



Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
(800) 451-6027  
www.IN.gov/idem

TO: Interested Parties / Applicant  
DATE: July 26, 2005  
RE: Indiana Veteran's Home / 157-19136-00009  
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 according to IC 13-15-6-3, 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 and IC 13-15-6-1 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, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

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

Enclosures  
FNPER.dot 1/10/05



Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
(800) 451-6027  
www.in.gov/idem

**FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP)  
OFFICE OF AIR QUALITY**

**Indiana Veterans' Home  
3851 North River Road  
West Lafayette, Indiana 47906**

(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 provision of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; and denial of a permit renewal application. 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 2-8 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.

Operation Permit No.: F 157-19136-00009	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 26, 2005 Expiration Date: July 26, 2010

## TABLE OF CONTENTS

<b>SECTION A</b>	<b>SOURCE SUMMARY</b> .....	5
A.1	General Information [326 IAC 2-8-3(b)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]	
A.3	Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(l)]	
A.4	FESOP Applicability [326 IAC 2-8-2]	
A.5	Prior Permits Superseded [326 IAC 2-1.1-9.5]	
<b>SECTION B</b>	<b>GENERAL CONDITIONS</b> .....	7
B.1	Permit No Defense [IC 13]	
B.2	Definitions [326 IAC 2-8-1]	
B.3	Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]	
B.4	Enforceability [326 IAC 2-8-6]	
B.5	Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]	
B.6	Severability [326 IAC 2-8-4(4)]	
B.7	Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]	
B.8	Duty to Provide Information [326 IAC 2-8-4(5)(E)]	
B.9	Compliance Order Issuance [326 IAC 2-8-5(b)]	
B.10	Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]	
B.11	Annual Compliance Certification [326 IAC 2-8-5(a)(1)]	
B.12	Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]	
B.13	Emergency Provisions [326 IAC 2-8-12]	
B.14	Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]	
B.15	Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]	
B.16	Permit Renewal [326 IAC 2-8-3(h)]	
B.17	Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]	
B.18	Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]	
B.19	Permit Revision Requirement [326 IAC 2-8-11.1]	
B.20	Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC13-14-2-2] [IC 13-17-3-2] [IC13-30-3-1]	
B.21	Transfer of Ownership or Operational Control [326 IAC 2-8-10] [IC 13-17-3-2]	
B.22	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [326 IAC 2-1.1-7]	
B.23	Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314] [326 IAC 1-1-6]	
<b>SECTION C</b>	<b>SOURCE OPERATION CONDITIONS</b> .....	16
	<b>Emission Limitations and Standards [326 IAC 2-8-4(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	Overall Source Limit [326 IAC 2-8]	
C.3	Opacity [326 IAC 5-1]	
C.4	Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.5	Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]	
C.6	Fugitive Dust Emissions [326 IAC 6-4]	
C.7	Operation of Equipment [326 IAC 2-8-5(a)(4)]	
C.8	Stack Height [326 IAC 1-7]	
C.9	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61 Subpart M]	
	<b>Testing Requirements [326 IAC 2-8-4(3)]</b>	
C.10	Performance Testing [326 IAC 3-6]	
	<b>Compliance Requirements [326 IAC 2-1.1-11]</b>	
C.11	Compliance Requirements [326 IAC 2-1.1-11]	

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

- C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
- C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

**Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]**

- C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]
- C.15 Compliance Response Plan -Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]
- C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

- C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]
- C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

**Stratospheric Ozone Protection**

- C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

**SECTION D.1 FACILITY OPERATION CONDITIONS: Three (3) boilers..... 23**

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

- D.1.1 Particulate [326 IAC 6-2-4] [326 IAC 6-2-3]
- D.1.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1] [326 IAC 7-2-1] [326 IAC 12-1] [326 IAC 2-8-4]
- D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

**Compliance Determination Requirements**

- D.1.4 Sulfur Dioxide Emissions and Sulfur Content]

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

- D.1.5 Visible Emissions Notations

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

- D.1.6 Record Keeping Requirements
- D.1.7 Reporting Requirements

**SECTION D.2 FACILITY OPERATION CONDITIONS: Waste incinerator ..... 28**

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

- D.2.1 Incinerator [326 IAC 4-2-2]
- D.2.2 Carbon Monoxide [326 IAC 9-1-2]
- D.2.3 HAPs [326 IAC 2-8-4] [326 IAC 11-6]

**Compliance Determination Requirements**

- D.2.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

- D.2.5 Record Keeping Requirements
- D.2.6 Reporting Requirements

<b>SECTION D.3 FACILITY OPERATION CONDITIONS: Insignificant Activities</b> .....	31
<b>Certification Form</b> .....	32
<b>Emergency Occurrence Form</b> .....	33
<b>Natural Gas Fired Boiler Certification</b> .....	35
<b>Quarterly Report Forms</b> .....	36
<b>Quarterly Deviation and Compliance Monitoring Report Form</b> .....	38

## 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 2-8-3(b)]

---

The Permittee owns and operates a stationary health care and residential facility.

Responsible Official:	Superintendent
Source Address:	3851 North River Road, West Lafayette, Indiana 47906
Mailing Address:	3851 North River Road, West Lafayette, Indiana 47906
General Source Phone Number:	(765) 463-1502
SIC Code:	8060
County Location:	Tippecanoe
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

---

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

- (a) One (1) boiler, identified as Boiler 3, constructed in 2000, exhausting to Stack 3, using natural gas or No. 2 fuel oil, heat input capacity: 20.2 million British thermal units per hour.
- (b) One (1) boiler, identified as Boiler 1, constructed in 1977, exhausting to Stack 1, using natural gas or No. 2 fuel oil, heat input capacity: 20.2 million British thermal units per hour.
- (c) One (1) boiler, identified as Boiler 2, constructed in 1977, exhausting to Stack 1, using natural gas or No. 2 fuel oil, heat input capacity: 12.1 million British thermal units per hour.
- (d) One (1) waste incinerator, identified as Incinerator, constructed in 1993, exhausting to Stack 4, using natural gas as a supplemental fuel, capacity: 6.6 million British thermal units and 590 pounds of general trash and medical waste per hour.

### A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

---

This stationary source also includes the following insignificant activity, as defined in 326 IAC 2-7-1(21):

- (a) One (1) diesel fuel storage tank, identified as BULK-TANK, constructed in 1998, capacity: 2,000 gallons.

### A.4 FESOP Applicability [326 IAC 2-8-2]

---

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 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.

## SECTION B GENERAL CONDITIONS

### B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted 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 FESOP under 326 IAC 2-8.

### B.2 Definitions [326 IAC 2-8-1]

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.3 Permit Term [326 IAC 2-8-4(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.4 Enforceability [326 IAC 2-8-6]

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.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

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 2-8-3(h) and 326 IAC 2-8-9.

### B.6 Severability [326 IAC 2-8-4(4)]

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.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

### B.8 Duty to Provide Information [326 IAC 2-8-4(5)(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 "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (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 an authorized individual 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. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (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  
Indianapolis, Indiana 46204

- (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 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (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  
Indianapolis, Indiana 46204

The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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.13 Emergency Provisions [326 IAC 2-8-12]

- (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, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes 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, 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 No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,  
Telephone No.: 317-233-5674 (ask for Compliance Section)  
Facsimile No.: 317-233-5967

- (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  
Indianapolis, Indiana 46204

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 2-8-4(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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-3(c)(6) 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 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) 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.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), 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  
Indianapolis, Indiana 46204

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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP 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 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-8(a)]
- (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 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(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 2-8-8(c)]

**B.16 Permit Renewal [326 IAC 2-8-3(h)]**

---

- (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 2-8-3. 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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (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 until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]  
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 2-8 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 needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 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  
Indianapolis, Indiana 46204

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(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 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without 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 approval required by 326 IAC 2-8-11.1 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  
Indianapolis, Indiana 46204

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 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(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 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(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 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.19 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-17-3-2] [IC 13-17-3-2] [IC13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a FESOP 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, at reasonable times, 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 at reasonable times, 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, at reasonable times, 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.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10] [IC 13-17-3-2]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 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  
Indianapolis, Indiana 46204

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [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) 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.23 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

**SECTION C**

**SOURCE OPERATION CONDITIONS**

Entire Source

**Emissions Limitations and Standards [326 IAC 2-8-4(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 one hundred (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 one hundred (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.

**C.2 Overall Source Limit [326 IAC 2-8]**

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

**C.3 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 forty percent (40%) 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.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

---

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

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

---

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

C.6 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).

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

---

Except as otherwise provided by statute, 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.8 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.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

---

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.

- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

### **Testing Requirements [326 IAC 2-8-4(3)]**

#### **C.10 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  
Indianapolis, Indiana 46204

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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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.11 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 2-8-4] [326 IAC 2-8-5(a)(1)]**

#### **C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]**

---

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

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

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

#### **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.

**Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

C.14 Risk Management Plan [326 IAC 2-8-4] [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.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

---

(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 is 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 time frame 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 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.

(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 an administrative amendment 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 response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (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.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]**

- (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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

**C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

- (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.18 General Reporting Requirements [326 IAC 2-8-4(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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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 Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204
- (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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

**Stratospheric Ozone Protection**

**C.19 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.

**SECTION D.1 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-8-4(10)]:**

- (a) One (1) boiler, identified as Boiler 3, constructed in 2000, exhausting to Stack 3, using natural gas or No. 2 fuel oil, heat input capacity: 20.2 million British thermal units per hour.
- (b) One (1) boiler, identified as Boiler 1, constructed in 1977, exhausting to Stack 1, using natural gas or No. 2 fuel oil, heat input capacity: 20.2 million British thermal units per hour.
- (c) One (1) boiler, identified as Boiler 2, constructed in 1977, exhausting to Stack 1, using natural gas or No. 2 fuel oil, heat input capacity: 12.1 million British thermal units per hour.

(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 2-8-4(1)]**

**D.1.1 Particulate [326 IAC 6-2-4] [326 IAC 6-2-3]**

- (a) Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the one (1) boiler constructed in 2000, identified as Boiler 3, rated at 20.2 million British thermal units per hour, shall be limited to 0.39 pounds per million British thermal units heat input.

This limitation is based on the following equation:

$$Pt = 1.09/Q^{0.26} \quad \text{where:}$$

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

- (b) Pursuant to 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the two (2) boilers constructed in 1977, identified as Boiler 1 and Boiler 2, rated at 20.2 million British thermal units per hour and 12.1 million British thermal units per hour heat input, respectively, shall be limited to 0.29 pounds per million British thermal units heat input.

This limitation is based on the following equation:

$$Pt = C \times a \times h / 76.5 \times Q^{0.75} \times N^{0.25}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

C = Maximum ground level concentration with respect to distance from the point source at the critical wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBTU/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.

h = Average stack height in feet.

D.1.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1] [326 IAC 7-2-1] [326 IAC 12-1] [326 IAC 2-8-4]

(a) Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):

- (1) The SO<sub>2</sub> emissions from Boiler 3 shall not exceed five tenths (0.5) pounds per million British thermal units heat input when operating on fuel oil; or
- (2) The sulfur content of the fuel oil used at Boiler 3 shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]

Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

(b) Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) the SO<sub>2</sub> emissions from Boilers 1 and 2 shall not exceed five tenths (0.5) pound per million British thermal units heat input when operating on fuel oil. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) day rolling weighted average.

(c) Pursuant to 326 IAC 2-8-4, the total use of No. 2 fuel oil by the three (3) boilers, identified as Boiler 1, Boiler 2 and Boiler 3, shall not exceed 2,718,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. The sulfur content of the used oil shall not exceed five-tenths percent (0.5%) by weight, based on a monthly weighted average. This will limit SO<sub>2</sub> emissions from the boilers to 96.6 tons per year and the potential to emit SO<sub>2</sub> from the entire source to less than 100 tons per year. Thus, the requirements of 326 IAC 2-7, Part 70, do not apply.

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

## Compliance Determination Requirements

### D.1.4 Sulfur Dioxide Emissions and Sulfur Content

---

- (a) Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance with Condition D.1.2(a) utilizing one of the following options:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
  - (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 with Condition D.1.2(b) and D.1.2(c) shall be determined utilizing one of the following options.
  - (1) 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 million British thermal units heat input by:
    - (A) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or
    - (B) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
      - (i) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
      - (ii) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
  - (2) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boilers, 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 (1) or (2) above shall not be refuted by evidence of compliance pursuant to the other method.

## Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

### D.1.5 Visible Emissions Notations

---

- (a) Daily visible emission notations of the boiler stacks exhausts (Stacks 1 and 3) shall be performed during normal daylight operations when operating on No. 2 fuel oil. 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) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for these units 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 and Implementation shall be considered a deviation from this permit.

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

#### **D.1.6 Record Keeping Requirements**

---

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit for Boiler 3 applies at all times including periods of startup, shutdown, and malfunction.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual No. 2 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, the natural gas fired boiler certification does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1); and

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

- (4) The name of the fuel supplier; and
  - (5) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of visible emission notations of the boiler stacks exhausts (Stacks 1 and 3) once per day when operating on No. 2 fuel oil.
- (c) To document compliance with Condition D.1.3, 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 Requirements, of this permit.

#### **D.1.7 Reporting Requirements**

---

- (a) The natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or its equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

- (b) A quarterly summary of the information to document compliance with Condition D.1.2(c) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

**SECTION D.2**

**FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-8-4(10)]:**

- (d) One (1) waste incinerator, identified as Incinerator, constructed in 1993, exhausting to Stack 4, using natural gas as a supplemental fuel, capacity: 6.6 million British thermal units and 590 pounds of general trash and medical waste per hour.

(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 2-8-4(1)]**

**D.2.1 Incinerator [326 IAC 4-2-2]**

Pursuant to 326 IAC 4-2-2, the waste incinerator, rated at 590 pounds per hour shall:

- (a) Consist of primary and secondary chambers or the equivalent;
- (b) Be equipped with a primary burner unless burning wood products;
- (c) Comply with 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2 (Permit Review Rules);
- (d) Be maintained properly according to an operation and maintenance plan meeting the following requirements:
  - (1) The operation and maintenance plan must be designed to meet the particulate matter emission limitation specified in (i), below, and shall include the following:
    - (A) Procedures for receiving, handling, and charging waste.
    - (B) Procedures for incinerator startup and shutdown.
    - (C) Procedures for responding to a malfunction.
    - (D) Procedures for maintaining proper combustion air supply levels.
    - (E) Procedures for operating the incinerator and associated air pollution control systems.
    - (F) Procedures for handling ash.
    - (G) A list of wastes that can be burned in the incinerator.
  - (2) Each incinerator operator shall review the plan before initial implementation of the operation and maintenance plan and annually thereafter.
  - (3) The operation and maintenance plan shall be readily accessible to incinerator operators.
  - (4) The Permittee shall notify the department, in writing, thirty (30) days after the operation and maintenance plan is initially developed.

- (5) The Permittee shall make the operation and maintenance plan available to the department upon request.
- (e) Only burn waste approved by IDEM;
- (f) Comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
- (g) Be operated so that emissions of hazardous materials including, but not limited to, viable pathogenic bacteria, dangerous chemical or gases, or noxious odors are prevented;
- (h) Not create a nuisance or a fire hazard; and
- (i) Not emit particulate matter (PM) in excess of 0.3 pounds per 1,000 pounds of dry exhaust gas corrected to fifty percent (50%) excess air.

The operation of the incinerator shall be terminated immediately upon noncompliance with any of the above mentioned requirements.

**D.2.2 Carbon Monoxide [326 IAC 9-1-2]**

---

Pursuant to 326 IAC 9-1-2(a)(3), the Permittee shall not operate a refuse incinerator or refuse burning equipment unless the waste gas stream is burned in a direct-flame afterburner or secondary chamber.

**D.2.3 HAPs [326 IAC 2-8-4] [326 IAC 11-6]**

---

Pursuant to 326 IAC 2-8-4 and in order to qualify as a co-fired combustor, the Permittee shall limit the fuel feed stream at the incinerator to ten percent (10%) or less of hospital and medical/infectious waste by weight per calendar quarter. In no case shall the amount of hospital and medical/infectious waste in the fuel feed stream exceed 258.42 tons per twelve (12) consecutive month period, with compliance determined at the end of each quarter. This will limit the individual HAP emissions from the incinerator to 4.33 tons per year and the total HAP emissions to 4.39 tons per year. Therefore, the total HAP emissions from the entire source will be limited to less than 10 tons per year, and the worst-case individual HAP emissions from the entire source are limited to less than 25 tons per year. Thus, the requirements of 326 IAC 2-7 do not apply. This will also make the incinerator exempt from the requirements of 326 IAC 11-6 and 40 CFR 60, Subpart Ce.

**Compliance Determination Requirements**

**D.2.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]**

---

Within 180 days after issuance of this FESOP, in order to demonstrate compliance with Condition D.2.1(i), the Permittee shall perform PM testing for the incinerator utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing.

**Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

**D.2.5 Record Keeping Requirements**

---

- (a) To document compliance with Condition D.2.3, the Permittee shall maintain quarterly records of the weight of hospital waste and medical/infectious waste combusted and the weight of all other fuels and wastes combusted on a quarterly basis at the co-fired combustor.

- (b) Pursuant to 40 CFR 60.2020, 40 CFR 60.2555 and 326 IAC 326 IAC 8-1-3(b), the records in (a) are also required in order to document that the incinerator is exempt from the requirements of 40 CFR 60, Parts CCCC and DDDD, and 326 IAC 11-8.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.2.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**SECTION D.3**

**FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-8-4(10)]:**

One (1) diesel fuel storage tank, identified as BULK-TANK, constructed in 1998, capacity: 2,000 gallons.

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

There are no conditions specifically applicable to this facility.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
CERTIFICATION**

Source Name: Indiana Veterans' Home  
Source Address: 3851 North River Road, West Lafayette, IN 47906  
Mailing Address: 3851 North River Road, West Lafayette, IN 47906  
FESOP No.: 157-19136-00009

**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) \_\_\_\_\_
- Affidavit (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 BRANCH  
100 North Senate Avenue  
Indianapolis, Indiana 46204  
Phone: 317-233-5674  
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
EMERGENCY OCCURRENCE REPORT**

Source Name: Indiana Veterans' Home  
Source Address: 3851 North River Road, West Lafayette, IN 47906  
Mailing Address: 3851 North River Road, West Lafayette, IN 47906  
FESOP No.: 157-19136-00009

**This form consists of 2 pages**

**Page 1 of 2**

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none"><li>• 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</li><li>• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16</li></ul>
---

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

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

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

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

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

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

A certification is not required for this report.

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
SEMI- ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Indiana Veterans' Home  
Source Address: 3851 North River Road, West Lafayette, IN 47906  
Mailing Address: 3851 North River Road, West Lafayette, IN 47906  
FESOP No.: 157-19136-00009

<input type="checkbox"/> Natural Gas Only
<input type="checkbox"/> Alternate Fuel burned
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:

Attach a signed certification to complete this report.

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

**FESOP Quarterly Report**

Source Name: Indiana Veterans' Home  
Source Address: 3851 North River Road, West Lafayette, IN 47906  
Mailing Address: 3851 North River Road, West Lafayette, IN 47906  
FESOP No.: 157-19136-00009  
Facility: Waste Incinerator  
Parameter: Waste in fuel feed stream (HAP emissions)  
Limit: No more than 10% hospital and medical/infectious waste by weight and no more than 258.42 tons of hospital and medical/infectious waste per consecutive twelve (12) month period

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

<b>Time Period</b>	<b>Hospital and Medical/Infectious Waste (tons)</b>	<b>All Other Waste (tons)</b>	<b>Weight % Hospital and Medical Infectious Waste</b>
<b>This quarter</b>			
<b>Twelve (12) month total</b>			

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

Submitted by: \_\_\_\_\_

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

Signature: \_\_\_\_\_

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

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

Attach a signed certification to complete this report.

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

**FESOP Quarterly Report**

Source Name: Indiana Veterans' Home  
Source Address: 3851 North River Road, West Lafayette, IN 47906  
Mailing Address: 3851 North River Road, West Lafayette, IN 47906  
FESOP No.: 157-19136-00009  
Facility: Three (3) Boilers (Boilers 1, 2 and 3)  
Parameter: No. 2 fuel oil usage  
Limit: 2,718,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month

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

<b>Month</b>	<b>This Month (gallons)</b>	<b>Previous 11 Months (gallons)</b>	<b>12 Month Total (gallons)</b>

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

Submitted by: \_\_\_\_\_

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

Signature: \_\_\_\_\_

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

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

Attach a signed certification to complete this report.

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Indiana Veterans' Home  
 Source Address: 3851 North River Road, West Lafayette, IN 47906  
 Mailing Address: 3851 North River Road, West Lafayette, IN 47906  
 FESOP No.: 157-19136-00009

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

<p>This report shall be submitted quarterly based on a calendar year. 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. 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. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<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>	
<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: \_\_\_\_\_

A certification is not required for this report.

**Indiana Department of Environmental Management  
Office of Air Quality**

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit  
(FESOP)

**Source Background and Description**

<b>Source Name:</b>	<b>Indiana Veterans' Home</b>
<b>Source Location:</b>	<b>3851 North River Road, West Lafayette, Indiana 47906</b>
<b>County:</b>	<b>Tippecanoe</b>
<b>SIC Code:</b>	<b>8060</b>
<b>Operation Permit No.:</b>	<b>T 157-19136-00009</b>
<b>Permit Reviewer:</b>	<b>CarrieAnn Paukowits</b>

The Office of Air Quality (OAQ) has reviewed a FESOP application from Indiana Veterans' Home relating to the operation of a health care and residential facility. This facility is a residential community including many buildings in which health care may be provided.

**Permitted Emission Units and Pollution Control Equipment**

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

- (a) One (1) boiler, identified as Boiler 3, constructed in 2000, exhausting to Stack 3, using natural gas or No. 2 fuel oil, heat input capacity: 20.2 million British thermal units per hour.

**Unpermitted Emission Units and Pollution Control Equipment**

The source also consists of the following unpermitted emission units:

- (b) One (1) boiler, identified as Boiler 1, constructed in 1977, exhausting to Stack 1, using natural gas or No. 2 fuel oil, heat input capacity: 20.2 million British thermal units per hour.
- (c) One (1) boiler, identified as Boiler 2, constructed in 1977, exhausting to Stack 1, using natural gas or No. 2 fuel oil, heat input capacity: 12.1 million British thermal units per hour.
- (d) One (1) waste incinerator, identified as Incinerator, constructed in 1993, exhausting to Stack 4, using natural gas as a supplemental fuel, capacity: 6.6 million British thermal units and 590 pounds of general trash and medical waste per hour.

The emergency generators at this source are considered trivial activities because they are emergency electrical generators at a residential location.

**New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval**

The application does not include any new proposed emission units.

**Insignificant Activities**

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

- One (1) diesel fuel storage tank, identified as BULK-TANK, constructed in 1998, capacity: 2,000 gallons.

### Existing Approvals

The source has constructed or has been operating under the following previous approvals:

CP 157-10005-00009, issued on December 7, 1998

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this Part 70 permit:

All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

### Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the heading *Unpermitted Emission Units and Pollution Control Equipment*. IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.
- (b) IDEM is aware that the source was not issued a FESOP by December 14, 1996 nor did they submit a Part 70 application by that date.

### Recommendation

The staff recommends to the Commissioner that the FESOP 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 Title V application was received on May 6, 2004, with additional information received on July 6, 2004. On February 23, 2005, the applicant requested that the application be processed as a FESOP application, rather than a Title V application.

There was no notice of completeness letter mailed to the source.

### Emission Calculations

See pages 1 through 12 of Appendix A of this document for detailed emission calculations.

### Potential to Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit 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, the department, or the appropriate local air pollution control agency."

<b>Pollutant</b>	<b>Potential to Emit (tons/yr)</b>
PM	12.4
PM <sub>10</sub>	12.6
SO <sub>2</sub>	120
VOC	6.30
CO	34.6
NO <sub>x</sub>	40.4

<b>HAPs</b>	<b>Potential to Emit (tons/yr)</b>
Benzene	0.0006
Dichlorobenzene	0.0003
Formaldehyde	0.019
Hexane	0.466
Toluene	0.0009
Lead	0.096
Cadmium	0.008
Chromium	0.002
Manganese	0.002
Nickel	0.002
Arsenic	0.001
Beryllium	0.0007
Mercury	0.139
Selenium	0.003
Hydrochloric acid	43.3
Antimony	0.017
Total CDD	0.00003
Total CDF	0.00009
Chlorine	0.136
Hydrogen flouride	0.193
Total PCB	0.0001

HAPs	Potential to Emit (tons/yr)
Total	44.4

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of SO<sub>2</sub> is equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) 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 of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.
- (c) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

**Potential to Emit After Issuance**

The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/emission unit	Potential To Emit (tons/year)						
	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Boilers 1, 2 and 3	3.16	3.29	96.6	1.26	19.3	32.9	0.434
Incinerator	9.10	9.26	3.25	4.04	15.3	7.23	4.33 individual; 4.45 total
Insignificant activities	-	-	-	1.00	-	-	negligible
Total Emissions	12.3	12.6	< 100	6.30	34.6	40.1	4.33 individual; 4.88 total

See "326 IAC 2-8 (FESOP)" under the "State Rule Applicability - Entire Source" section of this document for details on the specific limitations.

**County Attainment Status**

The source is located in Tippecanoe County.

Pollutant	Status
PM <sub>2.5</sub>	attainment
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
1-Hour Ozone	attainment
8-Hour Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) 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 NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Tippecanoe County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Tippecanoe County has been classified as attainment or unclassifiable in Indiana for all remaining 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) This source does not require a Part 70, Title V Operating Permit. Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not included in the permit.
- (b) The requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart D), are not included in the permit for this source. The three (3) boilers, all constructed after August 17, 1971, each have a capacity less than 250 million British thermal units per hour.
- (c) The requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Da), are not included in the permit for this source. The one (1) boiler (Boiler 3), constructed after September 18, 1978, has a capacity less than 250 million British thermal units per hour.
- (d) The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60 Subpart Da) are not included in the permit for the two (2) boilers identified as Boilers 1 and 2. The two (2) boilers were constructed prior to September 18, 1978.
- (e) The requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Db), are not included in the permit for this source. The one (1) boiler (Boiler 3), constructed after June 19, 1984, has a capacity less than 100 million British thermal units per hour.

- (f) The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60 Subpart Db) are not included in the permit for the two (2) boilers identified as Boilers 1 and 2. The two (2) boilers (Boilers 1 and 2) were constructed prior to June 19, 1984.
- (g) The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60 Subpart Dc) are not included in the permit for the two (2) boilers identified as Boilers 1 and 2. The two (2) boilers were constructed prior to June 9, 1989.
- (h) The one (1) boiler (Boiler 3) constructed after June 9, 1989 has a capacity greater than 10 million British thermal units per hour and less than 100 million British thermal units per hour. Therefore, the one (1) boiler is subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Dc). Pursuant to this rule, the following conditions shall apply:
  - (1) The Permittee shall not cause to be discharged into the atmosphere from Boiler 3 any gases that contain SO<sub>2</sub> in excess of 215 ng/J (0.50 lb/million Btu) heat input; or shall not combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The SO<sub>2</sub> emission limits and fuel oil sulfur limits apply at all times, including periods of startup, shutdown, and malfunction.
  - (2) Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance utilizing one of the following options:
    - (A) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
    - (B) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
      - (i) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
      - (ii) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
  - (3) This boiler has a heat input capacity less than 30 million British thermal units per hour. Therefore, there are no particulate limitations applicable under 40 CFR 60.43c.

The provisions of 40 CFR Part 60 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to Boiler 3 except when otherwise specified in 40 CFR 60, Subpart Dc.

- (i) The requirements of the New Source Performance Standard, 40 CFR 60 Subpart Eb, are not included in the permit for the waste incinerator. The waste incinerator was constructed prior to September 20, 1994.
- (j) The waste incinerator at this source has a capacity less than 250 tons per day. Therefore, the requirements of 40 CFR 60, Subparts Cb and Ea, are not included in the permit.
- (k) The waste incinerator at this source combusts medical waste and was constructed prior to June 20, 1996. Therefore, this source can be subject to the requirements of 40 CFR 60, Subpart Ce. However, pursuant to 40 CFR 60.32e(c), any co-fired combustor (de-

lined in §60.51c) is not subject to this subpart if the owner or operator of the co-fired combustor:

- (1) Notifies the Administrator of an exemption claim;
- (2) Provides an estimate of the relative weight of hospital waste, medical/infectious waste, and other fuels and/or wastes to be combusted; and
- (3) Keeps records on a calendar quarter basis of the weight of hospital waste and medical/infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired combustor.

Pursuant to 40 CFR 60.51c, "*Co-fired combustor* means a unit combusting hospital waste and/or medical/infectious waste with other fuels or wastes (e.g., coal, municipal solid waste) and subject to an enforceable requirement limiting the unit to combusting a fuel feed stream, 10 percent or less of the weight of which is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis. For purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered "other" wastes when calculating the percentage of hospital waste and medical/infectious waste combusted."

The applicant notified the IDEM, OAQ, and the U.S. EPA of an exemption claim on February 7, 2000. The applicant provided an estimate of the relative weight of hospital waste, medical/infectious waste and other fuels combusted, and the applicant maintains records of the weight of each waste combusted. In addition, the inspector assigned to this source agrees that the incinerator should be considered exempt from this rule. Therefore, this source is exempt from the requirements of 40 CFR 60, Subpart Ce. Records shall be required to demonstrate that the weight percent hospital and medical/infectious waste burned does not exceed ten percent (10%) by weight of the total waste burned each calendar quarter.

- (l) The incinerator at this source does burn more than fifty (50) tons of waste per day. Therefore, the requirements of 40 CFR 60, Subpart E, are not included in the permit for this source.
- (m) The incinerator at this source was constructed prior to August 30, 1999, and was not reconstructed after June 6, 2001. Therefore, the requirements of the Standards of Performance for Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001, 40 CFR 60, Subpart AAAA, are not included in the permit.
- (n) The capacity of the incinerator at this source is 590 pounds per hour, equivalent to a maximum of 7.08 tons per day, which is less than 35 tons per day. Thus, the incinerator does not need to be regulated by the state plan required by 40 CFR 60, Subpart BBBB. Therefore, the requirements of 40 CFR 60, Subpart BBBB, are not included in the permit.
- (o) The incinerator at this source burns greater than thirty percent (30%) refuse-derived fuel, and has the capacity to burn less than 35 tons (32 megagrams) per day, and this source is required to keep records of the amount of each fuel burned. Therefore, pursuant to 40 CFR 60.2020 and 40 CFR 60.2555, this source is exempt from the requirements of 40 CFR 60, Subparts CCCC and DDDD, respectively.

- (p) The incinerator at this source does not burn hazardous waste. Therefore, the requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63.1200, Subpart EEE, are not included in the permit for this source.
- (q) The diesel fuel storage tank at this source has a capacity less than 40 cubic meters. Therefore, the requirements of 40 CFR 60.110b, Subpart Kb, are not included in the permit for this source, and the tank is not subject to the requirements of 326 IAC 12 and the previous version of Subpart Kb.
- (r) The emissions from this source are limited so that it is not a major source of HAPs. Therefore, the requirements of 40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, are not included in the permit for this source.

#### **State Rule Applicability – Entire Source**

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

- (a) This source was constructed prior to August 7, 1977. Therefore, the requirements of 326 IAC 2-2, PSD, are not applicable.
- (b) The unrestricted potential emissions of each criteria pollutant from this source are less than 250 tons per year. Therefore, this source is still a minor source pursuant to 326 IAC 2-2, PSD.
- (c) All modifications to this source after August 7, 1977, have unrestricted potential emissions less than 250 tons per year of each criteria pollutant. Therefore, they were minor modifications to an existing minor source, and the requirements of 326 IAC 2-2 were not applicable.

##### 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

This source was constructed prior to July 27, 1997. Therefore, the requirements of 326 IAC 2-4.1-1, New Source Toxics Control, do not apply.

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

This source is not located in Lake or Porter County with the potential to emit greater than twenty-five (25) tons per year of NO<sub>x</sub>, does not emit five (5) tons per year or more of lead and does not require a Part 70 Operating Permit. Therefore, the requirements of 326 IAC 2-6 do not apply.

##### 326 IAC 2-8 (FESOP)

Pursuant to this rule, the amount of SO<sub>2</sub> emitted shall be limited to less than one hundred (100) tons per year, the amount of each individual HAP emitted shall be limited to less than ten (10) tons per year and the potential to emit total HAPs shall be limited to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 2-7, do not apply. Specific limitations are as follows:

- (a) The No. 2 fuel oil usage at the three (3) boilers, Boilers 1 through 3, shall not exceed 2,718,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. The sulfur content of the fuel oil shall not exceed one half percent (0.5%) by weight, based on a monthly weighted average. This will limit the potential to emit SO<sub>2</sub> from the use of fuel oil to 96.5 tons per year and the potential to emit

SO<sub>2</sub> from the entire source to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-7, Part 70, do not apply.

- (b) The incinerator at this source is a co-fired combustor. In order to qualify as a co-fired combustor, the Permittee must limit the fuel feed stream to ten percent (10%) or less of hospital and medical/infectious waste by weight per calendar quarter (see item (k) under "Federal Rule Applicability" in this document). Based upon the maximum capacity of the incinerator, this is equivalent to a maximum of 258.42 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This will limit the individual HAP emissions from the incinerator to 4.33 tons per year and the total HAP emissions to 4.39 tons per year. Therefore, the worst-case individual HAP emissions from the entire source are limited to less than 10 tons per year, and the total HAP emissions from the entire source are limited to less than 25 tons per year. Thus, the requirements of 326 IAC 2-7 are not applicable based on the HAP emissions from this source.

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) 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.

#### **State Rule Applicability – Individual Facilities**

##### 326 IAC 4-2-2 (Incinerators)

Pursuant to 326 IAC 4-2-2, the waste incinerator, rated at 590 pounds per hour shall:

- (a) Consist of primary and secondary chambers or the equivalent;
- (b) Be equipped with a primary burner unless burning wood products;
- (c) Comply with 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2 (Permit Review Rules);
- (d) Be maintained properly according to an operation and maintenance plan meeting the following requirements:
  - (1) The operation and maintenance plan must be designed to meet the particulate matter emission limitation specified in (i), below, and shall include the following:
    - (A) Procedures for receiving, handling, and charging waste.
    - (B) Procedures for incinerator startup and shutdown.
    - (C) Procedures for responding to a malfunction.

- (D) Procedures for maintaining proper combustion air supply levels.
  - (E) Procedures for operating the incinerator and associated air pollution control systems.
  - (F) Procedures for handling ash.
  - (G) A list of wastes that can be burned in the incinerator.
- (2) Each incinerator operator shall review the plan before initial implementation of the operation and maintenance plan and annually thereafter.
  - (3) The operation and maintenance plan must be readily accessible to incinerator operators.
  - (4) The Permittee shall notify the department, in writing, thirty (30) days after the operation and maintenance plan is initially developed.
  - (5) The Permittee shall make the operation and maintenance plan available to the department upon request.
- (e) Only burn waste approved by IDEM;
  - (f) Comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
  - (g) Be operated so that emissions of hazardous materials including, but not limited to, viable pathogenic bacteria, dangerous chemical or gases, or noxious odors are prevented;
  - (h) Not create a nuisance or a fire hazard; and
  - (i) Not emit particulate matter (PM) in excess of 0.3 pounds per 1,000 pounds of dry exhaust gas corrected to fifty percent (50%) excess air.

The operation of the incinerator shall be terminated immediately upon noncompliance with any of the above mentioned requirements.

### 326 IAC 6-2-3 (Particulate Emissions Limitations for Facilities Constructed prior to September 21, 1983)

The two (2) boilers, identified as Boiler 1 and Boiler 2, constructed in 1977, with heat input capacities of 20.2 and 12.1 million British thermal units per hour, respectively, must comply with the particulate emission limitation of 326 IAC 6-2-3. This limitation is based on the following equation given in 326 IAC 6-2-3:

$$Pt = C \times a \times h / 76.5 \times Q^{0.75} \times N^{0.25}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input.

C = Maximum ground level concentration with respect to distance from the point source at the critical wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBTU/hr heat input.

h = Average stack height in feet.

For the two (2) boilers:

$$Pt = 50 \times 0.67 \times 10.5 / 76.5 \times (32.3)^{0.75} \times 2^{0.25} = 0.29 \text{ lb/MMBtu}$$

Based on Appendix A, the worst case potential PM emission rate when operating on No. 2 fuel oil is:

$$2.02 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.461 \text{ lb/hr}$$
$$(0.461 \text{ lb/hr} / 32.3 \text{ MMBtu/hr}) = 0.014 \text{ lb PM per MMBtu}$$

Therefore, the two (2) boilers, identified as Boiler 1 and Boiler 2, will comply with this rule.

#### 326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983)

The one (1) boiler, identified as Boiler 3, constructed in 2000, must comply with the requirements of 326 IAC 6-2-4. The emission limitation is based on the following equation given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input.

The heat input capacity of the Boiler 3 is 20.2 million British thermal units per hour. There were two (2) boilers rated at 32.3 million British thermal units per hour, total, in operation when this boiler was constructed.

$$Pt = 1.09/(52.5)^{0.26} = 0.39 \text{ lb/MMBtu heat input}$$

Based on the AP-42 emission factors, the worst case PM emission rate when operating on No. 2 fuel oil is 0.014 lb/MMBtu.

Therefore, the one (1) boiler, identified as Boiler 3, will comply with this rule.

#### 326 IAC 7.1-1 (Sulfur Dioxide Emission Limitations)

The requirements of 326 IAC 7-1.1 are applicable to the three (3) boilers because the potential to emit SO<sub>2</sub> from each boiler is greater than 25 tons per year. Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub>

Emissions Limitations) the SO<sub>2</sub> emissions from each boiler when operating on fuel oil shall not exceed five-tenths (0.5) pound per million British thermal units heat input. Compliance with this limitation shall be accomplished by limiting the weight percent sulfur in the No. 2 distillate fuel oil to no more than one half of one percent (0.5%).

#### 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

This source is not located in Clark, Floyd, Lake or Porter County. Therefore, the requirements of 326 IAC 8-9 are not applicable to the storage vessel at this source.

#### 326 IAC 9-1 (Carbon Monoxide Emission Limits)

Pursuant to 326 IAC 9-1-2(a)(3), the Permittee shall not operate a refuse incinerator or refuse burning equipment unless the waste gas stream is burned in a direct-flame afterburner or secondary chamber. This source uses a secondary chamber. Therefore, the incinerator is in compliance with this rule.

#### 326 IAC 11-6 (Hospital/Medical/Infectious Waste Incinerators)

The incinerator at this source combusts medical waste and construction was commenced on or before June 20, 1996. However, less than ten percent (10%) of the waste combusted is medical waste. The majority of the waste is municipal waste. Pursuant to 326 IAC 11-6(b)(2) a co-fired combustor is exempt from this rule if the owner or operator of does the following:

- (a) Notifies the department and U.S. EPA of an exemption claim.
- (b) Provides the department and U.S. EPA with an estimate of the relative weight of hospital waste, medical/infectious waste, and other fuels or wastes to be combusted.
- (c) Maintains records on a calendar quarter basis of the weight of hospital waste and medical/infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired combustor.

The applicant notified the IDEM, OAQ, and the U.S. EPA of an exemption claim on February 7, 2000. The applicant provided an estimate of the relative weight of hospital waste, medical/ infectious waste and other fuels combusted, and the applicant maintains records of the weight of each waste combusted. In addition, the inspector assigned to this source agrees that the incinerator can be considered exempt from this rule. Therefore, the incinerator at this source is exempt from the requirements of 326 IAC 11-6.

#### 326 IAC 11-7 (Municipal Waste Combustors)

The capacity of the incinerator at this source is 590 pounds per hour, equivalent to a maximum of 7.08 tons per day, which is less than 250 tons per day. Therefore, the incinerator is not subject to the requirements of 326 IAC 11-7.

#### 326 IAC 11-8 (Commercial and Industrial Solid Waste Incineration Units)

The incinerator at this source burns greater than thirty percent (30%) refuse-derived fuel, and has the capacity to burn less than 35 tons (32 megagrams) per day, and this source is required to keep records of the amount of each fuel burned. Therefore, pursuant to 326 IAC 11-8-1(b)(3)(B), the requirements of 326 IAC 11-8 are not applicable.

### Testing Requirements

Initial testing is required for the one (1) incinerator to demonstrate compliance with the particulate emission limitation in 326 IAC 4-2-2.

### Compliance Requirements

Permits issued under 326 IAC 2-8 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 2-8-4. 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 in 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:

The three (3) boilers have applicable compliance monitoring conditions as specified below:

Visible emission notations of the boiler stacks exhausts (Stacks 1 and 3) shall be performed once per day during normal daylight operations when operating on No. 2 fuel oil. 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. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. 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 these units 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 and Implementation shall be considered a deviation from this permit.

These monitoring conditions are necessary because the boilers must operate properly to ensure compliance with 326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating), 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) and 326 IAC 2-8 (FESOP). Boiler 3 must also comply with 326 IAC 12 (40 CFR 60, Subpart Dc).

### Conclusion

The operation of this health care and residential facility shall be subject to the conditions of this FESOP, F 157-19136-00009.

## Indiana Department of Environmental Management Office of Air Quality

Addendum to the  
Technical Support Document for Federally Enforceable State Operating Permit (FESOP)

<b>Source Name:</b>	<b>Indiana Veterans' Home</b>
<b>Source Location:</b>	<b>3851 North River Road, West Lafayette, Indiana 47906</b>
<b>County:</b>	<b>Tippecanoe</b>
<b>FESOP:</b>	<b>F 157-19136-00009</b>
<b>SIC Code:</b>	<b>8060</b>
<b>Permit Reviewer:</b>	<b>CarrieAnn Paukowits</b>

On June 13, 2005, the Office of Air Quality (OAQ) had a notice published in the Journal & Courier, Lafayette, Indiana, stating that Indiana Veterans' Home had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a health care and residential facility. The notice also stated that OAQ proposed to issue a FESOP for this operation and provided information on how the public could review the proposed FESOP 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 FESOP should be issued as proposed.

Upon further review, the OAQ has decided to make the following change to the FESOP. The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

### Change 1:

Indiana was required to incorporate credible evidence provisions into state rules consistent with the SIP call published by U.S. EPA in 1997 (62 FR 8314). Indiana has incorporated the credible evidence provision in 326 IAC 1-1-6. This rule is effective March 16, 2005; therefore, Condition B.23 has been revised in the permit as follows:

**B.23 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314] [326 IAC 1-1-6]**

~~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.~~ **For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.**

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100**

**Three (3) Boilers when operating on Natural Gas**

**Company Name:** Indiana Veterans' Home  
**Address City IN Zip:** 3851 North River Road, West Lafayette, IN 47906  
**Permit Number:** 157-19136  
**Pit ID:** 157-00009  
**Reviewer:** CarrieAnn Paukowits  
**Date:** May 6, 2004

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100	5.50	84.0
				**see below		

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Equipment	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission in tons/yr					
			PM*	PM10*	SO2	NOx	VOC	CO
Boiler 1	20.20	176.952	0.168	0.672	0.053	8.848	0.487	7.432
Boiler 2	12.10	105.996	0.101	0.403	0.032	5.300	0.291	4.452
Boiler 3	20.20	176.952	0.168	0.672	0.053	8.848	0.487	7.432
<b>Total</b>	<b>52.50</b>	<b>460</b>	<b>0.437</b>	<b>1.75</b>	<b>0.138</b>	<b>23.0</b>	<b>1.26</b>	<b>19.3</b>

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**HAPs Emissions**

**Three (3) Boilers when operating on Natural Gas**

**Company Name: Indiana Veterans' Home**  
**Address City IN Zip: 3851 North River Road, West Lafayette, IN 47906**  
**Permit Number: 157-19136**  
**Plt ID: 157-00009**  
**Reviewer: CarrieAnn Paukowits**  
**Date: May 6, 2004**

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.10E-03	Dichlorobenzene 1.20E-03	Formaldehyde 7.50E-02	Hexane 1.80E+00	Toluene 3.40E-03
Potential Emission in tons/yr	0.0005	0.0003	0.017	0.414	0.0008

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.00E-04	Cadmium 1.10E-03	Chromium 1.40E-03	Manganese 3.80E-04	Nickel 2.10E-03	Total HAPs
Potential Emission in tons/yr	0.0001	0.0003	0.0003	0.0001	0.0005	<b>0.434</b>

Methodology is the same as page 1.

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

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)**  
**Three (3) Boilers when operating on #2 Fuel Oil**

**Company Name: Indiana Veterans' Home**  
**Address, City IN Zip: 3851 North River Road, West Lafayette, IN 47906**  
**Permit Number: 157-19136**  
**Plt ID: 157-00009**  
**Reviewer: CarrieAnn Paukowits**  
**Application Date: May 6, 2004**

S = Weight % Sulfur

0.500

Emission Factor in lb/kgal	Pollutant				
	PM*	SO2	NOx	VOC	CO
	2.00	71.0 (142.0S)	20.0	0.340	5.00

Equipment	Heat Input Capacity MMBtu/hr	Potential Throughput kgals/yr	Potential Emission in tons/yr				
			PM*	SO2	NOx	VOC	CO
Boiler 1	20.20	1264	1.264	44.870	12.639	0.215	3.160
Boiler 2	12.10	757	0.757	26.878	7.571	0.129	1.893
Boiler 3	20.20	1264	1.264	44.870	12.639	0.215	3.160
<b>Total</b>	<b>52.50</b>	<b>3285</b>	<b>3.29</b>	<b>117</b>	<b>32.9</b>	<b>0.558</b>	<b>8.21</b>

**Methodology**

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

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

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

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

See page 4 for HAPs emission calculations.

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)**  
**Three (3) Boilers when operating on #2 Fuel Oil**  
**HAPs Emissions**

**Company Name: Indiana Veterans' Home**  
**Address, City IN Zip: 3851 North River Road, West Lafayette, IN 47906**  
**Permit Number: 157-19136**  
**Plt ID: 157-00009**  
**Reviewer: CarrieAnn Paukowits**  
**Date: May 6, 2004**

	HAPs - Metals				
Emission Factor in lb/mmBtu	Arsenic 0.000004	Beryllium 0.000003	Cadmium 0.000003	Chromium 0.000003	Lead 0.000009
Potential Emission in tons/yr	0.0009	0.0007	0.0007	0.0007	0.0021

	HAPs - Metals (continued)				
Emission Factor in lb/mmBtu	Mercury 0.000003	Manganese 0.000006	Nickel 0.000003	Selenium 0.00002	Total HAPs
Potential Emission in tons/yr	0.0007	0.0014	0.0007	0.0034	<b>0.011</b>

**Methodology**

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)\*Emission Factor (lb/mmBtu)\*8,760 hrs/yr / 2,000 lb/ton

**Appendix A: Emission Calculations  
Incinerator  
When Operating as a Refuse Incinerator**

**Company Name:** Indiana Veterans' Home  
**Address City IN Zip:** 3851 North River Road, West Lafayette, IN 47906  
**Permit Number:** 157-19136  
**Plt ID:** 157-00009  
**Reviewer:** CarrieAnn Paukowits  
**Application Date:** May 6, 2004

<p align="center">THROUGHPUT lbs/hr 590</p>
---

THROUGHPUT  
ton/yr  
2584.2

	POLLUTANT				
	PM	SO2	CO	VOC	NOX
Emission Factor in lb/ton	7.0	2.5	10.0	3.0	3.0
Potential Emissions in ton/yr	9.04	3.23	12.9	3.88	3.88

**Methodology**

Emission factors are from AP 42 (5th Edition 1/95) Table 2.1-12, Uncontrolled emission factors for industrial/commercial refuse combustors, multiple chambers

Throughput (lb/hr) \* 8760 hr/yr \* ton/2000 lb = throughput (ton/yr)

**Appendix A: Emission Calculations  
Incinerator When Operating As A  
Controlled Air Medical Waste Incinerator**

**Company Name:** Indiana Veterans' Home  
**Address City IN Zip:** 3851 North River Road, West Lafayette, IN 47906  
**Permit Number:** 157-19136  
**Plt ID:** 157-00009  
**Reviewer:** CarrieAnn Paukowits  
**Application Date:** May 6, 2004

<b>THROUGHPUT</b> lbs/hr 590
------------------------------------

THROUGHPUT  
tons/yr  
2584.2

Emission Factor in lb/ton	POLLUTANT								
	PM	SO2	CO	TOC	NOX	Lead**	HCl**	Aluminum	Antimony**
	4.67	2.17	2.95	0.299	3.56	0.073	33.500	0.011	0.013
Potential Emissions in ton/yr	6.03	2.80	3.81	0.386	4.60	0.094	43.3	0.014	0.017
Control Efficiency	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Potential Emissions after control in ton/yr	6.03	2.80	3.81	0.386	4.60	0.094	43.3	0.014	0.017

Emission Factor in lb/ton	POLLUTANT								
	Arsenic**	Barium	Beryllium**	Cadmium**	Total CDD**	Total CDF**	Chlorine**	Chromium**	Copper
	2.42E-04	3.24E-03	6.25E-06	5.48E-03	2.13E-05	7.15E-05	0.105	7.75E-04	0.013
Potential Emissions in ton/yr	3.13E-04	0.004	0.000008	0.007	0.00003	0.00009	0.136	0.001	0.016
Control Efficiency	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Potential Emissions after control in ton/yr	3.13E-04	0.004	0.000008	0.007	0.00003	0.00009	0.136	0.001	0.016

Emission Factor in lb/ton	POLLUTANT								
	HBr	HF**	Iron	Manganese**	Mercury**	Nickel**	Total PCB**	Silver	Thallium
	0.043	0.149	0.014	5.67E-04	0.107	5.90E-04	4.65E-05	2.26E-04	1.10E-03
Potential Emissions in ton/yr	0.056	0.193	0.019	0.0007	0.138	0.0008	0.00006	0.0003	0.001
Control Efficiency	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Potential Emissions after control in ton/yr	0.056	0.193	0.019	0.0007	0.138	0.0008	0.00006	0.0003	0.001

\*\* Hazardous Air Pollutants listed in Clean Air Act

**HCl** Hydrogen Chloride  
**CDD** Chlorinated Dibenzo-P-Dioxin  
**CDF** Chlorinated Dibenzofuran  
**HBr** Hydrogen Bromide  
**HF** Hydrogen Flouride  
**PCB** Polychlorinated Biphenyls

**Methodology**

Emission factors are from AP 42 (5th Edition 1/95) Tables 2.3-1 through 2.3-13, Emission Factors for Controlled Air Medical Waste Incinerators.  
 Throughput (lb/hr) \* 8760 hr/yr \* ton/2000 lb = throughput (ton/yr)

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Supplemental Incinerator Fuel**

**Company Name:** Indiana Veterans' Home  
**Address City IN Zip:** 3851 North River Road, West Lafayette, IN 47906  
**Permit Number:** 157-19136  
**Plt ID:** 157-00009  
**Reviewer:** CarrieAnn Paukowits  
**Application Date:** May 6, 2004

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

6.60

58

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100	5.50	84.0
				**see below		
Potential Emission in tons/yr	0.055	0.220	0.017	2.89	0.159	2.43

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

See page 8 for HAPs emissions calculations.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Supplemental Incinerator Fuel  
 HAPs Emissions**

**Company Name:** Indiana Veterans' Home  
**Address City IN Zip:** 3851 North River Road, West Lafayette, IN 47906  
**Permit Number:** 157-19136  
**Pit ID:** 157-00009  
**Reviewer:** CarrieAnn Paukowits  
**Date:** May 6, 2004

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.10E-03	Dichlorobenzene 1.20E-03	Formaldehyde 7.50E-02	Hexane 1.80E+00	Toluene 3.40E-03
Potential Emission in tons/yr	6.07E-05	3.47E-05	2.17E-03	5.20E-02	9.83E-05

HAPs - Metals						
Emission Factor in lb/MMcf	Lead 5.00E-04	Cadmium 1.10E-03	Chromium 1.40E-03	Manganese 3.80E-04	Nickel 2.10E-03	<b>Total</b>
Potential Emission in tons/yr	1.45E-05	3.18E-05	4.05E-05	1.10E-05	6.07E-05	<b>0.055</b>

Methodology is the same as page 7.

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

**Appendix A: Emissions Calculations**

**Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)  
Limited Emissions from three (3) Boilers when operating on #2 Fuel Oil**

**Company Name:** Indiana Veterans' Home  
**Address, City IN Zip:** 3851 North River Road, West Lafayette, IN 47906  
**Permit Number:** 157-19136  
**Plt ID:** 157-00009  
**Reviewer:** CarrieAnn Paukowits  
**Application Date:** May 6, 2004

S = Weight % Sulfur

0.500
-------

Emission Factor in lb/kgal	Pollutant				
	PM*	SO2	NOx	VOC	CO
	2.00	71.0 (142.0S)	20.0	0.340	5.00

Equipment	Heat Input Capacity MMBtu/yr	Potential Throughput kgals/yr	Potential Emission in tons/yr				
			PM*	SO2	NOx	VOC	CO
Boilers 1 - 3	380567	2718	2.72	96.5	27.2	0.462	6.80

**Methodology**

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

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

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

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

See page 10 for HAPs emission calculations.

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)**  
**Limited Emissions from three (3) Boilers when operating on #2 Fuel Oil**  
**HAPs Emissions**

**Company Name: Indiana Veterans' Home**  
**Address, City IN Zip: 3851 North River Road, West Lafayette, IN 47906**  
**Permit Number: 157-19136**  
**Plt ID: 157-00009**  
**Reviewer: CarrieAnn Paukowits**  
**Date: May 6, 2004**

HAPs - Metals					
Emission Factor in lb/mmBtu	Arsenic 0.000004	Beryllium 0.000003	Cadmium 0.000003	Chromium 0.000003	Lead 0.000009
Potential Emission in tons/yr	0.0008	0.0006	0.0006	0.0006	0.002

HAPs - Metals (continued)					
Emission Factor in lb/mmBtu	Mercury 0.000003	Manganese 0.000006	Nickel 0.000003	Selenium 0.00002	Total HAPs
Potential Emission in tons/yr	0.0006	0.001	0.0006	0.003	0.009

**Methodology**

No data was available in AP-42 for organic HAPs.  
 Potential Emissions (tons/year) = Throughput (mmBtu/hr)\*Emission Factor (lb/mmBtu)\*8,760 hrs/yr / 2,000 lb/ton

**Appendix A: Emission Calculations**  
**Limited Emissions from the Incinerator When Operating As A**  
**Controlled Air Medical Waste Incinerator**

**Company Name:** Indiana Veterans' Home  
**Address City IN Zip:** 3851 North River Road, West Lafayette, IN 47906  
**Permit Number:** 157-19136  
**Plt ID:** 157-00009  
**Reviewer:** CarrieAnn Paukowits  
**Application Date:** May 6, 2004

THROUGHPUT lbs/hr 590
-----------------------------

THROUGHPUT (10% of total)  
tons/yr  
258.42

Emission Factor in lb/ton	POLLUTANT								
	PM	SO2	CO	TOC	NOX	Lead**	HCl**	Aluminum	Antimony**
	4.67	2.17	2.95	0.299	3.56	0.073	33.500	0.011	0.013
Potential Emissions in ton/yr	0.603	0.280	0.381	0.039	0.460	0.009	4.33	0.001	0.002
Control Efficiency	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Potential Emissions after control in ton/yr	0.603	0.280	0.381	0.039	0.460	0.009	4.33	0.001	0.002

Emission Factor in lb/ton	POLLUTANT								
	Arsenic**	Barium	Beryllium**	Cadmium**	Total CDD**	Total CDF**	Chlorine**	Chromium**	Copper
	2.42E-04	3.24E-03	6.25E-06	5.48E-03	2.13E-05	7.15E-05	0.105	7.75E-04	0.013
Potential Emissions in ton/yr	3.13E-05	0.0004	0.000001	0.001	0.000003	0.00001	0.014	0.000	0.002
Control Efficiency	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Potential Emissions after control in ton/yr	3.13E-05	0.0004	0.000001	0.001	0.000003	0.00001	0.014	0.000	0.002

Emission Factor in lb/ton	POLLUTANT								
	HBr	HF**	Iron	Manganese**	Mercury**	Nickel**	Total PCB**	Silver	Thallium
	0.043	0.149	0.014	5.67E-04	0.107	5.90E-04	4.65E-05	2.26E-04	1.10E-03
Potential Emissions in ton/yr	0.006	0.019	0.002	0.0001	0.014	0.0001	0.00001	0.00003	0.0001
Control Efficiency	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Potential Emissions after control in ton/yr	0.006	0.019	0.002	0.0001	0.014	0.0001	0.00001	0.00003	0.0001

\*\* Hazardous Air Pollutants listed in Clean Air Act

**HCl** Hydrogen Chloride  
**CDD** Chlorinated Dibenzo-P-Dioxin  
**CDF** Chlorinated Dibenzofuran  
**HBr** Hydrogen Bromide  
**HF** Hydrogen Flouride  
**PCB** Polychlorinated Biphenyls

**Methodology**

Emission factors are from AP 42 (5th Edition 1/95) Tables 2.3-1 through 2.3-13, Emission Factors for Controlled Air Medical Waste Incinerators.  
Throughput (lb/hr) \* 8760 hr/yr \* ton/2000 lb = throughput (ton/yr)

**Appendix A: Emissions Calculations  
Total Emissions**

**Company Name:** Indiana Veterans' Home  
**Address City IN Zip:** 3851 North River Road, West Lafayette, IN 47906  
**FESOP:** 157-19136  
**Plt ID:** 157-00009  
**Reviewer:** CarrieAnn Paukowitz  
**Date:** May 6, 2004

**Unrestricted Potential Emissions**

**Three (3) Boilers**

	PM	PM10	SO2	NOx	VOC	CO	Individual HAP	Total HAPs
Operating on Natural Gas	0.437	1.75	0.138	23.0	1.26	19.3	0.414	0.434
Operating on Fuel oil	3.29	3.29	117	32.9	0.558	8.21	0.002	0.011
<b>Worst Case Fuel for each pollutant</b>	<b>3.29</b>	<b>3.29</b>	<b>117</b>	<b>32.9</b>	<b>1.26</b>	<b>19.3</b>	<b>0.414</b>	<b>0.434</b>

**Incinerator**

	PM	PM10	SO2	NOx	VOC	CO	Individual HAP	Total HAPs
When combusting refuse	9.04	9.04	3.23	3.88	3.88	12.9	-	-
When combusting hospital/medical waste	6.03	6.03	2.80	4.60	0.386	3.81	43.3	43.9
Supplemental fuel	0.055	0.22	0.017	2.89	0.159	2.43	-	0.055
<b>Worst Case for each pollutant + supplemental fuel</b>	<b>9.10</b>	<b>9.26</b>	<b>3.25</b>	<b>7.49</b>	<b>4.04</b>	<b>15.3</b>	<b>43.3</b>	<b>44.0</b>

**Insignificant Activities**

	PM	PM10	SO2	NOx	VOC	CO	Individual HAP	Total HAPs
Bulk Tank	-	-	-	-	1.00	-	negligible	negligible

**Total Emissions (Unrestricted Potential)**

	PM	PM10	SO2	NOx	VOC	CO	Individual HAP	Total HAPs
<b>Total Emissions</b>	<b>12.4</b>	<b>12.6</b>	<b>120</b>	<b>40.4</b>	<b>6.30</b>	<b>34.6</b>	<b>43.3</b>	<b>44.4</b>

**Limited Potential to Emit**

**Three (3) Boilers**

	PM	PM10	SO2	NOx	VOC	CO	Individual HAP	Total HAPs
Operating on Natural Gas	0.437	1.75	0.138	23.0	1.26	19.3	0.414	0.434
Operating on Fuel oil*	2.72	2.72	96.5	27.2	0.462	6.80	0.002	0.009
<b>Total for each pollutant</b>	<b>3.16</b>	<b>3.29</b>	<b>96.6</b>	<b>32.9</b>	<b>1.26</b>	<b>19.3</b>	<b>0.414</b>	<b>0.434</b>

**Incinerator**

	PM	PM10	SO2	NOx	VOC	CO	Individual HAP	Total HAPs
When combusting refuse	9.04	9.04	3.23	3.88	3.88	12.9	-	-
When combusting hospital/medical waste*	0.603	0.603	0.280	0.460	0.039	0.381	4.33	4.39
Supplemental fuel	0.055	0.22	0.017	2.89	0.159	2.43	-	0.055
<b>Total for each pollutant</b>	<b>9.10</b>	<b>9.26</b>	<b>3.25</b>	<b>7.23</b>	<b>4.04</b>	<b>15.3</b>	<b>4.33</b>	<b>4.45</b>

**Insignificant Activities**

	PM	PM10	SO2	NOx	VOC	CO	Individual HAP	Total HAPs
Bulk Tank	-	-	-	-	1.00	-	negligible	negligible

**Total Emissions (Limited Potential to Emit)**

	PM	PM10	SO2	NOx	VOC	CO	Individual HAP	Total HAPs
<b>Total Emissions</b>	<b>12.3</b>	<b>12.6</b>	<b>99.9</b>	<b>40.1</b>	<b>6.30</b>	<b>34.6</b>	<b>4.33</b>	<b>4.88</b>

\*Emissions limited

Since only one operating scenario is limited for the boilers and only one scenario is limited for the incinerators, the limited potential to emit is calculated as follows:

For each pollutant, the limited potential to emit is the sum of the emissions from each scenario (so that the other does not require a limit) or the unrestricted potential emissions, whichever is less.