



Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

June 30, 2004

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

TO: Interested Parties / Applicant

RE: University of Notre Dame du Lac / 141-7412-00013

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

### Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and

- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
401 M Street  
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

# PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**University of Notre Dame du Lac  
100 Facilities Building  
Notre Dame, Indiana 46556**

(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 and 326 IAC 2-1-3.2 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 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T141-7412-00013	
Issued by: Original Signed by Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: June 30, 2004 Expiration Date: June 30, 2009

## TABLE OF CONTENTS

<b>A</b>	<b>SOURCE SUMMARY</b> .....	<b>6</b>
A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 2-7-5(15)]	
A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)][326 2-7-5(15)]	
A.4	Part 70 Permit Applicability [326 IAC 2-7-2]	
<b>B</b>	<b>GENERAL CONDITIONS</b> .....	<b>8</b>
B.1	Definitions [326 IAC 2-7-1]	
B.2	Permit Term [326 IAC 2-7-5(2)]	
B.3	Enforceability [326 IAC 2-7-7(a)]	
B.4	Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]	
B.5	Severability [326 IAC 2-7-5(5)]	
B.6	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.7	Duty to Provide Information [326 IAC 2-7-5(6)(E)]	
B.8	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]	
B.9	Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.10	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)][326 1-6-3]	
B.11	Emergency Provisions [326 IAC 2-7-16]	
B.12	Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]	
B.13	Multiple Exceedances [326 IAC 2-7-5(1)(E)]	
B.14	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]	
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]	
B.16	Permit Renewal [326 IAC 2-7-4]	
B.17	Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]	
B.18	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]	
B.19	Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]	
B.20	Operational Flexibility [326 IAC 2-7-20]	
B.21	Inspection and Entry [326 IAC 2-7-6(2)][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]	
B.22	Transfer of Ownership or Operational Control [326 IAC 2-7-11]	
B.23	Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-7-5(7)]	
B.24	Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]	
<b>C</b>	<b>SOURCE OPERATION CONDITIONS</b> .....	<b>17</b>
	<b>Emission Limitations and Standards [326 IAC 2-7-5(1)]</b>	
C.1	Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]	
C.2	Opacity [326 IAC 5-1]	
C.3	Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5	Fugitive Dust Emissions [326 IAC 6-4]	
C.6	Operation of Equipment [326 IAC 2-7-6(6)]	
C.7	Stack Height [326 IAC 1-7]	
C.8	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]	
	<b>Testing Requirements [326 IAC 2-7-6(1)]</b>	
C.9	Performance Testing [326 IAC 3-6]	
	<b>Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]</b>	
C.10	Compliance Schedule [326 IAC 2-7-6(3)]	
C.11	Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]	
C.12	Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]	
C.13	Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]	
C.14	Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]	

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

- C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5][326 IAC 2-7-6]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

**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]
- C.19 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
- C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]
- C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

**Stratospheric Ozone Protection**

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

**MACT Standards [326 IAC 2-7-5(1)]**

- C.23 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- C.24 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]
- C.25 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters - Notification Requirements [40 CFR 63, Subpart DDDDD]
- C.26 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

**D.1 FACILITY OPERATION CONDITIONS - Boiler B-1 ..... 25**

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

- D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-1-18]
- D.1.2 Opacity [326 IAC 5-1]
- D.1.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1]
- D.1.4 Operation Standards [326 IAC 2-1.1-5(a)(4)][40 CFR 261][40 CFR 279][329 IAC 13]
- D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.1.6 Fuel Oil Sulfur Content Limit
- D.1.7 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3][326 IAC 7-2][326 IAC 7-1.1-2]
- D.1.8 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)][40 CFR 261]

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

- D.1.9 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

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

- D.1.10 Record Keeping Requirements
- D.1.11 Reporting Requirements

**D.2 FACILITY OPERATION CONDITIONS - Boilers B-2 and B-3 ..... 28**

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

- D.2.1 Particulate Matter Limitation (PM) [326 IAC 6-1-18]
- D.2.2 Opacity [326 IAC 5-1]
- D.2.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1]
- D.2.4 Operation Standards [326 IAC 2-1.1-5(a)(4)][40 CFR 261][40 CFR 279][329 IAC 13]
- D.2.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.2.7 Continuous Emissions Monitoring [326 IAC 3-5]
- D.2.8 Operation of Cyclones [326 IAC 2-7-6(6)]
- D.2.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3][326 IAC 7-2][326 IAC 7-1.1-2]
- D.2.10 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)][40 CFR 261]

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

- D.2.11 Opacity Readings [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]
- D.2.12 Monitoring: Cyclones [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

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

- D.2.13 Record Keeping Requirements
- D.2.14 Reporting Requirements

**D.3 FACILITY OPERATION CONDITIONS- Boiler B-4 ..... 32**

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

- D.3.1 Particulate Matter Limitation (PM) [326 IAC 6-1-18]
- D.3.2 Opacity [326 IAC 5-1]
- D.3.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1-2]
- D.3.4 Operation Standards [326 IAC 2-1.1-5(a)(4)][40 CFR 261][40 CFR 279][329 IAC 13]
- D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.3.6 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.3.7 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]
- D.3.8 Continuous Emissions Monitoring [326 IAC 3-5]
- D.3.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3][326 IAC 7-2][326 IAC 7-1.1-2]
- D.3.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3][326 IAC 7-2][326 IAC 7-1.1-2]
- D.3.11 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)][40 CFR 261]

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

- D.3.12 Alstom Switched Integrated Rectifier (SIR) Unit [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
- D.3.13 Opacity Readings [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

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

- D.3.14 Record Keeping Requirements
- D.3.15 Reporting Requirements

**D.4 FACILITY OPERATION CONDITIONS - Boiler B-5 ..... 38**

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

- D.4.1 Particulate Matter Limitation (PM) [326 IAC 6-1-18]
- D.4.2 Opacity [326 IAC 5-1]
- D.4.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1-2]
- D.4.4 Operation Standards [326 IAC 2-1.1-5(a)(4)][40 CFR 261][40 CFR 279][329 IAC 13]
- D.4.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.4.6 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3][326 IAC 7-2][326 IAC 7-1.1-2]
- D.4.7 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)][40 CFR 261]

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

- D.4.8 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

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

- D.4.9 Record Keeping Requirements
- D.4.10 Reporting Requirements

**D.5 FACILITY OPERATION CONDITIONS - Diesel-fired Generators ..... 41**

**General Construction Conditions for Generators G-8, G-9, and G-10**

- D.5.1 Effective Date of the Permit [IC13-15-5-3]
- D.5.2 Permit Expiration Date [326 IAC 2-2-8(a)(1)]

D.5.3 Significant Source Modification [326 IAC 2-7-10.5(h)]

**Operation Conditions for Generators**

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

- D.5.4 Emission Limitations for Diesel-Fired Generators [326 IAC 2-2]
- D.5.5 Particulate Emission Limitations [326 IAC 6-1-2]
- D.5.6 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1] [326 IAC 7-2-1]
- D.5.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.5.8 Testing Requirements [326 IAC 3-6] [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.5.9 Sulfur Dioxide Emissions and Sulfur Content

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

- D.5.10 Visible Emissions Notations

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

- D.5.11 Record Keeping Requirements
- D.5.12 Reporting Requirements

**D.6 FACILITY OPERATION CONDITIONS - Dry Cleaning Operations . . . . . 45**

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

- D.6.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 63, Subpart A]
- D.6.2 Perchloroethylene Dry Cleaning Facilities NESHAP [326 IAC 20-7-1][40 CFR 63, Subpart M]
- D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

- D.6.4 Monitoring [40 CFR 63.322 and 63.323]

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

- D.6.5 Record Keeping Requirement [40 CFR 63.323(d), 63.324(d) & (e)]
- D.6.6 Reporting Requirements

**D.7 FACILITY OPERATION CONDITIONS- Insignificant Activities . . . . . 48**

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

- D.7.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]
- D.7.2 Standards of Performance for Volatile Organic Liquid Storage Vessels [326 IAC 12][40 CFR §60.116b]
- D.7.3 Volatile Organic Compounds (VOC)
- D.7.4 Volatile Organic Compounds (VOC)

<b>Certification . . . . .</b>	<b>50</b>
<b>Emergency/Deviation Occurrence Report . . . . .</b>	<b>51</b>
<b>Natural Gas Fired Boiler Certification . . . . .</b>	<b>53</b>
<b>Quarterly Deviation and Compliance Monitoring Report . . . . .</b>	<b>54</b>
<b>Quarterly Report - Coal for Boilers 2, 3, and 4 . . . . .</b>	<b>56</b>
<b>Quarterly Report - Fuel Oil for Boilers 1, 4 and 5 . . . . .</b>	<b>57</b>
<b>Quarterly Report - SO<sub>2</sub> from Diesel Fired Generators . . . . .</b>	<b>58</b>

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). 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)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary power plant for heating purposes and a dry cleaning operation.

Responsible Official: Vice President for Business Operations  
Source Address: 100 Facilities Building, Notre Dame, Indiana, 46556  
Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556  
Phone Number: (574)631-6666  
SIC Code: 8221  
County Location: St. Joseph  
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  
1 of 28 categories

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

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

- (a) One (1) No.6 fuel oil or natural gas fired boiler constructed in 1961, identified as B-1, with a maximum design capacity of 137 MMBtu per hour heat input, exhausting to stack S-1.
- (b) Two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each, each equipped with low NOx burners when using natural gas, and cyclones, identified as D-1 and D-2, respectively, for particulate control on each when combusting coal, with opacity measured by a certified continuous opacity monitor identified as COM1 when combusting coal, exhausting at stack S-1.
- (c) One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input, equipped with an electrostatic precipitator, identified as E-1, for particulate control when combusting coal, with opacity measured by a certified continuous opacity monitor identified as COM2 when combusting coal and/or oil, exhausting at stack S-2.
- (d) One (1) No.2 fuel oil or natural gas boiler constructed in 1973, identified as B-5, with a maximum design capacity of 244.5 MMBtu per hour heat input, equipped with low NOx burners for natural gas and fuel oil, exhausting at stack S-3.
- (e) Two (2) diesel-fired generators constructed in 1953, identified as G-3 and G-4, with maximum design capacities of 13.70 MMBtu per hour heat input each, exhausting to stacks S-4 and S-5, respectively.
- (f) Three (3) diesel-fired generators, for which a construction permit was issued in 2003, identified as G-8, G-9, and G-10, each with a maximum rated capacity of 2,593 brake horsepower (6.59 MMBtu per hour heat input each), exhausting to stacks S-6, S-7, and S-8, respectively, with total additional generator capacity of 5.79 MW.
- (g) Dry cleaning operations, identified as DC-1, consisting of two (2) dry-to-dry systems using perchloroethylene, with a maximum amount of 1.0 gallon per day disposed of or sold. The air-perchloroethylene gas-vapor streams are routed through two (2) refrigerated condensers for control.

### 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):

- (a) One (1) underground diesel fuel storage tank for which a construction permit was issued in 2003 for generators G-8, G-9, and G-10, identified as UST, with maximum storage capacity of 30,000 gallons. [326 IAC 12-1] [40 CFR 60, Subpart A]
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3]
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [40 CFR 52 Subpart P][326 IAC 6-3-2]
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [40 CFR 52 Subpart P][326 IAC 6-3-2]
- (e) Other activities or categories not previously identified that have emissions equal to or less than insignificant thresholds [40 CFR 52 Subpart P][326 IAC 6-3-2]:
  - (1) Long and short term coal storage piles, totaling 10.33 acres;
  - (2) One (1) 1200 ton coal handling facility;
  - (3) One (1) 450 ton coal bunker for boilers B-2 and B-3;
  - (4) One (1) 250 ton coal bunker for boiler B-4;
  - (5) One (1) 3200 cubic feet dry ash storage silo;
  - (6) Underground storage tanks: four at 50,000 gallons for No.2 fuel oil; five at 20,000 gallons for No.6 fuel oil; one at 20,000 gallons for diesel fuel; and one underground diesel fuel storage tank installed in 2003 for generators G-8, G-9, and G-10, identified as UST, with maximum storage capacity of 30,000 gallons;
  - (7) Five (5) 300 gallon diesel fuel day tanks for G-3, G-4, G-8, G-9, and G-10; and
  - (8) One (1) Maintenance Shop paint booth.

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); and
- (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) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

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

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, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### 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 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, 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, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, 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, using the attached Certification Form, with each submittal requiring certification.
- (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 July 1 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

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, 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;
  - (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); and
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

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 (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) 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; and
  - (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 PMPs 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

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 PMPs, 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, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, 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 Part 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 IDEM Northern Regional Office 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

And notify the IDEM, Northern Regional Office, OAQ;

Telephone Number: 1-800-753-5519 (ask for Air Compliance Section), or  
Telephone Number: 574-245-4870 (ask for Air Compliance Section)  
Facsimile Number: 574-245-4877

- (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

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, 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, 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] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (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) 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, 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.
- (c) 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.

- (d) 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.
- (e) 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).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, 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) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

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

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, 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, 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, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, 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 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

- (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, on or before the date it is due.
  - (2) If IDEM, OAQ, 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, takes 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, any additional information identified as being needed to process the application.
- (d) **United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]**  
If IDEM, OAQ, 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 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) 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  
  
Any such application shall be certified 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)]
- (d) 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.18 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.19 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

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, 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, or U.S. EPA is required.

**B.20 Source Modification Requirement [326 IAC 2-7-10.5]**

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

**B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]**

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, 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 2-7-11]

- (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  
  
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, 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, 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, Billing, Licensing and Training 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 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

- (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.

#### C.2 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), opacity 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 as determined 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.3 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. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

#### C.4 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.5 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.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

#### C.7 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.

#### C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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.9 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

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 not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

## Compliance Requirements [326 IAC 2-1.1-11]

### C.10 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.11 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 thirty (30) 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 thirty (30) days, the Permittee may extend the compliance schedule related to the equipment for an additional thirty (30) 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

in writing, prior to the end of the initial thirty (30) 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.12 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 any draft fan is in operation, except as provided otherwise in the Section D requirements.
- (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) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of one (1) hour or more, compliance with the applicable opacity limits shall be demonstrated by the following:
  - (1) The affected boiler(s) shall combust only No.2 fuel oil or natural gas and visible emission (VE) notations shall be performed once per shift during daylight operations following the shutdown or malfunction of the certified COM. A trained employee shall record whether emissions are normal or abnormal for the state of operation of the emission unit 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) VE notations may be discontinued, and the affected boiler(s) may resume combustion of coal, once a COM is online.
- (d) 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.13 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, or other approved methods as specified in this permit.

**C.14 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 ( $\pm 2\%$ ) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a 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 two percent ( $\pm 2\%$ ) of full scale reading.
- (c) The Permittee may request the 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.15 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 December 9, 1996.
- (b) Upon direct notification by IDEM, OAQ, 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.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

---

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

C.17 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. A CRP shall be submitted to IDEM, OAQ 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 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.

(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
- (2) If none of the reasonable response steps listed in the Compliance Response 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, the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response 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. 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.18 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, 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.19 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 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 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

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, on or before the date it is due.

**C.20 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 makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner

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

- (a) The Permittee 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
- (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, 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.

**Stratospheric Ozone Protection**

**C.22 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.

**MACT Standards [326 IAC 2-7-5(1)]**

**C.23 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]**

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected sources, as designated by 40 CFR 63.7490(a) for boilers B-2, B-3, and B-4 and 40 CFR 63.7506(b) for boilers B-1 and B-5, except when otherwise specified in 40 CFR 63 Subpart DDDDD. The Permittee must comply with these requirements on and after the effective date of 40 CFR 63, Subpart DDDDD.
- (b) Since the applicable requirements associated with the compliance options for the affected source for the large solid fuel subcategory (boilers B-2, B-3, and B-4) are not included and specifically identified

in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

C.24 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

---

- (a) The affected sources are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR 63, Subpart DDDDD), as of the effective date of 40 CFR 63, Subpart DDDDD. Pursuant to this rule, the Permittee must comply with 40 CFR 63, Subpart DDDDD on and after three years after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the *Federal Register*.
- (b) The following emissions units comprise the affected source for the large solid fuel subcategory: boilers B-2, B-3, and B-4.
- (c) The following emissions units comprise the affected source for the large liquid fuel subcategory: boilers B-1 and B-5.
- (d) The definitions of 40 CFR 63, Subpart DDDDD at 40 CFR 63.7575 are applicable to the affected sources.
- (e) Since the applicable requirements associated with the compliance options for the affected sources for the large solid fuel subcategory (boilers B-2, B-3, and B-4) are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition for the affected sources for the large solid fuel subcategory.

C.25 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters - Notification Requirements [40 CFR 63, Subpart DDDDD]

---

- (a) Pursuant to 40 CFR 63.7545(a) and 40 CFR 63.7506(b), the Permittee shall submit an Initial Notification for boilers B-1 and B-5 containing the information specified in 40 CFR 63.9(b)(2) not later than 120 days after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the *Federal Register*, as required by 40 CFR 63.7545(b).
- (b) Pursuant to 40 CFR 63.7545, the Permittee shall submit the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4), and (f)(6), and 63.9(b) through (h) that apply to the affected sources for the large solid fuel subcategory (boilers B-2, B-3, and B-4) and chosen compliance methods by the dates specified. These notifications include, but are not limited to, the following:
  - (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) not later than 120 days after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the *Federal Register*, as required by 40 CFR 63.7545(b).
  - (2) If required to conduct a performance test, a notification of intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required by 40 CFR 63.7(b)(1) and 40 CFR 63.7545(d).
  - (3) If required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530(a), a Notification of Compliance Status containing the information required by 40 CFR 63.9(h)(2)(ii) in accordance with 40 CFR 62.7545(e).
    - (A) For each initial compliance demonstration, the Permittee shall submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR 63.10(d)(2).
    - (B) The Notification of Compliance Status shall contain the items in 40 CFR 63.7545(e)(1) through (9), as applicable.
  - (4) If required to use a continuous monitoring system (CMS), notification of a performance evaluation, if required, as specified in 40 CFR 63.9(g), by the date of submission of the

notification of intent to conduct a performance test.

- (c) The notifications required by paragraphs (a) and (b) 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

The notification requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.26 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit for the affected sources for the large solid fuel subcategory (boilers B-2, B-3, and B-4).

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR 63, Subpart DDDDD, a description of the affected sources and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than nine months prior to the compliance date as specified in 40 CFR 63.7495(b).
- (c) The significant permit modification 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

## SECTION D.1

## FACILITY OPERATION CONDITIONS

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

- (a) One (1) No.6 fuel oil or natural gas fired boiler constructed in 1961, identified as B-1, with a maximum design capacity of 137 MMBtu per hour heat input, exhausting to stack S-1.

(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 Particulate Matter Limitation (PM) [326 IAC 6-1-18]

- (a) Pursuant to 326 IAC 6-1-18 (Particulate emission limitations for sources in St. Joseph County) PM emissions from boiler B-1 shall not exceed 0.087 pounds of particulate matter per million British thermal units heat input.
- (b) Pursuant to 326 IAC 6-1-18 (Particulate emission limitations for sources in St. Joseph County) PM emissions from boilers B-1 through B-5 shall not exceed a total of 118.7 tons per year.

#### D.1.2 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), opacity from stack S-1 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 as determined 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.

#### D.1.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1]

Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) the SO<sub>2</sub> emissions from boiler B-1 shall not exceed one and six tenths (1.6) pounds per MMBtu heat input when combusting No.6 fuel oil.

#### D.1.4 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 boiler B-1. If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.
- (c) If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler rinses.

#### D.1.5 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 boiler B-1.

### Compliance Determination Requirements

#### D.1.6 Fuel Oil Sulfur Content Limit

To demonstrate compliance with condition D.1.1 when boiler B-1 combusts fuel oil, the sulfur content of the fuel oil combusted shall not exceed 1.06 percent.

#### D.1.7 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

- (a) Pursuant to 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that when combusting fuel oil in B-1, the sulfur dioxide emissions do not exceed the equivalent of 1.6 pounds per MMBtu, 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, with the prior approval of the department, modify the procedures specified in 326 IAC 3-7-4(a), use alternate equivalent procedures, or 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 shall 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 7-2 shall not apply. [326 IAC 7-2-1(g)]

#### D.1.8 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

If applicable, the Permittee shall use appropriate methodology as identified in 40 CFR Part 261 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.1.9 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

When boiler B-1 is the only boiler exhausting to stack S-1, and it is combusting fuel oil:

- (a) Visible emission (VE) notations of the stack exhaust shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) If abnormal emissions are observed at the stack 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 of 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 the boiler.

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

#### D.1.10 Record Keeping Requirements

- (a) To document compliance with the SO<sub>2</sub> Conditions D.1.3 and D.1.7, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limit as required in Conditions D.1.3 and D.1.7.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;

- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
  - (5) The name of the fuel supplier; and
  - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (b) To document compliance with condition D.1.9, the Permittee shall maintain records of once per shift visible emission notations of stack exhaust S-1, if boiler B-1 is the only boiler in operation for stack S-1, and it is combusting fuel oil.
  - (c) To document compliance with D.1.5, the Permittee shall maintain records of the results of all boiler inspections, including any additional inspections prescribed by the Preventive Maintenance Plan.
  - (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.11 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.3 in any compliance period when fuel oil was combusted, and the natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, 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) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2

## FACILITY OPERATION CONDITIONS

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

- (b) Two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each, each equipped with low NO<sub>x</sub> burners when using natural gas, and cyclones, identified as D-1 and D-2, respectively, for particulate control on each when combusting coal, with opacity measured by a certified continuous opacity monitor identified as COM1 when combusting coal, exhausting at stack S-1.

(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 Particulate Matter Limitation (PM) [326 IAC 6-1-18]

- (a) Pursuant to 326 IAC 6-1-18 (Particulate emission limitations for sources in St. Joseph County) PM emissions from boilers B-2 and B-3 shall not exceed 0.28 pounds of particulate matter per million British thermal units heat input each.
- (b) Pursuant to 326 IAC 6-1-18 (Particulate emission limitations for sources in St. Joseph County) PM emissions from boilers B-1 through B-5 shall not exceed a total of 118.7 tons per year.

#### D.2.2 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), opacity from stack S-1 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 as determined 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.

#### D.2.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1]

Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from boilers B-2 and B-3 shall not exceed 6.0 pounds per million British thermal units (lb/MMBtu) of heat input each.

#### D.2.4 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

- (a) All coal burned in boilers B-2 and B-3, 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 boilers B-2, and B-3. If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.
- (c) If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler rinses.

#### D.2.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

- (a) A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boilers B-2 and B-3 and their control devices.
- (b) The PMP for each dust collector (D-1 and D-2) shall include inspections of the internal components of each collector, conducted biannually or every 6,000 hours of operation, whichever occurs first, in accordance with the Section B - Preventive Maintenance Plan. Items to be checked include air infiltration, plugging of inlet spinner vanes, outlet tube erosion, deposits on the inside surfaces of the tubes, and plugging of the bottom of the tubes.

## Compliance Determination Requirements

### D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 24 months following the date of permit issuance, compliance with the PM limitations in Condition D.2.1 shall be determined by a performance stack test conducted while B-2 and B-3 are combusting coal utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of 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.2.7 Continuous Emissions Monitoring [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), the continuous opacity monitoring system (COM1) used for measuring opacity from B-2 and/or B-3 when combusting coal shall be calibrated, maintained, and operated for measuring opacity which meet all applicable performance specifications of 326 IAC 3-5-2.
- (b) The continuous opacity monitoring system (COM1) is subject to the monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate the continuous opacity monitoring system (COM1) pursuant to 326 IAC 3-5.

### D.2.8 Operation of Cyclones [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the cyclones, D1 and D2, shall be operated at all times that their respective boilers, B-2 and/or B-3 are in operation and combusting coal.

### D.2.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

- (a) Pursuant to 326 IAC 7-2-1(c)(2), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of six (6.0) pounds per MMBtu from each boiler, B-2 and B-3, when combusting coal, or when combusting coal simultaneously with another fuel, using a thirty (30) day calendar average.
- (b) 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 3-7-2(b)(2) and 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; or
  - (3) The Permittee shall meet the minimum sampling requirements specified in 326 IAC 3-7-2(b)(3), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2 (c), (d) and (e).
- (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 7-2 shall not apply. [326 IAC 7-2-1(g)]

### D.2.10 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

If applicable, the Permittee shall use appropriate methodology as identified in 40 CFR Part 261 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.2.11 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

---

While boilers B-2 and/or B-3 are operating and combusting coal:

- (a) 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 may include, but are not limited to, boiler loads being reduced.
- (b) Opacity readings in excess of twenty percent (20%) but not exceeding the opacity limit for boilers B-2 and B-3 when combusting coal, 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 of this permit.

### **D.2.12 Monitoring: Cyclones [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

---

- (a) The ability of the cyclones, D-1 and D-2, to control particulate emissions shall be monitored at least once per shift, when their respective boilers, B-2 and B-3, are in operation and combusting coal, by measuring and recording the total static pressure drop across the units.
- (b) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the static pressure drop is outside of the normal operating range for the corresponding boiler steam load. A pressure drop reading that is outside 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 deviation of this permit.

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

### **D.2.13 Record Keeping Requirements**

---

- (a) To document compliance with Conditions D.2.1, D.2.2, D.2.7, D.2.11 and D.2.12, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Conditions D.2.1, D.2.2, and D.2.11.
  - (1) Data and results from the most recent stack test.
  - (2) All continuous opacity monitoring data (COM1), pursuant to 326 IAC 3-5-6.
  - (3) The results of all visible emission (VE) notations and Method 9 visible emission readings taken at stack S-1 during any periods of COM1 downtime.
  - (4) All cyclone (D-1 and D-2) parametric monitoring readings.
- (b) To document compliance with SO<sub>2</sub> Conditions D.2.3 and D.2.10, the Permittee shall maintain records in accordance with (1) and (2) below. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limits as required in Conditions D.2.3 and D.2.10.
  - (1) All fuel sampling and analysis data, pursuant to 326 IAC 7-2.
  - (2) Actual fuel usage since last compliance determination period.
- (c) Pursuant to 326 IAC 3-7-5(a), owners or operators of sources with total coal-fired capacity greater than or equal to one hundred (100) MMBtu per hour actual heat input 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.

- (d) To document compliance with D.2.5, the Permittee shall maintain records of the results of all boiler and emission control equipment inspections, including 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.2.14 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Conditions D.2.1 and D.2.3 in any compliance period when coal was combusted shall be submitted to the address listed in Section C - General Reporting Requirements, 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) A quarterly report of opacity exceedances, during operation of B-2 and/or B-3 during coal combustion, to document compliance with Conditions D.2.2 and D.2.7, shall be submitted to the address listed in Section C - General Reporting Requirements, 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).
- (c) For boilers B-2 and B-3, a quarterly report of the calendar month average coal sulfur content, coal heat content, and sulfur dioxide emission rate in pounds per million Btus and the total monthly coal consumption shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported to document compliance with Condition D.2.9. [326 IAC 7-2-1(c)(2)]

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

- (d) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system (COM1) 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).

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

## SECTION D.3

## FACILITY OPERATION CONDITIONS

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

- (c) One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input, equipped with an electrostatic precipitator, identified as E-1, for particulate control when combusting coal, with opacity measured by a certified continuous opacity monitor identified as COM2 when combusting coal and/or oil, exhausting at stack S-2.

(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 Particulate Matter Limitation (PM) [326 IAC 6-1-18]

- (a) Pursuant to 326 IAC 6-1-18 (Particulate emission limitations for sources in St. Joseph County) PM emission limitations for boiler B-4 shall not exceed 0.17 pounds of particulate matter per million British thermal units heat input.
- (b) Pursuant to 326 IAC 6-1-18 (Particulate emission limitations for sources in St. Joseph County) PM emissions from boilers B-1 through B-5 shall not exceed a total of 118.7 tons per year.

#### D.3.2 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), opacity from stack S-2 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 as determined 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.

#### D.3.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from boiler B-4 shall not exceed the following limits:

- (a) For facilities combusting coal and oil simultaneously: six and zero-tenths (6.0) pounds per million British thermal units (lb/MMBtu) of heat input.
- (b) Distillate fuel combustion: 0.5 pounds per million British thermal units (lb/MMBtu) of heat input.

#### D.3.4 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 boiler B-4. If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.
- (c) If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler rinses.

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

- (a) A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boiler B-4 and its 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 or Alstom Switched Integrated Rectifier (SIR) Unit 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:
  - (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 or SIR Unit 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 or SIR Unit controllers (including but not limited to low voltage trip point, over current trip point, and spark rate).
  - (J) Vibrator air pressure settings.

### **Compliance Determination Requirements**

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

Within 24 months following the date of permit issuance, compliance with the PM limitations in Condition D.3.1 shall be determined by a performance stack test conducted, while B-4 combusts coal, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of 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.3.7 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]**

Except as otherwise provided by statute or rule, or in this permit, the electrostatic precipitator (ESP) shall be operated at all times that boiler B-4 vented to the ESP is in operation and combusting coal.

#### **D.3.8 Continuous Emissions Monitoring [326 IAC 3-5]**

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), the continuous opacity monitoring system (COM2) for boiler B-4, when combusting fuel oil or coal, shall be calibrated, maintained, and operated for measuring opacity which meet all applicable performance specifications of 326 IAC 3-5-2.
- (b) The continuous opacity monitoring system (COM2) is subject to the monitor system certification requirements pursuant to 326 IAC 3-5-3.

- (c) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate the continuous opacity monitoring system (COM2) pursuant to 326 IAC 3-5.

D.3.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

- (a) Pursuant to 326 IAC 7-2-1(c)(2), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of six (6.0) pounds per MMBtu from boiler B-4 when combusting coal, or when combusting coal simultaneously with another fuel, using a calendar month average.
- (b) 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 3-7-2(b)(2) and 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; or
  - (3) The Permittee shall meet the minimum sampling requirements specified in 326 IAC 3-7-2(b)(3), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2(c), (d) and (e).
- (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 7-2 shall not apply. [326 IAC 7-2-1(g)]

D.3.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3][326 IAC 7-2][326 IAC 7-1.1-2]

Compliance shall be determined for boiler B-4 when using distillate oil (No.2 fuel oil), or fuel oil in combination with natural gas, by utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per MMBtu by:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification, or analyses from approved modified procedures specified in 326 IAC 3-7-4(a), or the use of alternate equivalent procedures, as implemented;
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from boiler B-4 when using distillate fuel, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

D.3.11 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

If applicable, the Permittee shall use appropriate methodology as identified in 40 CFR Part 261 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.3.12 Alstom Switched Integrated Rectifier (SIR) Unit [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- (a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when boiler B-4 is in operation and combusting coal, by measuring and recording the number of SIR Units in service, their primary and secondary voltages, and their currents.
- (b) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of SIR Units in service falls below 50 percent (50%). SIR Unit failure resulting in less than 50 percent (50%) 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 of this permit.

#### **D.3.13 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

While boiler B-4 is operating and combusting coal or fuel oil;

- (a) In the event of opacity exceeding twenty percent (20%) 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 fifteen percent (20%). Examples of expected response steps include, but are not limited to, boiler loads being reduced, adjustment of flue gas conditioning rate, and SIR Units being returned to service.
- (b) Opacity readings in excess of twenty percent (20%) but not exceeding the opacity limit for boiler B-4 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 of this permit.

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

#### **D.3.14 Record Keeping Requirements**

- (a) To document compliance with Conditions D.3.1, D.3.2, D.3.8, D.3.12 and D.3.13, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Conditions D.3.1, D.3.2, D.3.8, D.3.12 and D.3.13.
  - (1) Data and results from the most recent stack test.
  - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6.
  - (3) The results of all visible emission (VE) notations and Method 9 visible emission readings taken during any periods of COM2 downtime.
  - (4) All SIR Unit monitoring.
- (b) To document compliance with SO<sub>2</sub> Conditions D.3.3(a) and D.3.9, the Permittee shall maintain records in accordance with (1) and (2) below. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limits as required in Conditions D.3.3(a) and D.3.9.
  - (1) All fuel sampling and analysis data, pursuant to 326 IAC 7-2.
  - (2) Actual fuel usage since last compliance determination period.
- (c) To document compliance with the SO<sub>2</sub> Conditions D.3.3(b) and D.3.10, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limit as required in Conditions D.3.3(b) and D.3.10.

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (d) Pursuant to 326 IAC 3-7-5(a), owners or operators of sources with total coal-fired capacity greater than or equal to one hundred (100) MMBtu per hour actual heat input 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.
- (e) To document compliance with Condition D.3.5, the Permittee shall maintain records of the results of all boiler and emission control equipment inspections, including 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.3.15 Reporting Requirements

- (a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Conditions D.3.1, D.3.2, D.3.3, D.3.10, and D.3.13 shall be submitted to the address listed in Section C - General Reporting Requirements, 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.
- (b) A quarterly report of the calendar month average coal sulfur content, coal heat content, and sulfur dioxide emission rate in pounds per million Btus and the total monthly coal consumption shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported to document compliance with D.3.9. [326 IAC 7-2-1(c)(2)]

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

- (c) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system (COM2) 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).

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

## SECTION D.4

## FACILITY OPERATION CONDITIONS

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

- (d) One (1) No.2 fuel oil or natural gas boiler constructed in 1973, identified as B-5, with a maximum design capacity of 244.5 MMBtu per hour heat input, equipped with low NOx burners for natural gas and fuel oil, exhausting at stack S-3.

(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 Limitation (PM) [326 IAC 6-1-18]

- (a) Pursuant to 326 IAC 6-1-18 (Particulate emission limitations for sources in St. Joseph County), PM emission limitations for boiler B-5 shall not exceed 0.02 pounds of particulate matter per million British thermal units heat input.
- (b) Pursuant to 326 IAC 6-1-18 (Particulate emission limitations for sources in St. Joseph County) PM emissions from boilers B-1 through B-5 shall not exceed a total of 118.7 tons per year.

#### D.4.2 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), opacity from stack S-3 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 as determined 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.

#### D.4.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from boiler B-5 shall not exceed 0.5 pounds per million British thermal units (lb/MMBtu) of heat input when using distillate oil.

#### D.4.4 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 boiler B-5. If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.
- (b) If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler rinses.

#### D.4.5 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 boiler B-5.

### Compliance Determination Requirements

#### D.4.6 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3][326 IAC 7-2][326 IAC 7-1.1-2]

Compliance shall be determined for boiler B-5 when using distillate oil (No.2 fuel oil), or fuel oil in combination with natural gas, by utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per MMBtu heat input by:

- (1) Providing vendor analysis of fuel delivered, if accompanied by a certification, or analyses from approved modified procedures specified in 326 IAC 3-7-4(a), or the use of alternate equivalent procedures, as implemented;
- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
  - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
  - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from boiler B-5 when using distillate fuel, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

#### D.4.7 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

If applicable, the Permittee shall use appropriate methodology as identified in 40 CFR Part 261 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.4.8 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission (VE) notations of the boiler B-5 stack exhaust, S-3, shall be performed once per shift during normal daylight operations while combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) 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 deviation of 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 the boiler.

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

#### D.4.9 Record Keeping Requirements

- (a) To document compliance with Condition D.4.3, the Permittee shall maintain records in accordance with (1) through (6) below:
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Calendar month average sulfur content, fuel consumption, and sulfur dioxide emission rate in pounds per MMBtu;
  - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
  - (5) The name of the fuel supplier; and
  - (6) A statement from the fuel supplier that certifies the sulfur content, and heat content of the fuel oil.
- (b) To document compliance with Condition D.4.8, the Permittee shall maintain records of once per shift visible emission notations of the boiler B-5 stack exhaust, S-3.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.4.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.4.1 and D.4.3, and the Natural Gas Boiler Certification shall be submitted to the address listed in Section C - General Reporting Requirements, 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.

## SECTION D.5

## FACILITY OPERATION CONDITIONS

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

- (e) Two (2) diesel-fired generators constructed in 1953, identified as G-3 and G-4, with maximum design ratings of 13.70 MMBtu per hour heat input each, exhausting to stacks S-4 and S-5, respectively.
- (f) Three (3) diesel-fired generators, for which a construction permit was issued in 2003, identified as G-8, G-9, and G-10, each with a maximum rated capacity of 2,593 brake horsepower (6.59 MMBtu per hour heat input each), exhausting to stacks S-6, S-7, and S-8, respectively, with total additional generator capacity of 5.79 MW.

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

### General Construction Conditions for Generators G-8, G-9, and G-10

#### D.5.1 Effective Date of the Permit [IC13-15-5-3]

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, and IC 13-15-5-3, the PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, became effective upon its issuance.

#### D.5.2 Permit Expiration Date [326 IAC 2-2-8(a)(1)]

Pursuant to 326 IAC 2-2-8(a)(1) (PSD Requirements: Source Obligation), the PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, to construct shall expire if construction is not commenced within eighteen (18) months after receipt of the PSD Significant Source Modification approval or if construction is discontinued for a continuous period of eighteen (18) months or more, or if construction is not completed within reasonable time. IDEM may extend the eighteen (18) month period upon satisfactory showing that an extension is justified.

#### D.5.3 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The affidavit of construction attached to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the PSD Significant Source Modification application or the permit. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the PSD Significant Source Modification application or the permit in a manner that is regulated under the provisions of 326 IAC 2-2, the source may not begin operation until the source modification has been revised pursuant to the provisions of that rule and the provisions of 326 IAC 2-2 and an Operation Permit Validation Letter is issued.
- (c) If actual construction of the emissions units differs from the construction proposed in the PSD Significant Source Modification application or the permit in a manner that is not regulated under the provisions of 326 IAC 2-2, the source may not begin operation until the source modification has been revised pursuant to the provisions of 326 IAC 2-7-10.5 and the provisions of 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

## Operation Conditions for the Generators

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

#### D.5.4 Emission Limitations for Diesel-Fired Generators [326 IAC 2-2]

- (a) Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, and 326 IAC 2-2-2 (PSD requirements: Applicability) in order to render minor modification status under PSD for PM<sub>10</sub> emissions, PM<sub>10</sub> (where PM<sub>10</sub> includes both filterable and condensable components) emissions from each diesel-fired generator unit (G-8, G-9, and G-10) shall not exceed 0.87 pounds per hour. If the stack test required under Condition D.4.8 shows that the PM<sub>10</sub> limit is not achievable in practice for the generators, the Permittee may request the Department to revise the permit to adjust the PM<sub>10</sub> limitations. This request shall meet the requirements of 326 IAC 2-2 (PSD requirements). The Department will provide an opportunity for public notice and comment prior to finalizing any permit revision. IC 13-15-7-3 (Revocation or Modification of a Permit: Appeal to Board) shall apply to this permit condition.
- (b) Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, and 326 IAC 2-2-5 and 2-2-6 (PSD Requirements: Air quality impacts and increment consumption);
- (1) NO<sub>x</sub> emissions from each diesel-fired generator unit (G-8, G-9, and G-10) shall be controlled using retarded ignition timing, and shall not exceed 37.44 pounds per hour.
- (2) SO<sub>2</sub> emissions from each diesel-fired generator unit (G-8, G-9, and G-10) shall not exceed 6.7 pounds per hour.

#### D.5.5 Particulate Emission Limitations [326 IAC 6-1-2]

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, for generators G-8, G-9, and G-10, and this permit for G-3 and G-4, and 326 IAC 6-1-2 (a), particulate matter emissions from the each of the diesel fired generators shall not exceed 0.03 grain per dry standard cubic foot.

#### D.5.6 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, and 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) for generators G-8, G-9, and G-10, and this permit for generators G-3 and G-4, SO<sub>2</sub> emissions from the diesel-fired generators shall not exceed five tenths (0.5) pounds per MMBtu heat input. Pursuant to 326 IAC 7-2-1(c)(3) compliance shall be demonstrated on a calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per million Btus.

#### D.5.7 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 these generators.

## Compliance Determination Requirements

#### D.5.8 Testing Requirements [326 IAC 3-6] [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, within 60 days of achieving maximum production rate, but no later than 180 days after initial startup, the Permittee shall perform NO<sub>x</sub>, PM, and PM10 testing, utilizing methods approved by the Commissioner, on a representative number of diesel-fired generators (G-8, G-9, G-10) to comply with Conditions D.5.4 and D.5.5. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the emissions units are in compliance. These tests shall be performed in accordance with Section C- Performance Testing.

#### D.5.9 Sulfur Dioxide Emissions and Sulfur Content

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, for generators G-8, G-9, and G-10, and this permit for G-3 and G-4, compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions from each of the diesel-fired generators do not exceed five-tenths (0.5) pounds per million Btu heat input by:

- (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or analyses from approved modified procedures specified in 326 IAC 3-7-4(a), or the use of alternate equivalent procedures, as implemented;
- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
  - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
  - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the diesel-fired generators, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

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

#### D.5.10 Visible Emissions Notations

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, for generators G-8, G-9, and G-10, and this permit for G-3 and G-4;

- (a) Visible emission notations of the generator stack exhausts (S-4, S-5, S-6, S-7, and S-8) shall be performed once per working shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "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.
- (c) 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.
- (d) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.

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

#### D.5.11 Record Keeping Requirements

- (a) To document compliance with Conditions D.5.4(b)(2) and D.5.6, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly, and shall be complete and sufficient to establish compliance with the SO<sub>2</sub> emission limits established in Conditions D.5.4(b)(2) and D.5.6.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Calendar month average sulfur content, fuel consumption, and sulfur dioxide emission rate in pounds per MMBtu;
  - (3) Actual diesel fuel usage since last compliance determination period and equivalent SO<sub>2</sub> emissions; and

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and

not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
  - (5) The name of the fuel supplier; and,
  - (6) A statement from the fuel supplier that certifies the sulfur content of the diesel fuel.
- (b) To document compliance with Condition D.5.10, the Permittee shall maintain records of visible emission notations of the generator stack exhausts (S-4, S-5, S-6, S-7, and S-8).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping.

#### D.5.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.6 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or 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).

## SECTION D.6

## FACILITY OPERATION CONDITIONS

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

(g) Dry cleaning operations, identified as DC-1, consisting of two (2) dry-to-dry systems using perchloroethylene, with a maximum amount of 1.0 gallon per day disposed of or sold. The air-perchloroethylene gas-vapor streams are routed through two (2) refrigerated condensers for control.

(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.6.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart M.

#### D.6.2 Perchloroethylene Dry Cleaning Facilities NESHAP [326 IAC 20-7-1][40 CFR 63, Subpart M]

(a) The dry cleaning facility, identified as DC-1, is subject to 40 CFR 63, Subpart M, which is incorporated by reference as 326 IAC 20-7-1.

(b) The Permittee shall comply with the following conditions:

- (1) Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device as determined according to the procedures listed in 40 CFR 63.325;
- (2) Close the door of each dry cleaning machine immediately after transferring articles to or from the machine, and keep the door closed at all other times;
- (3) Operate and maintain each dry cleaning system according to the manufacturer's specifications and recommendations; and
- (4) Store all perchloroethylene and wastes that contain perchloroethylene in solvent tanks or solvent containers with no perceptible leaks.

(c) Each refrigerated condenser:

- (1) Shall be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating; and
- (2) Shall be operated with a diverter valve, if air can pass through the refrigerated condenser when the machine door is open.

#### D.6.3 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 this facility and its control device.

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

#### D.6.4 Monitoring [40 CFR 63.322 and 63.323]

(a) The Permittee shall minimize leaks of perchloroethylene by the following steps:

- (1) Inspect the following components weekly for perceptible leaks while the dry cleaning system is operating:
  - (A) Hose and pipe connections, fittings, couplings, and valves;
  - (B) Door gaskets and seatings;

- (C) Filter gaskets and seatings;
  - (D) Pumps;
  - (E) Solvent tanks and containers;
  - (F) Water separators;
  - (G) Muck cookers;
  - (H) Stills;
  - (I) Exhaust dampers;
  - (J) Diverter valves; and
  - (K) Cartridge filter housings.
- (2) Repair all perceptible leaks detected during the inspections required in (1) within 24 hours. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within two (2) working days of detecting such a leak. Such repair parts shall be installed within five (5) working days after receipt.
- (b) The Permittee shall measure the temperature of the air-perchloroethylene gas-vapor stream on the outlet side of each refrigerated condenser weekly during the last cool down cycle prior to opening the machine door, with a temperature sensor to determine if it is equal to or less than 7.2 °C (45 °F). The temperature sensor shall be used according to the manufacturer's instruction and shall be designed to measure a temperature of 7.2 °C (45 °F) to an accuracy of ±1.1 °C (±2 °F).
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

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

#### D.6.5 Record Keeping Requirement [40 CFR 63.323(d), 63.324(d) & (e)]

- (a) The Permittee shall keep receipts of perchloroethylene purchases and a log of the following information and maintain such information on site and show upon request for a period of five (5) years:
- (1) The volume of perchloroethylene purchased each month by the dry cleaning facility as recorded from perchloroethylene purchases; if no perchloroethylene is purchased during a given month then the Permittee would enter zero gallons into the log;
  - (2) The calculation and result of the yearly perchloroethylene consumption determined on the first day of each month performed as follows:
    - (A) Sum the volume of all perchloroethylene purchases made in each of the previous twelve (12) months, as recorded in the log described in Condition D.6.5(a)(1).
    - (B) If no perchloroethylene purchases were made in a given month, then the perchloroethylene consumption for that month is zero gallons.
    - (C) The total sum calculated is the yearly perchloroethylene consumption at the facility.
  - (3) The dates when the dry cleaning system components are inspected for perceptible leaks, as specified in Condition 6.4(a)(1), and the name or location of dry cleaning system components where perceptible leaks are detected;
  - (4) The dates of repair and records of written or verbal orders for repair parts associated with leak repair and any temperature adjustments, to demonstrate compliance with Condition 6.4(a)(2) and (b); and
  - (5) The date and temperature sensor monitoring results including actions taken to correct temperature exceedances for each refrigerated condenser, as specified in Condition 6.4(b).
- (b) The Permittee shall retain onsite a copy of the design specifications and the operating manuals for each dry cleaning system and each emission control device located at the dry cleaning facility.

- (c) To document compliance with Condition D.6.4(c), the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping.

#### D.6.6 Reporting Requirements

---

- (a) Upon issuance of this permit, the Permittee shall submit within thirty (30) days, to the address listed in Section C - General Reporting Requirements, a notification of compliance status providing the following information and signed by the responsible official who shall certify its accuracy:
  - (1) The yearly perchloroethylene solvent consumption limit based upon the yearly solvent consumption calculated according to 40 CFR 63.323(d);
  - (2) Whether or not they are in compliance with each applicable requirement of 40 CFR 63.322; and
  - (3) All information contained in the statement is accurate and true.
- (b) Should the high twelve month rolling total of perchloroethylene purchases exceed 2,100 gallons, the Permittee shall notify the IDEM, OAQ of this change in facility status.
- (c) The reports required in (a) and (b) of this condition 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  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

## SECTION D.7

## FACILITY OPERATION CONDITIONS - Insignificant Activities

### Facility Description [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):

- (a) One (1) underground diesel fuel storage tank for which a construction permit was issued in 2003 for generators G-8, G-9, and G-10, identified as UST, with maximum storage capacity of 30,000 gallons. [326 IAC 12-1] [40 CFR 60, Subpart A]
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3]

(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.7.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, the provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to one (1) underground diesel fuel storage tank, identified as UST, described in this section except when otherwise specified in 40 CFR 60 Subpart Kb.

#### D.7.2 Standards of Performance for Volatile Organic Liquid Storage Vessels [326 IAC 12][40 CFR §60.116b]

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, the one underground diesel storage tank, identified as UST, shall comply with New Source Performance Standards (NSPS), 326 IAC 12 (40 CFR Part 60.116b, Subpart Kb). 40 CFR §60.116b, paragraphs (a) and (b) require the Permittee to maintain accessible records showing the dimensions of each storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept for the life of the storage tank.

#### D.7.3 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

#### D.7.4 Volatile Organic Compounds (VOC)

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment 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<sup>EC</sup>) (one hundred degrees Fahrenheit (100<sup>EF</sup>));

- (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<sup>EC</sup>) (one hundred degrees Fahrenheit (100<sup>EF</sup>)), 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<sup>EC</sup>) (one hundred degrees Fahrenheit (100<sup>EF</sup>)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9<sup>EC</sup>) (one hundred twenty degrees Fahrenheit (120<sup>EF</sup>)):
- (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.

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

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: University of Notre Dame du Lac  
Source Address: 100 Facilities Building, Notre Dame, Indiana 46556  
Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556  
Part 70 Permit No.: T141-7412-00013

**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:

- Annual Compliance Certification Letter
- Test Result (specify) \_\_\_\_\_
- Report (specify) \_\_\_\_\_
- Notification (specify) \_\_\_\_\_
- 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:

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**

**PART 70 OPERATING PERMIT  
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: University of Notre Dame du Lac  
Source Address: 100 Facilities Building, Notre Dame, Indiana 46556  
Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556  
Part 70 Permit No.: T141-7412-00013

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2

1. This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
  - The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)
- The Permittee must submit notice in writing within ten (10) calendar days

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/Deviation:

Describe the cause of the Emergency/Deviation:

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

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
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: \_\_\_\_\_

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

**PART 70 OPERATING PERMIT  
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: University of Notre Dame du Lac  
Source Address: 100 Facilities Building, Notre Dame, Indiana 46556  
Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556  
Part 70 Permit No.: T141-7412-00013

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

Report period

Beginning: \_\_\_\_\_

Ending: \_\_\_\_\_

Boiler Affected

Alternate Fuel

Days burning alternate fuel

From

To


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:

Date:

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

**PART 70 OPERATING PERMIT  
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: University of Notre Dame du Lac  
 Source Address: 100 Facilities Building, Notre Dame, Indiana 46556  
 Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556  
 Part 70 Permit No.: T141-7412-00013

**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:**

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

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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

### Part 70 Quarterly Report Coal for Boilers 2, 3 and 4

Source Name: University of Notre Dame du Lac  
 Source Address: 100 Facilities Building, Notre Dame, Indiana 46556  
 Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556  
 Part 70 Permit No.: T141-7412-00013  
 Facility: Boilers (B-2, B-3, and B-4)  
 Parameters: SO<sub>2</sub> emissions, coal analysis (B-2, B-3, B-4), coal usage (B-2, B-3, B-4)  
 Limits: SO<sub>2</sub> emissions from each boiler shall not exceed 6.0 pounds per million Btu when using coal

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

	(A)	(B)	[ 2 X (A) X 2000 ] ÷ [ (B) ]
Month	Monthly Average Coal Sulfur Content* (%)	Monthly Average Coal Heat Content* (MMBtu/lb)	Equivalent Sulfur Dioxide Emissions (lb/MMBtu)

\* Calculate the weighted sulfur and heat content for coal based on weighed average of daily coal usage

- 9 No deviation occurred in this quarter.
- 9 Deviation(s) occurred in this quarter.  
 Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
 Title / Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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

### Part 70 Quarterly Report Fuel Oil for Boilers 1, 4 and 5

Source Name: University of Notre Dame du Lac

Source Address: 100 Facilities Building, Notre Dame, Indiana, 46556

Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556

Part 70 Permit No.: T141-7412-00013

Facility: Boilers (B-1, B-4, and B-5)

Parameters: SO<sub>2</sub> emissions, sulfur content (B-1, B-4, B-5), fuel oil usage (B-1, B-4, B-5)

Limits: SO<sub>2</sub> emissions from boiler B-1 (Residual or No.6 fuel oil) shall not exceed 1.6 lb/MMBtu;

SO<sub>2</sub> emissions from boiler B-4 & B-5 (Distillate or No.2 fuel oil) shall not exceed 0.5 lb/MMBtu

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Monthly Average Fuel Oil Sulfur Content (%)		Monthly Average Fuel Oil Heat Content* (MMBtu/gallon)		Fuel Oil Consumption (Total Gallons)		Equivalent Sulfur Dioxide Emissions (lb/MMBtu)	
	B-1	B-4 & B-5	B-1	B-4 & B-5	B-1	B-4 & B-5	B-1	B-4 & B-5

No deviation occurred in this quarter.

Deviation(s) occurred in this quarter.  
 Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
 Title / Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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

**PART 70 Quarterly Report  
 SO<sub>2</sub> from Diesel Fired Generators**

Source Name: University of Notre Dame du Lac  
 Source Address: 100 Facilities Building, Notre Dame, IN 46556  
 Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556  
 Permit No.: 141-15828-00013  
 Facility: diesel fired generators, G-3, G-4, G-8, G-9, and G-10  
 Parameter: Sulfur Dioxide (SO<sub>2</sub>)  
 Limit: 0.5 pounds per million Btu heat input

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Monthly Average Fuel Oil Sulfur Content (%)	Monthly Average Fuel Oil Heat Content (MMBtu/gallon)	Fuel Oil Consumption (Total Gallons)	Equivalent Sulfur Dioxide Emissions (lbs/MMBtu)

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.  
 Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
 Title / Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Quality

## Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: University of Notre Dame  
Source Location: 100 Facilities Building, Notre Dame, Indiana 46556  
County: Saint Joseph  
SIC Code: 8221  
Operation Permit No.: T141-7412-00013  
Permit Reviewer: Melissa Groch

On November 10, 2003, the Office of Air Quality (OAQ) had a notice published in the South Bend Tribune, South Bend, Indiana, stating that the University of Notre Dame had applied for a Part 70 Operating Permit to operate a campus power plant and dry cleaning operation. The notice also stated that OAQ 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.

All of the comments received during this comment period were submitted by the University of Notre Dame. The IDEM has addressed each one of these comments in this document. In some instances, language has been added or omitted as a result of the comments. Added language is shown in bold and language with strikeout has been deleted.

### **Comment No. 1:**

#### Section D.1 Facility Operation Conditions

Considering the significant difference between B-1 as compared to B-2 and B-3 (which are identical units) with regard to the type of fuel burned, air pollution controls, continuous air pollution monitoring and their general operation, we believe that our Title V in order to be more concise and accurate should detail the facility operation conditions in two sections rather than one, as was done in the original draft Title V. We acknowledge that all three boilers share a common stack, but do not believe relative to the variations indicated that this is the overriding fact that would be the precedent for the imposition of new source monitoring requirements on pre-NSPS B-1. The separate permit sections for B-1 and B-2/B-3 are more effective for operational compliance and efficiency, whereas a single section could lead to misinterpretations and compliance errors.

Attached please find Title V Section language that separately addresses B-1 and B-2/B-3 in **UND (University of Notre Dame) Proposed Sections D.1 and D.2**, respectively. These suggested sections also include overstrike edits and italics additions related to Formal Comments to follow on these sections.

### **Amended Comment No.1 (On March 17, 2004, in response to IDEM's request for further clarification on the rules applicable to boiler B-1, Notre Dame submitted an amended comment):**

The University's read of 326 IAC 3-5-1(b) is that it would not apply to B-1 under only two conditions: burn only natural gas, or, never exceed B-1's opacity limit in 326 IAC 5-1 (30%) or B-1's particulate matter limit (0.087 lbs./mmbtu) when burning oil or a mix of gas and oil. If the University's read of 326 IAC 3-5-1(b) is correct then it would apply and B-1 would thus have a state operating rule required certified COM per IDEM's response.

### **Responses to Comment No. 1 and Amended Comment No.1:**

The IDEM agrees that the boiler B-1 description and requirements can be placed into a separate section, apart from the requirements for boilers B-2 and B-3. For the purposes of this Addendum to the TSD (ATSD), the **UND Proposed Sections D.1 and D.2** mentioned above in the Permittee's comment (and other comments throughout this document) are not attached in order to avoid confusion. Since there are numerous changes made as a result of splitting Section D.1 into two sections, not everything is shown in strikeout and/or bold in order to simplify the changes. The changes made are discussed below.

- The Facility Description box for Section D.1, now only lists part (a), the description for boiler B-1. Part (b), the description for boilers B-2 and B-3, is now in Section D.2, and the subsequent sections have been renumbered accordingly.

- It has been determined that the COM does not need to be operating at times when boiler B-1 combusts fuel oil and it is the only boiler exhausting to stack S-1. Therefore, the descriptions in A.2(a) and the Facility Description box for Section D.1 have been changed to read as:

One (1) No.6 fuel oil or natural gas fired boiler constructed in 1961, identified as B-1, with a maximum design capacity of 137 MMBtu per hour heat input, ~~with opacity measured by a certified continuous opacity monitor identified as COM1 when using fuel oil, or fuel oil in combination with natural gas,~~ exhausting to stack S-1.

- Part (b) of condition D.1.1, Particulate Matter Limitation, is now listed as D.2.1(a), and the part (c) language is now part (b) for both conditions D.1.1 and the new D.2.1.
- Part (b) has been moved from D.1.3, Sulfur Dioxide Emission Limitations, to condition D.2.3.
- Condition D.1.4 (Operation Standards) has been replicated as the new D.2.4, except that the references to boiler B-1 have been deleted. Part (c) of D.1.4 is now part (b). Below are the changes affecting parts (a), (b), and (c) of D.1.4:
  - (a) ~~All coal burned in boilers B-2 and B-3, 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 boilers B-1, ~~B-2, and B-3.~~ If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.
  - ~~(c)~~(b) If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler rinses.
- For condition D.1.5, Preventive Maintenance Plan, the part (a) references to the boilers have been changed for both conditions, and the entire part (b) has been moved and renumbered as D.2.5(b). Condition D.1.5 now reads as:
  - ~~(a)~~ A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boilers B-1, ~~B-2, and B-3 and their control devices.~~
  - (b) ~~The PMP for each dust collector (D-1 and D-2) shall include inspections of the internal components of each collector, conducted biannually or every 6,000 hours of operation, whichever occurs first, in accordance with the Section B - Preventive Maintenance Plan. Items to be checked include air infiltration, plugging of inlet spinner vanes, outlet tube erosion, deposits on the inside surfaces of the tubes, and plugging of the bottom of the tubes.~~
- D.1.6, Testing Requirements, is the new D.2.6. Since boiler B-1 is not required to test for the purposes of the Part 70 operating permit, Section D.1 no longer has this condition as a requirement. All subsequent conditions in Section D.1 have been renumbered as a result. Also, the TSD had stated that since calculations showed that boiler B-1 was not in compliance with the PM limit while combusting fuel oil, it was required to test. Based on the new fuel oil sulfur content limit requested by the Permittee (See Comment 5), calculations now show that when boiler B-1 combusts fuel oil, it is in compliance with its PM limit and no longer needs a stack test to demonstrate compliance.
- Condition D.1.7, Continuous Emissions Monitoring, is the new D.2.7 and the reference to boiler B-1 has been deleted. It has been determined that B-1 is not required to operate a COM when combusting fuel oil, since it complies with the criteria under 326 IAC 3-5-1(c)(2)(A). All subsequent conditions in Section D.1 have been renumbered as a result.
- Condition D.1.8, Operation of Cyclones, has been moved out of Section D.1 and renumbered D.2.8. All subsequent conditions in Section D.1 have been renumbered as a result.
- Condition D.1.10, Sulfur Dioxide Emissions and Sulfur Content, has been moved to Section D.2 and renumbered D.2.9. All subsequent conditions in Section D.1 have been renumbered as a result.
- Condition D.1.12, Opacity Readings, is now D.2.11, and boiler B-1 is no longer referenced. Because the opacity at boiler B-1 is not required to be measured and recorded by a COM, condition D.1.12 is no longer required. In Section D.1, condition D.1.12 is now D.1.9, and has been revised to read as follows:

~~Opacity Readings~~ **Visible Emissions Notations** [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

~~While~~ **When** boiler B-1 is **the only boiler exhausting to stack S-1, and it is** combusting fuel oil:

- (a) ~~In the event of opacity exceeding twenty five percent (25%) 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 five percent (25%). Examples of expected response steps may include, but are not limited to, boiler loads being reduced.~~  
**Visible emission (VE) notations of the stack exhaust shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.**

- (b) ~~Opacity readings in excess of twenty five percent (25%) but not exceeding the opacity limit for boiler B-1, when combusting fuel oil, 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 of this permit. If abnormal emissions are observed at the stack 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 of 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 the boiler.**

- Condition D.1.13, Monitoring: Cyclones, has been moved to Section D.2 and renumbered D.2.12.
- D.1.14, Record Keeping Requirements, is now listed as D.1.10. Part (a) has been moved to the new Section D.2, and is under D.2.13. Part (b) of D.1.10 is now part (a), and the last paragraph has been deleted because boiler B-1 no longer has COM requirements. The new part (b) requires record keeping for the new visible emissions notations condition, D.1.9. It reads as:

**To document compliance with condition D.1.9, the Permittee shall maintain records of once per shift visible emission notations of stack exhaust S-1, if boiler B-1 is the only boiler in operation for stack S-1, and it is combusting fuel oil.**

- In the Record Keeping Requirements condition, now listed as D.1.10, part (c) has been moved and renumbered as D.2.13(b). It now references D.2.3 and D.2.10. Part (d) has also been moved and is now D.2.13(c).
- D.1.14(f) is now D.1.10(d), and under the new D.2.13, it is part (e).
- For Section D.1, D.1.15- Reporting Requirements, is now listed as D.1.11. In the new Section D.2 it is D.2.14. Part (a) has been changed to reference only oil for D.1.11(a), and for D.2.14(a), only coal is referenced. Also, because boilers B-2 and B-3 have a COM, the natural gas certification requirement in the new D.2.14(a) has been removed as discussed further in the response to comment 12. Part (c) is now D.2.14(c), and references D.2.9. Part (d) is now D.2.14(d). Part (e) is now D.1.11(b), and in D.2.14 it is still part (e).

Because of the changes above, the Table of Contents, all subsequent D Sections, including the conditions in each of those sections, have been renumbered accordingly.

Previously, it was unclear to IDEM what the Permittee’s concern was regarding the NSPS issue, as it was not referenced as a requirement for any of the boilers in Section D.1 of the draft Part 70 operating permit. This resulted in the Permittee’s submittal of an amended comment. As a reminder, the Technical Support Document (TSD) outlines the various reasons why NSPS standards do not apply to the boilers at the University of Notre Dame.

**Comment No. 2 (Referenced Sections are from Public Notice Draft Permit):**

B-1 is a pre-NSPS boiler not subject to 40 CFR Part 60 new source continuous monitoring requirements as are all other existing University of Notre Dame boilers. The continuous monitoring requirements were applied to our solid fuel-fired boilers, B-2, B-3 and B-4 as part of a USEPA’s Consent Decree with the University. This Consent Decree was terminated effective September 14, 2001. Thus the University asserts that extension of the 40 CFR Part 60 new source continuous monitoring requirements to a non-applicable boiler, B-1, is in error and requests that IDEM revise the aforementioned sections to mirror boiler B-5’s comparable requirements and sections. The imposition of improper continuous opacity monitoring requirements on a pre-NSPS boiler is without regulatory authority and the opportunity for notice and comment during a public rulemaking. Specific edits requested are as follows:

Section D.1 (a) Facility Description [326 IAC 2-7-15]

Delete the words “, with opacity measured by a certified continuous opacity monitor identified as COM1 when using fuel oil or fuel oil in combination with natural gas,” since continuous opacity monitoring is not required by any regulation or statute, and specifically, the NSPS is not applicable to B-1, which was constructed in 1961.

Section D.1.7 (a) Continuous Emissions Monitoring [326 IAC 3-5]

Delete the entire section as pertains to B-1, as has been done in our revised Section D.1.

Section D.1.12 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

Delete the entire section as pertains to B-1, as has been done in our revised Section D.1.

Section D.1.14 Record Keeping Requirements

Delete the entire section as pertains to B-1, as written and replace with the proposed Section D.1.9

Section D.1.15(c)&(d) Reporting Requirements

Delete the first paragraph of Paragraph (c) as pertains to B-1. Delete paragraph (d) in its entirety as pertains to B-1.

**Response to Comment No. 2:**

As noted above in IDEM's response to comment No.1, there are no NSPS requirements listed in Section D.1 as applicable to boilers B-1, B-2 or B-3. Condition D.1.7 of this section, referenced rule 326 IAC 3-5 (Continuous Monitoring of Emissions) as the basis for the COM (continuous opacity monitor) requirement on stack S-1. This requirement has been removed in addition to the Opacity Readings condition for boiler B-1. The requirements for boiler B-1, and associated record keeping and reporting requirements, now mirror those of boiler B-5 as requested above. The deletion of these COM requirements are supported by 326 IAC 3-5, as noted in the response to comment 1. Because IDEM prefers the TSD to reflect the permit at the time of public notice, no revisions will be made to that document.

**Comment No. 3:**

Section A.3 (a) Specifically Regulated Insignificant Activities

TSD Insignificant Activities (mm)(6)

The current wording is inaccurate since the Underground Storage Tank has not yet been installed. The accurate wording of this item would be to replace “installed in 2003” with “for which a construction permit was issued in 2003” since construction is not scheduled until 2004.

**Amended Comment No. 3:**

Section A.3(e)(1) – You confirmed receipt of our revised coal pile storage area of 10.33 acres.

Section A.3(e)(7) – We updated you that diesel generators G-8, G-9 and G-10 will each use a 300 gal. day tank. You indicated that those would be added in this section along with the day tanks for G-3 and G-4. If we may offer the following language, “Five (5) 300 gallon diesel fuel day tanks for G-3, G-4, G-8, G-9 and G-10;”

**Responses to Comment No. 3 and Amended Comment No. 3:**

The above changes have been made to condition A.3. The new part (a) for condition A.3 reads as:

One (1) underground diesel fuel storage tank ~~installed~~ **for which a construction permit was issued** in 2003 for generators G-8, G-9, and G-10, identified as UST, with maximum storage capacity of 30,000 gallons. [326 IAC 12-1] [40 CFR 60, Subpart A]

Also, part (a) of the Section D.6 description box, now Section D.7, has been changed. Since the Permittee has recalculated the coal storage acreage, A.3(e)(1) now reads as:

Long and short term coal storage piles, totaling ~~4.76 and 0.27~~ **10.33** acres, ~~respectively;~~

Because there will be additional day tanks for generators G-8, G-9, and G-10, part (e)(7) has been revised as follows:

~~Two (2)~~ **Five (5)** 300 gallon diesel fuel day tanks for G-3, ~~and G-4,~~ **G-8, G-9, and G-10;** and

Since IDEM prefers the TSD to reflect the permit at the time of public notice, no changes will be made to the description in that document. This response to comment serves as the correction.

**Comment No. 4:**

Section C.12 (a) Maintenance of Continuous Monitoring Equipment

We would request that the following sentence be added at the end of this paragraph. "Except as provided otherwise in Section D requirements." Thus allowing the specific Section D references that allow boiler operations without a COM on natural gas or No.2 Fuel Oil.

**Response to Comment No. 4:**

IDEM agrees that the phrase suggested above is an appropriate addition because it doesn't affect the intent of the second sentence of part (a). Therefore, the revised second sentence of part (a) reads as follows:

For a boiler, the COM shall be in operation at all times that any draft fan is in operation, **except as provided otherwise in the Section D requirements.**

**Comment No. 5:**

Section D.1.6 Testing Requirements (UND proposed Sec.D.1)

The TSD PM Compliance Status for B-1 on page 9 of 15 indicates a need for performance stack testing while operating on No.6 Fuel oil, based on the calculated value of 0.09 lb/MMBtu of PM using an AP-42 emission factor of 13.33 lb/kgal and a weight percent sulfur of 1.1.

Our historic sulfur content for No.6 Fuel Oil is considerably less than 1.1%, therefore we would request that by back calculating the point at which a stack test would not be required would yield a weight percent sulfur of 1.06%, which would meet the 0.087 lb/MMBtu PM limit. As such using 1.06% sulfur as our No.6 Fuel Oil sulfur limit the need for performance stack testing for PM for both B-1 would not be required, so long as the University only uses No.6 Fuel oil with a weight percent sulfur not to exceed 1.06%.

Therefore we request the TSD calculation be modified and that Section D.1.6 be replaced with a requirement to not exceed 1.06 weight percent sulfur while B-1 is combusting No.6 fuel oil. The new requirement is as follows:

Section D.1.6(b) "The permittee shall demonstrate compliance with the particulate matter limitation in condition D.1.1(a), while boiler B-1 is combusting No.6 fuel oil, with a weight percent sulfur not to exceed 1.06 percent."

See UND Section D.1.6(b). Accordingly, the heading for condition D.1.6 should be revised to "Sulfur Dioxide Emissions, Particulate Emissions and Sulfur Content".

**Response to Comment No. 5:**

IDEM disagrees that the title and intent of the condition Sulfur Dioxide Emissions and Sulfur Content, now listed as D.1.7, should be changed. This condition reflects the requirements applicable to the boilers based on the rules 326 IAC 2-7-6 and 2-1.1-11. The calculations shown in the TSD are based on the Part 70 permit application information submitted by the University of Notre Dame. Because IDEM prefers that the TSD reflect the permit at the time of public notice, the TSD calculations will not be revised. Instead, an updated version is written below as follows:

Since the potential PM emission rate for boiler B-1, when combusting No.6 fuel oil with a sulfur content of 1.06%, is equal to the PM limit of 0.087 lb/MMBtu ( $11.94 \text{ lb/hr} \div 137 \text{ MMBtu/hr}$ ), boiler B-1 demonstrates compliance with 326 IAC 6-1-18.

Because it is not appropriate to add a fuel oil sulfur content limit to condition D.1.6, it will instead be a separate condition. This new requirement is added as condition D.1.6 and reads as follows:

**D.1.6 Fuel Oil Sulfur Content Limit**

**To demonstrate compliance with condition D.1.3 when boiler B-1 combusts fuel oil, the sulfur content of the fuel oil combusted shall not exceed 1.06 percent.**

All subsequent conditions in Section D.1 and the Table of Contents have been changed to reflect this addition.

**Comment No. 6:**

Section D.1.6 Continuous Emissions Monitoring (UND proposed Sec.D.1)

Section D.1.10 (b) Reporting Requirements

To remain consistent with the similar section for B-5, which also combusts only natural gas and fuel oil, we would request that the Sections for Compliance Determination Requirements, Continuous Emissions Monitoring (D.1.7),

Compliance Monitoring Requirements, Opacity Readings (D.1.12) and Reporting Requirements (D.1.15(b)), be deleted and replaced with language similar to the Compliance Monitoring Requirements, Visible Emissions Notations, for B-5 as indicated in our proposed Section D.1.8 and D.1.9(b). The imposition of improper continuous opacity monitoring requirements on a pre-NSPS boiler is without regulatory authority and the opportunity for notice and comment during a public rulemaking.

**Response to Comment No. 6:**

Please see the responses to comments 1 and 2. Regarding the visible emission notation's record keeping for boiler B-5, D.3.10(b), now D.4.9(b), has been revised due to a minor typo. This sentence now reads as:

To document compliance with Condition D.3.94.8, the Permittee shall maintain records of ~~daily~~ **once per shift** visible emission notations of the boiler B-5 stack exhaust, S-3.

**Comment No. 7:**

Sections D.2.6 (UND Proposed Section D.2), D.2.6 and D.3.6 Testing Requirements

All prior stack tests required of the University of Notre Dame have previously been performed more than 2 years ago. Hence these referenced sections as written are not applicable. We would therefore recommend replacing "Within 36 months following the most recent stack test," with "Within 36 months following the date of final permit issuance", to remain consistent with the TSD page 12 of 15 under Testing Requirements.

**Amended Comment No.7:** On April 22, 2004, the attorney for Notre Dame University, Maryann Saggese, verbally amended this comment during a telephone conversation. After explaining that 36 months would be more than five years since the last stack test, the Permittee stated that 24 months from the date of permit issuance is would be an agreeable schedule.

**Responses to Comment No. 7 and Amended Comment No. 7:**

IDEM agrees that this phrase should be changed to an acceptable timeframe and fulfills the testing required by the Part 70 operating permit program. The first phrase of each of the testing conditions, now renumbered as D.2.6 and D.3.6, reads as follows:

Within ~~36~~ **24** months following the ~~most recent stack test~~ **date of permit issuance**,...

During the review of this comment, it was determined that the condition requiring testing for boiler B-5 was not necessary. Boiler B-5 is equipped with low NOx burners, combusts only natural gas or No.2 fuel oil, and generally is not operated as frequently as the other boilers. As a result, it is not necessary to test this boiler for the purpose of the Part 70 operating permit. This condition, which was listed as D.3.6 prior to the section renumbering, read as:

~~Within 36 months following the most recent stack test, compliance with the PM limitations in Condition D.3.1 shall be determined by a performance stack test conducted, while B-5 is combusting fuel oil, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.~~

All subsequent conditions in this section have been renumbered as a result, and the Table of Contents has also been changed to reflect this deletion.

**Comment No. 8 (Referenced Sections are from Public Notice Draft Permit):**

Section D.1.9 (b)(2)(C) Record Keeping Requirements (UND Proposed Section D.1), D.2.10 (a)(2), and D.3.7 (a)(2) Sulfur Dioxide Emissions and Sulfur Content

We would like to request an additional sampling and analysis protocol. Therefore we would ask that D.1.9 (b)(2)(B), D.2.10 (a)(2)(A), and D.3.7 (a)(2)(A) have the word "or" added to its end and that the following language be added as D.1.9 (b)(2)(C), D.2.10 (a)(2)(C), and D.3.7 (a)(2)(C) "Oil samples shall be collected immediately prior to combustion as an "As Burned" sample." We request this change to allow our Part 70 permit to reflect our current IDEM approved sampling protocol for fuel oil.

**Response to Comment No. 8:**

IDEM agrees that the Permittee may have a different approved sampling protocol regarding the above listed conditions. However, it is not a requirement of 326 IAC 3-7-4 (Fuel oil sampling; analysis methods) to add these modified procedures to the Permittee's operating permit. Even so, to include the specific collection procedure above as a provision in the operating permit would be inflexible for the Permittee. For clarification, rule language

has been added to condition D.1.9(b)(1), now listed as D.1.7(b)(1). This language explains that the Permittee may use approved modified or alternate equivalent procedures. This sentence now reads as:

The Permittee may, **with the prior approval of the department, modify the procedures specified in 326 IAC 3-7-4(a), use alternate equivalent procedures, or** rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; or,

Other affected conditions are D.3.10(a)(1), D.4.6(a)(1), and D.5.9(a)(1) (previously, these were D.2.10(a)(1), D.3.7(a)(1), and D.4.9(a)(1), respectively). Part (a)(1) for each now reads as:

Providing vendor analysis of fuel delivered, if accompanied by a certification, **or analyses from approved modified procedures specified in 326 IAC 3-7-4(a), or the use of alternate equivalent procedures, as implemented;**

**Comment No. 9:**

Section D.1.12 Opacity Readings (With regard to Boiler B-1 only)

In our proposed version of Section D.1 we have deleted the Opacity Readings language for the reasons indicated in Comment No.2.

**Response to Comment No. 9:**

Please see the responses to comments 1 and 2.

**Comment No. 10:**

Section D.2.11(b) (UND Proposed Sections D.1 and D.2)

Although we are comfortable with the intent of requiring a compliance monitoring response, we do not understand how the failure to perform a compliance monitoring response can be a violation, as a violation is defined as an exceedance of the 30% opacity limit per 326 IAC 5-1-2. We believe that failure to perform a compliance monitoring response is rather a deviation.

**Response to Comment No. 10:**

IDEM agrees that the change requested above can be made to the last sentence in part (b) of the Opacity Reading conditions. Although any failure to take a response step is a deviation, a deviation such as this may in fact be considered a violation depending on the circumstances. This condition is now listed as D.2.11, and the last sentence now reads as:

Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a ~~violation~~ **deviation** of this permit.

This revision has also been made to other conditions that have the same sentence. They are conditions renumbered as D.2.12(b), D.3.12(b), D.3.13(b), D.4.8(b), and D.5.10(d).

**Comment No. 11:**

TSD - Compliance Requirements (a)(1)(A) through (D)

We request that in the TSD Compliance Requirements throughout part (a) that all references to B-1 be deleted and a similar paragraph to (a)(4) be included for boiler B-1.

**Response to Comment No. 11:**

For the reasons discussed in the responses to comments 1 and 2, these changes were made in the permit and will not be made in the TSD.

**Comment No. 12:**

Section D.1.10 (a), D.2.13 (a) (UND Proposed Section D.1 & D.2), D.2.15 (a) and D.3.11 Reporting Requirements

With regard Natural Gas Boiler Certification referenced we currently report compliance with PM and SO<sub>2</sub> emission limits via the calculation of those emissions when burning coal and fuel oil. The Natural Gas Boiler Certification appears to require reporting of the combustion of natural gas as an alternate fuel, which regardless would have negligible if not zero impact on PM and SO<sub>2</sub> emissions. Therefore we would request that this requirement be deleted.

**Response to Comment No. 12:**

The requirement to submit the natural gas boiler certification is not related to the compliance reporting for PM and SO<sub>2</sub>. The Permittee must provide reasonable assurance of compliance with the opacity limitation. This is the basis

for requiring this report. The requirement to submit this certification is included in the operating permit to indicate compliance with 326 IAC 5-1 in lieu of requiring daily visible emissions notations during times when natural gas is the only fuel being combusted. Boilers B-1 and B-5 are examples of units in this particular situation. However, because boiler B-4 has a COM system to measure opacity, part (a) of condition D.2.15, now D.3.15, has been revised to delete the natural gas certification requirement. The first sentence of this part now reads as follows:

A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Conditions D.3.1, D.3.2, D.3.3, D.3.10, and D.3.13 ~~and the Natural Gas Boiler Certification~~ shall be submitted to the address listed in Section C - General Reporting Requirements, 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.

As noted earlier in the response to comment 1, it was not necessary to include this certification in the new D.2.14(a) for boilers B-2 and B-3, for the same reasons.

**Comment No. 13:**

Section D.1.12 (b) Visible Emissions Notations

The Model Part 70 Permit as well as recently issued Part 70 Permits state that failure to take response steps shall be considered a deviation from this permit, not a violation. An exceedance of the 25% opacity level could occur without a violation of an opacity or emission limit. Therefore, this paragraph should be corrected to state that such a failure to take response steps after an exceedance of the 25% opacity level is observed, "shall be considered a deviation". This correction is consistent with the requirements stated in Section C.17(b)(4) concerning Compliance Response Plans.

**Response to Comment No.13:**

Please see the response to comment 10. Also, note that condition D.1.12, now listed as D.2.11, is the Opacity Readings condition for boilers B-2 and B-3. In the response to comment 1, a new condition was added regarding visible emission notations for boiler B-1. It is numbered D.1.9.

**Comment No. 14:**

Section D.1.13 Monitoring: Cyclones

TSD – Compliance Requirements (a)(2)(A) through (B)

As part of our negotiations for the Consent Decree of 1998 the University offered to monitor static pressure drops as a means of compliance. The response from USEPA Region V was that they insisted upon the installation of a COM. Since 1998 our operating experience has found that monitoring static pressure drops is an inconsistent indicator of collector efficiency. We believe that the COM and PMP requirements as proposed in this permit are more than adequate to ensure compliance. We therefore request that these sections be stricken in its entirety. We have left the language in our proposed section D.2.13 with overstrike for reference.

**Response to Comment No. 14:**

This condition is now listed as D.2.12. The authority for requiring this monitoring is found under rules 326 IAC 2-7-6(1) and 326 IAC 2-7-5(1). The monitoring of the pressure drop of each cyclone provides an indication of whether the control device is operating properly. Monitoring of the static pressure drop can alert the operator to relative changes (such as the plugging of cones) over a period of time. The operator can use this information to chart trends and determine if the unit is operating within the optimal range as determined by baseline testing of the unit and manufacturer's specifications. Pressure drop is an indicator of a variety of conditions within the cyclone. Any deviations from the normal operational range of the unit, whether gradual or sudden, should alert the operator that the unit needs maintenance. The Compliance Response Plan should include response steps to anticipate corrective actions when abnormal conditions arise. In the future, if a valid stack test result demonstrates compliance with the PM limits at stack S-1, while coal is being combusted as the sole fuel and the cyclones are not in operation, the Permittee may request that their operating permit be modified. Until these steps are taken, the requirements to measure the pressure drops across the cyclones will not be deleted from the permit.

**Comment No. 15:**

Section D.2.12 (a)(4) (UND Proposed Section) Record Keeping Requirements

Based on our previous comment requesting deletion of dust collector static pressure drop compliance we request that this section be stricken in its entirety.

**Response to Comment No. 15:**

Please see the response to comment 14. This condition is now D.2.13. No change has been made as a result.

**Comment No. 16:**

Section D.2.5 (b)(3) Preventative Maintenance Plan

The proposed language is inaccurate because it is not possible for this positive draft boiler B-4 to infiltrate either water or air, or to exfiltrate water. In the case of a positive draft boiler, if a leak occurs stack gases are emitted. Due to the nature of stack gases their odor is immediately noticed and repairs must be promptly performed due to the health concerns. There is no emission compliance issue as a result of such prompt maintenance. This is precisely the type of routine inspection and maintenance activities, which are currently included in the Preventative Maintenance Plan. It would be unnecessary, redundant and inappropriate to specify this type of routine maintenance as a specific permit requirement with additional recordkeeping. Therefore, we recommend that paragraph (b) be stricken in its entirety.

**Response to Comment No. 16:**

IDEM disagrees that all of part (b) should be deleted from this condition. The ESP must operate properly in order for boiler B-4 to achieve compliance; therefore, it is reasonable and necessary to require the source to inspect the ESP periodically. The schedules in this condition require certain inspections at a minimum of every two years or during every major maintenance outage, and other detailed inspections after any outage lasting more than three days. These schedules are essential for a unit that controls a significantly large solid fuel-fired boiler such as B-4 in order to assure reasonable compliance. The detailed requirements for inspecting the ESPs are taken from a US EPA Publication titled "Operation and Maintenance Manual for Electrostatic Precipitators", which is document number EPA/625/1-85/017. Preventive maintenance ensures that ESPs are operating efficiently. Unless stack testing is completed on stack S-2 while B-4 combusts coal without the ESP operating, and the results demonstrate compliance with the limits, it is necessary to keep this condition in the operating permit. Because it is not physically possible for boiler B-4 to infiltrate either water or air, or to exfiltrate water, part (b)(3) of this condition, now listed as D.3.5, has been deleted as shown by strikeout below:

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

**Comment No. 17:**

Section D.2.8 (a) Continuous Emissions Monitoring

The COM for B-4 was originally installed to comply with regulations for solid fuel combustion of an emission unit with a heat rate greater than 100 MMBtu per hour and less than 250 MMBtu per hour. Therefore there is no regulatory authority to require the operation of a COM on B-4 when combusting either natural gas or fuel oil. This is consistent with B-1 and B-5 which also combust natural gas and fuel oil. We respectfully request the reference to continuous emissions monitoring when combusting fuel oil for B-4 be deleted.

**Response to Comment No. 17:**

The Continuous Emissions Monitoring condition, now listed as D.3.8, requires the operation of a COM when boiler B-4 combusts either coal or fuel oil. 326 IAC 3-5-1(b)(2) states that this rule applies to facilities that are fossil fuel-fired steam generators of greater than one hundred million (100,000,000) British thermal units (Btus) per hour heat input capacity. This rule does not specify only solid fuel combustion. No changes have been made as a result.

**Comment No. 18:**

Section D.2.13 Opacity Readings

We do not believe that there is justification for a compliance monitoring response for B-4 that would be different than requested for B-2 and B-3. There is still ample response time at the 25% level to take corrective actions towards mitigating opacity exceedances at the 30% limit. In addition we do not believe that this lower 15% response level will enhance overall compliance. The 15% level for response would solely create onerous additional reporting and record keeping requirements.

There is no rule or statute that mandates this significantly lower requirement and therefore we feel that its improper imposition would be without regulatory authority and without the opportunity for public comment during rulemaking.

Therefore we request that this response level be changed to 25%.

**Response to Comment No. 18:**

The provisions mandating this condition are stated in the condition's title. The rule cites are 326 IAC 2-7-6(1) and 326 IAC 2-7-5(1), and IDEM has the authority to require such monitoring pursuant to these rules. This condition does not establish an opacity limit that is more stringent than the opacity limits established by 326 IAC 5-1. Rather, the condition requires the Permittee to take response steps when the opacity is above the level indicative of normal operating conditions. An opacity reading that is in compliance with 326 IAC 5-1, but above the level of normal operating conditions and requires a response step is not considered a deviation. It is only a deviation if the Permittee fails to take any response steps 326 IAC 2-7-5(1) and 326 IAC 2-7-6(1).

Unusually high opacity levels can indicate a process upset or a malfunction of the control device. Either of these situations could cause an exceedance of a particulate matter limitation. Without performing a stack test, the Permittee could not affirm that the unusually high opacity levels were not indicating a violation of the particulate matter limits in the permit. It is unlikely that the Permittee would be able to perform a particulate matter stack test immediately upon observing unusually high opacity levels from a stack. Without taking any response steps or conducting any stack test, the only information available regarding emissions would be that the opacity levels were unusually high. Without any other evidence to the contrary, the unusually high opacity levels would be credible evidence that the emissions from the stack could be in violation of the particulate matter limits in the permit. For these reasons, the Permittee is required to take response steps whenever unusually high opacity levels are observed. The levels in this condition were based on the specific performance of the boiler. The intent of the condition is to ensure continuous compliance of the boiler, and to ensure that the Permittee performs appropriate steps in order to prevent possible noncompliance from occurring at the COM. Due to earlier revisions, this condition is now listed as D.3.13. On May 12, 2004, the Permittee agreed to have the trigger levels for boilers B-2, B-3 and B-4, all changed to the same value of 20%. The Permittee requested the same level for each so they may achieve more efficiency in their operational practices. IDEM agrees with this change because a slightly higher trigger level for boiler B-4 continues to provide reasonable assurance of compliance with the particulate limit. These changes have been made to renumbered conditions D.2.11 and D.3.13. The first sentence of part (a) for D.2.11 now reads as:

In the event of opacity exceeding ~~twenty-five~~ percent (~~250~~%) 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-five~~ percent (~~250~~%).

The first sentence of part (b) under D.2.11 now reads as:

Opacity readings in excess of ~~twenty-five~~ percent (~~250~~%) but not exceeding the opacity limit for boilers B-2 and B-3 when combusting coal, are not a deviation from this permit.

The first sentence of part (a) under D.3.13 now reads as:

In the event of opacity exceeding ~~fifteen~~ **twenty** percent (~~15~~**20**%) 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 ~~fifteen~~ **twenty** percent (~~15~~**20**%).

And lastly, the first sentence of part (b) under D.3.13 now reads as:

Opacity readings in excess of ~~fifteen~~ **twenty** percent (~~15~~**20**%) but not exceeding the opacity limit for boiler B-4 are not a deviation from this permit.

**Comment No. 19:**

Section D.3.7 (a) Sulfur Dioxide Emissions and Sulfur Content

Based on our interpretation of 326 IAC 3-7-4, SO<sub>2</sub> emission compliance should be based on a calendar month average calculation of SO<sub>2</sub> pounds per MMBtu heat input, rather than each separate individual delivery of fuel. This requirement was correctly stated for Section D.4.6. Therefore we request that paragraph (a) be revised to read, "do not exceed five tenths (0.5) pounds per MMBtu heat input."

**Response to Comment No. 19:**

IDEM agrees that the phrase "heat input" may be added to part (a) of this condition. Although the rule has not stated the limit in this manner, the intent is not affected by this change. As a result, this condition part, now listed as D.4.6(a), reads as follows:

Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per MMBtu **heat input** by:

**Comment No. 20:**

Section D.3.9 (b) Visible Emissions Notations

Section D.4.10 (d) Visible Emissions Notations

The Model Part 70 Permit as well as recently issued Part 70 Permits state that failure to take response steps shall be considered a deviation from this permit, not a violation. Abnormal emissions could occur without a violation of an opacity or emission limit. Therefore, this paragraph should be corrected to state that such failure to take response steps after an abnormal emission is observed, "shall be considered a deviation". This correction is consistent with the requirements stated in Section C.17(b)(4) concerning Compliance Response Plans.

**Response to Comment No. 20:**

IDEM agrees that this change can be made to reflect current permit language being used. Please see the Response to Comment 10.

**Comment No. 21:**

Section D.3.10 (a)(2) Record Keeping Requirements

A reference to calendar month averaging needs to be made with respect to sulfur content. Therefore we would recommend that the language found in D.4.11(a)(2) be used. This comment is consistent with our Comment No.19.

**Response to Comment No. 21:**

IDEM agrees that these condition parts should be identical for consistency. Therefore, condition D.3.10(a)(2), now listed as D.4.9(a)(2), is revised as follows:

**Calendar month average sulfur content, F fuel consumption, ~~sulfur content, heat content,~~ and equivalent sulfur dioxide and particulate matter emission rates in pounds per MMBtu;**

Please note that because of an earlier comment regarding Section D.1, subsequent sections have been renumbered, and the condition referenced in the Permittee's comment, D.4.11(a)(2), is now listed as D.5.11(a)(2).

**Comment No. 22:**

Section D.4.5 Particulate Emission Limitations; Fuel Combustion Steam Generators

By IDEM's definition a "Fuel Combustion Steam Generator" is a furnace or boiler used in the process of burning solid, liquid or gaseous fuel or any combination thereof for the purpose of producing steam by heat transfer. Hence we believe that the title of Section D.4.5 should not reference "Fuel Combustion Steam Generators". Possibly a better title would be D.4.5 Particulate Emission Limitations; Diesel-Fired Generators [326 IAC 5.1-2].

**Response to Comment No. 22:**

This condition is now listed as D.5.5 due to earlier changes requested by the Permittee, and the title now reads as:

D.45.5 Particulate Emission Limitations; ~~Fuel Combustion Steam Generators~~ [326 IAC 6-1-2]

**Comment No. 23:**

Section D.4.5 Particulate Emission Limitations; Fuel Combustion Steam Generators

A Revised Part 70/Title V Permit Application ("the Application") for Plant ID No.141-00013 regarding G-3 and G-4 was submitted to the IDEM October 20, 2000. This application for G-3 and G-4 was to request proper classification of these previously identified insignificant activities. The units are grand fathered with respect to construction permit regulations, because the units were in existence prior to the enactment of the Clean Air Act and any associated implementing regulations. Therefore the process weight rule 326 IAC 6-1-2 is not applicable to G-3 and G-4. We therefore respectfully request that 326 IAC 5-1-2(a), Opacity Limitations, be the particulate emission limitation for these units as denoted in the Application, Section 3.0, Compliance Information. In addition, G-3 and G-4 should be removed from Section D.4.5.

**Response to Comment No. 23:**

Please note that 326 IAC 6-1-2 is not the process weight rate rule. It is titled "Particulate emission limitations; fuel combustion steam generators, asphalt concrete plant, grain elevators, foundries, mineral aggregate operations;

modification by commissioner” and doesn’t exempt units by date of construction. 326 IAC 6-1-2(a) does not exempt units such as generators G-3 and G-4. This condition is now listed as D.5.5. As a result, these generators will not be removed from this condition. Please note that 326 IAC 5-1-2 does not state that it may be used in lieu of the particulate matter provisions.

**Comment No. 24:**

Section D.4.8 Testing Requirements

This paragraph needs to be revised to specifically state that the stack testing is only required for G-8, G-9 and G-10 pursuant to the Source Modification. G-3 and G-4 do not require stack testing. This language should be revised to state “on a representative number of the diesel-fired generators G-8, G-9 and G-10”.

**Response to Comment No. 24:**

IDEM agrees to add the generator ids to the language of this condition. In addition to this change, the condition references have been revised to reflect that this condition is now in Section D.5 and listed specifically as D.5.8. The first sentence will now read as:

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, within 60 days of achieving maximum production rate, but no later than 180 days after initial startup, the Permittee shall perform NOx, PM, and PM10 testing, utilizing methods approved by the Commissioner, on a representative number of diesel-fired generators (**G8, G-9, G-10**) to comply with Conditions D.45.4 and D.45.5.

**Comment No. 25:**

TSD Compliance Requirements (b) Third Paragraph

This section is intended to cover “Diesel Generators”, but the cite of 326 IAC 6-1-2 is for “Fuel Combustion Steam Generators, Asphalt Concrete Plant, Grain Elevators, Foundries, Mineral Aggregate Operations; Modification by Commissioner”. Therefore we recommend striking the words “with 326 IAC 6-1-2 (Particulate emissions limitations: fuel combustion steam generators)”.

**Response to Comment No. 25:**

Because IDEM wants the TSD to reflect the permit at the time of public notice, no change will be made. With regards to the issue noted in the comment above, please see the response to comment 23.

**Comment No. 26:**

Part 70 Quarterly Reports SO<sub>2</sub> from Diesel Fired Generators

In the heading of the report on (page 55) under Facility we believe that the reference to “(No.1 fuel oil)” should be corrected to “(No.1 or No.2 fuel oil)”.

**Response to Comment No. 26:**

IDEM disagrees, because the description in the Source Modification issued for these generators does not specify either No.1 or No.2 fuel oil. A deletion has been made on this form (now found on page 58 of the permit) to remain consistent with the equipment descriptions. The following phrase is revised to read as follows:

diesel (~~No.1 fuel oil~~) fired generators, G-3, G-4, G-8, G-9, and G-10

**Comment No. 27:**

TSD Un-permitted Emission Units and Pollution Control Equipment

Units G-3 and G-4 were installed in 1953, as such, the units are “grand fathered” with respect to construction permit regulations, in that the units were in existence prior to the enactment of the Clean Air Act and any associated implementing regulations. Therefore it is our opinion that it is inappropriate to list these units under the “Unpermitted” Section. The description which follows precisely states that these are “not considered unpermitted emission units”. G-3 and G-4 are already included in the “Permitted” Section in paragraph (e) and they should be removed from the Unpermitted section. They should be removed from the “Unpermitted” section to eliminate confusion and because their existence is not a violation of law.

**Response to Comment No. 27:**

The intention of listing these two units as “unpermitted”, was to explain that they are not listed on previous permits. It is not meant to imply that the Permittee chose not to apply for new source review for the units, or that they may be subject to enforcement action. It is understandable why their placement on the first page of the TSD may seem to conflict. Please note that the explanation in the “Unpermitted” section is not a description. The units

are no longer considered as grand-fathered for the purposes of the Part 70 operating permit because they now appear in a permit, resulting in their descriptions being placed under the "Permitted Emission Units and Pollution Control Equipment" section. Since they have never appeared on earlier permits for the source, an explanation was written and placed in the "Unpermitted" section. Because it is not necessary to correct the placement of units G-3 and G-4 in the TSD, and since IDEM prefers that the TSD reflect the permit at the time of public notice, no changes will be made.

**Comment No. 28:**

TSD Insignificant Activities

(mm)(1) We request that the references to acreages be deleted and our coal piles be listed as insignificant activities.

**Response to Comment No. 28:**

The coal piles are already listed as insignificant activities. Since IDEM prefers the TSD to reflect the permit at the time of public notice, the TSD will not be revised. The permit itself also lists this same description under A.3(e)(1). Please see the response to comment 3.

**Comment No. 29:**

TSD State Rule Applicability – Boilers, SO<sub>2</sub> Compliance Status (based on AP-42 emission factors, unless conclusive stack test results are available):

The emission factor for #2 Fuel Oil in Appendix A: Potential Emission Calculations, Fuel Oil for Boilers B-1, B-4 and B-5 is incorrect. The value of 142S for SO<sub>2</sub>, shown in the table, corresponds with a value for a SCC of 1-03-005-02/03 for Distillate Oil. This SCC is incorrect as it is for Boilers with an MMBtu/hr rating of less than 100 MMBtu/hr. We believe the correct value to be used in this calculation should have been taken from a SCC of 1-03-005-01 for No.2 Fuel Oil. This SCC is for Boilers with an MMBtu/hr rating greater than 100 MMBtu/hr, which is appropriate for both B-4 and B-5.

The correct emission factor would hence be 157S. Our historic sulfur content for No.2 Fuel Oil is considerably less than 0.49%, therefore we would request that by back calculating the point at which a stack test would not be required would yield a weight percent sulfur of 0.45, which would meet the 0.5 lb/MMBtu limit. Using 0.45% sulfur as our No.2 Fuel Oil sulfur limit the need for performance stack testing for SO<sub>2</sub> for both B-4 and B-5 would not be required.

**Response to Comment No. 29:**

IDEM does not agree that the emission factor discussed above should be changed. The value used in the table of the TSD Appendix A, page 6, is the correct SO<sub>2</sub> emission factor value for both boilers. AP-42 Section 1.3 - Fuel Oil Combustion had updates on April 28, 2000. In table 1.3-1, for boilers that are greater than 100 million BTU/hr, the SO<sub>2</sub> emission factor for both No.2 oil fired and for No.2 oil fired with LNB/FGR, is 142S, and not 157S. This correction can be found online at <http://www.epa.gov/ttn/chief/ap42/ch01/final/c01s03erra.html>. Therefore, the TSD Appendix calculations use the most current values available, and do not need to be changed as a result.

**Comment No. 30:**

TSD State Rule Applicability – Generators

326 IAC 6-1-2 (Particulate Emission Limitations; Fuel Combustion Steam Generators)

The cite is inaccurate. The equipment referred to are diesel-fired generators and not "liquid fuel-fired Steam Generators".

**Response to Comment No. 30:**

Because IDEM wants the TSD to reflect the permit at the time of public notice, no change will be made. With regards to the issue noted in the comment above, please see the response to comment 22.

\*\*\*\*\*

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted).

1. The title of condition B.21, Inspection and Entry, has been revised to include an additional rule cite as follows:

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1][**IC 13-17-3-2**]

Inadvertently, the Table of Contents included a condition title, B.21 Construction Permit Requirement, which did not appear in the permit. This title has been deleted from the Table of Contents and the subsequent titles were renumbered to match their condition numbers as they appear in Section B.

2. Condition C.7, Stack Height, has been revised to clarify which parts of the regulation are not federally enforceable. The last sentence of this condition now reads as:

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.

3. In condition C.9 – Performance Testing, the term “source” is replaced with “Permittee” in the second sentence of part (c) as follows:

An extension may be granted by IDEM, OAQ, if the ~~source~~ **Permittee** submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

4. In condition C.16 – Risk Management Plan, the CFR rule cite in the title line has been shortened to [40 CFR 68-245], also the term “source” has been replaced with “Permittee”, as follows:

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

5. Condition C.17 - Compliance Response Plan - Preparation, Implementation, Records, and Reports has been clarified with respect to what should be included with the notification. This will provide OAQ with an opportunity to assess the situation and determine whether any additional actions are necessary to demonstrate compliance with applicable requirements. Part (b)(3) now reads as:

If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (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 notification shall also include** the status of the applicable compliance monitoring parameter with respect to normal, and the results of the **response** actions taken up to the time of notification.

6. IDEM has revised condition C.19 - Emission Statement. Rule 326 IAC 2-6 has new revisions that are in effect. The condition has been rewritten as a result, and the Permittee is now required to follow the provisions of the new rule. The changes to this condition are as follows:

(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 pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting)~~ **all pollutants listed in 326 IAC 2-6-4(a);**
- (2) ~~Indicate estimated actual emissions of 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

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

(be) 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, on or before the date it is due.

7. In condition C.21 – General Reporting Requirements, the term “source” is replaced with “Permittee” in the first sentence of part (a) as follows:

The ~~source~~ **Permittee** shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent.

8. Because there is a new federal requirement titled National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD], which affects the boilers at Notre Dame, condition C.23 has been deleted in its entirety, and replaced with a new condition which reads as:

~~C.23 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~~

**General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]**

(a) **The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected sources, as designated by 40 CFR 63.7490(a) for boilers B-2, B-3, and B-4 and 40 CFR 63.7506(b) for boilers B-1 and B-5, except when otherwise specified in 40 CFR 63 Subpart DDDDD. The Permittee must comply with these requirements on and after the effective date of 40 CFR 63, Subpart DDDDD.**

(b) **Since the applicable requirements associated with the compliance options for the affected source for the large solid fuel subcategory (boilers B-2, B-3, and B-4) are not included and**

**specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.**

Due to the new rule, along with the above change, three other new conditions have been added to Section C. These conditions are:

**C.24 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]**

- (a) The affected sources are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR 63, Subpart DDDDD), as of the effective date of 40 CFR 63, Subpart DDDDD. Pursuant to this rule, the Permittee must comply with 40 CFR 63, Subpart DDDDD on and after three years after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the Federal Register.
- (b) The following emissions units comprise the affected source for the large solid fuel subcategory: boilers B-2, B-3, and B-4.
- (c) The following emissions units comprise the affected source for the large liquid fuel subcategory: boilers B-1 and B-5.
- (d) The definitions of 40 CFR 63, Subpart DDDDD at 40 CFR 63.7575 are applicable to the affected sources.
- (e) Since the applicable requirements associated with the compliance options for the affected sources for the large solid fuel subcategory (boilers B-2, B-3, and B-4) are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition for the affected sources for the large solid fuel subcategory.

**C.25 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters - Notification Requirements [40 CFR 63, Subpart DDDDD]**

- (a) Pursuant to 40 CFR 63.7545(a) and 40 CFR 63.7506(b), the Permittee shall submit an Initial Notification for boilers B-1 and B-5 containing the information specified in 40 CFR 63.9(b)(2) not later than 120 days after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the Federal Register, as required by 40 CFR 63.7545(b).
- (b) Pursuant to 40 CFR 63.7545, the Permittee shall submit the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4), and (f)(6), and 63.9(b) through (h) that apply to the affected sources for the large solid fuel subcategory (boilers B-2, B-3, and B-4) and chosen compliance methods by the dates specified. These notifications include, but are not limited to, the following:
  - (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) not later than 120 days after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the Federal Register, as required by 40 CFR 63.7545(b).
  - (2) If required to conduct a performance test, a notification of intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required by 40 CFR 63.7(b)(1) and 40 CFR 63.7545(d).
  - (3) If required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530(a), a Notification of Compliance Status containing the information required by 40 CFR 63.9(h)(2)(ii) in accordance with 40 CFR 62.7545(e).
    - (A) For each initial compliance demonstration, the Permittee shall submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR 63.10(d)(2).
    - (B) The Notification of Compliance Status shall contain the items in 40 CFR 63.7545(e)(1) through (9), as applicable.

- (4) **If required to use a continuous monitoring system (CMS), notification of a performance evaluation, if required, as specified in 40 CFR 63.9(g), by the date of submission of the notification of intent to conduct a performance test.**
- (c) **The notifications required by paragraphs (a) and (b) 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**

**The notification requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**

**C.26 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]**

**The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit for the affected sources for the large solid fuel subcategory (boilers B-2, B-3, and B-4).**

- (a) **The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR 63, Subpart DDDDD, a description of the affected sources and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.**
- (b) **The significant permit modification application shall be submitted no later than nine months prior to the compliance date as specified in 40 CFR 63.7495(b).**
- (c) **The significant permit modification 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**

Because of these new conditions, the Table of Contents has also been revised, and the title of this section is now **"MACT Standards [326 IAC 2-7-5(1)]"**, instead of **"Part 2 MACT Application Submittal Requirement"**.

9. There also is a new federal requirement titled National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE) [40 CFR Part 63, Subpart DDDDD], which affects two existing generators (G-3 and G-4) at Notre Dame. Under 40 CFR 63.6590(b)(3), they are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ, because they are existing compression ignition (CI) stationary RICE, as defined by 40 CFR 63.6675. Pursuant to 40 CFR 63.6590(b)(3), there are no applicable requirements from 40 CFR 63, Subpart ZZZZ and 40 CFR 63, Subpart A for existing CI stationary RICE.

Section D.5 (previously, this was Section D.4) of the permit includes three new generators that have already received construction approval, but have not yet been built. These three units, G-8, G-9 and G-10, will be subject to this federal requirement upon the date of their completed construction and start-up. The Permittee is required to submit a significant permit modification application to incorporate the applicable provisions 40 CFR Part 63, Subpart DDDDD, into their operating permit, prior to the operation of these new units.

10. 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 permits. The following has been 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.**

11. On April 15, 2004, the United States Environmental Protection Agency (U.S. EPA) named 23 Indiana counties and one partial county nonattainment for the new 8-hour ozone standard. The designations became effective on June 15, 2004. St. Joseph County has been designated as nonattainment for the 8-hour ozone standard. The following has been added to the County Status line under condition A.1, General Information:

County Status: Attainment for all criteria pollutants  
**Nonattainment for ozone under the 8-hour standard**

Although the TSD itself will not be revised as it is a historical document and the TSD was correct at the time of public notice, the following is being provided to show how the county attainment status has been affected as a result of the 8-hour ozone standard designations. The county attainment status regarding other pollutants remains unchanged. Below is a record of an updated county attainment status table:

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
<b>1-hour Ozone</b>	<b>attainment- maintenance</b>
<b>8-hour Ozone</b>	<b>nonattainment- basic</b>
CO	attainment
Lead	attainment

(1) ~~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. St. Joseph County has been designated as attainment or unclassifiable for ozone.~~

**Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.**

12. The third sentence on the Quarterly Deviation and Compliance Monitoring Report has been changed to read as:

~~Deviations that are required to be reported by an applicable requirement~~ **A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit,** shall be reported according to the schedule stated in the applicable requirement and **does** not need to be included in this report.

\*\*\*\*\*  
**EPA Comment:**

On June 25, 2004, Genevieve Damico of U.S. EPA Region 5 submitted the following comment on the proposed Part 70 permit:

In the TSD in the Federal Applicability Section, I noticed non-applicability determinations for the boilers. Where this non-applicability determination is not in the permit and, therefore, isn't given a permit shield,

this situation has raised a number of concerns through enforcement because it is part of permit documentation. Specifically non-applicability determinations based on construction dates should be removed because the construction dates aren't the only way to trigger the rule applicability. The source could modify and trigger the rule. To make a thorough applicability determination IDEM would need to review all modifications the source has made since it constructed to determine that the rule was not triggered.

**Response to EPA Comment:**

The non-applicability determinations stated in the Technical Support Document (TSD) are intended to explain why requirements that might seem to possibly be applicable are not included in the Part 70 permit. The determinations were based primarily on the information provided in the Part 70 application, with additional information obtained from the IDEM files including documents such as previous air permit applications and inspection reports. If an applicant requests that a non-applicability determination be included in the actual permit to have a permit shield for those provisions, then the OAQ requests more extensive documentation of construction times and any additional work performed on the included emission units.

# Indiana Department of Environmental Management Office of Air Quality

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

### Source Background and Description

**Source Name:** University of Notre Dame du Lac  
**Source Location:** 100 Facilities Building, Notre Dame, Indiana 46556  
**County:** St. Joseph  
**SIC Code:** 8221  
**Operation Permit No.:** T141-7412-00013  
**Permit Reviewer:** Melissa Groch

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from the University of Notre Dame du Lac relating to the operation of a campus power plant and a dry cleaning operation.

### Permitted Emission Units and Pollution Control Equipment

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

- (a) One (1) No.6 fuel oil or natural gas fired boiler constructed in 1961, identified as B-1, with a maximum design capacity of 137 MMBtu per hour heat input, with opacity measured by a certified continuous opacity monitor identified as COM1 when using fuel oil, or fuel oil in combination with natural gas, exhausting to stack S-1.
- (b) Two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each, each equipped with low NOx burners when using natural gas, and cyclones, identified as D-1 and D-2, respectively, for particulate control on each when combusting coal, with opacity measured by a certified continuous opacity monitor identified as COM1 when combusting coal, exhausting at stack S-1.
- (c) One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input, equipped with an electrostatic precipitator, identified as E-1, for particulate control when combusting coal, with opacity measured by a certified continuous opacity monitor identified as COM2 when combusting coal and/or oil, exhausting at stack S-2.
- (d) One (1) No.2 fuel oil or natural gas boiler constructed in 1973, identified as B-5, with a maximum design capacity of 244.5 MMBtu per hour heat input, equipped with low NOx burners for natural gas and fuel oil, exhausting at stack S-3.
- (e) Two (2) diesel-fired generators constructed in 1953, identified as G-3 and G-4, with maximum design capacities of 13.70 MMBtu per hour heat input each, exhausting to stacks S-4 and S-5, respectively.
- (f) Three (3) diesel-fired generators, for which a construction permit was issued in 2003, identified as G-8, G-9, and G-10, each with a maximum rated capacity of 2,593 brake horsepower (6.59 MMBtu per hour heat input each), exhausting to stacks S-6, S-7, and S-8, respectively, with total additional generator capacity of 5.79 MW.
- (g) Dry cleaning operations, identified as DC-1, consisting of two (2) dry-to-dry systems using perchloroethylene, with a maximum amount of 1.0 gallon per day disposed of or sold. The air-perchloroethylene gas-vapor streams are routed through two (2) refrigerated condensers for control.

### Unpermitted Emission Units and Pollution Control Equipment

The two (2) diesel-fired generators constructed in 1953, identified as G-3 and G-4, are not considered unpermitted emission units since they were constructed prior to permitting rules, or considered as grandfathered units.

## Insignificant Activities

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

- (a) Space Heaters, process heaters, or boilers using the following fuels:
  - (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
  - (2) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu per hour.
- (c) Combustion source flame safety purging on startup.
- (d) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (e) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (f) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (g) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (h) Refractory storage not requiring air pollution control equipment.
- (i) Packaging lubricants or greases.
- (j) Filling drums, pails or other packaging containers with lubricating oils, waxes, and greases.
- (k) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (l) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (m) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (n) Cleaners and solvents having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F).
- (o) Cleaners and solvents having a vapor pressure equal to or less than 0.7 kPa; or 0.1 psi measured at 20 degrees C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (p) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (q) Closed loop heating and cooling systems.
- (r) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs.
- (s) Water based adhesives that are less than or equal to 5% by volume of VOCs, excluding HAPs.
- (t) Noncontact cooling tower systems with a forced and induced draft cooling tower system not regulated under a NESHAP.

- (u) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (v) Heat exchanger cleaning and repair.
- (w) Process vessel degassing and cleaning to prepare for internal repairs.
- (x) Paved and unpaved roads and parking lots with public access.
- (y) Covered conveyors for coal or coke conveying of less than or equal to 360 tons per day.
- (z) Underground conveyors.
- (aa) Coal bunker and coal scale exhausts and associated dust collector vents.
- (bb) 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.
- (cc) 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.
- (dd) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (ee) On-site fire and emergency response training approved by the department.
- (ff) Emergency diesel generators not exceeding 1600 horsepower.
- (gg) Emergency natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.
- (hh) Stationary fire pumps.
- (ii) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (jj) Filter or coalescer media changeout.
- (kk) Vents from ash transport systems not operated at positive pressure.
- (ll) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (mm) Other activities or categories not previously identified that have emissions equal to or less than insignificant thresholds:
  - (1) Long and short term coal storage piles with a total acreage of 1.76 and 0.27 acres, respectively;
  - (2) One (1) 1200 ton coal handling facility;
  - (3) One (1) 450 ton coal bunker for boilers B-2 and B-3;
  - (4) One (1) 250 ton coal bunker for boiler B-4;
  - (5) One (1) 3200 cubic feet dry ash storage silo;
  - (6) Underground storage tanks: four at 50,000 gallons for No.2 fuel oil; five at 20,000 gallons for No.6 fuel oil; one at 20,000 gallons for diesel fuel; and one underground diesel fuel storage tank installed in 2003 for generators G-8, G-9, and G-10, identified as UST, with maximum storage capacity of 30,000 gallons;

- (7) Two (2) 300 gallon diesel fuel day tanks for G-3 and G-4; and
- (8) One (1) Maintenance Shop paint booth.

### **Existing Approvals**

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

- (1) Air Pollution Operation Permit U 1 1, for boilers 1, 2, and 3, issued on 12/4/94, expired on 12/4/96;
- (2) Air Pollution Operation Permit U 1 2, for boiler 4, issued on 12/4/94, expired on 12/4/96;
- (3) Air Pollution Operation Permit U 1 3, for boiler 5, issued on 12/4/94, expired on 12/4/96;
- (4) Exemption CP 141-8214-00013, issued on 3/13/97;
- (5) Significant Source Modification and Major Source Modification under PSD 141-15828-00013\*, issued April 30, 2003; and
- (6) First Administrative Amendment 141-17260-00013, issued June 2, 2003.

Permits U 1 1 through U 1 3 were issued by the St. Joseph County Health Department, Air Pollution Control Division.

All conditions from previous approvals were incorporated into this Part 70 permit.

\* The equipment from this permit has not yet been constructed.

### **Enforcement Issue**

There are no IDEM enforcement actions pending.

Previously, the EPA issued a Consent Decree on March 25, 1998, which set specific operating and testing requirements for the boilers at this source. On September 14, 2001, this Consent Decree was terminated, except for paragraph 21, which continues to be effective until expiration pursuant to its terms. Paragraph 21 states that Notre Dame shall retain for five years copies of all reports, test results, or other documents that relate to the Consent Decree.

### **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 December 9, 1996.

A notice of completeness letter was mailed to the source on December 19, 1996.

### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations on pages 1 through 6 of 6.

### **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 Emissions (tons/year)
PM	greater than 100
PM-10	greater than 100
SO <sub>2</sub>	greater than 100
VOC	less than 100
CO	greater than 100
NO <sub>x</sub>	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 Emissions (tons/year)
Hydrogen Chloride (HCL)	greater than 10
Hydrogen Fluoride (HF)	greater than 10
TOTAL	single greater than 10, combination more than 25

\*This table lists only the two highest HAPs. See Appendix A calculations for other HAPs.

- (a) The potential emissions (as defined in 326 IAC 2-1.1-1(16)) of NO<sub>x</sub>, SO<sub>2</sub>, CO, and PM10 are 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 not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

**Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 2002 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
Total PM	94.79
PM-10	36.92
SO <sub>2</sub>	3,361.53
VOC	3.72
CO	86.56
NO <sub>x</sub>	598.96
Lead	0.041

**County Attainment Status**

The source is located in St. Joseph County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (1) 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. St. Joseph County has been designated as attainment or unclassifiable for ozone.
- (2) St. Joseph County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

### **Federal Rule Applicability**

- (a) Boilers B-1, B-2, B-3, and B-4 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.4, Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), due to their construction dates which predate the applicable date of August 17, 1971.
- (b) Boiler B-5 is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.4, Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), due to its maximum capacity being less than 250 MMBtu per hour.
- (c) Boilers B-1, B-2, B-3, B-4, and B-5 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.4, Subpart Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978), due to their maximum capacities being less than 250 MMBtu per hour, and construction dates which predate the applicable date of September 18, 1978.
- (d) Boilers B-1, B-2, B-3, B-4, and B-5 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.4, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units), due to their construction dates which predate the applicable date of June 19, 1984.
- (e) Boiler B-1 is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.4, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), due to the maximum capacity being greater than 100 MMBtu per hour.
- (f) Boilers B-2 and B-3 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.4, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), because they were constructed in 1952. Also, the addition of low NOx burners, which commenced after the applicable date of June 9, 1989, did not increase emissions of any regulated pollutant for this facility, and only affects these boilers when using natural gas.
- (g) Boiler B-4 is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.4, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), due to the maximum capacity being greater than 100 MMBtu per hour.
- (h) Boiler B-5 is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.4, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), due to the maximum capacity being greater than 100 MMBtu per hour.
- (i) The underground diesel fuel tank UST for generators G-8, G-9, and G-10, is subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60, Subpart Kb (Standards of Performance for Storage Vessels for Volatile Organic Liquids), due to its construction being after July 23, 1984, and because it stores a volatile organic liquid (VOL).

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, the provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to one (1) underground diesel fuel storage tank, identified as UST, described in this section except when otherwise specified in 40 CFR 60 Subpart Kb.

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, because the tank has a capacity of more than 75 cubic meters and less than 151 cubic meters, and will store VOL with a maximum true vapor pressure less than 15 kilopascals, it shall comply with New Source Performance Standards (NSPS), Standards of Performance for Volatile Organic Liquid Storage Vessels (326 IAC 12, 40 CFR Part 60.116b, Subpart Kb) where in 40 CFR §60.116b, paragraphs (a) and (b) require the Permittee to maintain accessible records showing the dimensions of each storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept for the life of the storage tank.

- (j) The dry cleaning operations, DC-1, are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20, 40 CFR 63.320, Subpart M (National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities), because it uses perchloroethylene, and it was constructed in 1991.

The dry cleaning facility, identified as DC-1, is subject to 40 CFR 63, Subpart M, which is incorporated by reference as 326 IAC 20-7-1.

- (1) The Permittee shall comply with the following conditions:

- (A) Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device as determined according to the procedures listed in 40 CFR 63.325;
- (B) Close the door of each dry cleaning machine immediately after transferring articles to or from the machine, and keep the door closed at all other times;
- (C) Operate and maintain each dry cleaning system according to the manufacturer's specifications and recommendations; and
- (D) Store all perchloroethylene and wastes that contain perchloroethylene in solvent tanks or solvent containers with no perceptible leaks.

- (2) Each refrigerated condenser:

- (A) Shall be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating; and
- (B) Shall be operated with a diverter valve, if air can pass through the refrigerated condenser when the machine door is open.

- (k) 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 29, 2002. The affected source categories for this source are Industrial, Commercial, & Institutional Boilers and Process Heaters (Subpart DDDDD) and Reciprocating Internal Combustion Engines (RICE)(Subpart ZZZZ). The Part 2 application deadline for these two categories is April 28, 2004.

- (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 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.
- (l) This source is not subject to the requirements of the Acid Rain Program (40 CFR 72), because the source does not produce electricity for sale.

#### **State Rule Applicability - Entire Source**

##### **326 IAC 1-6-3 (Preventive Maintenance Plan)**

The source has submitted a Preventive Maintenance Plan (PMP) on December 9, 1996. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

##### **326 IAC 1-5-2 (Emergency Reduction Plans)**

The source has submitted an Emergency Reduction Plan (ERP) on December 9, 1996. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

##### **326 IAC 2-2 (Prevention of Significant Deterioration)**

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), this source is a major source.

##### **326 IAC 2-6 (Emission Reporting)**

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of NO<sub>x</sub>. 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 (Visible Emissions Limitations)**

The source is located in the area north of Kern Road and east of Pine Road. Therefore, pursuant to 326 IAC 5-1-2(Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), 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 by 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.

### 326 IAC 10-4 (Nitrogen Oxides Budget Trading Program)

The units at this source 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 a generator that has a nameplate capacity greater than twenty-five (25) megawatts and produces electricity for sale under a firm contract to the electric grid. The units are not a large affected units because they do not have a maximum design heat inputs greater than two hundred fifty million (250,000,000) Btus per hour each.

### State Rule Applicability -Boilers

#### 326 IAC 6-1-18 (Saint Joseph County particulate matter emission limitations)

Pursuant to 326 IAC 6-1-18, the particulate matter emission limitation;

from each of the five boilers (B-1 through B-5) shall have a collective annual limit of 118.7 tons of PM per year;

for boiler B-1, specified in this rule, shall in no case exceed 0.087 pounds of particulate matter per million British thermal units heat input;

for boilers B-2 and B-3, specified in this rule, shall in no case exceed 0.28 pounds of particulate matter each per million British thermal units heat input;

for boiler B-4, specified in this rule, shall in no case exceed 0.17 pounds of particulate matter per million British thermal units heat input; and

for boiler B-5, specified in this rule, shall in no case exceed 0.02 pounds of particulate matter per million British thermal units heat input.

#### PM Compliance Status (based on AP-42 emission factors, unless conclusive stack test results are available):

Based on calculations, the potential PM emission rate for boiler B-1 when combusting No.6 fuel oil is 0.09 lb/MMBtu (12.3 lb/hr ÷ 137 MMBtu/hr). This indicates noncompliance with the PM limit of 0.087 lb/MMBtu. As a result, testing will be required by this permit if No.6 fuel oil is combusted in boiler B-1.

Since the PM potential emission rate of 0.002 lb/MMBtu (0.25 lb/hr ÷ 137 MMBtu/hr) from boiler B-1, when combusting natural gas, is less than the PM limit of 0.087 lb/MMBtu, this boiler is in compliance with 326 IAC 6-1-18 when combusting natural gas.

Stack testing conducted on November 15, 2000, for boiler B-2 shows an emission rate of 0.11 lb/MMBtu of PM, when combusting coal, which is less than the PM limit of 0.28 lb/MMBtu. This result shows that boiler B-2 is in compliance with 326 IAC 6-1-18 when combusting coal.

Stack testing conducted on November 17, 2000, for boiler B-3 shows an emission rate of 0.15 lb/MMBtu of PM, when combusting coal, which is less than the PM limit of 0.28 lb/MMBtu. This result shows that boiler B-3 is in compliance with 326 IAC 6-1-18 when combusting coal.

Since the PM potential emission rate of 0.002 lb/MMBtu (0.18 lb/hr ÷ 96 MMBtu/hr) each from boilers B-2 and B-3, when combusting natural gas, is less than the PM limit of 0.28 lb/MMBtu each, they are in compliance with 326 IAC 6-1-18 when combusting natural gas.

Stack testing conducted on October 5, 2000, for boiler B-4 shows an emission rate of 0.088 lb/MMBtu of PM, when combusting coal, which is less than the PM limit of 0.17 lb/MMBtu. This result shows that boiler B-4 is in compliance with 326 IAC 6-1-18 when combusting coal.

Since the PM potential emission rate of 0.014 lb/MMBtu (3.33 lb/hr ÷ 234 MMBtu/hr) from boiler B-4, when combusting No.2 fuel oil, is less than the PM limit of 0.17 lb/MMBtu, this boiler is in compliance with 326 IAC 6-1-18 when combusting No.2 fuel oil.

Since the PM potential emission rate of 0.002 lb/MMBtu (0.43 lb/hr ÷ 234 MMBtu/hr) from boiler B-4, when combusting natural gas, is less than the PM limit of 0.17 lb/MMBtu, this boiler is in compliance with 326 IAC

6-1-18 when combusting natural gas.

Since the PM potential emission rate of 0.014 lb/MMBtu ( $3.5 \text{ lb/hr} \div 244.5 \text{ MMBtu/hr}$ ) from boiler B-5, when combusting No.2 fuel oil, is less than the PM limit of 0.02 lb/MMBtu, this boiler is in compliance with 326 IAC 6-1-18 when combusting No.2 fuel oil.

Since the PM potential emission rate of 0.002 lb/MMBtu ( $0.46 \text{ lb/hr} \div 244.5 \text{ MMBtu/hr}$ ) from boiler B-5, when combusting natural gas, is less than the PM limit of 0.02 lb/MMBtu, this boiler is in compliance with 326 IAC 6-1-18 when combusting natural gas.

#### 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from boilers B-2, B-3, and B-4 shall not exceed 6.0 pounds per million British thermal units (lb/MMBtu) of heat input when combust coal, or coal in combination with another permitted fuel.

#### SO<sub>2</sub> Compliance Status (based on AP-42 emission factors, unless conclusive stack test results are available):

Since the SO<sub>2</sub> potential emission rate of 6.0 lb/MMBtu ( $580.4 \text{ lb/hr} \div 96 \text{ MMBtu/hr}$ ) each from boilers B-2 and B-3, when combusting coal, is equal to the SO<sub>2</sub> limit of 6.0 lb/MMBtu each, these boilers are in compliance with 326 IAC 7-1.1-2 when combusting coal.

Stack testing conducted on October 5, 2000, for boiler B-4 shows an emission rate of 4.56 lb/MMBtu of SO<sub>2</sub>, when combusting coal, which is less than the SO<sub>2</sub> limit of 6.0 lb/MMBtu. This result shows that boiler B-4 is in compliance with 326 IAC 7-1.1-2 when combusting coal.

#### 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from boilers B-1, B-4, and B-5 shall not exceed the following limits when burning the following:

Boiler B-1: residual (No.6) oil combustion: 1.6 pounds per million British thermal units (lb/MMBtu) of heat input.

Boilers B-4 and B-5: distillate (No.2) fuel combustion: 0.5 pounds per million British thermal units (lb/MMBtu) of heat input.

#### SO<sub>2</sub> Compliance Status (based on AP-42 emission factors, unless conclusive stack test results are available):

Since the SO<sub>2</sub> potential emission rate of 1.16 lb/MMBtu ( $159 \text{ lb/hr} \div 137 \text{ MMBtu/hr}$ ) from boiler B-1, when combusting No.6 fuel oil, is less than the SO<sub>2</sub> limit of 1.6 lb/MMBtu, this boiler is in compliance with 326 IAC 7-1.1-2 when combusting No.6 fuel oil.

Since the SO<sub>2</sub> potential emission rate of 0.5 lb/MMBtu ( $116.3 \text{ lb/hr} \div 234 \text{ MMBtu/hr}$ ) from boiler B-4, when combusting No.2 fuel oil, is equal to the SO<sub>2</sub> limit of 0.5 lb/MMBtu, this boiler is in compliance with 326 IAC 7-1.1-2 when combusting No.2 fuel oil.

Since the SO<sub>2</sub> potential emission rate of 0.5 lb/MMBtu ( $121.5 \text{ lb/hr} \div 244.5 \text{ MMBtu/hr}$ ) from boiler B-5, when combusting No.2 fuel oil, is equal to the SO<sub>2</sub> limit of 0.5 lb/MMBtu, this boiler is in compliance with 326 IAC 7-1.1-2 when combusting No.2 fuel oil.

### **State Rule Applicability - Generators**

#### 326 IAC 2-2-3 (Best Available Control Technology)

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, the (3) diesel-fired generators, G-8, G-9, and G-10, will be located at a non-profit educational institution. Therefore, pursuant to 326 IAC 2-2-2(d), this modification is exempt from 326 IAC 2-2-3 (PSD BACT). The applicant submitted copies of letters from the Internal Revenue Service confirming the not-for-profit status for the University's operation per Sections 509 and 501 of the IRS code.

#### 326 IAC 2-2-5 and 2-2-6 (Air quality impacts and Increment consumption)

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, the addition of

generators G-8, G-9, and G-10, does not cause the source to violate the NAAQs and does not exceed the incremental consumption above eighty percent (80%) of the PSD increment for any affected pollutant. To maintain this status, pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), the Permittee shall limit NOx emissions using retarded ignition timing to less than 37.44 pounds per hour and SO<sub>2</sub> emissions to less than 6.7 pounds per hour from each diesel-fired generator.

**326 IAC 6-1-2 (Particulate Emission Limitations; Fuel Combustion Steam Generators)**

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, for generators G-8, G-9, and G-10, and this permit for G-3 and G-4, and 326 IAC 6-1-2 (a), particulate matter emissions from the each of the diesel fired generators shall not exceed 0.03 grain per dry standard cubic foot.

The Permittee has not yet submitted the required affidavit of construction regarding the construction of the new generators listed in PSD Significant Source Modification 141-15828-00013.

**326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)**

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, and 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) for generators G-8, G-9, and G-10, and this permit for generators G-3 and G-4, SO<sub>2</sub> emissions from the diesel-fired generators shall not exceed five tenths (0.5) pounds per MMBtu heat input.

Pursuant to 326 IAC 7-2-1(c)(3) compliance shall be demonstrated on a calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per million Btus upon request.

**State Rule Applicability - Underground diesel fuel storage tank, UST**

**326 IAC 12-1(New Source Performance Standards)**

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003;

- (a) The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to one (1) underground diesel fuel storage tank, identified as UST, except when otherwise specified in 40 CFR 60 Subpart Kb.
- (b) The one underground diesel storage tank, identified as UST, shall comply with 40 CFR Part 60.116b (Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels). 40 CFR §60.116b, paragraphs (a) and (b) require the Permittee to maintain accessible records showing the dimensions of each storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept for the life of the storage tank.

**State Rule Applicability - Degreasing Operation**

**326 IAC 8-3-2 (Cold Cleaner Operations)**

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

**326 IAC 8-3-5 (Cold Cleaner Degreaser Operation)**

Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold

cleaner degreaser facility shall ensure that the following control equipment 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°C) (one hundred degrees Fahrenheit (100°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°C) (one hundred degrees Fahrenheit (100°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°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°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.

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.

## Testing Requirements

Within 36 months after issuance of this permit, compliance with the PM limitations for each of the boilers (B-1 through B-5) shall be determined by performance stack tests conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every permit term from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

Stack testing for boiler B-1 shall be performed while combusting No.6 fuel oil, since calculations indicate this boiler may be out of compliance with its PM limit while combusting No.6 fuel oil.

Sulfur dioxide emission limitations are tested only if the Permittee chooses. Measurement of the sulfur content of fuel oil and/or coal is sufficient in determining compliance because the content may vary among each batch of fuel oil or coal. Testing emissions as each new fuel source comes in is expensive and illogical because the sulfur content is variable and therefore the easiest means of measuring emissions.

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, within 60 days of achieving maximum production rate, but no later than 180 days after initial startup, the Permittee shall perform NO<sub>x</sub> and PM-10 tests for generators G-8, G-9, and G-10, utilizing methods approved by the Commissioner to show compliance with the NO<sub>x</sub> and PM-10 limits. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the emissions units are in compliance.

## 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) The five boilers (B-1 through B-5) have applicable compliance monitoring conditions as specified below:
  - (1) For opacity readings, while boilers B-1, B-2, and B-3 are operating and combusting fuel other than natural gas:
    - (A) In the event of opacity exceeding twenty-five percent (25%) 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-five percent (25%). Examples of expected response steps may include, but are not limited to, boiler loads being reduced.
    - (B) Opacity readings in excess of twenty-five percent (25%) but not exceeding the opacity limits for boiler B-1, B-2, and B-3, when combusting fuel oil (B-1) or coal (B-2, B-3), 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. The Permittee shall calibrate, maintain, and operate the continuous monitoring system (COM1) for the measurement of the opacity of emissions discharged into the atmosphere from the boilers, B-1 when combusting fuel oil, and from B-2 and B-3 when combusting coal. The continuous monitoring system must also meet the requirements of 326 IAC 3-5 (Continuous Monitoring).

And, while boiler B-4 is operating and combusting coal and/or natural gas;

- (C) In the event of opacity exceeding fifteen percent (15%) 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 fifteen percent (15%). Examples of expected response steps include, but are not limited to, boiler loads being reduced, adjustment of flue gas conditioning rate, and SIR units being returned to service.

- (D) Opacity readings in excess of fifteen percent (15%) but not exceeding the opacity limit for boiler B-4 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.
- (2) For boilers B-2 and B-3 cyclones:
    - (A) The ability of the cyclones, D-1 and D-2, to control particulate emissions shall be monitored at least once per shift, when their respective boilers, B-2 and B-3, are in operation and combusting coal, by measuring and recording the total static pressure drop across the units.
    - (B) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the static pressure drop is outside of the normal operating range for the corresponding boiler steam load. A pressure drop reading that is outside 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.
  - (3) For the ESP associated with boiler B-4:
    - (A) The ability of the ESP to control particulate emissions shall be monitored once per shift, when boiler B-4 is in operation and combusting coal, by measuring and recording the number of SIR Units in service, their primary and secondary voltages, and their currents.
    - (B) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of SIR Units in service falls below 50 percent (50%). SIR Unit failure resulting in less than 50 percent (50%) 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.
  - (4) Visible emission (VE) notations of the boiler B-5 stack exhaust, S-3, shall be performed once per shift during normal daylight operations while combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal. 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. "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. 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 each boiler.

These monitoring requirements are necessary because the continuous opacity monitor must operate properly to ensure compliance of boilers B-1, B-2, B-3, B-4, and B-5 with 326 IAC 6-1-18 (Saint Joseph County particulate matter emission limitations) and 326 IAC 2-7 (Part 70).

- (b) The generators (G-3, G-4, G-8, G-9, G-10) have the following compliance monitoring requirement as specified below:

Visible emission (VE) notations of the generators stack exhausts (S-4, S-5, S-6, S-7, S-8), shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "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. 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. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

This monitoring requirement is necessary because the generators (G-3, G-4, G-8, G-9, G-10) must operate properly to ensure compliance with 326 IAC 6-1-2 (Particulate emission limitations: fuel combustion steam generators) and 326 IAC 2-7 (Part 70).

- (c) The dry cleaning operations, DC-1, have applicable compliance monitoring conditions as specified below:

Pursuant to the Perchloroethylene Dry Cleaning Facilities NESHAP Monitoring [326 IAC 20-7-1][40 CFR 63, Subpart M] [40 CFR 63.322 and 63.323], the Permittee shall minimize leaks of perchloroethylene by the following steps:

- (1) Inspect the following components weekly for perceptible leaks while the dry cleaning system is operating:
  - (A) Hose and pipe connections, fittings, couplings, and valves;
  - (B) Door gaskets and seatings;
  - (C) Filter gaskets and seatings;
  - (D) Pumps;
  - (E) Solvent tanks and containers;
  - (F) Water separators;
  - (G) Muck cookers;
  - (H) Stills;
  - (I) Exhaust dampers;
  - (J) Diverter valves; and
  - (K) Cartridge filter housings.
- (2) Repair all perceptible leaks detected during the inspections required in (1) within 24 hours. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within two (2) working days of detecting such a leak. Such repair parts shall be installed within five (5) working days after receipt.

The Permittee shall measure the temperature of the air-perchloroethylene gas-vapor stream on the outlet side of each refrigerated condenser weekly during the last cool down cycle prior to opening the machine door, with a temperature sensor to determine if it is equal to or less than 7.2 °C (45 °F). The temperature sensor shall be used according to the manufacturer's instruction and shall be designed to measure a temperature of 7.2 °C (45 °F) to an accuracy of ±1.1 °C (±2 °F).

Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary to ensure compliance of the dry cleaning operations with 326 IAC 12, (40 CFR 63.320, Subpart M).

## Conclusion

The operation of this campus power plant shall be subject to the conditions of the attached proposed Part 70 Permit No. T141-7412-00013.

**Appendix A: Potential Emissions Calculations  
Natural Gas Combustion for Boilers B-1 through B-5**

**Company Name: University of Notre Dame du Lac  
Address City IN Zip: 100 Facilities Building, Notre Dame, Indiana 46556  
CP: T141-7412  
Plt ID: 00013  
Reviewer: Melissa Groch**

**MM BTU/HR <100**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Construction Date
96.0 each, B-2 and B-3	840.96	1952

	Pollutant	PM*	PM10	SO2	NOx	Low NOx	VOC	CO
Emission Factor in lb/MMCF		1.9	7.6	0.6	100.0	50	5.5	84.0
Potential Emission in tons per year:	each	0.8	3.2	0.25	n/a	21.0	2.3	35.3
	Total:	1.6	6.4	0.5	n/a	42.0	4.6	70.6

**MM BTU/HR >100**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Construction Date
137.0 B-1	1200.12	1961
234.0 B-4	2049.84	1966
244.5 B-5	2141.82	1973

	Pollutant	PM*	PM10	SO2	NOx	Low NOx	VOC	CO
Emission Factor in lb/MMCF		1.9	7.6	0.6	280.0	140	5.5	84.0
Potential Emission in tons per year:	B-1	1.1	4.6	0.4	168.0	n/a	3.3	50.4
	B-4	1.9	7.8	0.6	287.0	n/a	5.6	86.1
	B-5	2.0	8.1	0.6	n/a	149.9	5.9	90.0
	Total:	5.1	20.5	1.6	455.0	149.9	14.8	226.5

**Methodology:**

MMBtu = 1,000,000 Btu                      MMCF = 1,000,000 Cubic Feet of Gas  
 Emission Factors for NOx: Uncontrolled = 280, Low NOx Burner = 140, Flue gas recirculation = 100  
 Emission Factors for CO: Uncontrolled = 84, Low NOx Burner = 84, Flue gas recirculation = 84  
 \*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.  
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu  
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1(Supplement D 3/98), 1.4-2, and 1.4-3  
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**Appendix A: Potential Emissions Calculations  
Natural Gas Combustion for Boilers B-1 through B-5**

**HAPs Emissions from Natural Gas**

**Company Name: University of Notre Dame du Lac  
Address City IN Zip: 100 Facilities Building, Notre Dame, Indiana 46556  
CP: T141-7412  
Plt ID: 00013  
Reviewer: Melissa Groch**

**MMBtu/hr <100 and MMBtu/hr > 100**

AP-42 Table 1.4-3

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emissions in tons/yr					
combined B-1	0.00126	0.00072	0.04500	1.08011	0.00204
B2 and B-3	0.00177	0.00101	0.06307	1.51373	0.00286
B-4	0.00215	0.00123	0.07687	1.84486	0.00348
B-5	0.00225	0.00129	0.08032	1.92764	0.00364
Total:	0.00743	0.00424	0.26526	6.36633	0.01203

AP-42 Tables 1.4-4, and for lead 1.4-2

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emissions in tons/yr					
combined B-1	0.00030	0.00066	0.00084	0.00023	0.00126
B2 and B-3	0.00042	0.00093	0.00118	0.00032	0.00177
B-4	0.00051	0.00113	0.00143	0.00039	0.00215
B-5	0.00054	0.00118	0.00150	0.00041	0.00225
Total:	0.00177	0.00389	0.00495	0.00134	0.00743

Methodology is the same as page 1 of 6.

The five highest organic and metal HAPs emission factors are provided above.  
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

7412calc.wk4

**Appendix A: Potential Emissions Calculations  
Coal and HAPs from Coal for Boilers B-2, B-3, and B-4**

**Company Name: University of Notre Dame du Lac**  
**Address, City IN Zip: 100 Facilities Building, Notre Dame, Indiana 46556**  
**Tilte V: T141-7412**  
**Plt ID: 00013**  
**Reviewer: Melissa Groch**

**COAL**

S = Weight % Sulfur =	3.5
A = Weight % ash =	10

Heat Input Capacity MMBtu/hr	Potential Throughput tons/yr	Construction Date	#SCC
96	each, B-2 and B-3	1952	1-03-002-09
234	B-4	1966	1-03-002-23

Emission Factor		Pollutant (lbs/ton)					CO
		PM	PM-10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	
	B-2 and B-3	66	13.2	133.0	11	0.05	5
	B-4	20	2.6	122.5	17	0.11	0.5
Potential Emissions in tons per year:							
	combined B-2 and B-3	2522.88	504.58	5083.99	420.48	1.91	191.13
	B-4	931.75	121.13	5706.94	791.98	5.12	23.29
	<b>Total (TPY)</b>	3454.63	625.70	10790.93	1212.46	7.04	214.42

**HAPs from Coal**

Emission Factor		Pollutant (lbs/ton)					
		Hydrogen Chloride	Hydrogen Fluoride	Acetaldehyde	Benzyl Chloride	Cyanide	Isophorone
		1.2	0.15	5.7E-04	7.0E-04	2.5E-03	5.8E-04
Potential Emissions in tons per year:							
	B-2 and B-3	45.87	5.73	0.02	0.03	0.10	0.02
	B-4	55.90	6.99	0.03	0.03	0.12	0.03
	<b>Total (TPY)</b>	101.78	12.72	0.05	0.06	0.21	0.05

**Methodology:**

The coal fired boilers B-2 and B-3 share the same stack, S1

1 lb bituminous coal has a BTU rating of 14,000

Emission Factors are from AP 42 (update 9/98), Tables 1.1-3, 1.1-4, 1.1-19 (SCC 1-03-002-09,1-03-002-23)

HAPs emission factors are from AP42 (update 9/98), Tables 1.1-15 and 1.1-14 (see this t

Potential Throughput (tons/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1,000,000 btu/MMbtu

Emission (tons/yr) = Throughput (tons/ yr) x Emission Factor (lb/ton)/2,000 lb/ton

able for other haps)

**Appendix A: Potential Emissions Calculations  
Fuel Oil for Boilers B-1, B-4, and B-5**

**Company Name: University of Notre Dame du Lac**  
**Address, City IN Zip: 100 Facilities Building, Notre Dame, Indiana 46556**  
**Title V: T141-7412-00013**  
**Reviewer: Melissa Groch**

**#6 Fuel Oil**

Heat Input Capacity MMBtu/hr		Potential Throughput kgals/year	Construction Date	SCC	S = Weight % Sulfur
137.00	B-1	8065.32	1961	1-03-004-01	1.06

		Pollutant				
Emission Factor in lb/kgal		PM*	SO2	NOx	VOC	CO
		12.96 [9.19(s) + 3.22]	166.42 (157S)	47.0	0.28	5.0
Potential Emissions in tons per year:	B-1	52.3	671.1	189.5	1.1	20.2

\* PM emission factor is filterable PM only. Condensable PM emission factor is 1.5 lb/kgal.

**#2 Fuel Oil**

Heat Input Capacity MMBtu/hr		Potential Throughput kgals/year	Construction Date	SCC	S = Weight % Sulfur
234	B-4	14641.71	1966	1-03-005-01	0.49
244.5	B-5	15298.71	1973	1-03-005-01	

		Pollutant				
Emission Factor in lb/kgal		PM*	SO2	NOx	VOC	CO
		2.0	69.6 (142S)	24.0	0.200	5.0
Potential Emissions in tons per year:	B-4	14.6	509.4	175.7	1.5	36.6
	B-5	15.3	532.2	183.6	1.5	38.2

\*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

**Methodology**

1 gallon of No.6 Fuel oil has a heating value of 148,800 Btu  
 1 gallon of No.2 Fuel Oil has a heating value of 140,000 Btu

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon  
 x 1 gal per heating value (MMBtu)

Emission Factors are from AP 42, Tables 1.3-2 and 1.3-4 (Supplement E 9/98), SCC 1-03-004-01 and 1-03-005-01

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

**Appendix A: Potential Emissions Calculations  
Fuel Oil for Boilers B-1, B-4, and B-5**

**HAPs Emissions from Fuel Oil**

**Company Name: University of Notre Dame du Lac  
Address, City IN Zip: 100 Facilities Building, Notre Dame, Indiana 46556  
Title V: T141-7412-00013  
Reviewer: Melissa Groch**

Heat Input Capacity MMBtu/hr	Stack	Potential Throughput kgals/ year		Construction Date	SCC	
		No.2	No.6			
137	B-1	S-1	n/a	8065.32	1961	1-03-004-01
234	B-4	S-2	14641.71	n/a	1966	1-03-005-01
244.5	B-5	S-3	15983.73	n/a	1973	1-03-005-01

**B-1 No.6 fuel oil (AP-42 Table 1.3-9) HAPs - Organics**

Emission Factor in lb/kgal	Benzene	Formaldehyde	Naphthalene	Toluene	Xylene
	2.14E-04	3.30E-02	1.13E-03	6.20E-03	1.09E-04
Potential Emissions in tons per year	B-1: 0.00086	0.13308	0.00456	0.02500	0.00044

**B-1 No.6 fuel oil (AP-42 Table 1.3-11) HAPs - Metals**

Emission Factor in lb/kgal	Antimony	Cobalt	Lead	Manganese	Nickel
	5.25E-03	6.02E-03	1.51E-03	3.00E-03	8.45E-02
Potential Emissions in tons per year	B-1: 0.02117	0.02428	0.00609	0.01210	0.34076

**B-4 and B-5 No.2 fuel oil (AP-42 Table 1.3-10) HAPs - Metals**

Emission Factor in lb/mmBtu	Arsenic	Beryllium	Cadmium	Chromium	Lead
	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emissions in tons per year	B-4: 0.25652	0.19239	0.19239	0.19239	0.57718
	B-5: 0.28003	0.21003	0.21003	0.21003	0.63008
	Total: 0.53656	0.40242	0.40242	0.40242	1.20726

**B-4 and B-5 No.2 fuel oil HAPs - Metals (continued)**

Emission Factor in lb/mmBtu	Mercury	Manganese	Nickel	Selenium
	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emissions in tons per year	B-4: 0.19239	0.38478	0.19239	0.96196
	B-5: 0.21003	0.42005	0.21003	1.05013
	Total: 0.40242	0.80484	0.40242	2.01209

Methodology is the same as page 1.

For No.6 fuel oil, the five highest organic and metal HAPs emission factors are provided. Additional HAPs emission factors are available in AP-42, Chapter 1.3.

For No.2 fuel oil, no data was available in AP-42 for organic HAPs.

. above .

**Generators G-3 and G-4  
Turbine (>600 HP)**

**Company Name: University of Notre Dame du Lac  
Address, City IN Zip: 100 Facilities Building, Notre Dame, Indiana 46556  
Title V: T141-7412-00013  
Reviewer: Melissa Groch**

**A. Emissions calculated based on heat input capacity (MMBtu/hr)**

Combined Heat Input Capacity                      Constructio                      S=  = WEIGHT % SULFUR  
MM Btu/hr    Date  
 G-3 and G-4    1953

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.1	0.0573	0.4 (1.01S)	3.2 **see below	0.1	0.85
Potential Emission in tons	12.0	6.9	48.5	384.0	10.8	102.0

\*\*NOx emissions: uncontrolled = 3.2 lb/MMBtu

**B. Emissions calculated based on output rating (hp)**

Heat Input Capacity                      Potential Throughput                      S=  = WEIGHT % SULFUR  
Horsepower (hp)    hp-hr/yr  
 G-3 and G-4   

Emission Factor in lb/hp-hr	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.0007	not provided	0.0032 (.00809S)	0.024 **see below	0.00071	0.00550
Potential Emission in tons	9.8	0.0	45.4	336.4	9.9	77.1

\*\*NOx emission factor: uncontrolled = 0.024 lb/hp-hr

Note that the PM10 emission factor in lb/hp-hr is not provided in the Supplement B update of

**Methodology:**

Potential Throughput (hp-hr/yr) = hp \* 8760 hr/yr

1 gallon of diesel fuel is rated at 137,000 Btu

Emission Factors are from AP 42 (Supplement B 10/96) Table 3.4-1 and Table 3.4-2

average conversion factor: 1 hp-hr = 7000 Btu, AP42 (Supplement B 10/96), Table 3.3-1, Footr

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] \* 8760 hr/yr

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000

\*No information was given regarding which method was used to determine the PM emission factor or whether condensable PM is included. The PM10 emission factor is filterable and condensable PM10 combined.

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

Calculations for generators G-8 through G-10 can be found in permit 141-15828-00013.

AP-42.

note a.  
/ (2,000 lb/ton )  
0 lb/ton )