



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

Eric J. Holcomb  
Governor

Bruno L. Pigott  
Commissioner

### NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a  
Minor Source Operating Permit (MSOP)

MSOP Renewal No.: M093-40663-00015

The Indiana Department of Environmental Management (IDEM) has received an application from St. Vincent Dunn Hospital located at 1600 23rd Street, Bedford, IN 47421 for a renewal of its MSOP issued on March 26, 2009. If approved by IDEM's Office of Air Quality (OAQ), this proposed renewal would allow St. Vincent Dunn Hospital to continue to operate its existing source.

This draft MSOP does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM's preliminary findings are available at:

Bedford Public Library  
1323 K Street  
Bedford, IN 47421

and

IDEM Southeast Regional Office  
820 West Sweet Street  
Brownstown, IN 47220-9557

A copy of the preliminary findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

A copy of the preliminary findings is also available via IDEM's Virtual File Cabinet (VFC.) Please go to: <http://www.in.gov/idem/> and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

#### How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30<sup>th</sup> day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting,

you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number M093-40663-00015 in all correspondence.

**Comments should be sent to:**

Jared Karban  
IDEM, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
(800) 451-6027, ask for Jared Karban or (317) 233-4230  
Or dial directly: (317) 233-4230  
Fax: (317) 232-6749 attn: Jared Karban  
E-mail: [jkarban@idem.IN.gov](mailto:jkarban@idem.IN.gov)

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: <http://www.in.gov/idem/airquality/2356.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**Air Permit Legal Notices**

On November 14, 2018, the State of Indiana Environmental Rules Board adopted rule amendments to 326 IAC 2-1.1-6, 326 IAC 2-7-13, 326 IAC 2-7-17, 326 IAC 2-8-13, 326 IAC 2-8-18, and 326 IAC 2-12-1 (LSA #17-395), concerning legal notice provisions for air permits issued under the NSR and Title V permit programs and other air permits for which newspaper notices are published by IDEM OAQ. The adopted rule amendments require that IDEM OAQ provide electronic public notices on IDEM's website as the primary and consistent method for communicating air permit notices to the public. IDEM anticipates that the final (effective) rule amendments will be promulgated on or about March 14, 2019. The status of these rule amendments (LSA #17-395) and the final effective date will be posted on the following website: <https://www.in.gov/idem/legal/2351.htm>.

Until the rule amendments to 326 IAC 2-1.1-6, 326 IAC 2-7-13, 326 IAC 2-7-17, 326 IAC 2-8-13, 326 IAC 2-8-18, and 326 IAC 2-12-1 are promulgated final (effective), IDEM OAQ will publish both newspaper public notices and electronic public notices on IDEM's website. Once the rule amendments are promulgated final (effective), IDEM OAQ will no longer publish newspaper public notices and will only publish electronic public notices on IDEM's website.

Electronic public notices, including permitting, rulemaking, meeting, and hearing notices, are posted on IDEM's website at: <https://www.in.gov/idem/5474.htm>. Public notices posted on IDEM's webpage will be accessible for the duration of the public comment period.

IDEM OAQ provides alternative methods for receiving public notices, such as the interested parties mailing list. The IDEM OAQ interested parties mailing list consists of people who have asked to be notified by email list or direct mail delivery of air permit actions related to a specific source or multiple sources, or for all air permit actions in a certain county or multiple counties. If you would like to be added

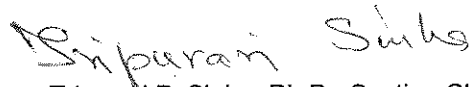
to the IDEM OAQ interested parties mailing list, call Patty Pear at (317) 233-6875 or call (800) 451-6027, select option 4, and ask for the "Permits Administration Section".

Citizens and interested parties can also subscribe to IDEM's regional public notice pages and receive an e-mail or text message to your phone every time IDEM adds information to a subscribed region at the following website: [https://public.govdelivery.com/accounts/INDEM/subscriber/new?qsp=INDEM\\_3](https://public.govdelivery.com/accounts/INDEM/subscriber/new?qsp=INDEM_3)

#### **What will happen after IDEM makes a decision?**

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM Regional Office indicated above, and the IDEM public file room on the 12<sup>th</sup> floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Jared Karban of my staff at the above address.

  
Tripurani P. Sinha, Ph.D., Section Chief  
Permits Branch  
Office of Air Quality



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Commissioner

DRAFT

## Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**St. Vincent Dunn Hospital  
1600 23rd Street  
Bedford, Indiana 47421**

(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.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

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 MSOP under 326 IAC 2-6.1.

|  |  |
|--|--|
| Operation Permit No.: 093-40663-00015<br>Master Agency Interest ID: 34712                              |  |
| Issued by:<br><br>Tripurari P. Sinha, Ph. D., Section Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date:<br><br>Expiration Date: |

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 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 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a stationary general medical hospital.

|                              |  |
|------------------------------|--|
| Source Address:              | 1600 23rd Street, Bedford, Indiana 47421       |
| General Source Phone Number: | 812-276-1272                                   |
| SIC Code:                    | 8062   |
| County Location:             | Lawrence                                       |
| Source Location Status:      | Attainment for all criteria pollutants         |
| Source Status:               | Minor Source Operating Permit Program          |
|                              | Minor Source, under PSD                        |
|                              | Minor Source, Section 112 of the Clean Air Act |
|                              | Not 1 of 28 Source Categories                  |

### A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR1, constructed in 1986, with a maximum capacity of 9 million British thermal units per hour, uncontrolled and exhausting to Stack BLR1.
- (b) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR2, constructed in 1986, with a maximum capacity of 9 million British thermal units per hour, uncontrolled, and exhausting to Stack BLR2.
- (c) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR3, constructed in 1996, with a maximum capacity of 3.6 million British thermal units per hour, and exhausting to Stack BLR3.
- (d) One (1) 288.3-horsepower No. 2 distillate fuel oil fired emergency generator, identified as Generator 1, constructed in 1978, with a maximum heat input capacity of 0.73 million British thermal units per hour, and exhausting to Generator 1 stack.
- (e) One (1) 804.6-horsepower No. 2 distillate fuel oil fired emergency generator, identified as Generator 2, constructed in 1996, and with a maximum heat input capacity of 2.05 million British thermal units per hour.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.



**B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]**

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- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (c) The notification 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.

**B.9 Preventive Maintenance Plan [326 IAC 1-6-3]**

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- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
  - (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.

The Permittee shall implement the PMPs.
- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, 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 and Enforcement Branch, Office of Air Quality

100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

The Permittee shall implement the PMPs.

- (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.
- (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.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

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- (a) All terms and conditions of permits established prior to 093-40663-00015 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

**B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]**

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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 one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

**B.12 Permit Renewal [326 IAC 2-6.1-7]**

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- (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 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
  - (1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and
  - (2) 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) 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 2-6.1 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, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

**B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]**

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- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 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  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

**B.14 Source Modification Requirement**

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

**B.15 Inspection and Entry  
[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]**

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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 permitted 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.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]**

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- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 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  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

**B.17 Annual Fee Payment [326 IAC 2-1.1-7]**

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- (a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.
- (b) 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.18 Credible Evidence [326 IAC 1-1-6]**

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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

**Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]**

**C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

**C.2 Permit Revocation [326 IAC 2-1.1-9]**

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

**C.3 Opacity [326 IAC 5-1]**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 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]**

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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

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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 Stack Height [326 IAC 1-7]

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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.8 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  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

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.

- (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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

#### **Testing Requirements [326 IAC 2-6.1-5(a)(2)]**

##### **C.9 Performance Testing [326 IAC 3-6]**

---

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
  
no later than thirty-five (35) days prior to the intended test date.
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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

##### **C.10 Compliance Requirements [326 IAC 2-1.1-11]**

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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 2-6.1-5(a)(2)]**

##### **C.11 Compliance Monitoring [326 IAC 2-1.1-11]**

---

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Instrument Specifications [326 IAC 2-1.1-11]

---

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. The analog instrument shall be capable of measuring values outside of the normal range.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

**Corrective Actions and Response Steps**

C.13 Response to Excursions or Exceedances

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Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

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- (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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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.

#### **Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]**

##### **C.15 Malfunctions Report [326 IAC 1-6-2]**

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Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, startups or shutdowns of any emission unit or emission control equipment, that results in violations of applicable air pollution control regulations or applicable emission limitations must be kept and retained for a period of three (3) years and be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any emission unit or emission control equipment occurs that lasts more than one (1) hour, the condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification must be made by telephone or other electronic means, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of the occurrence.
- (c) Failure to report a malfunction of any emission unit or emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information on the scope and expected duration of the malfunction must be provided, including the items specified in 326 IAC 1-6-2(c)(3)(A) through (E).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

##### **C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]**

- 
- (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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

##### **C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]**

- 
- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (b) 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.
- (c) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR1, with a maximum capacity of 9 million British thermal units per hour, installed in 1986, and exhausting to Stack BLR1.
- (b) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR2, with a maximum capacity of 9 million British thermal units per hour, installed in 1986, and exhausting to Stack BLR2.
- (c) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR3, with a maximum capacity of 3.6 million British thermal units per hour, installed in 1996, and exhausting to Stack BLR3.

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

#### D.1.1 Particulate Emissions [326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the two (2) boilers, identified as BLR1 and BLR2, each rated at 9 million British thermal units per hour shall be limited to 0.51 pounds per million British thermal units heat input.
- (b) Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the one (1) boiler, identified as BLR3, rated at 3.6 million British thermal units per hour, shall be limited to 0.49 pounds per million British thermal units heat input.

This limitation was computed using the following equation:

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

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 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. (Q = 21.6 million British thermal units per hour)

#### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

##### D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for three (3) boilers BLR1, BLR2, and BR3. Section B – Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

## **Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]**

### **D.1.3 Visible Emissions Notations**

---

- (a) Visible emission notations of the boiler stack exhaust (Stack BLR1, Stack BLR2, and Stack BLR3) shall be performed once per day during normal daylight operations, when combusting 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.

If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response required by this condition. Failure to take a reasonable response shall be considered a deviation from this permit

### **D.1.4 Record Keeping Requirements**

---

- (a) To document the compliance status with Condition D.4.4, the Permittee shall maintain daily records of the visible emission notations of the boiler (BLR) stack exhaust (Stack BLR1, Stack BLR2, and Stack BLR3). The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g., the process did not operate that day).

**SECTION E.1**

**NESHAP**

**Emissions Unit Description:**

- (a) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR1, constructed in 1986, with a maximum capacity of 9 million British thermal units per hour, uncontrolled and exhausting to Stack BLR1.
- (b) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR2, constructed in 1986, with a maximum capacity of 9 million British thermal units per hour, uncontrolled, and exhausting to Stack BLR2.
- (c) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR3, constructed in 1996, with a maximum capacity of 3.6 million British thermal units per hour, and exhausting to Stack BLR3.

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

**National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements**

**[326 IAC 2-6.1-5(a)(1)]**

E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

- (a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart JJJJJJ.
- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

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

E.1.2 Industrial, Commercial, and Institutional Boilers Area Sources NESHAP [40 CFR Part 63, Subpart JJJJJJ]

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The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart JJJJJJ (included as Attachment A to the operating permit) for the emission unit(s) listed above:

- (1) 40 CFR 63.11193
  - (2) 40 CFR 63.11194(a)(1)
  - (3) 40 CFR 63.11196(a)(2)
  - (4) 40 CFR 63.11201(b)(d)
  - (5) 40 CFR 63.11205(a)
  - (6) 40 CFR 63.11210(b)(i)
  - (7) 40 CFR 63.11214(c)
  - (8) 40 CFR 63.11220(a)
  - (9) 40 CFR 63.11221
  - (10) 40 CFR 63.11223(b)
  - (11) 40 CFR 63.11225
  - (13) 40 CFR 63.11235
  - (14) 40 CFR 63.11236
  - (15) 40 CFR 63.11237
- Table 2 (item 4)  
Table 8

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH

MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

|                      |                           |
|----------------------|---------------------------|
| <b>Company Name:</b> | St. Vincent Dunn Hospital |
| <b>Address:</b>      | 1600 23rd Street          |
| <b>City:</b>         | Bedford, Indiana 47421    |
| <b>Phone #:</b>      | 812-276-1272              |
| <b>MSOP #:</b>       | 093-40663-00015           |

I hereby certify that St. Vincent Dunn Hospital is :

☐ still in operation.

I hereby certify that St. Vincent Dunn Hospital is :

☐ no longer in operation.

☐ in compliance with the requirements of  
MSOP 093-40663-00015.

☐ not in compliance with the requirements of  
MSOP 093-40663-00015.

|                                       |
|---------------------------------------|
| <b>Authorized Individual (typed):</b> |
| <b>Title:</b>                         |
| <b>Signature:</b>                     |
| <b>Date:</b>                          |

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

|                       |
|-----------------------|
| <b>Noncompliance:</b> |
|                       |
|                       |
|                       |
|                       |

## MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
FAX NUMBER: (317) 233-6865**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6  
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?\_\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ?\_\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES?\_\_\_\_\_, 25 TONS/YEAR VOC ?\_\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ?\_\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ?\_\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?\_\_\_\_\_, 25 TONS/YEAR FLUORIDES ?\_\_\_\_\_, 100 TONS/YEAR CARBON MONOXIDE ?\_\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?\_\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?\_\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ?    Y        N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ?    Y        N

COMPANY: \_\_\_\_\_ PHONE NO. (    ) \_\_\_\_\_

LOCATION: (CITY AND COUNTY) \_\_\_\_\_

PERMIT NO. \_\_\_\_\_ AFS PLANT ID: \_\_\_\_\_ AFS POINT ID: \_\_\_\_\_ INSP: \_\_\_\_\_

CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/20\_\_\_\_        AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/20\_\_\_\_        AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO<sub>2</sub>, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_

INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

\*SEE PAGE 2



**Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

**326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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## **Attachment A**

### **Minor Source Operating Permit (MSOP) No: 093-40663-00015**

[Downloaded from the eCFR on September 14, 2016]

#### **Electronic Code of Federal Regulations**

#### **Title 40: Protection of Environment**

#### **PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES**

#### **Subpart JJJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources**

SOURCE: 76 FR 15591, Mar. 21, 2011, unless otherwise noted.

#### **What This Subpart Covers**

##### **§63.11193 Am I subject to this subpart?**

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler as defined in §63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in §63.2, except as specified in §63.11195.

##### **§63.11194 What is the affected source of this subpart?**

(a) This subpart applies to each new, reconstructed, or existing affected source as defined in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection of all existing industrial, commercial, and institutional boilers within a subcategory, as listed in §63.11200 and defined in §63.11237, located at an area source.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler within a subcategory, as listed in §63.11200 and as defined in §63.11237, located at an area source.

(b) An affected source is an existing source if you commenced construction or reconstruction of the affected source on or before June 4, 2010.

(c) An affected source is a new source if you commenced construction of the affected source after June 4, 2010, and the boiler meets the applicability criteria at the time you commence construction.

(d) An affected source is a reconstructed source if the boiler meets the reconstruction criteria as defined in §63.2, you commenced reconstruction after June 4, 2010, and the boiler meets the applicability criteria at the time you commence reconstruction.

(e) An existing dual-fuel fired boiler meeting the definition of gas-fired boiler, as defined in §63.11237, that meets the applicability requirements of this subpart after June 4, 2010 due to a fuel switch from gaseous fuel to solid fossil fuel, biomass, or liquid fuel is considered to be an existing source under this subpart as long as the boiler was designed to accommodate the alternate fuel.

(f) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or part 71 as a result of this subpart. You may, however, be required to obtain a title V permit due to another reason or reasons. See 40 CFR 70.3(a) and (b) or 71.3(a) and (b). Notwithstanding the

exemption from title V permitting for area sources under this subpart, you must continue to comply with the provisions of this subpart.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

**§63.11195 Are any boilers not subject to this subpart?**

The types of boilers listed in paragraphs (a) through (k) of this section are not subject to this subpart and to any requirements in this subpart.

(a) Any boiler specifically listed as, or included in the definition of, an affected source in another standard(s) under this part.

(b) Any boiler specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act.

(c) A boiler required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by subpart EEE of this part (e.g., hazardous waste boilers).

(d) A boiler that is used specifically for research and development. This exemption does not include boilers that solely or primarily provide steam (or heat) to a process or for heating at a research and development facility. This exemption does not prohibit the use of the steam (or heat) generated from the boiler during research and development, however, the boiler must be concurrently and primarily engaged in research and development for the exemption to apply.

(e) A gas-fired boiler as defined in this subpart.

(f) A hot water heater as defined in this subpart.

(g) Any boiler that is used as a control device to comply with another subpart of this part, or part 60, part 61, or part 65 of this chapter provided that at least 50 percent of the average annual heat input during any 3 consecutive calendar years to the boiler is provided by regulated gas streams that are subject to another standard.

(h) Temporary boilers as defined in this subpart.

(i) Residential boilers as defined in this subpart.

(j) Electric boilers as defined in this subpart.

(k) An electric utility steam generating unit (EGU) as defined in this subpart.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013; 81 FR 63125, Sept. 14, 2016]

**§63.11196 What are my compliance dates?**

(a) If you own or operate an existing affected boiler, you must achieve compliance with the applicable provisions in this subpart as specified in paragraphs (a)(1) through (3) of this section.

(1) If the existing affected boiler is subject to a work practice or management practice standard of a tune-up, you must achieve compliance with the work practice or management practice standard no later than March 21, 2014.

(2) If the existing affected boiler is subject to emission limits, you must achieve compliance with the emission limits no later than March 21, 2014.

(3) If the existing affected boiler is subject to the energy assessment requirement, you must achieve compliance with the energy assessment requirement no later than March 21, 2014.

(b) If you start up a new affected source on or before May 20, 2011, you must achieve compliance with the provisions of this subpart no later than May 20, 2011.

(c) If you start up a new affected source after May 20, 2011, you must achieve compliance with the provisions of this subpart upon startup of your affected source.

(d) If you own or operate an industrial, commercial, or institutional boiler and would be subject to this subpart except for the exemption in §63.11195(b) for commercial and industrial solid waste incineration units covered by 40 CFR part 60, subpart CCCC or subpart DDDD, and you cease combusting solid waste, you must be in compliance with this subpart on the effective date of the waste to fuel switch as specified in §60.2145(a)(2) and (3) of subpart CCCC or §60.2710(a)(2) and (3) of subpart DDDD.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

### **Emission Limits, Work Practice Standards, Emission Reduction Measures, and Management Practices**

#### **§63.11200 What are the subcategories of boilers?**

The subcategories of boilers, as defined in §63.11237 are:

- (a) Coal.
- (b) Biomass.
- (c) Oil.
- (d) Seasonal boilers.
- (e) Oil-fired boilers with heat input capacity of equal to or less than 5 million British thermal units (Btu) per hour.
- (f) Boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up.
- (g) Limited-use boilers.

[78 FR 7506, Feb. 1, 2013]

#### **§63.11201 What standards must I meet?**

- (a) You must comply with each emission limit specified in Table 1 to this subpart that applies to your boiler.
- (b) You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler. An energy assessment completed on or after January 1, 2008 that meets or is amended to meet the energy assessment requirements in Table 2 to this subpart satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement.
- (c) You must comply with each operating limit specified in Table 3 to this subpart that applies to your boiler.
- (d) These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in §63.11237, during which time you must comply only with Table 2 to this subpart.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

## General Compliance Requirements

### §63.11205 What are my general requirements for complying with this subpart?

(a) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) You must demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or a continuous monitoring system (CMS), including a continuous emission monitoring system (CEMS), a continuous opacity monitoring system (COMS), or a continuous parameter monitoring system (CPMS), where applicable. You may demonstrate compliance with the applicable mercury emission limit using fuel analysis if the emission rate calculated according to §63.11211(c) is less than the applicable emission limit. Otherwise, you must demonstrate compliance using stack testing.

(c) If you demonstrate compliance with any applicable emission limit through performance stack testing and subsequent compliance with operating limits (including the use of CPMS), with a CEMS, or with a COMS, you must develop a site-specific monitoring plan according to the requirements in paragraphs (c)(1) through (3) of this section for the use of any CEMS, COMS, or CPMS. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).

(1) For each CMS required in this section (including CEMS, COMS, or CPMS), you must develop, and submit to the Administrator for approval upon request, a site-specific monitoring plan that addresses paragraphs (c)(1)(i) through (vi) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS. This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing CEMS or COMS operated according to the performance specifications under appendix B to part 60 of this chapter and that meet the requirements of §63.11224.

(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(iv) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);

(v) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c) (as applicable in Table 8 to this subpart), (e)(1), and (e)(2)(i).

(2) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(3) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

## Initial Compliance Requirements

### §63.11210 What are my initial compliance requirements and by what date must I conduct them?

- (a) You must demonstrate initial compliance with each emission limit specified in Table 1 to this subpart that applies to you by either conducting performance (stack) tests, as applicable, according to §63.11212 and Table 4 to this subpart or, for mercury, conducting fuel analyses, as applicable, according to §63.11213 and Table 5 to this subpart.
- (b) For existing affected boilers that have applicable emission limits, you must demonstrate initial compliance with the applicable emission limits no later than 180 days after the compliance date that is specified in §63.11196 and according to the applicable provisions in §63.7(a)(2), except as provided in paragraph (k) of this section.
- (c) For existing affected boilers that have applicable work practice standards, management practices, or emission reduction measures, you must demonstrate initial compliance no later than the compliance date that is specified in §63.11196 and according to the applicable provisions in §63.7(a)(2), except as provided in paragraph (j) of this section.
- (d) For new or reconstructed affected boilers that have applicable emission limits, you must demonstrate initial compliance with the applicable emission limits no later than 180 days after March 21, 2011 or within 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).
- (e) For new or reconstructed oil-fired boilers that commenced construction or reconstruction on or before September 14, 2016, that combust only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a particulate matter (PM) emission limit under this subpart and that do not use a post-combustion technology (except a wet scrubber) to reduce PM or sulfur dioxide emissions, you are not subject to the PM emission limit in Table 1 of this subpart until September 14, 2019, providing you monitor and record on a monthly basis the type of fuel combusted. If you intend to burn a new type of fuel or fuel mixture that does not meet the requirements of this paragraph, you must conduct a performance test within 60 days of burning the new fuel. On and after September 14, 2019, you are subject to the PM emission limit in Table 1 of this subpart and you must demonstrate compliance with the PM emission limit in Table 1 no later than March 12, 2020.
- (f) For new or reconstructed boilers that combust only ultra-low-sulfur liquid fuel as defined in §63.11237, you are not subject to the PM emission limit in Table 1 of this subpart providing you monitor and record on a monthly basis the type of fuel combusted. If you intend to burn a fuel other than ultra-low-sulfur liquid fuel or gaseous fuels as defined in §63.11237, you must conduct a performance test within 60 days of burning the new fuel.
- (g) For new or reconstructed affected boilers that have applicable work practice standards or management practices, you are not required to complete an initial performance tune-up, but you are required to complete the applicable biennial or 5-year tune-up as specified in §63.11223 no later than 25 months or 61 months, respectively, after the initial startup of the new or reconstructed affected source.
- (h) For affected boilers that ceased burning solid waste consistent with §63.11196(d) and for which your initial compliance date has passed, you must demonstrate compliance within 60 days of the effective date of the waste-to-fuel switch as specified in §60.2145(a)(2) and (3) of subpart CCCC or §60.2710(a)(2) and (3) of subpart DDDD. If you have not conducted your compliance demonstration for this subpart within the previous 12 months, you must complete all compliance demonstrations for this subpart before you commence or recommence combustion of solid waste.
- (i) For affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within subpart JJJJJ or the boiler becoming subject to subpart JJJJJ, you must demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted according to §63.11225(g).
- (j) For boilers located at existing major sources of HAP that limit their potential to emit (e.g., make a physical change or take a permit limit) such that the existing major source becomes an area source, you must comply with the applicable provisions as specified in paragraphs (j)(1) through (3) of this section.

(1) Any such existing boiler at the existing source must demonstrate compliance with subpart JJJJJJ within 180 days of the later of March 21, 2014 or upon the existing major source commencing operation as an area source.

(2) Any new or reconstructed boiler at the existing source must demonstrate compliance with subpart JJJJJJ within 180 days of the later of March 21, 2011 or startup.

(3) Notification of such changes must be submitted according to §63.11225(g).

(k) For existing affected boilers that have not operated on solid fossil fuel, biomass, or liquid fuel between the effective date of the rule and the compliance date that is specified for your source in §63.11196, you must comply with the applicable provisions as specified in paragraphs (k)(1) through (3) of this section.

(1) You must complete the initial compliance demonstration, if subject to the emission limits in Table 1 to this subpart, as specified in paragraphs (a) and (b) of this section, no later than 180 days after the re-start of the affected boiler on solid fossil fuel, biomass, or liquid fuel and according to the applicable provisions in §63.7(a)(2).

(2) You must complete the initial performance tune-up, if subject to the tune-up requirements in §63.11223, by following the procedures described in §63.11223(b) no later than 30 days after the re-start of the affected boiler on solid fossil fuel, biomass, or liquid fuel.

(3) You must complete the one-time energy assessment, if subject to the energy assessment requirements specified in Table 2 to this subpart, no later than the compliance date specified in §63.11196.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7507, Feb. 1, 2013; 81 FR 63125, Sept. 14, 2016]

**§63.11211 How do I demonstrate initial compliance with the emission limits?**

(a) For affected boilers that demonstrate compliance with any of the emission limits of this subpart through performance (stack) testing, your initial compliance requirements include conducting performance tests according to §63.11212 and Table 4 to this subpart, conducting a fuel analysis for each type of fuel burned in your boiler according to §63.11213 and Table 5 to this subpart, establishing operating limits according to §63.11222, Table 6 to this subpart and paragraph (b) of this section, as applicable, and conducting CMS performance evaluations according to §63.11224. For affected boilers that burn a single type of fuel, you are exempted from the compliance requirements of conducting a fuel analysis for each type of fuel burned in your boiler. For purposes of this subpart, boilers that use a supplemental fuel only for startup, unit shutdown, and transient flame stability purposes still qualify as affected boilers that burn a single type of fuel, and the supplemental fuel is not subject to the fuel analysis requirements under §63.11213 and Table 5 to this subpart.

(b) You must establish parameter operating limits according to paragraphs (b)(1) through (4) of this section.

(1) For a wet scrubber, you must establish the minimum scrubber liquid flow rate and minimum scrubber pressure drop as defined in §63.11237, as your operating limits during the three-run performance stack test. If you use a wet scrubber and you conduct separate performance stack tests for PM and mercury emissions, you must establish one set of minimum scrubber liquid flow rate and pressure drop operating limits. If you conduct multiple performance stack tests, you must set the minimum scrubber liquid flow rate and pressure drop operating limits at the highest minimum values established during the performance stack tests.

(2) For an electrostatic precipitator operated with a wet scrubber, you must establish the minimum total secondary electric power (secondary voltage and secondary current), as defined in §63.11237, as your operating limits during the three-run performance stack test.

(3) For activated carbon injection, you must establish the minimum activated carbon injection rate, as defined in §63.11237, as your operating limit during the three-run performance stack test.

(4) The operating limit for boilers with fabric filters that demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in §63.11224, and

that each fabric filter must be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.

(c) If you elect to demonstrate compliance with an applicable mercury emission limit through fuel analysis, you must conduct fuel analyses according to §63.11213 and Table 5 to this subpart and follow the procedures in paragraphs (c)(1) through (3) of this section.

(1) If you burn more than one fuel type, you must determine the fuel type, or mixture, you could burn in your boiler that would result in the maximum emission rates of mercury.

(2) You must determine the 90th percentile confidence level fuel mercury concentration of the composite samples analyzed for each fuel type using Equation 1 of this section.

$$P_{90} = \text{mean} + (SD * t) \quad (\text{Eq. 1})$$

Where:

$P_{90}$  = 90th percentile confidence level mercury concentration, in pounds per million Btu.

mean = Arithmetic average of the fuel mercury concentration in the fuel samples analyzed according to §63.11213, in units of pounds per million Btu.

SD = Standard deviation of the mercury concentration in the fuel samples analyzed according to §63.11213, in units of pounds per million Btu.

t = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable mercury emission limit, the emission rate that you calculate for your boiler using Equation 1 of this section must be less than the applicable mercury emission limit.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7508, Feb. 1, 2013]

#### **§63.11212 What stack tests and procedures must I use for the performance tests?**

(a) You must conduct all performance tests according to §63.7(c), (d), (f), and (h). You must also develop a site-specific test plan according to the requirements in §63.7(c).

(b) You must conduct each stack test according to the requirements in Table 4 to this subpart. Boilers that use a CEMS for carbon monoxide (CO) are exempt from the initial CO performance testing in Table 4 to this subpart and the oxygen concentration operating limit requirement specified in Table 3 to this subpart.

(c) You must conduct performance stack tests at the representative operating load conditions while burning the type of fuel or mixture of fuels that have the highest emissions potential for each regulated pollutant, and you must demonstrate initial compliance and establish your operating limits based on these performance stack tests. For subcategories with more than one emission limit, these requirements could result in the need to conduct more than one performance stack test. Following each performance stack test and until the next performance stack test, you must comply with the operating limit for operating load conditions specified in Table 3 to this subpart.

(d) You must conduct a minimum of three separate test runs for each performance stack test required in this section, as specified in §63.7(e)(3) and in accordance with the provisions in Table 4 to this subpart.

(e) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 of appendix A-7 to part 60 of this chapter to convert the measured PM concentrations and the measured mercury concentrations that result from the performance test to pounds per million Btu heat input emission rates.



[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7508, Feb. 1, 2013]

**§63.11213 What fuel analyses and procedures must I use for the performance tests?**

(a) You must conduct fuel analyses according to the procedures in paragraphs (b) and (c) of this section and Table 5 to this subpart, as applicable. You are not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability purposes. You are required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury in Table 1 of this subpart.

(b) At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in Table 5 to this subpart. Each composite sample must consist of a minimum of three samples collected at approximately equal intervals during a test run period.

(c) Determine the concentration of mercury in the fuel in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 5 to this subpart.

**§63.11214 How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?**

(a) If you own or operate an existing or new coal-fired boiler with a heat input capacity of less than 10 million Btu per hour, you must conduct a performance tune-up according to §63.11210(c) or (g), as applicable, and §63.11223(b). If you own or operate an existing coal-fired boiler with a heat input capacity of less than 10 million Btu per hour, you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted an initial tune-up of the boiler.

(b) If you own or operate an existing or new biomass-fired boiler or an existing or new oil-fired boiler, you must conduct a performance tune-up according to §63.11210(c) or (g), as applicable, and §63.11223(b). If you own or operate an existing biomass-fired boiler or existing oil-fired boiler, you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted an initial tune-up of the boiler.

(c) If you own or operate an existing affected boiler with a heat input capacity of 10 million Btu per hour or greater, you must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 to this subpart and that the assessment is an accurate depiction of your facility at the time of the assessment or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended.

(d) If you own or operate a boiler subject to emission limits in Table 1 of this subpart, you must minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. You must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7508, Feb. 1, 2013; 81 FR 63126, Sept. 14, 2016]

**Continuous Compliance Requirements**

**§63.11220 When must I conduct subsequent performance tests or fuel analyses?**

(a) If your boiler has a heat input capacity of 10 million Btu per hour or greater, you must conduct all applicable performance (stack) tests according to §63.11212 on a triennial basis, except as specified in paragraphs (b) through (e) of this section. Triennial performance tests must be completed no more than 37 months after the previous performance test.

(b) For new or reconstructed boilers that commenced construction or reconstruction on or before September 14, 2016, when demonstrating initial compliance with the PM emission limit, if your boiler's performance test results show

that your PM emissions are equal to or less than half of the PM emission limit, you do not need to conduct further performance tests for PM until September 14, 2021, but must continue to comply with all applicable operating limits and monitoring requirements and must comply with the provisions as specified in paragraphs (b)(1) through (4) of this section.

(1) A performance test for PM must be conducted by September 14, 2021.

(2) If your performance test results show that your PM emissions are equal to or less than half of the PM emission limit, you may choose to conduct performance tests for PM every fifth year. Each such performance test must be conducted no more than 61 months after the previous performance test.

(3) If you intend to burn a new type of fuel other than ultra-low-sulfur liquid fuel or gaseous fuels as defined in §63.11237, you must conduct a performance test within 60 days of burning the new fuel type.

(4) If your performance test results show that your PM emissions are greater than half of the PM emission limit, you must conduct subsequent performance tests on a triennial basis as specified in paragraph (a) of this section.

(c) For new or reconstructed boilers that commenced construction or reconstruction after September 14, 2016, when demonstrating initial compliance with the PM emission limit, if your boiler's performance test results show that your PM emissions are equal to or less than half of the PM emission limit, you may choose to conduct performance tests for PM every fifth year, but must continue to comply with all applicable operating limits and monitoring requirements and must comply with the provisions as specified in paragraphs (c)(1) through (3) of this section.

(1) Each such performance test must be conducted no more than 61 months after the previous performance test.

(2) If you intend to burn a new type of fuel other than ultra-low-sulfur liquid fuel or gaseous fuels as defined in §63.11237, you must conduct a performance test within 60 days of burning the new fuel type.

(3) If your performance test results show that your PM emissions are greater than half of the PM emission limit, you must conduct subsequent performance tests on a triennial basis as specified in paragraph (a) of this section.

(d) If you demonstrate compliance with the mercury emission limit based on fuel analysis, you must conduct a fuel analysis according to §63.11213 for each type of fuel burned as specified in paragraphs (d)(1) through (3) of this section. If you plan to burn a new type of fuel or fuel mixture, you must conduct a fuel analysis before burning the new type of fuel or mixture in your boiler. You must recalculate the mercury emission rate using Equation 1 of §63.11211. The recalculated mercury emission rate must be less than the applicable emission limit.

(1) For existing boilers and new or reconstructed boilers that commenced construction or reconstruction on or before September 14, 2016, when demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are measured to be equal to or less than half of the mercury emission limit, you do not need to conduct further fuel analysis sampling until September 14, 2017, but must continue to comply with all applicable operating limits and monitoring requirements and must comply with the provisions as specified in paragraphs (d)(1)(i) and (ii) of this section.

(i) Fuel analysis sampling for mercury must be conducted by September 14, 2017.

(ii) If your fuel analysis results show that the mercury constituents in the fuel or fuel mixture are equal to or less than half of the mercury emission limit, you may choose to conduct fuel analysis sampling for mercury every 12 months.

(2) For new or reconstructed boilers that commenced construction or reconstruction after September 14, 2016, when demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are measured to be equal to or less than half of the mercury emission limit, you may choose to conduct fuel analysis sampling for mercury every 12 months, but must continue to comply with all applicable operating limits and monitoring requirements.

(3) When demonstrating compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are greater than half of the mercury emission limit, you must conduct quarterly sampling.

(e) For existing affected boilers that have not operated on solid fossil fuel, biomass, or liquid fuel since the previous compliance demonstration and more than 3 years have passed since the previous compliance demonstration, you must complete your subsequent compliance demonstration no later than 180 days after the re-start of the affected boiler on solid fossil fuel, biomass, or liquid fuel.

[81 FR 63127, Sept. 14, 2016]

**§63.11221 Is there a minimum amount of monitoring data I must obtain?**

(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by §63.11205(c).

(b) You must operate the monitoring system and collect data at all required intervals at all times the affected source is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods (see §63.8(c)(7) of this part), repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in your site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.

(c) You may not use data collected during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or quality control activities in calculations used to report emissions or operating levels. Any such periods must be reported according to the requirements in §63.11225. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

(d) Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in your site-specific monitoring plan), failure to collect required data is a deviation of the monitoring requirements.

[78 FR 7508, Feb. 1, 2013, as amended at 81 FR 63127, Sept. 14, 2016]

**§63.11222 How do I demonstrate continuous compliance with the emission limits?**

(a) You must demonstrate continuous compliance with each emission limit and operating limit in Tables 1 and 3 to this subpart that applies to you according to the methods specified in Table 7 to this subpart and to paragraphs (a)(1) through (4) of this section.

(1) Following the date on which the initial compliance demonstration is completed or is required to be completed under §§63.7 and 63.11196, whichever date comes first, you must continuously monitor the operating parameters. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in paragraph (a) of this section constitutes a deviation from your operating limits established under this subpart, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests.

(2) If you have an applicable mercury or PM emission limit, you must keep records of the type and amount of all fuels burned in each boiler during the reporting period. If you have an applicable mercury emission limit, you must demonstrate that all fuel types and mixtures of fuels burned would result in lower emissions of mercury than the applicable emission limit (if you demonstrate compliance through fuel analysis), or result in lower fuel input of mercury than the maximum values calculated during the last performance stack test (if you demonstrate compliance through performance stack testing).

(3) If you have an applicable mercury emission limit and you plan to burn a new type of fuel, you must determine the mercury concentration for any new fuel type in units of pounds per million Btu, using the procedures in Equation 1 of §63.11211 based on supplier data or your own fuel analysis, and meet the requirements in paragraphs (a)(3)(i) or (ii) of this section.

(i) The recalculated mercury emission rate must be less than the applicable emission limit.

(ii) If the mercury concentration is higher than mercury fuel input during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.11212 to demonstrate that the mercury emissions do not exceed the emission limit.

(4) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm is counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time is counted as the actual amount of time taken to initiate corrective action.

(b) You must report each instance in which you did not meet each emission limit and operating limit in Tables 1 and 3 to this subpart that apply to you. These instances are deviations from the emission limits in this subpart. These deviations must be reported according to the requirements in §63.11225.

[76 FR 15591, Mar. 21, 2011, as amended at 81 FR 63127, Sept. 14, 2016]

**§63.11223 How do I demonstrate continuous compliance with the work practice and management practice standards?**

(a) For affected sources subject to the work practice standard or the management practices of a tune-up, you must conduct a performance tune-up according to paragraph (b) of this section and keep records as required in §63.11225(c) to demonstrate continuous compliance. You must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

(b) Except as specified in paragraphs (c) through (f) of this section, you must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of this section. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. For a new or reconstructed boiler, the first biennial tune-up must be no later than 25 months after the initial startup of the new or reconstructed boiler.

(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.

(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.

(4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.

(5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

(6) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of this section.

(i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.

(ii) A description of any corrective actions taken as a part of the tune-up of the boiler.

(iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

(7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

(c) Boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up must conduct a tune-up of the boiler every 5 years as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed boiler with an oxygen trim system, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.

(d) Seasonal boilers must conduct a tune-up every 5 years as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed seasonal boiler, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. Seasonal boilers are not subject to the emission limits in Table 1 to this subpart or the operating limits in Table 3 to this subpart.

(e) Oil-fired boilers with a heat input capacity of equal to or less than 5 million Btu per hour must conduct a tune-up every 5 years as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed oil-fired boiler with a heat input capacity of equal to or less than 5 million Btu per hour, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months.

(f) Limited-use boilers must conduct a tune-up every 5 years as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed limited-use boiler, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. Limited-use boilers are not subject to the emission limits in Table 1 to this subpart, the energy assessment requirements in Table 2 to this subpart, or the operating limits in Table 3 to this subpart.

(g) If you own or operate a boiler subject to emission limits in Table 1 of this subpart, you must minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's

recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. You must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7509, Feb. 1, 2013; 81 FR 63127, Sept. 14, 2016]

**§63.11224 What are my monitoring, installation, operation, and maintenance requirements?**

(a) If your boiler is subject to a CO emission limit in Table 1 to this subpart, you must either install, operate, and maintain a CEMS for CO and oxygen according to the procedures in paragraphs (a)(1) through (6) of this section, or install, calibrate, operate, and maintain an oxygen analyzer system, as defined in §63.11237, according to the manufacturer's recommendations and paragraphs (a)(7) and (d) of this section, as applicable, by the compliance date specified in §63.11196. Where a certified CO CEMS is used, the CO level shall be monitored at the outlet of the boiler, after any add-on controls or flue gas recirculation system and before release to the atmosphere. Boilers that use a CO CEMS are exempt from the initial CO performance testing and oxygen concentration operating limit requirements specified in §63.11211(a) of this subpart. Oxygen monitors and oxygen trim systems must be installed to monitor oxygen in the boiler flue gas, boiler firebox, or other appropriate intermediate location.

(1) Each CO CEMS must be installed, operated, and maintained according to the applicable procedures under Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B, and each oxygen CEMS must be installed, operated, and maintained according to Performance Specification 3 at 40 CFR part 60, appendix B. Both the CO and oxygen CEMS must also be installed, operated, and maintained according to the site-specific monitoring plan developed according to paragraph (c) of this section.

(2) You must conduct a performance evaluation of each CEMS according to the requirements in §63.8(e) and according to Performance Specifications 3 and 4, 4A, or 4B at 40 CFR part 60, appendix B.

(3) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) every 15 minutes. You must have CEMS data values from a minimum of four successive cycles of operation representing each of the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CEMS calibration, quality assurance, or maintenance activities are being performed, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2).

(5) You must calculate hourly averages, corrected to 3 percent oxygen, from each hour of CO CEMS data in parts per million CO concentrations and determine the 10-day rolling average of all recorded readings, except as provided in §63.11221(c). Calculate a 10-day rolling average from all of the hourly averages collected for the 10-day operating period using Equation 2 of this section.

$$\text{10-day average} = \frac{\sum_{i=1}^n Hpvi}{n} \quad \text{(Eq. 2)}$$

Where:

Hpvi = the hourly parameter value for hour i

n = the number of valid hourly parameter values collected over 10 boiler operating days

(6) For purposes of collecting CO data, you must operate the CO CEMS as specified in §63.11221(b). For purposes of calculating data averages, you must use all the data collected during all periods in assessing compliance, except that you must exclude certain data as specified in §63.11221(c). Periods when CO data are unavailable may constitute monitoring deviations as specified in §63.11221(d).

(7) You must operate the oxygen analyzer system at or above the minimum oxygen level that is established as the operating limit according to Table 6 to this subpart when firing the fuel or fuel mixture utilized during the most recent

CO performance stack test. Operation of oxygen trim systems to meet these requirements shall not be done in a manner which compromises furnace safety.

(b) If you are using a control device to comply with the emission limits specified in Table 1 to this subpart, you must maintain each operating limit in Table 3 to this subpart that applies to your boiler as specified in Table 7 to this subpart. If you use a control device not covered in Table 3 to this subpart, or you wish to establish and monitor an alternative operating limit and alternative monitoring parameters, you must apply to the United States Environmental Protection Agency (EPA) Administrator for approval of alternative monitoring under §63.8(f).

(c) If you demonstrate compliance with any applicable emission limit through stack testing and subsequent compliance with operating limits, you must develop a site-specific monitoring plan according to the requirements in paragraphs (c)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).

(1) For each CMS required in this section, you must develop, and submit to the EPA Administrator for approval upon request, a site-specific monitoring plan that addresses paragraphs (c)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan (if requested) at least 60 days before your initial performance evaluation of your CMS.

(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device).

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems.

(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(2) In your site-specific monitoring plan, you must also address paragraphs (c)(2)(i) through (iii) of this section.

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), and (4)(ii).

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d).

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

(d) If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each CPMS according to the procedures in paragraphs (d)(1) through (4) of this section.

(1) The CPMS must complete a minimum of one cycle of operation every 15 minutes. You must have data values from a minimum of four successive cycles of operation representing each of the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed, to have a valid hour of data.

(2) You must calculate hourly arithmetic averages from each hour of CPMS data in units of the operating limit and determine the 30-day rolling average of all recorded readings, except as provided in §63.11221(c). Calculate a 30-day rolling average from all of the hourly averages collected for the 30-day operating period using Equation 3 of this section.

$$\text{30-day average} = \frac{\sum_{i=1}^n Hpvi}{n} \quad (\text{Eq. 3})$$

Where:

Hpvi = the hourly parameter value for hour i

n = the number of valid hourly parameter values collected over 30 boiler operating days

(3) For purposes of collecting data, you must operate the CPMS as specified in §63.11221(b). For purposes of calculating data averages, you must use all the data collected during all periods in assessing compliance, except that you must exclude certain data as specified in §63.11221(c). Periods when CPMS data are unavailable may constitute monitoring deviations as specified in §63.11221(d).

(4) Record the results of each inspection, calibration, and validation check.

(e) If you have an applicable opacity operating limit under this rule, you must install, operate, certify and maintain each COMS according to the procedures in paragraphs (e)(1) through (8) of this section by the compliance date specified in §63.11196.

(1) Each COMS must be installed, operated, and maintained according to Performance Specification 1 of 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8 and according to Performance Specification 1 of 40 CFR part 60, appendix B.

(3) As specified in §63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in §63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of §63.8(e). You must identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit.

(7) You must calculate and record 6-minute averages from the opacity monitoring data and determine and record the daily block average of recorded readings, except as provided in §63.11221(c).

(8) For purposes of collecting opacity data, you must operate the COMS as specified in §63.11221(b). For purposes of calculating data averages, you must use all the data collected during all periods in assessing compliance, except that you must exclude certain data as specified in §63.11221(c). Periods when COMS data are unavailable may constitute monitoring deviations as specified in §63.11221(d).

(f) If you use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate the bag leak detection system as specified in paragraphs (f)(1) through (8) of this section.

(1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.

(2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with EPA-454/R-98-015 (incorporated by reference, see §63.14).



(3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

(5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(6) The bag leak detection system must be equipped with an audible or visual alarm system that will activate automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard or seen by plant operating personnel.

(7) For positive pressure fabric filter systems that do not duct all compartments or cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.

(8) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7510, Feb. 1, 2013]

**§63.11225 What are my notification, reporting, and recordkeeping requirements?**

(a) You must submit the notifications specified in paragraphs (a)(1) through (5) of this section to the administrator.

(1) You must submit all of the notifications in §§63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply to you by the dates specified in those sections except as specified in paragraphs (a)(2) and (4) of this section.

(2) An Initial Notification must be submitted no later than January 20, 2014 or within 120 days after the source becomes subject to the standard.

(3) If you are required to conduct a performance stack test you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance stack test is scheduled to begin.

(4) You must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in §63.11196 unless you own or operate a new boiler subject only to a requirement to conduct a biennial or 5-year tune-up or you must conduct a performance stack test. If you own or operate a new boiler subject to a requirement to conduct a tune-up, you are not required to prepare and submit a Notification of Compliance Status for the tune-up. If you must conduct a performance stack test, you must submit the Notification of Compliance Status within 60 days of completing the performance stack test. You must submit the Notification of Compliance Status in accordance with paragraphs (a)(4)(i) and (vi) of this section. The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs (a)(4)(i) through (v) of this section, as applicable, and signed by a responsible official.

(i) You must submit the information required in §63.9(h)(2), except the information listed in §63.9(h)(2)(i)(B), (D), (E), and (F). If you conduct any performance tests or CMS performance evaluations, you must submit that data as specified in paragraph (e) of this section. If you conduct any opacity or visible emission observations, or other monitoring procedures or methods, you must submit that data to the Administrator at the appropriate address listed in §63.13.

(ii) "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler."

(iii) "This facility has had an energy assessment performed according to §63.11214(c)."

(iv) For units that install bag leak detection systems: "This facility complies with the requirements in §63.11224(f)."

(v) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."

(vi) The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in §63.13.

(5) If you are using data from a previously conducted emission test to serve as documentation of conformance with the emission standards and operating limits of this subpart, you must include in the Notification of Compliance Status the date of the test and a summary of the results, not a complete test report, relative to this subpart.

(b) You must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of this section. You must submit the report by March 15 if you had any instance described by paragraph (b)(3) of this section. For boilers that are subject only to the energy assessment requirement and/or a requirement to conduct a biennial or 5-year tune-up according to §63.11223(a) and not subject to emission limits or operating limits, you may prepare only a biennial or 5-year compliance report as specified in paragraphs (b)(1) and (2) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(i) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."

(ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."

(iii) "This facility complies with the requirement in §§63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

(3) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

(4) The total fuel use by each affected boiler subject to an emission limit, for each calendar month within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by you or EPA through a petition process to be a non-waste under §241.3(c), whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of §241.3, and the total fuel usage amount with units of measure.

(c) You must maintain the records specified in paragraphs (c)(1) through (7) of this section.

(1) As required in §63.10(b)(2)(xiv), you must keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.

(2) You must keep records to document conformance with the work practices, emission reduction measures, and management practices required by §63.11214 and §63.11223 as specified in paragraphs (c)(2)(i) through (vi) of this section.

(i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

(ii) For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §241.3(b)(1) of this chapter, you must keep a record which documents how the secondary material meets each of the legitimacy criteria under §241.3(d)(1). If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to §241.3(b)(4) of this chapter, you must keep records as to how the operations that produced the fuel satisfies the definition of processing in §241.2 and each of the legitimacy criteria in §241.3(d)(1) of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under §241.3(c) of this chapter, you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per §241.4, you must keep records documenting that the material is a listed non-waste under §241.4(a).

(iii) For each boiler required to conduct an energy assessment, you must keep a copy of the energy assessment report.

(iv) For each boiler subject to an emission limit in Table 1 to this subpart, you must keep records of monthly fuel use by each boiler, including the type(s) of fuel and amount(s) used. For each new oil-fired boiler that meets the requirements of §63.11210(e) or (f), you must keep records, on a monthly basis, of the type of fuel combusted.

(v) For each boiler that meets the definition of seasonal boiler, you must keep records of days of operation per year.

(vi) For each boiler that meets the definition of limited-use boiler, you must keep a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and records of fuel use for the days the boiler is operating.

(3) For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation that were done to demonstrate compliance with the mercury emission limits. Supporting documentation should include results of any fuel analyses. You can use the results from one fuel analysis for multiple boilers provided they are all burning the same fuel type.

(4) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(6) You must keep the records of all inspection and monitoring data required by §§63.11221 and 63.11222, and the information identified in paragraphs (c)(6)(i) through (vi) of this section for each required inspection or monitoring.

(i) The date, place, and time of the monitoring event.

(ii) Person conducting the monitoring.

(iii) Technique or method used.

(iv) Operating conditions during the activity.

(v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.

(vi) Maintenance or corrective action taken (if applicable).

(7) If you use a bag leak detection system, you must keep the records specified in paragraphs (c)(7)(i) through (iii) of this section.

(i) Records of the bag leak detection system output.

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings.

(iii) The date and time of all bag leak detection system alarms, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

(d) Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. You may keep the records off site for the remaining 3 years.

(e)(1) Within 60 days after the date of completing each performance test (as defined in §63.2) required by this subpart, you must submit the results of the performance tests, including any associated fuel analyses, following the procedure specified in either paragraph (e)(1)(i) or (ii) of this section.

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site ([https://www3.epa.gov/ttn/chief/ert/ert\\_info.html](https://www3.epa.gov/ttn/chief/ert/ert_info.html)) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

(2) Within 60 days after the date of completing each CEMS performance evaluation (as defined in §63.2), you must submit the results of the performance evaluation following the procedure specified in either paragraph (e)(2)(i) or (ii) of this section.

(i) For performance evaluations of continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the evaluation, you must submit the results of the performance evaluation to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) Performance evaluation data must be submitted in a file format generated through the use of the EPA's ERT or an alternate file format consistent with the XML schema listed on the EPA's ERT Web site. If you claim that some of the performance evaluation information being submitted is CBI, you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic storage media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(ii) For any performance evaluations of continuous monitoring systems measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the evaluation, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §63.13.

(f) If you intend to commence or recommence combustion of solid waste, you must provide 30 days prior notice of the date upon which you will commence or recommence combustion of solid waste. The notification must identify:

(1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that will commence burning solid waste, and the date of the notice.

(2) The currently applicable subcategory under this subpart.

(3) The date on which you became subject to the currently applicable emission limits.

(4) The date upon which you will commence combusting solid waste.

(g) If you have switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within this subpart, in the boiler becoming subject to this subpart, or in the boiler switching out of this subpart due to a fuel change that results in the boiler meeting the definition of gas-fired boiler, as defined in §63.11237, or you have taken a permit limit that resulted in you becoming subject to this subpart or no longer being subject to this subpart, you must provide notice of the date upon which you switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify:

(1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice.

(2) The date upon which the fuel switch, physical change, or permit limit occurred.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7511, Feb. 1, 2013; 81 FR 63127, Sept. 14, 2016]

#### **§63.11226 [Reserved]**

#### **Other Requirements and Information**

#### **§63.11235 What parts of the General Provisions apply to me?**

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

#### **§63.11236 Who implements and enforces this subpart?**

(a) This subpart can be implemented and enforced by EPA or an administrator such as your state, local, or tribal agency. If the EPA Administrator has delegated authority to your state, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your state, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a state, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraphs (c) of this section are retained by the EPA Administrator and are not transferred to the state, local, or tribal agency.

(c) The authorities that cannot be delegated to state, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.

(1) Approval of an alternative non-opacity emission standard and work practice standards in §63.11223(a).

(2) Approval of alternative opacity emission standard under §63.6(h)(9).

(3) Approval of major change to test methods under §63.7(e)(2)(ii) and (f). A “major change to test method” is defined in §63.90.

(4) Approval of a major change to monitoring under §63.8(f). A “major change to monitoring” is defined in §63.90.

(5) Approval of major change to recordkeeping and reporting under §63.10(f). A “major change to recordkeeping/reporting” is defined in §63.90.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7513, Feb. 1, 2013]

#### **§63.11237 What definitions apply to this subpart?**

Terms used in this subpart are defined in the Clean Air Act, in §63.2 (the General Provisions), and in this section as follows:

*10-day rolling average* means the arithmetic mean of all valid hours of data from 10 successive operating days, except for periods of startup and shutdown and periods when the unit is not operating.

*30-day rolling average* means the arithmetic mean of all valid hours of data from 30 successive operating days, except for periods of startup and shutdown and periods when the unit is not operating.

*Annual capacity factor* means the ratio between the actual heat input to a boiler from the fuels burned during a calendar year and the potential heat input to the boiler had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

*Annual heat input* means the heat input for the 12 months preceding the compliance demonstration.

*Bag leak detection system* means a group of instruments that are capable of monitoring particulate matter loadings in the exhaust of a fabric filter (*i.e.*, baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

*Biodiesel* means a mono-alkyl ester derived from biomass and conforming to ASTM D6751-11b, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels (incorporated by reference, see §63.14).

*Biomass* means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (*e.g.*, trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (*e.g.*, almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition of biomass is not intended to suggest that these materials are or are not solid waste.

*Biomass subcategory* includes any boiler that burns any biomass and is not in the coal subcategory.

*Boiler* means an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam and/or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. A device combusting solid waste, as defined in §241.3 of this chapter, is not a boiler unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Waste heat boilers, process heaters, and autoclaves are excluded from the definition of *Boiler*.

*Boiler system* means the boiler and associated components, such as, feedwater systems, combustion air systems, fuel systems (including burners), blowdown systems, combustion control systems, steam systems, and condensate return systems, directly connected to and serving the energy use systems.

*Calendar year* means the period between January 1 and December 31, inclusive, for a given year.

*Coal* means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by the American Society for Testing and Materials in ASTM D388 (incorporated by reference, see §63.14), coal refuse, and petroleum coke. For the purposes of this subpart, this definition of “coal” includes synthetic fuels derived from coal including, but not

limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures. Coal derived gases are excluded from this definition.

*Coal subcategory* includes any boiler that burns any solid fossil fuel and no more than 15 percent biomass on an annual heat input basis.

*Commercial boiler* means a boiler used in commercial establishments such as hotels, restaurants, and laundries to provide electricity, steam, and/or hot water.

*Common stack* means the exhaust of emissions from two or more affected units through a single flue. Affected units with a common stack may each have separate air pollution control systems located before the common stack, or may have a single air pollution control system located after the exhausts come together in a single flue.

*Daily block average* means the arithmetic mean of all valid emission concentrations or parameter levels recorded when a unit is operating measured over the 24-hour period from 12 a.m. (midnight) to 12 a.m. (midnight), except for periods of startup and shutdown and periods when the unit is not operating.

*Deviation* (1) Means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any applicable requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; or

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

(2) A deviation is not always a violation.

*Distillate oil* means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §63.14) or diesel fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §63.14), kerosene, and biodiesel as defined by the American Society of Testing and Materials in ASTM D6751-11b (incorporated by reference, see §63.14).

*Dry scrubber* means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems used as control devices in fluidized bed boilers are included in this definition. A dry scrubber is a dry control system.

*Dry scrubber* means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems used as control devices in fluidized bed boilers and process heaters are included in this definition. A dry scrubber is a dry control system.

*Electric boiler* means a boiler in which electric heating serves as the source of heat. Electric boilers that burn gaseous or liquid fuel during periods of electrical power curtailment or failure are included in this definition.

*Electric utility steam generating unit (EGU)* means a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit. To be "capable of combusting" fossil fuels, an EGU would need to have these fuels allowed in their operating permits and have the appropriate fuel handling facilities on-site or otherwise available (e.g., coal handling equipment, including coal storage area, belts and conveyers, pulverizers, etc.; oil storage facilities). In addition, fossil fuel-fired EGU means any EGU that fired fossil fuel for more than 10.0 percent of the average annual heat input in any 3 consecutive calendar years or for more than 15.0 percent of the annual heat input during any one calendar year after April 16, 2015.

*Electrostatic precipitator (ESP)* means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field, collecting the particles using a grounded collecting surface, and transporting the particles into a hopper. An electrostatic precipitator is usually a dry control system.

*Energy assessment* means the following for the emission units covered by this subpart:

(1) The energy assessment for facilities with affected boilers with less than 0.3 trillion Btu per year (TBtu/year) heat input capacity will be 8 on-site technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 50 percent of the affected boiler(s) energy (e.g., steam, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities, within the limit of performing an 8-hour energy assessment.

(2) The energy assessment for facilities with affected boilers with 0.3 to 1.0 TBtu/year heat input capacity will be 24 on-site technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 33 percent of the affected boiler(s) energy (e.g., steam, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities, within the limit of performing a 24-hour energy assessment.

(3) The energy assessment for facilities with affected boilers with greater than 1.0 TBtu/year heat input capacity will be up to 24 on-site technical labor hours in length for the first TBtu/year plus 8 on-site technical labor hours for every additional 1.0 TBtu/year not to exceed 160 on-site technical hours, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 20 percent of the affected boiler(s) energy (e.g., steam, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities.

(4) The on-site energy use system(s) serving as the basis for the percent of affected boiler(s) energy production, as applicable, in paragraphs (1), (2), and (3) of this definition may be segmented by production area or energy use area as most logical and applicable to the specific facility being assessed (e.g., product X manufacturing area; product Y drying area; Building Z).

*Energy management program* means a program that includes a set of practices and procedures designed to manage energy use that are demonstrated by the facility's energy policies, a facility energy manager and other staffing responsibilities, energy performance measurement and tracking methods, an energy saving goal, action plans, operating procedures, internal reporting requirements, and periodic review intervals used at the facility. Facilities may establish their program through energy management systems compatible with ISO 50001.

*Energy use system* (1) Includes the following systems located on the site of the affected boiler that use energy provided by the boiler:

(i) Process heating; compressed air systems; machine drive (motors, pumps, fans); process cooling; facility heating, ventilation, and air conditioning systems; hot water systems; building envelop; and lighting; or

(ii) Other systems that use steam, hot water, process heat, or electricity, provided by the affected boiler.

(2) Energy use systems are only those systems using energy clearly produced by affected boilers.

*Equivalent* means the following only as this term is used in Table 5 to this subpart:

(1) An equivalent sample collection procedure means a published voluntary consensus standard or practice (VCS) or

EPA method that includes collection of a minimum of three composite fuel samples, with each composite consisting of a minimum of three increments collected at approximately equal intervals over the test period.

(2) An equivalent sample compositing procedure means a published VCS or EPA method to systematically mix and obtain a representative subsample (part) of the composite sample.



(3) An equivalent sample preparation procedure means a published VCS or EPA method that: Clearly states that the standard, practice or method is appropriate for the pollutant and the fuel matrix; or is cited as an appropriate sample preparation standard, practice or method for the pollutant in the chosen VCS or EPA determinative or analytical method.

(4) An equivalent procedure for determining heat content means a published VCS or EPA method to obtain gross calorific (or higher heating) value.

(5) An equivalent procedure for determining fuel moisture content means a published VCS or EPA method to obtain moisture content. If the sample analysis plan calls for determining mercury using an aliquot of the dried sample, then the drying temperature must be modified to prevent vaporizing this metal. On the other hand, if metals analysis is done on an "as received" basis, a separate aliquot can be dried to determine moisture content and the mercury concentration mathematically adjusted to a dry basis.

(6) An equivalent mercury determinative or analytical procedure means a published VCS or EPA method that clearly states that the standard, practice, or method is appropriate for mercury and the fuel matrix and has a published detection limit equal or lower than the methods listed in Table 5 to this subpart for the same purpose.

*Fabric filter* means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse. A fabric filter is a dry control system.

*Federally enforceable* means all limitations and conditions that are enforceable by the EPA Administrator, including, but not limited to, the requirements of 40 CFR parts 60, 61, 63, and 65, requirements within any applicable state implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

*Fluidized bed boiler* means a boiler utilizing a fluidized bed combustion process that is not a pulverized coal boiler.

*Fluidized bed combustion* means a process where a fuel is burned in a bed of granulated particles, which are maintained in a mobile suspension by the forward flow of air and combustion products.

*Fossil fuel* means natural gas, oil, coal, and any form of solid, liquid, or gaseous fuel derived from such material.

*Fuel type* means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, sub-bituminous coal, lignite, anthracite, biomass, distillate oil, residual oil. Individual fuel types received from different suppliers are not considered new fuel types.

*Gaseous fuels* includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, hydrogen, and biogas.

*Gas-fired boiler* includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

*Heat input* means heat derived from combustion of fuel in a boiler and does not include the heat input from preheated combustion air, recirculated flue gases, returned condensate, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns.

*Hot water heater* means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous, liquid, or biomass fuel and hot water is withdrawn for use external to the vessel. Hot water boilers (*i.e.*, not generating steam) combusting gaseous, liquid, or biomass fuel with a heat input capacity of less than 1.6 million Btu per hour are included in this definition. The 120 U.S. gallon capacity threshold to be considered a hot water heater is independent of the 1.6 million Btu per hour heat input capacity threshold for hot water boilers. Hot water heater also means a tankless unit that provides on-demand hot water.

*Hourly average* means the arithmetic average of at least four CMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed.

*Industrial boiler* means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.

*Institutional boiler* means a boiler used in institutional establishments such as, but not limited to, medical centers, nursing homes, research centers, institutions of higher education, elementary and secondary schools, libraries, religious establishments, and governmental buildings to provide electricity, steam, and/or hot water.

*Limited-use boiler* means any boiler that burns any amount of solid or liquid fuels and has a federally enforceable annual capacity factor of no more than 10 percent.

*Liquid fuel* includes, but is not limited to, distillate oil, residual oil, any form of liquid fuel derived from petroleum, used oil meeting the specification in 40 CFR 279.11, liquid biofuels, biodiesel, and vegetable oil.

*Load fraction* means the actual heat input of a boiler divided by heat input during the performance test that established the minimum sorbent injection rate or minimum activated carbon injection rate, expressed as a fraction (e.g., for 50 percent load the load fraction is 0.5). For boilers that co-fire natural gas with a solid or liquid fuel, the load fraction is determined by the actual heat input of the solid or liquid fuel divided by heat input of the solid or liquid fuel fired during the performance test (e.g., if the performance test was conducted at 100 percent solid fuel firing, for 100 percent load firing 50 percent solid fuel and 50 percent natural gas, the load fraction is 0.5).

*Minimum activated carbon injection rate* means load fraction multiplied by the lowest hourly average activated carbon injection rate measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limit.

*Minimum oxygen level* means the lowest hourly average oxygen level measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable carbon monoxide emission limit.

*Minimum scrubber liquid flow rate* means the lowest hourly average scrubber liquid flow rate (e.g., to the particulate matter scrubber) measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limit.

*Minimum scrubber pressure drop* means the lowest hourly average scrubber pressure drop measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limit.

*Minimum sorbent injection rate* means:

- (1) The load fraction multiplied by the lowest hourly average sorbent injection rate for each sorbent measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limits; or
- (2) For fluidized bed combustion, the lowest average ratio of sorbent to sulfur measured during the most recent performance test.

*Minimum total secondary electric power* means the lowest hourly average total secondary electric power determined from the values of secondary voltage and secondary current to the electrostatic precipitator measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limits.

*Natural gas* means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §63.14); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions (*i.e.*, a temperature of 288 Kelvin, a relative humidity of 60 percent, and a pressure of 101.3 kilopascals). Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 35 and 41 megajoules (MJ) per dry standard cubic meter (950 and 1,100 Btu per dry standard cubic foot); or

(4) Propane or propane-derived synthetic natural gas. Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure  $C_3H_8$ .

*Oil subcategory* includes any boiler that burns any liquid fuel and is not in either the biomass or coal subcategories. Gas-fired boilers that burn liquid fuel only during periods of gas curtailment, gas supply interruptions, startups, or for periodic testing are not included in this definition. Periodic testing on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

*Opacity* means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

*Operating day* means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the boiler unit. It is not necessary for fuel to be combusted for the entire 24-hour period.

*Oxygen analyzer system* means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler flue gas, boiler firebox, or other appropriate intermediate location. This definition includes oxygen trim systems.

*Oxygen trim system* means a system of monitors that is used to maintain excess air at the desired level in a combustion device over its operating load range. A typical system consists of a flue gas oxygen and/or carbon monoxide monitor that automatically provides a feedback signal to the combustion air controller or draft controller.

*Particulate matter (PM)* means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an approved alternative method.

*Performance testing* means the collection of data resulting from the execution of a test method used (either by stack testing or fuel analysis) to demonstrate compliance with a relevant emission standard.

*Period of gas curtailment or supply interruption* means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

*Process heater* means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material (e.g., glycol or a mixture of glycol and water) for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. Process heaters include units that heat water/water mixtures for pool heating, sidewalk heating, cooling tower water heating, power washing, or oil heating.

*Qualified energy assessor* means:

(1) Someone who has demonstrated capabilities to evaluate energy savings opportunities for steam generation and major energy using systems, including, but not limited to:

- (i) Boiler combustion management.
- (ii) Boiler thermal energy recovery, including
  - (A) Conventional feed water economizer,
  - (B) Conventional combustion air preheater, and
  - (C) Condensing economizer.
- (iii) Boiler blowdown thermal energy recovery.
- (iv) Primary energy resource selection, including
  - (A) Fuel (primary energy source) switching, and
  - (B) Applied steam energy versus direct-fired energy versus electricity.
- (v) Insulation issues.
- (vi) Steam trap and steam leak management.
- (vii) Condensate recovery.
- (viii) Steam end-use management.

(2) Capabilities and knowledge includes, but is not limited to:

- (i) Background, experience, and recognized abilities to perform the assessment activities, data analysis, and report preparation.
- (ii) Familiarity with operating and maintenance practices for steam or process heating systems.
- (iii) Additional potential steam system improvement opportunities including improving steam turbine operations and reducing steam demand.
- (iv) Additional process heating system opportunities including effective utilization of waste heat and use of proper process heating methods.
- (v) Boiler-steam turbine cogeneration systems.
- (vi) Industry specific steam end-use systems.

*Regulated gas stream* means an offgas stream that is routed to a boiler for the purpose of achieving compliance with a standard under another subpart of this part or part 60, part 61, or part 65 of this chapter.

*Residential boiler* means a boiler used to provide heat and/or hot water and/or as part of a residential combined heat and power system. This definition includes boilers located at an institutional facility (e.g., university campus, military base, church grounds) or commercial/industrial facility (e.g., farm) used primarily to provide heat and/or hot water for:

- (1) A dwelling containing four or fewer families, or
- (2) A single unit residence dwelling that has since been converted or subdivided into condominiums or apartments.

*Residual oil* means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society of Testing and Materials in ASTM D396-10 (incorporated by reference, see §63.14(b)).

*Responsible official* means responsible official as defined in §70.2.

*Seasonal boiler* means a boiler that undergoes a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) each 12-month period due to seasonal conditions, except for periodic testing. Periodic testing shall not exceed a combined total of 15 days during the 7-month shutdown. This definition only applies to boilers that would otherwise be included in the biomass subcategory or the oil subcategory.

*Shutdown* means the period in which cessation of operation of a boiler is initiated for any purpose. Shutdown begins when the boiler no longer supplies useful thermal energy (such as steam or hot water) for heating, cooling, or process purposes or generates electricity, or when no fuel is being fed to the boiler, whichever is earlier. Shutdown ends when the boiler no longer supplies useful thermal energy (such as steam or hot water) for heating, cooling, or process purposes or generates electricity, and no fuel is being combusted in the boiler.

*Solid fossil fuel* includes, but is not limited to, coal, coke, petroleum coke, and tire-derived fuel.

*Solid fuel* means any solid fossil fuel or biomass or bio-based solid fuel.

*Startup* means:

(1) Either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or hot water) for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the useful thermal energy (such as steam or hot water) from the boiler is supplied for heating and/or producing electricity, or for any other purpose, or

(2) The period in which operation of a boiler is initiated for any purpose. Startup begins with either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or hot water) for heating, cooling or process purposes or producing electricity, or the firing of fuel in a boiler for any purpose after a shutdown event. Startup ends 4 hours after when the boiler supplies useful thermal energy (such as steam or hot water) for heating, cooling, or process purposes or generates electricity, whichever is earlier.

*Temporary boiler* means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A boiler is not a temporary boiler if any one of the following conditions exists:

(1) The equipment is attached to a foundation.

(2) The boiler or a replacement remains at a location within the facility and performs the same or similar function for more than 12 consecutive months, unless the regulatory agency approves an extension. An extension may be granted by the regulating agency upon petition by the owner or operator of a unit specifying the basis for such a request. Any temporary boiler that replaces a temporary boiler at a location within the facility and performs the same or similar function will be included in calculating the consecutive time period unless there is a gap in operation of 12 months or more.

(3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.

(4) The equipment is moved from one location to another within the facility but continues to perform the same or similar function and serve the same electricity, steam, and/or hot water system in an attempt to circumvent the residence time requirements of this definition.

*Tune-up* means adjustments made to a boiler in accordance with the procedures outlined in §63.11223(b).

*Ultra-low-sulfur liquid fuel* means a distillate oil that has less than or equal to 15 parts per million (ppm) sulfur.

*Useful thermal energy* means energy (*i.e.*, steam or hot water) that meets the minimum operating temperature, flow, and/or pressure required by any energy use system that uses energy provided by the affected boiler.

*Vegetable oil* means oils extracted from vegetation.

*Voluntary Consensus Standards (VCS)* mean technical standards (*e.g.*, materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. EPA/Office of Air Quality Planning and Standards, by precedent, has only used VCS that are written in English. Examples of VCS bodies are: American Society of Testing and Materials (ASTM, 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428-B2959, (800) 262-1373, <http://www.astm.org>), American Society of Mechanical Engineers (ASME, Three Park Avenue, New York, NY 10016-5990, (800) 843-2763, <http://www.asme.org>), International Standards Organization (ISO 1, ch. de la Voie-Creuse, Case postale 56, CH-1211 Geneva 20, Switzerland, +41 22 749 01 11, <http://www.iso.org/iso/home.htm>), Standards Australia (AS Level 10, The Exchange Centre, 20 Bridge Street, Sydney, GPO Box 476, Sydney NSW 2001, +61 2 9237 6171 <http://www.standards.org.au>), British Standards Institution (BSI, 389 Chiswick High Road, London, W4 4AL, United Kingdom, +44 (0)20 8996 9001, <http://www.bsigroup.com>), Canadian Standards Association (CSA, 5060 Spectrum Way, Suite 100, Mississauga, Ontario L4W 5N6, Canada, 800-463-6727, <http://www.csa.ca>), European Committee for Standardization (CEN CENELEC Management Centre Avenue Marnix 17 B-1000 Brussels, Belgium +32 2 550 08 11, <http://www.cen.eu/cen>), and German Engineering Standards (VDI Guidelines Department, P.O. Box 10 11 39 40002, Duesseldorf, Germany, +49 211 6214-230, <http://www.vdi.eu>). The types of standards that are not considered VCS are standards developed by: the United States, *e.g.*, California Air Resources Board (CARB) and Texas Commission on Environmental Quality (TCEQ); industry groups, such as American Petroleum Institute (API), Gas Processors Association (GPA), and Gas Research Institute (GRI); and other branches of the U.S. Government, *e.g.*, Department of Defense (DOD) and Department of Transportation (DOT). This does not preclude EPA from using standards developed by groups that are not VCS bodies within their rule. When this occurs, EPA has done searches and reviews for VCS equivalent to these non-EPA methods.

*Waste heat boiler* means a device that recovers normally unused energy (*i.e.*, hot exhaust gas) and converts it to usable heat. Waste heat boilers are also referred to as heat recovery steam generators. Waste heat boilers are heat exchangers generating steam from incoming hot exhaust gas from an industrial (*e.g.*, thermal oxidizer, kiln, furnace) or power (*e.g.*, combustion turbine, engine) equipment. Duct burners are sometimes used to increase the temperature of the incoming hot exhaust gas.

*Wet scrubber* means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler to control emissions of particulate matter or to absorb and neutralize acid gases, such as hydrogen chloride. A wet scrubber creates an aqueous stream or slurry as a byproduct of the emissions control process.

*Work practice standard* means any design, equipment, work practice, or operational standard, or combination thereof, which is promulgated pursuant to section 112(h) of the Clean Air Act.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7513, Feb. 1, 2013; 81 FR 61328, Sept. 14, 2016]

**Table 1 to Subpart JJJJJJ of Part 63—Emission Limits**

As stated in §63.11201, you must comply with the following applicable emission limits:

| <b>If your boiler is in this subcategory . . .</b>  | <b>For the following pollutants . . .</b> | <b>You must achieve less than or equal to the following emission limits, except during periods of startup and shutdown . . .</b>  |
|---|---|---|
| 1. New coal-fired boilers with heat input capacity of 30 million British thermal units per hour (MMBtu/hr) or greater that do not meet the definition of limited-use boiler | a. PM (Filterable)<br>b. Mercury<br>c. CO | 3.0E-02 pounds(lb) per million British thermal units (MMBtu) of heat input.<br>2.2E-05 lb per MMBtu of heat input.<br>420 parts per million (ppm) by volume on a dry basis corrected to 3 percent oxygen (3-run average or 10-day rolling average). |
| 2. New coal-fired boilers with heat input capacity of between 10 and 30 MMBtu/hr that do not meet the definition of limited-use boiler                                      | a. PM (Filterable)<br>b. Mercury<br>c. CO | 4.2E-01 lb per MMBtu of heat input.<br>2.2E-05 lb per MMBtu of heat input.<br>420 ppm by volume on a dry basis corrected to 3 percent oxygen (3-run average or 10-day rolling average).   |
| 3. New biomass-fired boilers with heat input capacity of 30 MMBtu/hr or greater that do not meet the definition of seasonal boiler or limited-use boiler                    | PM (Filterable)                           | 3.0E-02 lb per MMBtu of heat input.   |
| 4. New biomass fired boilers with heat input capacity of between 10 and 30 MMBtu/hr that do not meet the definition of seasonal boiler or limited-use boiler                | PM (Filterable)                           | 7.0E-02 lb per MMBtu of heat input.   |
| 5. New oil-fired boilers with heat input capacity of 10 MMBtu/hr or greater that do not meet the definition of seasonal boiler or limited-use boiler                        | PM (Filterable)                           | 3.0E-02 lb per MMBtu of heat input.   |
| 6. Existing coal-fired boilers with heat input capacity of 10 MMBtu/hr or greater that do not meet the definition of limited-use boiler                                     | a. Mercury<br>b. CO                       | 2.2E-05 lb per MMBtu of heat input.<br>420 ppm by volume on a dry basis corrected to 3 percent oxygen (3-run average or 10-day rolling average).  |

[78 FR 7517, Feb. 1, 2013, as amended at 81 FR 63129, Sept. 14, 2016]

**Table 2 to Subpart JJJJJJ of Part 63—Work Practice Standards, Emission Reduction Measures, and Management Practices**

As stated in §63.11201, you must comply with the following applicable work practice standards, emission reduction measures, and management practices:

| <b>If your boiler is in this subcategory . . .</b>   | <b>You must meet the following . . .</b>   |
|--|--|
| 1. Existing or new coal-fired, new biomass-fired, or new oil-fired boilers (units with heat input capacity of 10 MMBtu/hr or greater)  | Minimize the boiler's startup and shutdown periods and conduct startups and shutdowns according to the manufacturer's recommended procedures. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. |
| 2. Existing coal-fired boilers with heat input capacity of less than 10 MMBtu/hr that do not meet the definition of limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio | Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler biennially as specified in §63.11223.  |

| If your boiler is in this subcategory . . .   | You must meet the following . . .  |
|---|--|
| 3. New coal-fired boilers with heat input capacity of less than 10 MMBtu/hr that do not meet the definition of limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio                       | Conduct a tune-up of the boiler biennially as specified in §63.11223.  |
| 4. Existing oil-fired boilers with heat input capacity greater than 5 MMBtu/hr that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio | Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler biennially as specified in §63.11223.    |
| 5. New oil-fired boilers with heat input capacity greater than 5 MMBtu/hr that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio      | Conduct a tune-up of the boiler biennially as specified in §63.11223.  |
| 6. Existing biomass-fired boilers that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio  | Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler biennially as specified in §63.11223.    |
| 7. New biomass-fired boilers that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio   | Conduct a tune-up of the boiler biennially as specified in §63.11223.  |
| 8. Existing seasonal boilers  | Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223. |
| 9. New seasonal boilers   | Conduct a tune-up of the boiler every 5 years as specified in §63.11223.   |
| 10. Existing limited-use boilers  | Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223. |
| 11. New limited-use boilers   | Conduct a tune-up of the boiler every 5 years as specified in §63.11223.   |
| 12. Existing oil-fired boilers with heat input capacity of equal to or less than 5 MMBtu/hr   | Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223. |
| 13. New oil-fired boilers with heat input capacity of equal to or less than 5 MMBtu/hr  | Conduct a tune-up of the boiler every 5 years as specified in §63.11223.   |
| 14. Existing coal-fired, biomass-fired, or oil-fired boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up   | Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223. |
| 15. New coal-fired, biomass-fired, or oil-fired boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up  | Conduct a tune-up of the boiler every 5 years as specified in §63.11223.   |



| <b>If your boiler is in this subcategory . . .</b>  | <b>You must meet the following . . .</b>   |
|---|--|
| 16. Existing coal-fired, biomass-fired, or oil-fired boilers (units with heat input capacity of 10 MMBtu/hr and greater), not including limited-use boilers | Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table satisfies the energy assessment requirement. Energy assessor approval and qualification requirements are waived in instances where past or amended energy assessments are used to meet the energy assessment requirements. A facility that operated under an energy management program developed according to the ENERGY STAR guidelines for energy management or compatible with ISO 50001 for at least 1 year between January 1, 2008, and the compliance date specified in §63.11196 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items (1) to (4) appropriate for the on-site technical hours listed in §63.11237: |
|   | (1) A visual inspection of the boiler system,  |
|   | (2) An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints,  |
|   | (3) An inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator,   |
|   | (4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,   |
|   | (5) A list of major energy conservation measures that are within the facility's control,   |
|   | (6) A list of the energy savings potential of the energy conservation measures identified, and   |
|   | (7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.  |

[78 FR 7518, Feb. 1, 2013, as amended at 81 FR 63129, Sept. 14, 2016]

**Table 3 to Subpart JJJJJJ of Part 63—Operating Limits for Boilers With Emission Limits**

As stated in §63.11201, you must comply with the applicable operating limits:

| <b>If you demonstrate compliance with applicable emission limits using . . .</b> | <b>You must meet these operating limits except during periods of startup and shutdown . . .</b>   |
|--|---|
| 1. Fabric filter control   | a. Maintain opacity to less than or equal to 10 percent opacity (daily block average); OR<br>b. Install and operate a bag leak detection system according to §63.11224 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period. |
| 2. Electrostatic precipitator control  | a. Maintain opacity to less than or equal to 10 percent opacity (daily block average); OR<br>b. Maintain the 30-day rolling average total secondary electric power of the electrostatic precipitator at or above the minimum total secondary electric power as defined in §63.11237.  |

| <b>If you demonstrate compliance with applicable emission limits using . . .</b> | <b>You must meet these operating limits except during periods of startup and shutdown . . .</b>   |
|--|---|
| 3. Wet scrubber control  | Maintain the 30-day rolling average pressure drop across the wet scrubber at or above the minimum scrubber pressure drop as defined in §63.11237 and the 30-day rolling average liquid flow rate at or above the minimum scrubber liquid flow rate as defined in §63.11237.   |
| 4. Dry sorbent or activated carbon injection control                             | Maintain the 30-day rolling average sorbent or activated carbon injection rate at or above the minimum sorbent injection rate or minimum activated carbon injection rate as defined in §63.11237. When your boiler operates at lower loads, multiply your sorbent or activated carbon injection rate by the load fraction (e.g., actual heat input divided by the heat input during the performance stack test; for 50 percent load, multiply the injection rate operating limit by 0.5). |
| 5. Any other add-on air pollution control type.                                  | This option is for boilers that operate dry control systems. Boilers must maintain opacity to less than or equal to 10 percent opacity (daily block average).   |
| 6. Fuel analysis   | Maintain the fuel type or fuel mixture (annual average) such that the mercury emission rate calculated according to §63.11211(c) are less than the applicable emission limit for mercury.   |
| 7. Performance stack testing   | For boilers that demonstrate compliance with a performance stack test, maintain the operating load of each unit such that it does not exceed 110 percent of the average operating load recorded during the most recent performance stack test.  |
| 8. Oxygen analyzer system  | For boilers subject to a CO emission limit that demonstrate compliance with an oxygen analyzer system as specified in §63.11224(a), maintain the 30-day rolling average oxygen level at or above the minimum oxygen level as defined in §63.11237. This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.11224(a)(7).  |

[78 FR 7519, Feb. 1, 2013]

**Table 4 to Subpart JJJJJJ of Part 63—Performance (Stack) Testing Requirements**

As stated in §63.11212, you must comply with the following requirements for performance (stack) test for affected sources:

| <b>To conduct a performance test for the following pollutant. . .</b> | <b>You must. . .</b>   | <b>Using. . .</b>  |
|---|--|--|
| 1. Particulate Matter   | a. Select sampling ports location and the number of traverse points    | Method 1 in appendix A-1 to part 60 of this chapter.   |
|   | b. Determine velocity and volumetric flow-rate of the stack gas        | Method 2, 2F, or 2G in appendix A-2 to part 60 of this chapter.  |
|   | c. Determine oxygen and carbon dioxide concentrations of the stack gas | Method 3A or 3B in appendix A-2 to part 60 of this chapter, or ASTM D6522-00 (Reapproved 2005), <sup>a</sup> or ANSI/ASME PTC 19.10-1981. <sup>a</sup> |
|   | d. Measure the moisture content of the stack gas                       | Method 4 in appendix A-3 to part 60 of this chapter.   |

| To conduct a performance test for the following pollutant. . . | You must. . .   | Using. . .   |
|--|---|--|
|  | e. Measure the particulate matter emission concentration                | Method 5 or 17 (positive pressure fabric filters must use Method 5D) in appendix A-3 and A-6 to part 60 of this chapter and a minimum 1 dscm of sample volume per run.   |
|  | f. Convert emissions concentration to lb/MMBtu emission rates           | Method 19 F-factor methodology in appendix A-7 to part 60 of this chapter.   |
| 2. Mercury   | a. Select sampling ports location and the number of traverse points     | Method 1 in appendix A-1 to part 60 of this chapter.   |
|  | b. Determine velocity and volumetric flow-rate of the stack gas         | Method 2, 2F, or 2G in appendix A-2 to part 60 of this chapter.  |
|  | c. Determine oxygen and carbon dioxide concentrations of the stack gas  | Method 3A or 3B in appendix A-2 to part 60 of this chapter, or ASTM D6522-00 (Reapproved 2005), <sup>a</sup> or ANSI/ASME PTC 19.10-1981. <sup>a</sup>   |
|  | d. Measure the moisture content of the stack gas                        | Method 4 in appendix A-3 to part 60 of this chapter.   |
|  | e. Measure the mercury emission concentration                           | Method 29, 30A, or 30B in appendix A-8 to part 60 of this chapter or Method 101A in appendix B to part 61 of this chapter or ASTM Method D6784-02. <sup>a</sup> Collect a minimum 2 dscm of sample volume with Method 29 of 101A per run. Use a minimum run time of 2 hours with Method 30A. |
|  | f. Convert emissions concentration to lb/MMBtu emission rates           | Method 19 F-factor methodology in appendix A-7 to part 60 of this chapter.   |
| 3. Carbon Monoxide   | a. Select the sampling ports location and the number of traverse points | Method 1 in appendix A-1 to part 60 of this chapter.   |
|  | b. Determine oxygen and carbon dioxide concentrations of the stack gas  | Method 3A or 3B in appendix A-2 to part 60 of this chapter, or ASTM D6522-00 (Reapproved 2005), <sup>a</sup> or ANSI/ASME PTC 19.10-1981. <sup>a</sup>   |
|  | c. Measure the moisture content of the stack gas                        | Method 4 in appendix A-3 to part 60 of this chapter.   |
|  | d. Measure the carbon monoxide emission concentration                   | Method 10, 10A, or 10B in appendix A-4 to part 60 of this chapter or ASTM D6522-00 (Reapproved 2005) <sup>a</sup> and a minimum 1 hour sampling time per run.  |

<sup>a</sup>Incorporated by reference, see §63.14.

**Table 5 to Subpart JJJJJJ of Part 63—Fuel Analysis Requirements**

As stated in §63.11213, you must comply with the following requirements for fuel analysis testing for affected sources:

| <b>To conduct a fuel analysis for the following pollutant . . .</b> | <b>You must . . .</b>  | <b>Using . . .</b>   |
|---|--|--|
| 1. Mercury  | a. Collect fuel samples  | Procedure in §63.11213(b) or ASTM D2234/D2234M <sup>a</sup> (for coal) or ASTM D6323 <sup>a</sup> (for biomass) or equivalent.   |
|   | b. Compose fuel samples  | Procedure in §63.11213(b) or equivalent.   |
|   | c. Prepare composited fuel samples                               | EPA SW-846-3050B <sup>a</sup> (for solid samples) or EPA SW-846-3020A <sup>a</sup> (for liquid samples) or ASTM D2013/D2013M <sup>a</sup> (for coal) or ASTM D5198 <sup>a</sup> (for biomass) or equivalent. |
|   | d. Determine heat content of the fuel type                       | ASTM D5865 <sup>a</sup> (for coal) or ASTM E711 <sup>a</sup> (for biomass) or equivalent.  |
|   | e. Determine moisture content of the fuel type                   | ASTM D3173 <sup>a</sup> or ASTM E871 <sup>a</sup> or equivalent.   |
|   | f. Measure mercury concentration in fuel sample                  | ASTM D6722 <sup>a</sup> (for coal) or EPA SW-846-7471B <sup>a</sup> (for solid samples) or EPA SW-846-7470A <sup>a</sup> (for liquid samples) or equivalent.   |
|   | g. Convert concentrations into units of lb/MMBtu of heat content |  |

<sup>a</sup>Incorporated by reference, see §63.14.

**Table 6 to Subpart JJJJJJ of Part 63—Establishing Operating Limits**

As stated in §63.11211, you must comply with the following requirements for establishing operating limits:

| <b>If you have an applicable emission limit for . . .</b> | <b>And your operating limits are based on . . .</b> | <b>You must . . .</b>   | <b>Using . . .</b>  | <b>According to the following requirements</b>   |
|---|---|---|---|--|
| 1. PM or mercury  | a. Wet scrubber operating parameters                | Establish site-specific minimum scrubber pressure drop and minimum scrubber liquid flow rate operating limits according to §63.11211(b) | Data from the pressure drop and liquid flow rate monitors and the PM or mercury performance stack tests | (a) You must collect pressure drop and liquid flow rate data every 15 minutes during the entire period of the performance stack tests;   |
|   |   |   |   | (b) Determine the average pressure drop and liquid flow rate for each individual test run in the three-run performance stack test by computing the average of all the 15-minute readings taken during each test run. |
|   | b. Electrostatic precipitator operating parameters  | Establish a site-specific minimum total secondary electric power operating limit according to §63.11211(b)                              | Data from the secondary electric power monitors and the PM or mercury performance stack tests           | (a) You must collect secondary electric power data every 15 minutes during the entire period of the performance stack tests;   |

| If you have an applicable emission limit for . . .                                | And your operating limits are based on . . .                        | You must . . .   | Using . . .   | According to the following requirements  |
|---|---|--|---|--|
|   |   |  |   | (b) Determine the average total secondary electric power for each individual test run in the three-run performance stack test by computing the average of all the 15-minute readings taken during each test run.             |
| 2. Mercury  | Dry sorbent or activated carbon injection rate operating parameters | Establish a site-specific minimum sorbent or activated carbon injection rate operating limit according to §63.11211(b) | Data from the sorbent or activated carbon injection rate monitors and the mercury performance stack tests | (a) You must collect sorbent or activated carbon injection rate data every 15 minutes during the entire period of the performance stack tests;   |
|   |   |  |   | (b) Determine the average sorbent or activated carbon injection rate for each individual test run in the three-run performance stack test by computing the average of all the 15-minute readings taken during each test run. |
|   |   |  |   | (c) When your unit operates at lower loads, multiply your sorbent or activated carbon injection rate by the load fraction, as defined in §63.11237, to determine the required injection rate.                                |
| 3. CO   | Oxygen  | Establish a unit-specific limit for minimum oxygen level   | Data from the oxygen analyzer system specified in §63.11224(a)  | (a) You must collect oxygen data every 15 minutes during the entire period of the performance stack tests;   |
|   |   |  |   | (b) Determine the average hourly oxygen concentration for each individual test run in the three-run performance stack test by computing the average of all the 15-minute readings taken during each test run.                |
| 4. Any pollutant for which compliance is demonstrated by a performance stack test | Boiler operating load   | Establish a unit-specific limit for maximum operating load according to §63.11212(c)                                   | Data from the operating load monitors (fuel feed monitors or steam generation monitors)                   | (a) You must collect operating load data (fuel feed rate or steam generation data) every 15 minutes during the entire period of the performance test.  |
|   |   |  |   | (b) Determine the average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test.  |

| If you have an applicable emission limit for . . . | And your operating limits are based on . . . | You must . . . | Using . . . | According to the following requirements   |
|--|--|----------------|-------------|---|
|  |  |                |             | (c) Determine the average of the three test run averages during the performance test, and multiply this by 1.1 (110 percent) as your operating limit. |

[78 FR 7520, Feb. 1, 2013, as amended at 81 FR 63129, Sept. 14, 2016]

**Table 7 to Subpart JJJJJJ of Part 63—Demonstrating Continuous Compliance**

As stated in §63.11222, you must show continuous compliance with the emission limitations for affected sources according to the following:

| If you must meet the following operating limits . . .        | You must demonstrate continuous compliance by . . .   |
|--|---|
| 1. Opacity   | a. Collecting the opacity monitoring system data according to §63.11224(e) and §63.11221; and   |
|  | b. Reducing the opacity monitoring data to 6-minute averages; and   |
|  | c. Maintaining opacity to less than or equal to 10 percent (daily block average).   |
| 2. Fabric Filter Bag Leak Detection Operation                | Installing and operating a bag leak detection system according to §63.11224(f) and operating the fabric filter such that the requirements in §63.11222(a)(4) are met.           |
| 3. Wet Scrubber Pressure Drop and Liquid Flow Rate           | a. Collecting the pressure drop and liquid flow rate monitoring system data according to §§63.11224 and 63.11221; and   |
|  | b. Reducing the data to 30-day rolling averages; and  |
|  | c. Maintaining the 30-day rolling average pressure drop and liquid flow rate at or above the minimum pressure drop and minimum liquid flow rate according to §63.11211.         |
| 4. Dry Scrubber Sorbent or Activated Carbon Injection Rate   | a. Collecting the sorbent or activated carbon injection rate monitoring system data for the dry scrubber according to §§63.11224 and 63.11221; and                              |
|  | b. Reducing the data to 30-day rolling averages; and  |
|  | c. Maintaining the 30-day rolling average sorbent or activated carbon injection rate at or above the minimum sorbent or activated carbon injection rate according to §63.11211. |
| 5. Electrostatic Precipitator Total Secondary Electric Power | a. Collecting the total secondary electric power monitoring system data for the electrostatic precipitator according to §§63.11224 and 63.11221; and                            |
|  | b. Reducing the data to 30-day rolling averages; and  |
|  | c. Maintaining the 30-day rolling average total secondary electric power at or above the minimum total secondary electric power according to §63.11211.                         |
| 6. Fuel Pollutant Content                                    | a. Only burning the fuel types and fuel mixtures used to demonstrate compliance with the applicable emission limit according to §63.11213 as applicable; and                    |
|  | b. Keeping monthly records of fuel use according to §§63.11222(a)(2) and 63.11225(b)(4).  |

| <b>If you must meet the following operating limits . . .</b> | <b>You must demonstrate continuous compliance by . . .</b>   |
|--|--|
| 7. Oxygen content  | a. Continuously monitoring the oxygen content of flue gas according to §63.11224 (This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.11224(a)(7)); and |
|  | b. Reducing the data to 30-day rolling averages; and   |
|  | c. Maintaining the 30-day rolling average oxygen content at or above the minimum oxygen level established during the most recent CO performance test.  |
| 8. CO emissions  | a. Continuously monitoring the CO concentration in the combustion exhaust according to §§63.11224 and 63.11221; and  |
|  | b. Correcting the data to 3 percent oxygen, and reducing the data to 1-hour averages; and  |
|  | c. Reducing the data from the hourly averages to 10-day rolling averages; and  |
|  | d. Maintaining the 10-day rolling average CO concentration at or below the applicable emission limit in Table 1 to this subpart.   |
| 9. Boiler operating load                                     | a. Collecting operating load data (fuel feed rate or steam generation data) every 15 minutes; and  |
|  | b. Reducing the data to 30-day rolling averages; and   |
|  | c. Maintaining the 30-day rolling average at or below the operating limit established during the performance test according to §63.11212(c) and Table 6 to this subpart.   |

[78 FR 7521, Feb. 1, 2013]

**Table 8 to Subpart JJJJJJ of Part 63—Applicability of General Provisions to Subpart JJJJJJ**

As stated in §63.11235, you must comply with the applicable General Provisions according to the following:

| <b>General provisions cite</b>                                  | <b>Subject</b>   | <b>Does it apply?</b>                           |
|---|--|---|
| §63.1   | Applicability  | Yes.  |
| §63.2   | Definitions  | Yes. Additional terms defined in §63.11237.     |
| §63.3   | Units and Abbreviations                                | Yes.  |
| §63.4   | Prohibited Activities and Circumvention                | Yes.  |
| §63.5   | Preconstruction Review and Notification Requirements   | No  |
| §63.6(a), (b)(1)-(b)(5), (b)(7), (c), (f)(2)-(3), (g), (i), (j) | Compliance with Standards and Maintenance Requirements | Yes.  |
| §63.6(e)(1)(i)  | General Duty to minimize emissions                     | No. See §63.11205 for general duty requirement. |
| §63.6(e)(1)(ii)   | Requirement to correct malfunctions ASAP               | No.   |
| §63.6(e)(3)   | SSM Plan   | No.   |
| §63.6(f)(1)   | SSM exemption  | No.   |

| General provisions cite  | Subject   | Does it apply?  |
|--|---|---|
| §63.6(h)(1)  | SSM exemption   | No.   |
| §63.6(h)(2) to (9)   | Determining compliance with opacity emission standards            | Yes.  |
| §63.7(a), (b), (c), (d) , (e)(2)-(e)(9), (f), (g), and (h)                               | Performance Testing Requirements                                  | Yes.  |
| §63.7(e)(1)  | Performance testing   | No. See §63.11210.  |
| §63.8(a), (b), (c)(1), (c)(1)(ii), (c)(2) to (c)(9), (d)(1) and (d)(2), (e),(f), and (g) | Monitoring Requirements   | Yes.  |
| §63.8(c)(1)(i)   | General duty to minimize emissions and CMS operation              | No.   |
| §63.8(c)(1)(iii)   | Requirement to develop SSM Plan for CMS                           | No.   |
| §63.8(d)(3)  | Written procedures for CMS  | Yes, except for the last sentence, which refers to an SSM plan. SSM plans are not required.                   |
| §63.9  | Notification Requirements   | Yes, excluding the information required in §63.9(h)(2)(i)(B), (D), (E) and (F). See §63.11225.                |
| §63.10(a) and (b)(1)   | Recordkeeping and Reporting Requirements                          | Yes.  |
| §63.10(b)(2)(i)  | Recordkeeping of occurrence and duration of startups or shutdowns | No.   |
| §63.10(b)(2)(ii)   | Recordkeeping of malfunctions                                     | No. See §63.11225 for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunctions. |
| §63.10(b)(2)(iii)  | Maintenance records   | Yes.  |
| §63.10(b)(2)(iv) and (v)   | Actions taken to minimize emissions during SSM                    | No.   |
| §63.10(b)(2)(vi)   | Recordkeeping for CMS malfunctions                                | Yes.  |
| §63.10(b)(2)(vii) to (xiv)   | Other CMS requirements  | Yes.  |
| §63.10(b)(3)   | Recordkeeping requirements for applicability determinations       | No.   |
| §63.10(c)(1) to (9)  | Recordkeeping for sources with CMS                                | Yes.  |
| §63.10(c)(10)  | Recording nature and cause of malfunctions                        | No. See §63.11225 for malfunction recordkeeping requirements.   |
| §63.10(c)(11)  | Recording corrective actions                                      | No. See §63.11225 for malfunction recordkeeping requirements.   |
| §63.10(c)(12) and (13)   | Recordkeeping for sources with CMS                                | Yes.  |
| §63.10(c)(15)  | Allows use of SSM plan  | No.   |



| General provisions cite   | Subject  | Does it apply?  |
|---|--|---|
| §63.10(d)(1) and (2)  | General reporting requirements   | Yes.  |
| §63.10(d)(3)  | Reporting opacity or visible emission observation results  | No.   |
| §63.10(d)(4)  | Progress reports under an extension of compliance  | Yes.  |
| §63.10(d)(5)  | SSM reports  | No. See §63.11225 for malfunction reporting requirements. |
| §63.10(e)   | Additional reporting requirements for sources with CMS   | Yes.  |
| §63.10(f)   | Waiver of recordkeeping or reporting requirements  | Yes.  |
| §63.11  | Control Device Requirements  | No.   |
| §63.12  | State Authority and Delegation   | Yes.  |
| §63.13-63.16  | Addresses, Incorporation by Reference, Availability of Information, Performance Track Provisions | Yes.  |
| §63.1(a)(5), (a)(7)-(a)(9), (b)(2), (c)(3)-(4), (d), 63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv), 63.8(a)(3), 63.9(b)(3), (h)(4), 63.10(c)(2)-(4), (c)(9) | Reserved   | No.   |

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7521, Feb. 1, 2013]

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

**Technical Support Document (TSD) for a Minor Source Operating Permit  
(MSOP) Renewal**

|  |
|--|
| <b>Source Description and Location</b> |
|--|

|                            |  |
|----------------------------|--|
| <b>Source Name:</b>        | <b>St. Vincent Dunn Hospital</b>                     |
| <b>Source Location:</b>    | <b>1600 23<sup>rd</sup> St. Bedford, IN 47421</b>    |
| <b>County:</b>             | <b>Lawrence</b>                                      |
| <b>SIC Code:</b>           | <b>8062 (General Medical and Surgical Hospitals)</b> |
| <b>Permit Renewal No.:</b> | <b>M093-40663-00015</b>                              |
| <b>Permit Reviewer:</b>    | <b>Jared Karban</b>                                  |

On November 2, 2018, St. Vincent Dunn Hospital submitted an application to the Office of Air Quality (OAQ) requesting to renew its operating permit. OAQ has reviewed the operating permit renewal application from St. Vincent Dunn Hospital relating to the operation of a medical waste incinerator at a hospital. St. Vincent Dunn Hospital was issued M093-27262-00015 on March 26, 2009.

|                           |
|---------------------------|
| <b>Existing Approvals</b> |
|---------------------------|

The source was issued MSOP Renewal No. M 093-27262-00015 on March 26, 2009. The source has since received the following approval:

MSOP NOC No. 093-30205-00015 on March 21, 2011.

|   |
|---|
| <b>Permitted Emission Units and Pollution Control Equipment</b> |
|---|

The source consists of the following permitted emission units:

- (a) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR1, constructed in 1986, with a maximum capacity of 9 million British thermal units per hour, uncontrolled and exhausting to Stack BLR1.
- (b) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR2, constructed in 1986, with a maximum capacity of 9 million British thermal units per hour, uncontrolled, and exhausting to Stack BLR2.
- (c) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR3, constructed in 1996, with a maximum capacity of 3.6 million British thermal units per hour, and exhausting to Stack BLR3.
- (d) One (1) 288.3-horsepower No. 2 distillate fuel oil fired emergency generator, identified as Generator 1, constructed in 1978, with a maximum heat input capacity of 0.73 million British thermal units per hour, and exhausting to Generator 1 stack.
- (e) One (1) 804.6-horsepower No. 2 distillate fuel oil fired emergency generator, identified as Generator 2, constructed in 1996, and with a maximum heat input capacity of 2.05 million British thermal units per hour.

### Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

- (a) One (1) 40.23-horsepower natural gas fired emergency generator, identified as Generator 3, with a maximum heat input capacity of 0.10 million British thermal units per hour, constructed in 1985, and exhausting to Generator 3 stack.
- (b) One (1) 134.1-horsepower natural gas fired emergency generator, identified as Generator 4, with a maximum heat input capacity of 0.34 million British thermal units per hour, constructed in 1994, and exhausting to Generator 4 stack.
- (c) One (1) 134.1-horsepower natural gas fired emergency generator, identified as Generator 5, with a maximum heat input capacity of 0.34 million British thermal units per hour, constructed in 1994, and exhausting to Generator 5 stack.
- (d) One (1) diesel fuel oil tank, constructed in 1991, capacity: 1,000 gallons.

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.

### Enforcement Issue

There are no enforcement actions pending.

### Emission Calculations

See Appendix A of this document for detailed emission calculations.

### County Attainment Status

The source is located in Lawrence County.

Sec. 48. The following attainment status designations are applicable to Lawrence County:

| Pollutant  | Designation  |
|--|--|
| SO <sub>2</sub>  | Better than national standards.  |
| CO   | Unclassifiable or attainment effective November 15, 1990.  |
| O <sub>3</sub>   | Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. <sup>1</sup> |
| PM <sub>2.5</sub>  | Unclassifiable or attainment effective April 5, 2005, for the annual PM <sub>2.5</sub> standard.       |
| PM <sub>2.5</sub>  | Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM <sub>2.5</sub> standard.  |
| PM <sub>10</sub>   | Unclassifiable effective November 15, 1990.  |
| NO <sub>2</sub>  | Cannot be classified or better than national standards.  |
| Pb   | Unclassifiable or attainment effective December 31, 2011.  |
| <sup>1</sup> Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. |  |

(Air Pollution Control Division; 326 IAC 1-4-48; filed Dec 26, 2007, 1:43 p.m.: 20080123-IR-326070308FRA; filed Jan 30, 2013, 12:34 p.m.: 20130227-IR-326110774FRA; filed Oct 25, 2013, 2:41 p.m.: 20131120-IR-326130164FRA)

- (a) **Ozone Standards**  
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. Lawrence 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) **PM<sub>2.5</sub>**  
Lawrence County has been classified as attainment for PM<sub>2.5</sub>. Therefore, direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **Other Criteria Pollutants**  
Lawrence County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

#### **Fugitive Emissions**

- (a) Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.
- (b) The fugitive emissions of criteria pollutants and hazardous air pollutants (HAP) are counted toward the determination of MSOP (326 IAC 2-6.1) applicability and source status under Section 112 of the Clean Air Act (CAA).

#### **Greenhouse Gas (GHG) Emissions**

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at [http://www.supremecourt.gov/opinions/13pdf/12-1146\\_4g18.pdf](http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf)) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

#### **Unrestricted Potential Emissions**

This table reflects the unrestricted potential emissions of the source.

|  | <b>Unrestricted Potential Emissions (ton/year)</b> |                                    |                                       |                       |                       |            |           |                   |
|--|--|------------------------------------|---------------------------------------|-----------------------|-----------------------|------------|-----------|-------------------|
|  | <b>PM<sup>1</sup></b>                              | <b>PM<sub>10</sub><sup>1</sup></b> | <b>PM<sub>2.5</sub><sup>1,2</sup></b> | <b>SO<sub>2</sub></b> | <b>NO<sub>x</sub></b> | <b>VOC</b> | <b>CO</b> | <b>Total HAPs</b> |
| <b>Total PTE of Entire Source</b>  | 1.65   | 1.85                               | 1.68                                  | 48.94                 | 20.58                 | 0.83       | 9.38      | 0.18              |
| Title V Major Source Thresholds  | --   | 100                                | 100                                   | 100                   | 100                   | 100        | 100       | 25                |
| MSOP Thresholds  | 25   | 25                                 | 25                                    | 25                    | 25                    | 25         | < 100     | < 25              |
| <sup>1</sup> Under the Part 70 Permit program (40 CFR 70), PM <sub>10</sub> and PM <sub>2.5</sub> , not particulate matter (PM), are each considered as a "regulated air pollutant."if not<br><sup>2</sup> PM <sub>2.5</sub> listed is direct PM <sub>2.5</sub> .<br>*Fugitive HAP emissions are always included in the source-wide emissions. |  |                                    |                                       |                       |                       |            |           |                   |

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of all regulated pollutants is less than 100 tons per year. However, SO<sub>2</sub> is equal to or greater than twenty-five (25) tons per year. The source is not subject to the provisions of 326 IAC 2-7. The source will be issued an MSOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(30)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(30)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7. The source will be issued an MSOP Renewal.

#### Potential to Emit After Issuance

The table below summarizes the uncontrolled/unlimited potential to emit of the entire source. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

|  | <b>Potential To Emit of the Entire Source After Issuance of Renewal (tons/year) (Uncontrolled/Unlimited)</b> |                                    |                                       |                       |                       |            |           |                   |
|--|--|------------------------------------|---------------------------------------|-----------------------|-----------------------|------------|-----------|-------------------|
|  | <b>PM<sup>1</sup></b>  | <b>PM<sub>10</sub><sup>1</sup></b> | <b>PM<sub>2.5</sub><sup>1,2</sup></b> | <b>SO<sub>2</sub></b> | <b>NO<sub>x</sub></b> | <b>VOC</b> | <b>CO</b> | <b>Total HAPs</b> |
| <b>Total PTE of Entire Source</b>  | 1.65   | 1.85                               | 1.68                                  | 48.94                 | 20.58                 | 0.83       | 9.38      | 0.18              |
| Title V Major Source Thresholds  | --   | 100                                | 100                                   | 100                   | 100                   | 100        | 100       | 25                |
| MSOP Thresholds  | 25   | 25                                 | 25                                    | 25                    | 25                    | 25         | < 100     | < 25              |
| PSD Major Source Thresholds  | 250  | 250                                | 250                                   | 250                   | 250                   | 250        | 250       | --                |
| <sup>1</sup> Under the Part 70 Permit program (40 CFR 70), PM <sub>10</sub> and PM <sub>2.5</sub> , not particulate matter (PM), are each considered as a "regulated air pollutant."<br><sup>2</sup> PM <sub>2.5</sub> listed is direct PM <sub>2.5</sub> .<br>*Fugitive HAP emissions are always included in the source-wide emissions. |  |                                    |                                       |                       |                       |            |           |                   |

Appendix A of this TSD reflects the detailed unlimited/uncontrolled emissions of the source.

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

|                                   |
|-----------------------------------|
| <b>Federal Rule Applicability</b> |
|-----------------------------------|

**New Source Performance Standards (NSPS)**

- (a) The requirements of the New Source Performance Standard for Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60.4200, Subpart IIII, are not included in the permit for Generator 1 and Generator 2. Construction of these units commenced prior to July 11, 2005.
- (b) None of the boilers are subject to the New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Dc), which is incorporated by reference as 326 IAC 12, because none of the boilers has capacity 10 MMBtu or more.
- (c) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) in the permit for this proposed revision.

**National Emission Standards for Hazardous Air Pollutants (NESHAPs)**

- (a) The Diesel-fired Emergency Generators, identified as Generator 1 and Generator 2, meet the definition of an existing (construction commenced before June 12, 2006) institutional emergency stationary RICE as defined in 40 CFR 63.6675, operate according to the provisions specified in 40 CFR 63.6640(f)(2),. Pursuant to 40 CFR 63.6585(f)(3), the requirements of 40 CFR 63, Subpart ZZZZ are not applicable to the Diesel-fired Emergency Generators, identified as G-1 and G-2.

This source operates under SIC Code 8062 (General Medical and Surgical Hospitals) and North American Industry Classification System (NAICS) Code 622110 (General Medical and Surgical Hospitals). Pursuant to an August 9, 2010, EPA Memorandum entitled "Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE" (currently located on the internet at: [http://www.epa.gov/ttn/atw/icengines/docs/guidance\\_emergency\\_engine\\_def.pdf](http://www.epa.gov/ttn/atw/icengines/docs/guidance_emergency_engine_def.pdf)), the operations at this source would fall under the category of "institutional", since this source operates under NAICS Code 622110.

- (b) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63, Subpart JJJJJJ., because it is a fuel oil-fired boiler constructed before June 4, 2010. The units subject to this rule include the following:
  - ( a) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR1, constructed in 1986, with a maximum capacity of 9 million British thermal units per hour, uncontrolled and exhausting to Stack BLR1.

- (b) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR2, constructed in 1986, with a maximum capacity of 9 million British thermal units per hour, uncontrolled, and exhausting to Stack BLR2.
- (c) One (1) natural gas fired boiler, using No. 2 distillate fuel oil as backup fuel, identified as BLR3, constructed in 1996, with a maximum capacity of 3.6 million British thermal units per hour, and exhausting to Stack BLR3.

This source is subject to the following portions of Subpart JJJJJJ:

- (1) 40 CFR 63.11193
  - (2) 40 CFR 63.11194(a)(1)
  - (3) 40 CFR 63.11196(a)(2)
  - (4) 40 CFR 63.11201(b)(d)
  - (5) 40 CFR 63.11205(a)
  - (6) 40 CFR 63.11210(b)(j)
  - (7) 40 CFR 63.11214(c)
  - (8) 40 CFR 63.11220(a)
  - (9) 40 CFR 63.11221
  - (10) 40 CFR 63.11223(b)
  - (11) 40 CFR 63.11225
  - (13) 40 CFR 63.11235
  - (14) 40 CFR 63.11236
  - (15) 40 CFR 63.11237
- Table 2 (item 4)  
Table 8

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the source except as otherwise specified in 40 CFR 63, Subpart (letter).

#### **Compliance Assurance Monitoring (CAM):**

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

|   |
|---|
| <b>State Rule Applicability - Entire Source</b> |
|---|

State rule applicability for this source has been reviewed as follows:

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

The source is subject to 326 IAC 1-6-3

#### **326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))**

MSOP applicability is discussed under the Potential to Emit After Issuance section of this document.

#### **326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset)**

PSD and Emission Offset applicability is discussed under the Potential to Emit After Issuance section of this document.

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

The provisions of 326 IAC 2-4.1 apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41, after July 27, 1997, unless the major source has been specifically regulated under or exempted from regulation under a NESHAP that

was issued pursuant to Section 112(d), 112(h), or 112(j) of the Clean Air Act (CAA) and incorporated under 40 CFR 63. On and after June 29, 1998, 326 IAC 2-4.1 is intended to implement the requirements of Section 112(g)(2)(B) of the Clean Air Act (CAA).

The operation of this source will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

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

This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, or LaPorte County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

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

This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).

**326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)**

The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions of greater than twenty-five (25) tons per year.

**326 IAC 6.5 (Particulate Matter Limitations Except Lake County)**

Pursuant to 326 IAC 6.5-1-1(a), this source (located in Lawrence County) is not subject to the requirements of 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

**326 IAC 6.8 (Particulate Matter Limitations for Lake County)**

Pursuant to 326 IAC 6.8-1-1(a), this source (located in Lawrence County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

|   |
|---|
| <b>State Rule Applicability – Individual Facilities</b> |
|---|

State rule applicability has been reviewed as follows:

**Generators**

**326 IAC 6-2-2 (Particulate Matter Emission Limitations for Sources of Indirect Heating)**

The Emergency Generators are not a source of indirect heating, as defined in 326 IAC 1-2-19 "Combustion for indirect heating". Therefore, the requirements of 326 IAC 6-2 do not apply.

**326 IAC 6-3-2 (Particulate Matter Limitations for Manufacturing Processes)**

Pursuant to 326 IAC 6-3-1.5(2), the Emergency Generators are not subject to the provisions of 326 IAC 6-3 because each is not considered a manufacturing process as defined in 326 IAC 6-3-1.5(2)

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

This emission units are not subject to 326 IAC 326 IAC 7-1.1 because it has a potential to emit . sulfur dioxide (SO<sub>2</sub>) of less than 25 tons per year or 10 pounds per hour.

**326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)**

Even though, Generator 2 was constructed after January 1, 1980, it is not subject to the requirements of 326 IAC 8-1-6 because its unlimited VOC potential emissions are less than twenty-five (25) tons per year.

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

The requirements of 326 IAC 9-1 do not apply to the Generators 1 and 2, because this source does not operate a catalyst regeneration petroleum cracking system or a petroleum fluid coker, grey iron cupola, blast furnace, basic oxygen steel furnace, or other ferrous metal smelting equipment.



### 326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)

The requirements of 326 IAC 10-3 do not apply to the Generators 1 and 2, since these units are not a blast furnace gas-fired boiler, a Portland cement kiln, or a facility specifically listed under 326 IAC 10-3-1(a)(2).

### Boilers

### 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-1(d), indirect heating facilities which received permit to construct after September 21, 1983 are subject to the requirements of 326 IAC 6-2-4.

The particulate matter emissions (Pt) shall be limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where:

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

Q = Total source maximum operating capacity rating in 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.

| Indirect Heating Units Which<br>Began Operation After September 21, 1983   |   |                                     |                 |                                |  |   |
|--|---|-------------------------------------|-----------------|--------------------------------|--|---|
| Facility   | Construction<br>Date<br>(Removal<br>Date) | Operating<br>Capacity<br>(MMBtu/hr) | Q<br>(MMBtu/hr) | Calculated<br>Pt<br>(lb/MMBtu) | Particulate<br>Limitation,<br>(Pt)<br>(lb/MMBtu) | PM PTE<br>based on<br>AP-42<br>(lb/MMBtu) |
| BLR1   | 1986                                      | 9                                   | 18              | 0.51                           | 0.51   | 0.002                                     |
|  |   |                                     |                 |                                |  | 0.014                                     |
| BLR2   | 1986                                      | 9                                   |                 |                                | 0.51   | 0.002                                     |
|  |   |                                     |                 |                                |  | 0.014                                     |
| BLR3   | 1996                                      | 3.6                                 | 21.6            | 0.49                           | 0.49   | 0.002                                     |
|  |   |                                     |                 |                                |  | 0.014                                     |
| Where: Q = Includes the capacity (MMBtu/hr) of the new unit(s) and the capacities for those unit(s) which were in operation at the source at the time the new unit(s) was constructed. |   |                                     |                 |                                |  |   |
| Note: Emission units shown in strikethrough were subsequently removed from the source. The effect of removing these units on "Q" is shown in the year the boiler was removed..         |   |                                     |                 |                                |  |   |

The boilers each have PM emissions of 0.002 lb/MMBtu and 0.014 lb/MMBtu; therefore, they are in compliance 326 IAC 6-2 without the use of a control device.

### 326 IAC 6-3-2 (Particulate Matter Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1.5(2), the Dual-fired Boilers are not subject to the provisions of 326 IAC 6-3 because each is not considered a manufacturing process as defined in 326 IAC 6-3-1.5(2)

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

This emission unit is not subject to 326 IAC 326 IAC 7-1.1 because it has a potential to emit (or limited potential to emit) sulfur dioxide (SO<sub>2</sub>) of less than 25 tons per year or 10 pounds per hour.

**326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)**

Even though, this facility was constructed after January 1, 1980, it is not subject to the requirements of 326 IAC 8-1-6 because its unlimited VOC potential emissions are less than twenty-five (25) tons per year.

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

This source does not have any carbon monoxide (CO) emissions limit under 326 IAC 9-1-2; therefore, the source is not subject to the requirements of this rule.

**326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)**

The requirements of 326 IAC 10-3 do not apply to the facility, since this unit is not a blast furnace gas-fired boiler, a Portland cement kiln, or a facility specifically listed under 326 IAC 10-3-1(a)(2).

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

The Dual-fired Boilers have HAP emissions less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year for any combination of HAPs; therefore, 326 IAC 2-4.1 is not applicable to this facility.

|   |
|---|
| <b>Compliance Determination and Monitoring Requirements</b> |
|---|

*Testing Requirements:*

(a) The Compliance Monitoring Requirements applicable to this source are as follows:

| Emission Unit | Type of Parametric Monitoring                        | Frequency              | Range or Specification |
|---------------|--|------------------------|------------------------|
| Stack BLR1    | Visible emission notations, when combusting fuel oil | Once per operating day | Normal or abnormal     |
| Stack BLR2    | Visible emission notations, when combusting fuel oil | Once per operating day | Normal or abnormal     |
| Stack BLR3    | Visible emission notations, when combusting fuel oil | Once per operating day | Normal or abnormal     |

These monitoring conditions are necessary because the stacks for BLR1, BLR2, and BLR3 must operate properly to assure compliance with 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating).

|                                      |
|--------------------------------------|
| <b>Conclusion and Recommendation</b> |
|--------------------------------------|

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on November 2, 2018.

The operation of this General Medical and Surgical Hospital shall be subject to the conditions of the attached MSOP Renewal No. 093-40663-00015.

The staff recommends to the Commissioner that the MSOP Renewal be approved.

|                     |
|---------------------|
| <b>IDEM Contact</b> |
|---------------------|

- (a) If you have any questions regarding this permit, please contact Jared Karban, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 233-4230 or (800) 451-6027, and ask for Jared Karban or (317) 233-4230.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: <http://www.in.gov/idem/airquality/2356.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**Appendix A: Emissions Calculations  
Source Summary**

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**Company Name:** St. Vincent Dunn Hospital  
**Source Address:** 1600 23rd St. Bedford, IN 47421  
**Permit Number:** M093-40663-00015  
**Reviewer:** Jared Karban

| Unrestricted Potential to Emit |             |             |             |                 |                 |             |             |             |                    |
|--------------------------------|-------------|-------------|-------------|-----------------|-----------------|-------------|-------------|-------------|--------------------|
| Emissions Units                | PM          | PM10        | PM2.5       | SO <sub>2</sub> | NO <sub>x</sub> | VOC         | CO          | Total HAP   | Single Worst HAP   |
| Dual-fired Boiler B-1          | 0.56        | 0.67        | 0.60        | 19.99           | 5.63            | 0.21        | 3.25        | 0.07        | 0.07 Hexane        |
| Dual-fired Boiler B-2          | 0.56        | 0.67        | 0.60        | 19.99           | 5.63            | 0.21        | 3.25        | 0.07        | 0.07 Hexane        |
| Dual-fired Boiler B-3          | 0.23        | 0.27        | 0.24        | 8.00            | 2.25            | 0.09        | 1.30        | 0.03        | 0.03 Hexane        |
| Diesel-fired Generator G-1     | 0.16        | 0.16        | 0.16        | 0.15            | 2.23            | 0.18        | 0.48        | 0.00        | 0.00 Formaldehyde  |
| Diesel-fired Generator G-2     | 0.14        | 0.08        | 0.08        | 0.81            | 4.83            | 0.14        | 1.11        | 0.002       | 0.001 Benzene      |
| <b>Total</b>                   | <b>1.65</b> | <b>1.85</b> | <b>1.68</b> | <b>48.94</b>    | <b>20.58</b>    | <b>0.83</b> | <b>9.38</b> | <b>0.18</b> | <b>0.17 Hexane</b> |

**Appendix A: Emissions Calculations**  
**Dual-fired Boiler B-1**

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**Company Name:** St. Vincent Dunn Hospital  
**Source Address:** 1600 23rd St. Bedford, IN 47421  
**Permit Number:** M093-40663-00015  
**Reviewer:** Jared Karban

| Natural Gas Combustion <100 MMBtu/hr   |                       |                                 |               |           |                    |                  |      |
|--|-----------------------|---------------------------------|---------------|-----------|--------------------|------------------|------|
| Heat Input Capacity<br>MMBtu/hr  | HHV<br>mmBtu<br>mmscf | Potential Throughput<br>MMCF/yr |               |           |                    |                  |      |
| 9.0  | 1020                  | 77.3                            |               |           |                    |                  |      |
| Emission Factor in lb/MMCF   | Pollutant             |                                 |               |           |                    |                  |      |
|  | PM*                   | PM10*                           | direct PM2.5* | SO2       | NOx                | VOC              | CO   |
|  | 1.9                   | 7.6                             | 7.6           | 0.6       | 100<br>**see below | 5.5              | 84   |
| Potential Emission in tons/yr  | 0.07                  | 0.29                            | 0.29          | 0.02      | 3.86               | 0.21             | 3.25 |
| *PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.<br>PM2.5 emission factor is filterable and condensable PM2.5 combined.<br>**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32  |                       |                                 |               |           |                    |                  |      |
| <b>Methodology</b><br>All emission factors are based on normal firing.<br>MMBtu = 1,000,000 Btu<br>MMCF = 1,000,000 Cubic Feet of Gas<br>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<br>Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu<br>Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton |                       |                                 |               |           |                    |                  |      |
| <b>Hazardous Air Pollutants (HAPs)</b>   |                       |                                 |               |           |                    |                  |      |
|  | HAPs - Organics       |                                 |               |           |                    |                  |      |
|  | Benzene               | Dichlorobenzene                 | Formaldehyde  | Hexane    | Toluene            | Total - Organics |      |
| Emission Factor in lb/MMcf   | 2.1E-03               | 1.2E-03                         | 7.5E-02       | 1.8E+00   | 3.4E-03            |                  |      |
| Potential Emission in tons/yr  | 8.1E-05               | 4.6E-05                         | 2.9E-03       | 0.07      | 1.3E-04            | 0.07             |      |
|  | HAPs - Metals         |                                 |               |           |                    |                  |      |
|  | Lead                  | Cadmium                         | Chromium      | Manganese | Nickel             | Total - Metals   |      |
| Emission Factor in lb/MMcf   | 5.0E-04               | 1.1E-03                         | 1.4E-03       | 3.8E-04   | 2.1E-03            |                  |      |
| Potential Emission in tons/yr  | 1.9E-05               | 4.3E-05                         | 5.4E-05       | 1.5E-05   | 8.1E-05            | 2.1E-04          |      |
| Methodology is the same as above.  |                       |                                 |               |           | Total HAPs         |                  |      |
| The five highest organic and metal HAPs emission factors are provided above.   |                       |                                 |               |           | Worst HAP          |                  |      |
| Additional HAPs emission factors are available in AP-42, Chapter 1.4.  |                       |                                 |               |           | 0.07               |                  |      |

| No. 2 Fuel Oil Combustion   |   |                            |                 |                       |             |                  |           |
|---|---|----------------------------|-----------------|-----------------------|-------------|------------------|-----------|
| Heat Input Capacity<br>MMBtu/hr<br>9  | Potential Throughput<br>kgals/year<br>563.1 | S = Weight % Sulfur<br>0.5 |                 |                       |             |                  |           |
|   | Pollutant                                   |                            |                 |                       |             |                  |           |
| Emission Factor in lb/kgal  | PM*   | PM10**                     | direct PM2.5*** | SO2<br>71<br>(142.0S) | NOx<br>20.0 | VOC<br>0.34      | CO<br>5.0 |
| Potential Emission in tons/yr   | 0.56  | 0.67                       | 0.60            | 19.99                 | 5.63        | 0.10             | 1.41      |
| <b>Methodology</b><br>1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu<br>Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal per 1000 gallon x 1 gal per 0.140 MM Btu<br>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 errata file)<br>*PM emission factor is filterable PM only.<br>**PM10 emission factor is filterable PM10 of 1.08 lb/kgal + condensable PM emission factor of 1.3 lb/kgal.<br>***Direct PM2.5 emission factor is filterable PM2.5 of 0.83 lb/kgal + condensable PM emission factor of 1.3 lb/kgal.<br>Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton |   |                            |                 |                       |             |                  |           |
| <b>Hazardous Air Pollutants (HAPs)</b>  |   |                            |                 |                       |             |                  |           |
|   | HAPs - Metals                               |                            |                 |                       |             |                  |           |
|   | Arsenic                                     | Beryllium                  | Cadmium         | Chromium              | Lead        |                  |           |
| Emission Factor in lb/mmBtu   | 4.0E-06                                     | 3.0E-06                    | 3.0E-06         | 3.0E-06               | 9.0E-06     |                  |           |
| Potential Emission in tons/yr   | 1.6E-04                                     | 1.2E-04                    | 1.2E-04         | 1.2E-04               | 3.5E-04     |                  |           |
|   | HAPs - Metals (continued)                   |                            |                 |                       |             |                  |           |
|   | Mercury                                     | Manganese                  | Nickel          | Selenium              |             |                  |           |
| Emission Factor in lb/mmBtu   | 3.0E-06                                     | 6.0E-06                    | 3.0E-06         | 1.5E-05               |             |                  |           |
| Potential Emission in tons/yr   | 1.2E-04                                     | 2.4E-04                    | 1.2E-04         | 5.9E-04               |             |                  |           |
| <b>Methodology</b><br>No data was available in AP-42 for organic HAPs.<br>Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton  |   |                            |                 | Total HAP             |             | 1.9E-03          |           |
|   |   |                            |                 | Single Worst HAP      |             | 5.9E-04 Selenium |           |

| Summary of Emissions from Boiler B-1 |             |             |             |                 |                 |             |             |             |                    |
|--------------------------------------|-------------|-------------|-------------|-----------------|-----------------|-------------|-------------|-------------|--------------------|
|                                      | PM          | PM10        | PM2.5       | SO <sub>2</sub> | NO <sub>x</sub> | VOC         | CO          | Total HAP   | Single Worst HAP   |
| Natural Gas                          | 0.07        | 0.29        | 0.29        | 0.02            | 3.86            | 0.21        | 3.25        | 0.07        | 0.07 Hexane        |
| No. 2 Fuel Oil                       | 0.56        | 0.67        | 0.60        | 19.99           | 5.63            | 0.10        | 1.41        | 1.9E-03     | 5.9E-04 Selenium   |
| <b>Worst Case</b>                    | <b>0.56</b> | <b>0.67</b> | <b>0.60</b> | <b>19.99</b>    | <b>5.63</b>     | <b>0.21</b> | <b>3.25</b> | <b>0.07</b> | <b>0.07 Hexane</b> |

Appendix A: Emissions Calculations  
Dual-fired Boiler B-2

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Company Name: St. Vincent Dunn Hospital  
Source Address: 1600 23rd St. Bedford, IN 47421  
Permit Number: M093-40663-00015  
Reviewer: Jared Karban

| Natural Gas Combustion <100 MMBtu/hr   |                    |                            |                                 |                      |                           |                  |          |
|--|--------------------|----------------------------|---------------------------------|----------------------|---------------------------|------------------|----------|
| Heat Input Capacity<br>MMBtu/hr  | HHV<br>mmBtu       |                            | Potential Throughput<br>MMCF/yr |                      |                           |                  |          |
| 9.0  | 1020               |                            | 77.3                            |                      |                           |                  |          |
|  |                    |                            | Pollutant                       |                      |                           |                  |          |
| Emission Factor in lb/MMCF   | PM*<br>1.9         | PM10*<br>7.6               | direct PM2.5*<br>7.6            | SO2<br>0.6           | NOx<br>100<br>**see below | VOC<br>5.5       | CO<br>84 |
| Potential Emission in tons/yr  | 0.07               | 0.29                       | 0.29                            | 0.02                 | 3.86                      | 0.21             | 3.25     |
| *PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.<br>PM2.5 emission factor is filterable and condensable PM2.5 combined.<br>**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32  |                    |                            |                                 |                      |                           |                  |          |
| <b>Methodology</b><br>All emission factors are based on normal firing.<br>MMBtu = 1,000,000 Btu<br>MMCF = 1,000,000 Cubic Feet of Gas<br>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<br>Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu<br>Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton |                    |                            |                                 |                      |                           |                  |          |
| <b>Hazardous Air Pollutants (HAPs)</b>   |                    |                            |                                 |                      |                           |                  |          |
| HAPs - Organics  |                    |                            |                                 |                      |                           |                  |          |
| Emission Factor in lb/MMcf   | Benzene<br>2.1E-03 | Dichlorobenzene<br>1.2E-03 | Formaldehyde<br>7.5E-02         | Hexane<br>1.8E+00    | Toluene<br>3.4E-03        | Total - Organics |          |
| Potential Emission in tons/yr  | 8.1E-05            | 4.6E-05                    | 2.9E-03                         | 0.07                 | 1.3E-04                   | 0.07             |          |
| HAPs - Metals  |                    |                            |                                 |                      |                           |                  |          |
| Emission Factor in lb/MMcf   | Lead<br>5.0E-04    | Cadmium<br>1.1E-03         | Chromium<br>1.4E-03             | Manganese<br>3.8E-04 | Nickel<br>2.1E-03         | Total - Metals   |          |
| Potential Emission in tons/yr  | 1.9E-05            | 4.3E-05                    | 5.4E-05                         | 1.5E-05              | 8.1E-05                   | 2.1E-04          |          |
| Methodology is the same as above.<br>The five highest organic and metal HAPs emission factors are provided above.<br>Additional HAPs emission factors are available in AP-42, Chapter 1.4.   |                    |                            |                                 |                      |                           |                  |          |
|  |                    |                            |                                 |                      |                           | Total HAPs       | 0.07     |
|  |                    |                            |                                 |                      |                           | Worst HAP        | 0.07     |

| No. 2 Fuel Oil Combustion  |   |                            |                    |                       |                  |                  |           |
|--|---|----------------------------|--------------------|-----------------------|------------------|------------------|-----------|
| Heat Input Capacity<br>MMBtu/hr<br>9   | Potential Throughput<br>kgals/year<br>563.1 | S = Weight % Sulfur<br>0.5 |                    |                       |                  |                  |           |
|  |   | Pollutant                  |                    |                       |                  |                  |           |
| Emission Factor in lb/kgal   | PM*   | PM10**                     | direct PM2.5***    | SO2<br>71<br>(142.0S) | NOx<br>20.0      | VOC<br>0.34      | CO<br>5.0 |
| Potential Emission in tons/yr  | 0.56  | 0.67                       | 0.60               | 19.99                 | 5.63             | 0.10             | 1.41      |
| <b>Methodology</b><br>1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu<br>Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal per 1000 gallon x 1 gal per 0.140 MMBtu<br>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 errata file)<br>*PM emission factor is filterable PM only.<br>**PM10 emission factor is filterable PM10 of 1.08 lb/kgal + condensable PM emission factor of 1.3 lb/kgal.<br>***Direct PM2.5 emission factor is filterable PM2.5 of 0.83 lb/kgal + condensable PM emission factor of 1.3 lb/kgal.<br>Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton |   |                            |                    |                       |                  |                  |           |
| <b>Hazardous Air Pollutants (HAPs)</b>   |   |                            |                    |                       |                  |                  |           |
|  |   | HAPs - Metals              |                    |                       |                  |                  |           |
| Emission Factor in lb/MMBtu  | Arsenic<br>4.0E-06                          | Beryllium<br>3.0E-06       | Cadmium<br>3.0E-06 | Chromium<br>3.0E-06   | Lead<br>9.0E-06  |                  |           |
| Potential Emission in tons/yr  | 1.6E-04                                     | 1.2E-04                    | 1.2E-04            | 1.2E-04               | 3.5E-04          |                  |           |
|  |   | HAPs - Metals (continued)  |                    |                       |                  |                  |           |
| Emission Factor in lb/MMBtu  | Mercury<br>3.0E-06                          | Manganese<br>6.0E-06       | Nickel<br>3.0E-06  | Selenium<br>1.5E-05   |                  |                  |           |
| Potential Emission in tons/yr  | 1.2E-04                                     | 2.4E-04                    | 1.2E-04            | 5.9E-04               |                  |                  |           |
| <b>Methodology</b><br>No data was available in AP-42 for organic HAPs.<br>Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/MMBtu)*8,760 hrs/yr / 2,000 lb/ton   |   |                            |                    |                       |                  |                  |           |
|  |   |                            |                    |                       | Total HAP        | 1.9E-03          |           |
|  |   |                            |                    |                       | Single Worst HAP | 5.9E-04 Selenium |           |

| Summary of Emissions from Boiler B-5 |      |      |       |                 |                 |      |      |           |                  |
|--------------------------------------|------|------|-------|-----------------|-----------------|------|------|-----------|------------------|
|                                      | PM   | PM10 | PM2.5 | SO <sub>2</sub> | NO <sub>x</sub> | VOC  | CO   | Total HAP | Single Worst HAP |
| Natural Gas                          | 0.07 | 0.29 | 0.29  | 0.02            | 3.86            | 0.21 | 3.25 | 0.07      | 0.07 Hexane      |
| No. 2 Fuel Oil                       | 0.56 | 0.67 | 0.60  | 19.99           | 5.63            | 0.10 | 1.41 | 1.9E-03   | 5.9E-04 Selenium |
| Worst Case                           | 0.56 | 0.67 | 0.60  | 19.99           | 5.63            | 0.21 | 3.25 | 0.07      | 0.07 Hexane      |

**Appendix A: Emissions Calculations**  
Dual-Fired Boiler B-3

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Company Name: St. Vincent Dunn Hospital  
Source Address: 1600 23rd St. Bedford, IN 47421  
Permit Number: M093-40663-00015  
Reviewer: Jared Karban

| Natural Gas Combustion <100 MMBtu/hr   |                               |   |                         |                      |                           |                  |          |
|--|-------------------------------|---|-------------------------|----------------------|---------------------------|------------------|----------|
| Heat Input Capacity<br>MMBtu/hr<br>3.6   | HHV<br>mmBtu<br>mmscf<br>1020 | Potential Throughput<br>MMCF/yr<br>30.9 |                         |                      |                           |                  |          |
| Pollutant  |                               |   |                         |                      |                           |                  |          |
| Emission Factor in lb/MMCF   | PM*<br>1.9                    | PM10*<br>7.6                            | direct PM2.5*<br>7.6    | SO2<br>0.6           | NOx<br>100<br>**see below | VOC<br>5.5       | CO<br>84 |
| Potential Emission in tons/yr  | 0.03                          | 0.12                                    | 0.12                    | 0.01                 | 1.55                      | 0.09             | 1.30     |
| *PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.<br>PM2.5 emission factor is filterable and condensable PM2.5 combined.<br>**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32  |                               |   |                         |                      |                           |                  |          |
| <b>Methodology</b><br>All emission factors are based on normal firing.<br>MMBtu = 1,000,000 Btu<br>MMCF = 1,000,000 Cubic Feet of Gas<br>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<br>Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu<br>Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton |                               |   |                         |                      |                           |                  |          |
| <b>Hazardous Air Pollutants (HAPs)</b>   |                               |   |                         |                      |                           |                  |          |
| HAPs - Organics  |                               |   |                         |                      |                           |                  |          |
| Emission Factor in lb/MMcf   | Benzene<br>2.1E-03            | Dichlorobenzene<br>1.2E-03              | Formaldehyde<br>7.5E-02 | Hexane<br>1.8E+00    | Toluene<br>3.4E-03        | Total - Organics |          |
| Potential Emission in tons/yr  | 3.2E-05                       | 1.9E-05                                 | 1.2E-03                 | 0.03                 | 5.3E-05                   | 0.03             |          |
| HAPs - Metals  |                               |   |                         |                      |                           |                  |          |
| Emission Factor in lb/MMcf   | Lead<br>5.0E-04               | Cadmium<br>1.1E-03                      | Chromium<br>1.4E-03     | Manganese<br>3.8E-04 | Nickel<br>2.1E-03         | Total - Metals   |          |
| Potential Emission in tons/yr  | 7.7E-06                       | 1.7E-05                                 | 2.2E-05                 | 5.9E-06              | 3.2E-05                   | 8.5E-05          |          |
| Methodology is the same as above.<br>The five highest organic and metal HAPs emission factors are provided above.<br>Additional HAPs emission factors are available in AP-42, Chapter 1.4.   |                               |   |                         |                      |                           | Total HAPs       | 0.03     |
|  |                               |   |                         |                      |                           | Worst HAP        | 0.03     |

| No. 2 Fuel Oil Combustion   |   |                            |                 |                |                  |                  |      |
|---|---|----------------------------|-----------------|----------------|------------------|------------------|------|
| Heat Input Capacity<br>MMBtu/hr<br>3.6  | Potential Throughput<br>kgals/year<br>225.3 | S = Weight % Sulfur<br>0.5 |                 |                |                  |                  |      |
|   | Pollutant                                   |                            |                 |                |                  |                  |      |
|   | PM*   | PM10**                     | direct PM2.5*** | SO2            | NOx              | VOC              | CO   |
| Emission Factor in lb/kgal  | 2.0   | 2.38                       | 2.13            | 71<br>(142.0S) | 20.0             | 0.34             | 5.0  |
| Potential Emission in tons/yr   | 0.23  | 0.27                       | 0.24            | 8.00           | 2.25             | 0.04             | 0.56 |
| <b>Methodology</b><br>1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu<br>Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal per 1000 gallon x 1 gal per 0.140 MM Btu<br>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 errata file)<br>*PM emission factor is filterable PM only.<br>**PM10 emission factor is filterable PM10 of 1.08 lb/kgal + condensable PM emission factor of 1.3 lb/kgal.<br>***Direct PM2.5 emission factor is filterable PM2.5 of 0.83 lb/kgal + condensable PM emission factor of 1.3 lb/kgal.<br>Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton |   |                            |                 |                |                  |                  |      |
| <b>Hazardous Air Pollutants (HAPs)</b>  |   |                            |                 |                |                  |                  |      |
|   | HAPs - Metals                               |                            |                 |                |                  |                  |      |
|   | Arsenic                                     | Beryllium                  | Cadmium         | Chromium       | Lead             |                  |      |
| Emission Factor in lb/mmBtu   | 4.0E-06                                     | 3.0E-06                    | 3.0E-06         | 3.0E-06        | 9.0E-06          |                  |      |
| Potential Emission in tons/yr   | 6.3E-05                                     | 4.7E-05                    | 4.7E-05         | 4.7E-05        | 1.4E-04          |                  |      |
|   | HAPs - Metals (continued)                   |                            |                 |                |                  |                  |      |
|   | Mercury                                     | Manganese                  | Nickel          | Selenium       |                  |                  |      |
| Emission Factor in lb/mmBtu   | 3.0E-06                                     | 6.0E-06                    | 3.0E-06         | 1.5E-05        |                  |                  |      |
| Potential Emission in tons/yr   | 4.7E-05                                     | 9.5E-05                    | 4.7E-05         | 2.4E-04        |                  |                  |      |
| <b>Methodology</b><br>No data was available in AP-42 for organic HAPs.<br>Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton  |   |                            |                 |                | Total HAP        | 7.7E-04          |      |
|   |   |                            |                 |                | Single Worst HAP | 2.4E-04 Selenium |      |

| Summary of Emissions from Boiler B-6 |             |             |             |                 |                 |             |             |             |                    |
|--------------------------------------|-------------|-------------|-------------|-----------------|-----------------|-------------|-------------|-------------|--------------------|
|                                      | PM          | PM10        | PM2.5       | SO <sub>2</sub> | NO <sub>x</sub> | VOC         | CO          | Total HAP   | Single Worst HAP   |
| Natural Gas                          | 0.03        | 0.12        | 0.12        | 0.01            | 1.55            | 0.09        | 1.30        | 0.03        | 0.03 Hexane        |
| No. 2 Fuel Oil                       | 0.23        | 0.27        | 0.24        | 8.00            | 2.25            | 0.04        | 0.56        | 7.7E-04     | 2.4E-04 Selenium   |
| <b>Worst Case</b>                    | <b>0.23</b> | <b>0.27</b> | <b>0.24</b> | <b>8.00</b>     | <b>2.25</b>     | <b>0.09</b> | <b>1.30</b> | <b>0.03</b> | <b>0.03 Hexane</b> |

**Appendix A: Emission Calculations**  
**Reciprocating Internal Combustion Engines - Diesel Fuel**  
**Output Rating (<=600 HP)**  
**Maximum Input Rate (<=4.2 MMBtu/hr)**

**Company Name:** St. Vincent Dunn Hospital  
**Source Address:** 1600 23rd St. Bedford, IN 47421  
**Permit Number:** M093-40663-00015  
**Reviewer:** Jared Karban

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

|                                 |         |
|---------------------------------|---------|
| Output Horsepower Rating (hp)   | 288.3   |
| Maximum Hours Operated per Year | 500     |
| Potential Throughput (hp-hr/yr) | 144,150 |

|                           | Pollutant |        |              |         |        |        |         |
|---------------------------|-----------|--------|--------------|---------|--------|--------|---------|
|                           | PM*       | PM10*  | direct PM2.5 | SO2     | NOx    | VOC    | CO      |
| Emission Factor in lb/hp  | 0.0022    | 0.0022 | 0.0022       | 0.00205 | 0.0310 | 0.0025 | 0.00668 |
| Potential Emission in ton | 0.16      | 0.16   | 0.16         | 0.15    | 2.23   | 0.18   | 0.48    |

\*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

**Hazardous Air Pollutants (HAPs)**

|                           | Pollutant |          |          |               |              |              |          |                   |
|---------------------------|-----------|----------|----------|---------------|--------------|--------------|----------|-------------------|
|                           | Benzene   | Toluene  | Xylene   | 1,3-Butadiene | formaldehyde | Acetaldehyde | Acrolein | Total PAH HAPs*** |
| Emission Factor in lb/hp  | 6.53E-06  | 2.86E-06 | 2.00E-06 | 2.74E-07      | 8.26E-06     | 5.37E-06     | 6.48E-07 | 1.18E-06          |
| Potential Emission in ton | 4.71E-04  | 2.06E-04 | 1.44E-04 | 1.97E-05      | 5.95E-04     | 3.87E-04     | 4.67E-05 | 8.48E-05          |

\*\*\*PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

\*\*\*\*Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

|   |                 |
|---|-----------------|
| <b>Potential Emission of Total HAPs (tons/yr)</b> | <b>1.95E-03</b> |
|---|-----------------|

**Methodology**

Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.3-1 and 3.3-2.

Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] \* [Maximum Hours Operated per Year]

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



**Appendix A: Emission Calculations**  
**Large Reciprocating Internal Combustion Engines - Diesel Fuel**  
**Output Rating (>600 HP)**  
**Maximum Input Rate (>4.2 MMBtu/hr)**  
**Diesel-fired Emergency Generator G-2**

Page 6 of 6 TSD App A

**Company Name:** St. Vincent Dunn Hospital  
**Address City IN Zip:** 1600 23rd St. Bedford, IN 47421  
**Permit Number:** M093-40663-00015  
**Reviewer:** Jared Karban

|  |         |
|--|---------|
| Output Horsepower Rating (hp)            | 804.6   |
| Maximum Hours Operated per Year          | 500     |
| Potential Throughput (hp-hr/yr)          | 402,300 |
| Sulfur Content (S) of Fuel (% by weight) | 0.500   |

|                               | Pollutant |          |               |                       |                         |          |          |
|-------------------------------|-----------|----------|---------------|-----------------------|-------------------------|----------|----------|
|                               | PM*       | PM10*    | direct PM2.5* | SO2                   | NOx                     | VOC      | CO       |
| Emission Factor in lb/hp-hr   | 7.00E-04  | 4.01E-04 | 4.01E-04      | 4.05E-03<br>(.00809S) | 2.40E-02<br>**see below | 7.05E-04 | 5.50E-03 |
| Potential Emission in tons/yr | 0.14      | 0.08     | 0.08          | 0.81                  | 4.83                    | 0.14     | 1.11     |

\*PM10 emission factor in lb/hp-hr was calculated using the emission factor in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

\*\*NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr

| Hazardous Air Pollutants (HAPs) | Pollutant |          |          |              |              |          |                   |
|---------------------------------|-----------|----------|----------|--------------|--------------|----------|-------------------|
|                                 | Benzene   | Toluene  | Xylene   | Formaldehyde | Acetaldehyde | Acrolein | Total PAH HAPs*** |
| Emission Factor in lb/hp-hr**** | 5.43E-06  | 1.97E-06 | 1.35E-06 | 5.52E-07     | 1.76E-07     | 5.52E-08 | 1.48E-06          |
| Potential Emission in tons/yr   | 1.09E-03  | 3.96E-04 | 2.72E-04 | 1.11E-04     | 3.55E-05     | 1.11E-05 | 2.99E-04          |

\*\*\*PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

\*\*\*\*Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

**Methodology**

Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1, 3.4-2, 3.4-3, and 3.4-4.

Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] \* [Maximum Hours Operated per Year]

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

|                         |                         |
|-------------------------|-------------------------|
| <b>Total HAPs</b>       | <b>2.22E-03</b>         |
| <b>Single Worst HAP</b> | <b>1.09E-03 Benzene</b> |



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204  
(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Eric J. Holcomb**  
Governor

**Bruno L. Pigott**  
Commissioner

January 4, 2019

Venon Fleming  
St Vincent Dunn Hospital  
1600 23rd St  
Bedford, IN 47421

Re: Public Notice  
St. Vincent Dunn Hospital  
Permit Level: MSOP Renewal  
Permit Number: 093-40663-00015

Dear Venon Fleming:

Enclosed is a copy of your draft MSOP Renewal, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Times - Mail in Bedford, Indiana publish the abbreviated version of the public notice no later than January 8, 2019. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Bedford Public Library, 1323 K Street in Bedford IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Jared Karban, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-4230 or dial (317) 233-4230.

Sincerely,

*Len Pogost*

Len Pogost  
Permits Branch  
Office of Air Quality

Enclosures  
PN Applicant Cover Letter 1/9/2017



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**Eric J. Holcomb**  
Governor

**Bruno Pigott**  
Commissioner

### ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

January 3, 2019

Times-Mail  
Attn: Classifieds  
813 16th St.  
Bedford, IN 47421

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for St. Vincent Dunn Hospital, Lawrence County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than January 8, 2019.

Please send the invoice, notarized form, clippings showing the date of publication to Bo Liu, at the Indiana Department of Environmental Management, Accounting, Room N1340, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

**To ensure proper payment, please reference account # 100174737.**

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Len Pogost at 800-451-6027 and ask for extension 3-2803 or dial 317-233-2803.

Sincerely,

*Len Pogost*

Len Pogost  
Permit Branch  
Office of Air Quality

Permit Level: MSOP Renewal  
Permit Number: 093-40663-00015

Enclosure

PN Newspaper.dot 1/9/2017



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Eric J. Holcomb  
Governor

Bruno L. Pigott  
Commissioner

January 4, 2019

To: Bedford Public Library 1323 K Street Bedford IN

From: Jenny Acker, Branch Chief  
Permits Branch  
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

**Applicant Name: St. Vincent Dunn Hospital**  
**Permit Number: 093-40663-00015**

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures  
PN Library 1/9/2017



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

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Eric J. Holcomb  
Governor

Bruno L. Pigott  
Commissioner

### Notice of Public Comment

**January 4, 2019**  
**St. Vincent Dunn Hospital**  
**093-40663-00015**

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.


Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

**Please Note:** *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at [PPEAR@IDEM.IN.GOV](mailto:PPEAR@IDEM.IN.GOV). If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure  
PN AAA Cover Letter 1/9/2017

# Mail Code 61-53

|                            |   |   |   |  |
|----------------------------|---|---|---|--|
| IDEM Staff                 | LPOGOST 1/4/2019<br>St Vincent Dunn Hospital 093-40663-00015 draft/               |   |   | AFFIX STAMP<br>HERE IF<br>USED AS<br>CERTIFICATE<br>OF MAILING |
| Name and address of Sender |  | Indiana Department of Environmental Management<br>Office of Air Quality – Permits Branch<br>100 N. Senate<br>Indianapolis, IN 46204 | Type of Mail:<br><br><b>CERTIFICATE OF MAILING ONLY</b> |  |

| Line | Article Number | Name, Address, Street and Post Office Address   | Postage | Handling Charges | Act. Value (If Registered) | Insured Value | Due Send if COD | R.R. Fee | S.D. Fee | S.H. Fee | Rest. Del. Fee | Remarks |
|------|----------------|---|---------|------------------|----------------------------|---------------|-----------------|----------|----------|----------|----------------|---------|
| 1    |                | Venon Fleming St Vincent Dunn Hospital 1600 23rd St Bedford IN 47421 (Source CAATS)   |         |                  |                            |               |                 |          |          |          |                |         |
| 2    |                | Bedford City Council and Mayors Office 1102 16th St Bedford IN 47421 (Local Official)   |         |                  |                            |               |                 |          |          |          |                |         |
| 3    |                | Lawrence County Board of Commissioners 916 15th Street Bedford IN 47421 (Local Official)  |         |                  |                            |               |                 |          |          |          |                |         |
| 4    |                | Bedford Public Library 1323 K Street Bedford IN 47421 (Library)   |         |                  |                            |               |                 |          |          |          |                |         |
| 5    |                | Mr. Anthony Wray 1861 Buddha Bypass Rd Bedford IN 47421 (Affected Party)  |         |                  |                            |               |                 |          |          |          |                |         |
| 6    |                | Mr. Bobby Minton 7745 S. Fairfax Rd Bloomington IN 47401 (Affected Party)   |         |                  |                            |               |                 |          |          |          |                |         |
| 7    |                | Mr. David Weatherholt Boilermaker Local #374 4777 East County Road 2100 North Dale IN 47523 (Affected Party)                        |         |                  |                            |               |                 |          |          |          |                |         |
| 8    |                | Mr. Don Sherry 1111 215 St. Tell City IN 47506-2815 (Affected Party)  |         |                  |                            |               |                 |          |          |          |                |         |
| 9    |                | David Jordan Environmental Resources Management (ERM) 8425 Woodfield Crossing Blvd., Suite 560-W Indianapolis IN 46240 (Consultant) |         |                  |                            |               |                 |          |          |          |                |         |
| 10   |                | Mitchell City Council and Mayors Office 407 S. 6th St. Mitchell IN 47446 (Local Official)   |         |                  |                            |               |                 |          |          |          |                |         |
| 11   |                | Lawrence County Health Department 2419 Mitchell Rd. Bedford, IN 47421 (Health Department)   |         |                  |                            |               |                 |          |          |          |                |         |
| 12   |                | Krystal Shetler Times-Mail 813 16th St Bedford IN 47421 (Affected Party)  |         |                  |                            |               |                 |          |          |          |                |         |
| 13   |                |   |         |                  |                            |               |                 |          |          |          |                |         |
| 14   |                |   |         |                  |                            |               |                 |          |          |          |                |         |
| 15   |                |   |         |                  |                            |               |                 |          |          |          |                |         |

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