Upon written notification to IDEM by the Permittee, coal sampling and analysis data may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7, coal sampling and analysis data shall be collected as follows:

(1) Coal sampling shall be performed using the methods specified in 326 IAC 3-7-2(a), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2(c), (d), and (e); or

(2) Pursuant to 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring.

IDEM and OES have made the following changes:

IDEM and OES Change 1:

Potential fugitive particulate matter emissions are less than 25 tons per year. Therefore, this rule is not applicable to this source, which is located in Center Township in Marion County. Condition C.5 has been removed, all following C Conditions have been renumbered and all D section references to C conditions (D.1.14 and D.2.18) have been adjusted.

~~C.5 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]~~
~~Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted. The plan is included as Attachment B.~~

IDEM and OES Change 2:

In order to clarify when the continuous opacity monitors must operate, the following change has been made to Condition C.11(a):

C.1~~1~~**0** Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) The Permittee shall calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. **For a boiler, the COM shall be in operation at all times that fuel is being combusted in the boiler.**

IDEM and OES Change 3:

To clarify the intended definition of calendar year, the following change has been made.

C.2~~1~~**0** General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years**, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive**.

IDEM and OES Change 4:

To be more clear and to use rule language by referring back to the rule rather than other portions of the condition, the following change has been made:

D.1.5 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

(a) Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the following applies:

(1) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period **during the start up or shut down period**. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]

(2) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

(b) If this facility cannot meet the opacity limitations in **326 IAC 5-1-3(a) or (b)** ~~(a)(1) and (a)(2) of this condition~~, the Permittee may submit a written request to IDEM, OAQ, for a temporary alternative opacity limitation in accordance with 326 IAC 5-1-3(d). The Permittee must demonstrate that the alternative limit is needed and justifiable.

IDEM and OES Change 5:

To clarify what type of records shall be maintained during periods of CEMS downtime, Condition D.1.14 has been changed as follows:

D.1.14 Record Keeping Requirements

(a) To document compliance with Section C - Opacity and Conditions D.1.1, D.1.2, D.1.3, D.1.8, D.1.9, and D.1.10, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.1.1, D.1.2, and D.1.3.

(1) Data and results from the most recent stack test; and

(2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5, Construction Permit CP097-0034-01, and 326 IAC 7-2-1(g). **During CEMS downtime, the Permittee shall maintain records of mass emission rates determined in accordance with Condition D.1.13 and C.11;**

(3) All preventive maintenance measures taken.

IDEM and OES Change 6:

The following corrections to Condition D.1.15 to more accurately reflect reporting requirements for boilers 11, 13 and 14.

D.1.15 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Condition D.1.1, D.1.2, D.1.3, D.1.4, D.1.8, D.1.9, and D.1.10 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:

(1) Date of downtime.

(2) Time of commencement.

(3) Duration of each downtime.

(4) Reasons for each downtime.

(5) Nature of system repairs and adjustments.

The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

IDEM and OES Change 7:

To be more clear, the following change has been made:

D.2.3 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

(a) Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the following applies for Boiler 12:

(1) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period **during the start up or shut down period**. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]

Operation of the electrostatic precipitator is not required during these times unless necessary to comply with these limits.

(2) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging periods in any sixty (60) minute period. The averaging periods in excess of the opacity limit shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

(b) If this facility cannot meet the opacity limitations in **326 IAC 5-1-3(a) or (b)**~~(a)(1) and (a)(2) of this condition~~, the Permittee may submit a written request to IDEM, OAQ, for a temporary alternative opacity limitation in accordance with 326 IAC 5-1-3(d). The Permittee must demonstrate that the alternative limit is needed and justifiable.

IDEM and OES Change 8:

To be more clear the following change has been made:

D.2.4 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

(a) Pursuant to 326 IAC 5-1-3(e) (Temporary Alternative Opacity Limitations), the following applies for Boilers 15 and 16:

(1) When building a new fire in a boiler, opacity may exceed the 30% opacity limitation for a period not to exceed **a total of** one half (0.5) hour (five (5) six (6)-minute averaging periods) **during the start up period** or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first.

(2) When shutting down a boiler, opacity may exceed the 30% opacity limitation for a period not to exceed **a total of** two tenths (0.2) hours (two (2) six (6)-minute averaging periods) **during the shut down period**.

(3) Operation of the electrostatic precipitator is not required during these times unless necessary to comply with these limits.

(b) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging periods in any sixty (60) minute period. The averaging periods in excess of the opacity limit shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

IDEM and OES Change 9:

To be more accurate, the following change has been made:

D.2.5 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

(a) All coal burned, including coal treated with any additive, shall meet ~~the~~ ASTM ~~definition of~~ **specifications for classification as** coal **(ASTM D388)**.

(b) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in these facilities. Any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any binding agent or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.

(c) Any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and **no more than** two full volume boiler rinses.

IDEM and OES Change 10:

To be more accurate, the phrase “violation of” has been changed to “deviation from” in Conditions D.2.15(b) and (c), D.2.16(b), and D.2.17.

D.2.15 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(b) Whenever the percentage of T-R sets in service falls to 75 percent (75%), the Permittee must take response steps to restore all T-R sets to service within 60 calendar days. Failure to take response steps and bring all T-R sets back into service within 60 calendar days shall be considered a ~~violation of~~ **deviation from** this permit.

(c) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below 75 percent (75%). T-R set failure resulting in

less than 75 percent availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a ~~violation of~~ **deviation from** this permit.

D.2.16 Electrostatic Precipitator Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(b) When for any one reading, operation is outside one of the normal ranges shown below, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A voltage or current reading outside the normal range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a ~~violation of~~ **deviation from** this permit.

(1)	Primary voltage:	133 - 310 V AC
(2)	Secondary voltage:	28 - 41 kV DC
(3)	T-R set primary current:	12 - 71 Amps AC

D.2.17 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(b) Opacity readings in excess of twenty percent (20%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a ~~violation of~~ **deviation from** this permit.

IDEM and OES Change 11:

To clarify what type of records shall be maintained during periods of CEMS downtime, Condition D.2.18 has been changed as follows:

D.2.18 Record Keeping Requirements

(a) To document compliance with Section C - Opacity and Conditions D.2.1, D.2.2, D.2.3, D.2.4, D.2.7, D.2.8, D.2.9, D.2.10, D.2.12, D.2.14, D.2.15, and D.2.16, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.2.2, D.2.3, D.2.4, and D.2.7.

(1) Data and results from the most recent stack test;

(2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5 and 326 IAC 326 IAC 7-2-1(g)~~;~~**. During CEMS downtime, the Permittee shall maintain records of mass emission rates determined in accordance with Condition D.2.14 and C.11;**

(3) All parametric monitoring readings;

IDEM and OES Change 12:

To be more specific, the following change has been made:

D.2.19 Reporting Requirements

(a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Section D.2.1, D.2.2, and D.2.10 shall be submitted to the

addresses listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:

(1) Date of downtime.
(2) Time of commencement.
(3) Duration of each downtime.
(4) Reasons for each downtime.
(5) Nature of system repairs and adjustments.

The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

IDEM and OES Change 13:

For clarification purposes, the following change has been made:

D.3.3 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

(a) Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the following applies:

(1) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period **during the start up or shut down period**. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]

(2) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

(b) If this facility cannot meet the opacity limitations in **326 IAC 5-1-3(a) or (b)** ~~(a)(1) and (a)(2)~~ of this condition, the Permittee may submit a written request to IDEM, OAQ, for a temporary alternative opacity limitation in accordance with 326 IAC 5-1-3(d). The Permittee must demonstrate that the alternative limit is needed and justifiable.

IDEM and OES Change 14:

To be more accurate, the following change has been made:

D.3.4 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

(a) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in these facilities. Any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any binding agent or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.

(b) Any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and **no more than** two full volume boiler rinses.

IDEM and OES Change 15:

Although Citizens Thermal Energy did not specifically make the request, based on CTE Comments 28 and 37, IDEM and OES have made the following change to Condition D.3.9:

D.3.9 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

The Permittee shall use appropriate methodology as identified in 40 CFR Part 261 **and/or 40 CFR Part 262** to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.

IDEM and OES Change 16:

The following change has been made to the Quarterly Deviation and Compliance Monitoring Report to clarify the intended reporting period:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name:	Citizens Thermal (Perry K Steam Plant)
Source Address:	366 Kentucky Avenue, Indianapolis, Indiana 46225
Mailing Address:	366 Kentucky Avenue, Indianapolis, Indiana 46225
Part 70 Permit No.:	T097-6567-00034

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. **For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.** Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

The mailing address on page 63 of 70 has been corrected.

The Table of Contents has been updated to reflect the above mentioned changes.

In accordance with the credible evidence rule (62 Fed. Reg. 8314, Feb 24, 1997); Section 113(a) of the Clean Air Act, 42 U.S.C. 7413(a); and a letter from the United States Environmental Protection Agency (USEPA) to IDEM, OAQ dated May 18, 2004, all permits must address the use of credible evidence; otherwise, USEPA will object to the permit. The following language will be incorporated into the permit to address credible evidence:

B.24 Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314]

Notwithstanding the Conditions of this Permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or Condition of this Permit.

All Boiler Emission Units Equipment/Applicable Rules

Appendix A: Emission Calculations
Summary of Equipment - applicable rules

Company Name: Citizens Thermal (Perry K Steam Plant)
Address City IN Zip: 336 Kentucky Avenue, Indianapolis, IN 4622

Permit No.: T097-6567-00034
Reviewer: A. Hennessy
Date: Sep-02

Emission Unit ID	Stack/Vent ID	Boiler Mfgr & Type of Boiler	Installation Date	Fuel(s)	Maximum Capacity Rating	Design Heat Input (MMBTU/HR)	Applicable Rule Limitations	Limit	Rule	Control (Y/N); Type; ID; Pollutant(s); Stack ID
							PM	0.125 #/MMBtu & 484.4 tpy *	326 IAC 6-1-12	
							PM10	NSR equation for #/MMBtu & 65.43 tpy** = COG	NSR Permit for COG	No;
11	3	Foster / Wheeler	1938				SO2	2.1 #/MMBtu or alternative; 2954.76 tpy** = COG	326 IAC 7-4-2; NSR Permit for COG	None;
							NOx	341.0 #/MMBtu & 1537.07 tpy** = COG NSR	NSR Permit for COG	None;
							CO	143.04 tpy** = COG	NSR Permit for COG	None;
							VOC	44.04 tpy** = COG	NSR Permit for COG	
			12 / 98	C.O.G.		382	COM	removed per permit mod	NSR Permit for COG	Stack/Vent 3
			modification	Natural Gas		368	Sulfuric Acid Mist	31.67 tpy** = COG	NSR Permit for COG	
							CEM	SO2, NOx & CO = COG	NSR Permit for COG	
				natural gas on startup			PM	0.175 #/MMBtu & 484.4 tpy *	326 IAC 6-1-12	Yes;
		Foster / Wheeler					PM10	none	---	ESP;
12	3		1938	coal	15.3 tons/hr	352	SO2	2.1 #/MMBtu or alternative	326 IAC 7-4-2	CE12;
		Pulverized - Dry Bottom					NOx	none	---	PM / (PM10);
							CO	none	---	
		Wall Fired					VOC	none	---	Stack/Vent 3
							COM	opacity	326 IAC 3-5(c)(2)(A)	
							PM	0.082 #/MMBtu & 484.4 tpy *	326 IAC 6-1-12	
		Babcock & Wilcox					PM10	NSR equation for #/MMBtu & 65.43 tpy** = COG	NSR Permit for COG	No;
13	4		1946				SO2	2.1 #/MMBtu or alternative; 2954.76 tpy** = COG	326 IAC 7-4-2; NSR Permit for COG	None;
							NOx	381.7 #/MMBtu & 1537.07 tpy** = COG NSR	NSR Permit for COG	None;
							CO	143.04 tpy** = COG	NSR Permit for COG	
							VOC	44.04 tpy** = COG	NSR Permit for COG	None;
			10 / 98	C.O.G.		411	COM	removed per permit mod	NSR Permit for COG	
			modification	Natural Gas		403	Sulfuric Acid Mist	31.67 tpy** = COG	NSR Permit for COG	Stack/Vent 4
							CEM	SO2, NOx & CO = COG	NSR Permit for COG	
							PM	0.082 #/MMBtu & 484.4 tpy *	326 IAC 6-1-12	
							PM10	NSR equation for #/MMBtu & 65.43 tpy** = COG	NSR Permit for COG	No;
14	4	Babcock & Wilcox	1946				SO2	2.1 #/MMBtu or alternative; 2954.76 tpy** = COG	326 IAC 7-4-2; NSR Permit = COG	None;
							NOx	381.7 #/MMBtu & 1537.07 tpy** = COG NSR	NSR Permit for COG	None;
							CO	143.04 tpy** = COG	NSR Permit for COG	
							VOC	44.04 tpy** = COG	NSR Permit for COG	None;
			10 / 98	C.O.G.		411	COM	removed per permit mod	NSR Permit for COG	
			modification	Natural Gas		403	Sulfuric Acid Mist	31.67 tpy** = COG	NSR Permit for COG	Stack/Vent 4
							CEM	SO2, NOx & CO = COG	NSR Permit for COG	
				natural gas on startup			PM	0.106 #/MMBtu & 484.4 tpy *	326 IAC 6-1-12	
							PM10	none	---	Yes;
15	1	Babcock & Wilcox	1953	coal	14.1 tons/hr	324	SO2	2.1 #/MMBtu or alternative	326 IAC 7-4-2	ESP;
							NOx	none	---	CE 1516
		Spreader Stoker					CO	none	---	PM / (PM10);
							VOC	none	---	
							COM	opacity	326 IAC 3-5(c)(2)(A)	Stack/Vent 1
				natural gas on startup			PM	0.106 #/MMBtu & 484.4 tpy *	326 IAC 6-1-12	
							PM10	none	---	Yes;
16	1	Babcock & Wilcox	1953	coal	14.1 tons/hr	324	SO2	2.1 #/MMBtu or alternative	326 IAC 7-4-2	ESP;
							NOx	none	---	CE 1516;
		Spreader Stoker					CO	none	---	PM / (PM10);
							VOC	none	---	
							COM	opacity	326 IAC 3-5(c)(2)(A)	Stack/Vent 1
							PM	0.015 #/MMBtu & 484.4 tpy *	326 IAC 6-1-12	
							PM10	none	---	No;
17	1	Combustion Engineering	1974	# 2 fuel oil	1647 gal/hr	228	SO2	0.3 #/MMBtu	326 IAC 7-4-2	None;
							NOx	none	---	None;
		Distillate Oil Firing					CO	none	---	None;
							VOC	none	---	
							COM	no	326 IAC 3-5 exempts gas/oi	Stack/Vent 1
							PM	0.015 #/MMBtu & 484.4 tpy *	326 IAC 6-1-12	
							PM10	none	---	No;
18	1	Combustion Engineering	1972	# 2 fuel oil	1647 gal/hr	228	SO2	0.3 #/MMBtu	326 IAC 7-4-2	None;
							NOx	none	---	None;
		Distillate Oil Firing					CO	none	---	None;
							VOC	none	---	
							COM	no	326 IAC 3-5 exempts gas/oi	Stack/Vent 1

* = Units 11 through 18 combined tons per year
** = Units 11, 13 & 14 combined tons per year

Appendix A: Emission Calculations

Industrial Boilers - Distillate oil firing

Emission Unit ID's # 17 & # 18 Combustion Engineering Boilers

Company Name: **Citizens Thermal (Perry K Steam Plant)**
Address City IN Zip: **336 Kentucky Avenue, Indianapolis, IN 46225**

Permit No.: **T097-6567-00034**
Reviewer: **A. Hennessy**
Date: **Sep-02**

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
228.0	14266.3	0.3

	Pollutant					
	PM	SO2	NOx	VOC	CO	PM10
Emission Factor in lb/kgal	2.0	47.1 *(157.0S)*	24.0	0.20	5.0	1.0
Potential Emission in tons/yr	14.3	336.0	171.2	1.4	35.7	7.1

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-4 (SCC 1-02-005-01/02/03) and 1.3-7

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Compliance Determination

PM emfac uncontrolled = 2 #/kgal	2 # / kgal x 1 kgal / 1000 gal x 1 gal / 0.14 MMBtu =	0.014 #'s PM / MMBtu
	326 IAC 6-1-12 =	**0.015 #'s PM / MMBtu**
SO2 emfac uncontrolled @ % S SO2 @ 0.3 % S = 142(S) / kgal	142(.3) # / kgal x 1 kgal / 1000 gal x 1 gal / 0.14 MMBtu =	0.3 #'s SO2 / MMBtu
	326 IAC 7-4-2 =	**0.3 #'s SO2 / MMBtu**

Contribution to limit of 484.4 tpy PM

Combined heat input x 326 IAC 6-1-12 short term limit x 8760 hrs/yr x heat input/gal:

2 units x 228 MMBtu/hr x 0.015 lbs/MMBtu x ton/2000 lbs x 8760 hr/yr =	29.9 tons PM/yr
2 units x 228 MMBtu/hr x 1 gal/ 0.140 MMBtu x 8760 hr/yr =	28.5 MMgal/yr

Emission Unit ID
 # 12
Foster Wheeler Boiler

Appendix A: Emission Calculations
Industrial Boilers - Pulverized Dry Bottom Wall Fired

Company Name: **Citizens Thermal (Perry K Steam Plant)**
Address City IN Zip: **336 Kentucky Avenue, Indianapolis, IN 46225**

Permit No.: **T097-6567-00034**
Reviewer: **A. Hennessy**
Date: **Sep-02**

Heat Input Capacity
MMBtu/hr

352.0

Potential throughput
tons/yr = 192720.0

8000	Btu / lb coal
5.1	% Sulfur by Weight = S
11	% Ash by Weight = A

	Pollutant					
	PM	SO2	NOx	VOC	CO	PM10
Emission Factor in lb/ton	110.0 *(10A)*	193.8 *(38S)*	22.0	0.06	0.5	25.3 *(2.3A)*
Potential Emission in tons/yr	10599.6	18674.6	2119.9	5.8	48.2	2437.9

Methodology

PI-02 Application form listed 1 pound of coal has a heating value of 8000 Btu per poun

Potential Throughput (tons/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x lb coal / MMBtu x ton /2000 lb

Emission Factors are from AP 42, Tables 1.1-1, 1.1-3 and 1.1-11

Emission (tons/yr) = Throughput (tons/yr) x Emission Factor (lb/ton)/2,000 lb/tor

	HAPs									
Source of Emfac (Pulverized, dry bottom)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)
	Arsenic	Beryllium	Cadmium	Chromium	Lead	Manganese	Mercury	Nickel	POMs	Formaldehyde
Emission Factor in lb/10^12 Btu	684.0	81	44.4	1570.00	507.0	2980.0	16	1290	2.08	ND
Potential Emission in tons/yr	1.1	0.1	0.1	2.4	0.8	4.6	0.0	2.0	0.0	ND

Methodology

Emfac in lb/10^12 Btu * max heat input (MMBtu/hr) *1.0E-06* 8760hrs/yr * ton/2000 lbs = potential emissions in tons per yea

Compliance Determination
Compliance with 326 IAC 6-1-12 short term limits in pounds per MMBtu will be determined by stack testin

Emission Unit ID's
 # 15 & # 16
Babcock & Wilcox Boilers

Appendix A: Emission Calculations
Industrial Boilers - Spreader Stokers

Company Name: **Citizens Thermal (Perry K Steam Plant)**
Address City IN Zip: **336 Kentucky Avenue, Indianapolis, IN 46225**

Permit No.: **T097-6567-00034**
Reviewer: **A. Hennessy**
Date: **Sep-02**

Heat Input Capacity MMBtu/hr			
		8000	Btu / lb coal
		5.1	% Sulfur by Weight = S
		11	% Ash by Weight = A
324.0	Potential throughput tons/yr =	177390.0	

	Pollutant					
	PM	SO2	NOx	VOC	CO	PM10
Emission Factor in lb/ton	66.0	193.8 *(38S)*	7.5	0.06	6.0	13.2
Potential Emission in tons/yr	5853.9	17189.1	665.2	5.3	532.2	1170.8

Methodology

PI-02 Application form listed 1 pound of coal has a heating value of 8000 Btu per pound

Potential Throughput (tons/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x lb coal / MMBtu x ton /2000 lbs

Emission Factors are from AP 42, Tables 1.1-1, 1.1-3 and 1.1-11

Emission (tons/yr) = Throughput (tons/yr) x Emission Factor (lb/ton)/2,000 lb/ton

	HAPs									
Source of Emfac (Spreader Stoker)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)
	Arsenic	Beryllium	Cadmium	Chromium	Lead	Manganese	Mercury	Nickel	POMs	Formaldehyde
Emission Factor in lb/10^12 Btu	542.0	ND	43.0	1570.0	507.0	2170.0	16.0	1290.0	ND	ND
Potential Emission in tons/yr	0.8	ND	0.1	2.4	0.8	3.3	0.0	2.0	ND	ND

Methodology

Emfac in lb/10^12 Btu * max heat input (MMBtu/hr) *1.0E-06* 8760hrs/yr * ton/2000 lbs = potential emissions in tons per yea

Compliance Determination
Compliance with 326 IAC 6-1-12 short term limits in pounds per MMBtu will be determined by stack testing

Appendix A: Emission Calculations
Fugitive Dust from Coal Storage & Handling

Coal Storage & Handling fugitive emissions

Company Name: Citizens Thermal (Perry K Steam Plant)
Address City IN Zip: 336 Kentucky Avenue, Indianapolis, IN 46225

Permit No.: T097-6567-00034
Reviewer: A. Hennessy
Date: November-02

1) Storage and enclosed conveying emissions, which result from wind erosion, are determined by the following calculations (from AP-42 old Chapter 11.2.3):

Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)
= 5.67 lb/acre/day
where s = 4.9 % silt content of material
p = 125 days of rain greater than or equal to 0.01 inches
f = 15 % of wind greater than or equal to 12 mph

Ep (storage) = Ef*sc*(40 cuft/ton)/(2000 lb/ton)/(43560 sqft/acre)/(25 ft)*(365 day/yr) = **0.0159 tons/yr PM**
0.0036 lb/hr PM
where sc = 419 000 tons capacity 0.0874 lb/day PM

2) The following calculations determine the amount of emissions created by unpaved roads, based on 8760 hours of use and AP-42, Ch 13.2.2.2

2 trip/hr x
1 mile/trip x
2 miles travelled per hour
8760 hr/yr = 17520 miles per year

Ef = k*5.9*(s/12)*(S/30)*(W/3)^0.7*(w/4)^0.5*((365-p)/365)
= 0.19 lbs/VMT
where k = 0.36 (particle size multiplier)
s = 6 % silt content of unpaved roads
p = 125 days of rain greater than or equal to 0.01 inches
S = 10 miles/hr vehicle speed
W = 2.25 tons average vehicle weight
w = 4 wheels

$$\frac{0.19 \text{ lb/mi} \times 17520 \text{ mi/yr}}{2000 \text{ lb/ton}} =$$ **1.67 tons/yr PM10**

3) The following calculations determine the amount of emissions created by rail unloading of coal, based on 8760 hours of use and AP-42, Ch 13.2.4.3

Ef = k*(0.0032)* (U/5)^1.3/(M/2)^1.4
= 0.0001 lb/ton
where k = 0.35 (particle size multiplier)
U = 10 mile/hr mean wind speed
M = 17.8 % material moisture content

sc = 419402 tons/yr

E (load/unload) = (Ef*sc)/(2000 lb/ton) = **0.03 tons/yr PM10**
0.006187816 lb/hr PM10
0.148507587 lb/day PM10

1.71 tons/yr total fugitive estimate

4) The following calculations determine the amount of emissions created by coal crushing, based on a coal throughput to the crusher of 400 tons per hour and use of Emission Factor 3-05-010-10.

Ef= 0.02 lb PM/ton coal crushed
Ef= 0.006 lb PM10/ton coal crushed
Throughput= 400 tons coal per hour

0.02 lb PM /ton coal * 400 tons coal / hour
PM= 8 lb/hour
PM= 192 lb/day

0.006 lbPM10 / ton coal * 400 tons coal/ hour
PM10= 2.4 lb/hour
PM10= 57.6 lb/day

Appendix A: Emission Calculations

Emission Unit ID Ash-12 — **Dust from Ash Conveying, Storage & Loadout** — Page 6 of 10 TSD App A

Ash Loadout Emissions

Company Name: **Citizens Thermal (Perry K Steam Plant)**

Address City IN Zip: **336 Kentucky Avenue, Indianapolis, IN 46225**

Permit No: **T097-6567-00034**

Reviewer: **A. Hennessy**

Date: **November-02**

Calculation of Ash Generation Potential

Boiler 12:

Maximum Coal Throughput:	352 MMBtu/hr x (10^6 lb coal/10,900 10^6 Btu) x (1 ton/2000 lb) =	16.15	tons of coal burned per hour
Maximum Ash Production @ 11% ash in coal:	Coal Throughput x 11% =	1.78	tons of ash produced per hour
AP-42 background document indicates that 70% of ash from dry-bottom pulverized coal is flyash:			
Flyash Production:	Ash production x 70% =	1.24	tons of flyash produced per hour
Bottom ash Production:	Ash production x 30% =	0.53	tons of bottom ash produced per hour

Boilers 15 and 16:

Maximum Coal Throughput:	324 MMBtu/hr x (10^6 lb coal/10,900 10^6 Btu) x (1 ton/2000 lb) =	14.86	tons of coal burned per hour (per boiler)
Maximum Ash Production @ 11% ash in coal:	Coal Throughput x 11% =	1.63	tons of ash produced per hour (per boiler)
Estimate flyash to bottom ash ratio at 1:1 (50% fly, 50% bottom)			
Flyash Production:	Ash production x 50% =	0.82	tons of flyash produced per hour (per boiler)
Bottom ash Production:	Ash production x 50% =	0.82	tons of bottom ash produced per hour (per boiler)

Flyash Handling System to Silo No. 3

Notes:

1. Assume 90% of flyash is collected in separators (not a control device).
2. AP-42 Emission Factors for Cement Unloading to Silo (pneumatic), 11.12-2 (October 2001).
3. Assume worst case conveying of ash only once per shift.

Emission Factors (SCC 3-05-011-07):

PM (lb/ton):	0.72
PM10 (lb/ton):	0.46

Process Weight Determination:

(Boiler 12 Flyash Generation) * 8 =	9.95	tons/hour
Estimation of Potential Emissions, PM-10:		
(Flyash Process Rate tons/hr x (1-0.9 eff)) x (Emission Factor) =	0.46	lb PM-10/hr
	10.98	lb PM-10/day
	2.00	tons PM-10/yr
Estimation of Potential Emissions, PM:		
(Flyash Process Rate tons/hr x (1-0.9 eff)) x (Emission Factor) =	0.72	lb PM/hr
	17.19	lb PM/day
	3.14	tons PM/yr

Bottom Ash Handling System to Silo No. 4

Notes:

1. Assume 95% of bottom ash is collected in separators (not a control device).
2. AP-42 Emission Factors for Cement Unloading to Silo (pneumatic), 11.12-2 (October 2001).
3. Assume worst case conveying of ash only once per shift.

Emission Factors (SCC 3-05-011-07):

PM (lb/ton):	0.72
PM10 (lb/ton):	0.46

Process Weight Determination:

(Boiler 12 Bottom ash Generation) *8 =	4.26	tons/hour
Estimation of Potential Emissions, PM-10:		
(Bottom ash Process Rate tons/hr x (1-0.95 eff)) x (Emission Factor) =	0.10	lb PM-10/hr
	2.35	lb PM-10/day
	0.43	tons PM-10/yr
Estimation of Potential Emissions, PM:		
(Bottom ash Process Rate tons/hr x (1-0.95 eff)) x (Emission Factor) =	0.15	lb PM/hr
	3.68	lb PM/day
	0.67	tons PM/yr

Flyash Handling System to Silo No. 2

Notes:

1. Assume 90% of flyash is collected in separators (not a control device).
2. AP-42 Emission Factors for Cement Unloading to Silo (pneumatic), 11.12-2 (October 2001).
3. Assume worst case conveying of ash only once per shift.

Emission Factors (SCC 3-05-011-07):

PM (lb/ton):	0.72
PM10 (lb/ton):	0.46

Process Weight Determination:

(Boilers 15 and 16 Flyash Generation) * 8 *2 =	13.08	tons/hour
Estimation of Potential Emissions, PM-10:		
(Flyash Process Rate tons/hr x (1-0.9 eff)) x (Emission Factor) =	0.60	lb PM-10/hr
	14.44	lb PM-10/day
	2.64	tons PM-10/yr
Estimation of Potential Emissions, PM:		
(Flyash Process Rate tons/hr x (1-0.9 eff)) x (Emission Factor) =	0.94	lb PM/hr
	22.60	lb PM/day
	4.12	tons PM/yr

Bottom Ash Handling System to Silo No. 1

Notes:

1. Assume 95% of bottom ash is collected in separators (not a control device).
2. AP-42 Emission Factors for Cement Unloading to Silo (pneumatic), 11.12-2 (October 2001).
3. Assume worst case conveying of ash only once per shift.

Emission Factors (SCC 3-05-011-07):

PM (lb/ton):	0.72
PM10 (lb/ton):	0.46

Process Weight Determination:

(Boilers 15 and 16 Bottom ash Generation) * 8 * 2 =	13.08	tons/hour
Estimation of Potential Emissions, PM-10:		
(Bottom ash Process Rate tons/hr x (1-0.95 eff)) x (Emission Factor) =	0.30	lb PM-10/hr
	7.22	lb PM-10/day
	1.32	tons PM-10/yr
Estimation of Potential Emissions, PM:		
(Bottom ash Process Rate tons/hr x (1-0.95 eff)) x (Emission Factor) =	0.47	lb PM/hr
	11.30	lb PM/day
	2.06	tons PM/yr

Emission Unit ID Ash-12
Ash Loadout Emissions

Appendix A: Emission Calculations
Dust from Ash Conveying, Storage & Loadout

Company Name: **Citizens Thermal (Perry K Steam Plant)**
Address City IN Zip: **336 Kentucky Avenue, Indianapolis, IN 46225**

Permit No.: **T097-6567-00034**
Reviewer: **A. Hennessy**
Date: **Nov-02**

Ash Unloading Into Dump Trucks

Notes:
1. Open dump trucks.
2. Bottom ash wetted and loaded in enclosed area (95% CE)
3. AP-42 Emission Factors for Cement Raw Material Unloading

Emission Factors (SCC 3-05-006-07):

PM (lb/ton):	0.2
PM10 (lb/ton):	0.1

Estimation of Potential Emissions:

(45 tons/hr x 0.1 lb PM-10/ton of ash) =	4.50	lb PM-10/hr
	108.0	lb PM-10/day
	19.71	tons PM-10/yr

Estimation of Potential Emissions, PM:

(45 tons/hr x 0.1 lb PM-10/ton of ash) =	9.00	lb PM/hr
	216.0	lb PM/day
	39.42	tons PM/yr

Potential After Consideration of controls deemed integral to the sytem, PM-10:

Potential Emissions, lb/hr x (1-0.95) =	0.23	lb PM-10/hr

Potential After Consideration of controls deemed integral to the sytem, PM:

Potential Emissions, lb/hr x (1-0.95) =	0.45	lb PM/hr

Ash Unloading Into Container Truck

Notes:
1. Pneumatic feeding of flyash (99% CE).
2. AP-42 Emission Factors for Cement Raw Material Unloading

PM (lb/ton):	0.2
PM10 (lb/ton):	0.1

Estimation of Potential Emissions, PM-10:

(45 tons/hr x 0.1 lb PM-10/ton of ash) =	4.50	lb PM-10/hr
	108.00	lb PM-10/day
	19.71	tons PM-10/yr

Estimation of Potential Emissions, PM:

(45 tons/hr x 0.1 lb PM-10/ton of ash) =	9.00	lb PM/hr
	216.00	lb PM/day
	39.42	tons PM/yr

Potential After Consideration of controls deemed integral to the sytem, PM-10:

Potential Emissions, lb/hr x (1-0.99) =	0.05	lb PM-10/hr

Potential After Consideration of controls deemed integral to the sytem, PM:

Potential Emissions, lb/hr x (1-0.99) =	0.09	lb PM/hr

HAPs Sum

Appendix A: Emission Calculations
Summary HAPs PTE

Company Name: Citizens Thermal (Perry K Steam Plant)
Address City IN Zip: 336 Kentucky Avenue, Indianapolis, IN 46225

Permit No.: T097-6567-00034
Reviewer: A. Hennessy
Date: Sep-02

	HAPs PTE in tons per year														Actual HAPs Reported per GSD-08	
Source of Emfac	NSR Review	NSR Review	NSR Review	NSR Review	NSR Review	NSR Review	NSR Review	NSR Review	NSR Review	NSR Review	NSR Review	NSR Review	NSR Review	NSR Review	EPRI	EPRI
	Arsenic	Beryllium	Cadmium	Chromium	Lead	Manganese	Mercury	Nickel	POMs	Formaldehyde	Flourides	Sulfuric Acid Mist	H2S	Total Reduced Sulfur	HCl	HF
Boiler #11, # 13 & # 14 combined	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	ND	ND	0.0	31.7	0.0	0.0	12.9	5.4
Source of Emfac	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	AP-42 (1.1-13)	NSR Review	NSR Review	NSR Review	NSR Review	EPRI	EPRI
Boiler # 12	1.1	0.1	0.1	2.4	0.8	4.6	0.0	2.0	0.0	ND	ND	ND	ND	ND	20.6	4.6
Boiler # 15	0.8	0.0	0.1	2.4	0.8	3.3	0.0	2.0	0.0	0.0	ND	ND	ND	ND	7.8	1.7
Boiler # 16	0.8	0.0	0.1	2.4	0.8	3.3	0.0	2.0	0.0	0.0	ND	ND	ND	ND	6.7	1.5
Sum	**2.7**	**0.1**	**0.3**	**7.2**	**2.4**	**11.2**	**0.6**	**6.0**	**0.0**	**0.0**	**0.0**	**31.7**	**0.0**	**0.0**	**47.9**	**13.2**

Appendix A: Emission Calculations
Recap of NSR Permit 03/06/98 for Coke Oven Gas/Natural Gas Conversion

Company Name: Citizens Thermal (Perry K Steam Plant)
Address City IN Zip: 336 Kentucky Avenue, Indianapolis, IN 46225

Permit No.: T097-6567-00034
Reviewer: A. Hennessy
Date: September-02

Heat input capacity for COG: Boilers 11, 13 and 14 are 382, 411 and 411 mmBtu/hr respectively.
Heat input capacity for Natural Gas: Boilers 11, 13 and 14 are 368, 403 and 403 mmBtu/hr respectively.

Potential Emissions(based on 8,760 hours per year at rated capacity) per fuel for all three boilers combined in tons per year

Pollutant	CO	NOx	SO2	PM	PM10	VOC	Pb
COG	189.85	3992.05	7171.99	**487.80**	487.80	52.74	0.00
Natural Gas	179.97	1285.53	3.09	**25.71**	25.71	51.42	0.00

Pollutant	Beryllium	Mercury	Fluorides	Sulfuric Acid Mist	Hydrogen Sulfide	Total Reduced Sulfur	Single HAP	Combination of HAP
COG	0.0000	0.04	0.00	76.87	0.00	0.00	21.04	34.63
Natural Gas	0.0000	0.04	0.00	0.01	0.00	0.00	0.78	0.82

NSR Analysis
Baseline Emissions (actual ton per year emissions from coal combustion for boilers 11, 13 and 14 combined)

Pollutant		1995	1996	'95-96 Average
CO	STEPS	43.83	44.81	44.32
NOx	STEPS	1493.02	1503.81	1498.42
SO2	STEPS	3090.59	2741.30	2915.95
PM	See note	106.70	132.50	119.60
PM10	See note	45.92	57.22	51.57
VOC	STEPS	4.94	4.97	4.96
Pb	STEPS	0.05	0.02	0.03
Beryllium	AP-42	0.1267	0.1263	0.1265
Mercury	AP-42	0.03	0.02	0.02
Fluorides	FIRE databas	16.04	15.01	15.53
Sulfuric Acid Mist	AP-42	33.13	29.38	31.26
Hydrogen Sulfide	Application	0.00	0.00	0.00
Total Reduced Sulfur	Application	0.00	0.00	0.00

	1995 usage	tons	mmcf
	11	62452	41
	13	37711	29
	14	39506	27
		139669.00	97.00
	1996 usage		
	11.00	63368.00	70.00
	13.00	33891.00	35.00
	14.00	41929.00	49.00
		139188.00	154.00
		278857.00	

PM/PM10 based on STEPS and inclusion of condensibles.

Netting Analysis (emissions in tons per year)

Pollutant	CO	NOx	SO2	PM	PM10	VOC	Pb	Beryllium	Mercury	Fluorides	Sulfuric Acid Mist	H2S	TRS
Contemporaneous increase from proposed modification													
	143.04	1537.07	2954.76	143.39	65.43	44.04	0.00	0.0000	0.06	0.00	31.67	0.00	0.00
Worst case hrs	6600	3370	3609	2575	1175	7315	8760	8760	8760	8760	3609	8760	8760
Contemporaneous decreases													
	44.32	1498.42	2915.95	119.6	51.57	4.96	0.03	0.1265	0.02	15.52	31.26	0	0
Other Contemporaneous increases													
	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Change in Emissions													
	98.72	38.65	38.81	23.79	13.86	39.08	-0.03	-0.13	0.04	-15.52	0.41	0.00	0.00
PSD or Offset Significant Level													
	100	40	40	25	15	40	0.6	0.0004	0.1	3	7	10	10

Allowable Emission rates in tons per year based on netting out of PSD or Offset review

Pollutant	CO	NOx	SO2	PM	PM10	VOC	Pb	Beryllium	Mercury	Fluorides	Sulfuric Acid Mist	H2S	TRS
	143.04	1537.07	2954.76	143.39	65.43	44.04	0.00	0.00	0.06	0.00	31.67	0.00	0.00

Appendix A: Emission Calculations
Recap of NSR Permit 03/06/98 for Coke Oven Gas/Natural Gas Conversion

Company Name:	**Citizens Thermal (Perry K Steam Plant)**
Address City IN Zip:	**336 Kentucky Avenue, Indianapolis, IN 46225**
Permit No.:	**T097-6567-00034**
Reviewer:	**A. Hennessy**
Date:	**May-03**

Pre-Project hourly baseline emission rates

	SO2	**NOx**	**PM**
Boiler 11	739.2	340.91	22.88
Boiler 13	827.4	381.7	29.7
Boiler 14	827.4	381.7	24.1

1. Values are based on 11,200 btu/lb for coal and heat input capacity of 352, 394, and 394 mmbtu/hr respectively. This was the maximum design heat input capacity from before the conversion.

2. Pre-project SO2 values are based on SO2 SIP limit.

3. Pre-project NOx values are based on NOx emission factor of 21.7 lb/ton.
   352 mmbtu /hr (or 394 for 13 and 14) * 1 lb coal / 11,200 btu * 21.7 lb NOx / ton coal * 1 ton / 2000 lbs

4. Pre- project PM values are based on stack test data for dry filterable portion.