



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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TO: Interested Parties / Applicant

DATE: February 25, 2011

RE: Sony DADC / 167-28489-00032

FROM: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures  
FNPER.dot12/03/07



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**Federally Enforceable State Operating Permit  
Renewal  
OFFICE OF AIR QUALITY**

**Sony DADC**

**1800 North Fruitridge Avenue, Terre Haute, Indiana 47804  
3181 North Fruitridge Avenue, Terre Haute, Indiana 47804;  
1700 North Fruitridge Avenue, Terre Haute, Indiana 47804;  
1600 North Fruitridge Avenue, Terre Haute, Indiana 47804; and  
1400 North Fruitridge Avenue, Terre Haute, Indiana 47804**

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F167-28489-00032	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: February 25, 2011 Expiration Date: February 25, 2021

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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 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-8-3(b)]

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The Permittee owns and operates a stationary manufacturing plant for optical discs.

Source Address:	1800 North Fruitridge Avenue, Terre Haute, Indiana 47804
General Source Phone Number:	812-462-8270
SIC Code:	3652
County Location:	Vigo
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

### A.2 Source Definition

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This Source Definition from the FESOP Renewal was incorporated into this permit as follows:

During the review of this source's renewal application, this stationary manufacturing plant for optical discs was determined to consist of five (5) plants:

- (a) Plant 3181 is located at 3181 North Fruitridge Avenue, Terre Haute, Indiana 47804;
- (b) Plant 1800 is located at 1800 North Fruitridge Avenue, Terre Haute, Indiana 47804;
- (c) Plant 1700 is located at 1700 North Fruitridge Avenue, Terre Haute, Indiana 47804;
- (d) Plant 1600 is located at 1600 North Fruitridge Avenue, Terre Haute, Indiana 47804; and
- (e) Plant 1400 is located at 1400 North Fruitridge Avenue, Terre Haute, Indiana 47804.

These plants are located on one or more contiguous or adjacent properties, have the same two-digit SIC code and are under common ownership and control, therefore they are considered one (1) source, as defined by 326 IAC 2-7-1(22).

Note: The 1800 North Fruitridge Avenue, Terre Haute, Indiana 47804 will be considered the main address for this plant.

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

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

- (a) One (1) printing operation, consisting of three silk screen printer and thirty-one offset printers, installed between 2005 and 2010, with a combined maximum throughput capacity of 225,120 units per hour, using no VOC control.
- (b) One (1) jig cleaning process, consisting of the following:
  - (1) One (1) jig cleaner, utilizing a chemical process using phosphoric acid and sodium hydroxide. This process has negligible potential to emit any regulated pollutants and uses non-VOC materials.

- (2) One (1) Blast operation, with a totally enclosed dust collector, consisting of two blast units, utilizing plastic beads and alumina as media at a maximum flow rate of 1,050 pounds of media per hour each, installed in 2000, exhausting inside the building.
  - (3) One (1) dry ice blast operation, totally enclosed, using dry ice under pressure to clean parts. This process has negligible potential to emit any regulated pollutants.
  - (4) Two (2) IPA dip tanks, each having a maximum capacity of five (5) gallons, and each having VOC emissions potential of less than 15 pounds per day.
  - (5) One (1) graphite jig coating unit with solvent, having VOC emissions potential of less than 15 pounds per day.
- (c) Fourteen (14) boilers, consisting of the following:
- (1) Kewanee Boiler Corp. boiler, installed before 1983, identified as Unit 001, with a maximum heat input capacity of 10.462 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack S19.
  - (2) Kewanee Boiler Corp. boiler, installed before 1983, identified as Unit 002, with a maximum heat input capacity of 10.462 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack S13.
  - (3) Burnham Corp. boiler, installed in 1986, identified as Unit 003, with a maximum heat input capacity of 9.863 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack S4.
  - (4) Burnham Corp. boiler, installed in 1986, identified as Unit 004, with a maximum heat input capacity of 9.863 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack S3.
  - (5) Superior Boiler Works boiler, installed in 1992, identified as Unit 005, with a maximum heat input capacity of 16.8 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack 001.  
  
Under 40CFR 60, Subpart Dc, this is considered an affected facility.
  - (6) Superior Boiler Works boiler, installed in 1992, identified as Unit 006, with a maximum heat input capacity of 16.8 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack 002.  
  
Under 40CFR 60, Subpart Dc, this is considered an affected facility.
  - (7) Cleaver Brooks Corp. boiler, installed in 1997, identified as Unit 012, with a maximum heat input capacity of 6.0 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 012.
  - (8) One (1) boiler, installed in 1971, identified as Unit 014, with a maximum heat input capacity of 4.19 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 014.
  - (9) One (1) boiler, installed in 1971, identified as Unit 015, with a maximum heat input capacity of 4.50 million BTU per hour, firing natural gas only, using no

control, and exhausting to stack 015.

- (10) One (1) boiler, installed in 1974, identified as Unit 016, with a maximum heat input capacity of 4.00 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 016.
  - (11) One (1) boiler, installed in 1971, identified as Unit 017, with a maximum heat input capacity of 8.36 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 017.
  - (12) One (1) boiler, installed in 1971, identified as Unit 018, with a maximum heat input capacity of 8.36 million BTU per hour, firing natural gas and utilizing #2 fuel oil as back-up, using no control, and exhausting to stack 018.
  - (13) One (1) boiler, installed in 2008, identified as Unit 019, with a maximum heat input capacity of 7.19 million BTU per hour, firing natural gas only, using low NO<sub>x</sub> burners, and exhausting to stack 019.
  - (14) One (1) boiler, installed in 2008, identified as Unit 020, with a maximum heat input capacity of 8.80 million BTU per hour, firing natural gas only, using low NO<sub>x</sub> burner, and exhausting to stack 020.
- (d) Two (2) plastic scrap shredders, with one installed prior to 1996, and one installed in 2009, with cyclone and baghouse for particulate control, used to grind non-conforming material for recycling.

A.4 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

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

- (a) Space heaters, process heaters, or boilers using the following fuels: Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) BTU per hour.
- (b) The following VOC and HAP storage containers:
  - (1) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids; and
  - (2) Packaging lubricants and greases.
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (d) Closed loop heating and cooling systems.
- (e) Exposure chambers, for curing of ultraviolet inks and ultraviolet coatings where heat is the intended discharge.
- (f) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (g) Replacement or repair of electrostatic precipitators, bags in baghouse, and filters in other air filtration equipment.
- (h) Paved and unpaved roads and parking lots with public access.

- (i) Enclosed systems for conveying plastic raw materials and plastic finished goods.
- (j) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling towers.
- (k) Emergency generators as follows: Diesel generators not exceeding 1600 horsepower including:
  - (1) Onan Corp. diesel emergency generator, installed in 1983, identified as Unit 007, with a maximum capacity of 115 BHP, firing #2 fuel only, using no control, and exhausting to stack 007. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (2) Onan Corp. diesel emergency generator, installed in 1986, identified as Unit 008, with a maximum capacity of 122 BHP, firing #2 fuel only, using no control, and exhausting to stack 008. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (3) Onan Corp. diesel emergency generator, installed in 1992, identified as Unit 009, with a maximum capacity of 188 BHP, firing #2 fuel only, using no control, and exhausting to stack 009. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (4) Caterpillar Corp. diesel emergency, installed in 1986, identified as Unit 010, with a maximum capacity of 200 BHP, firing #2 fuel only, using no control, and exhausting to stack 010. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (5) Onan Corp. diesel emergency generator, installed in 1998, with a maximum capacity of 620 BHP, firing #2 fuel only, using no control, and exhausting to stack 013. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (6) One (1) diesel emergency generator identified as Unit 021, installed in 2004, with a maximum capacity of 150 BHP, firing #2 fuel only, using no control and exhausting to stack 022. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (7) One (1) diesel emergency generator identified as Unit 022, installed in 2004, with a maximum capacity of 884 BHP, firing #2 fuel only, using no control and exhausting to stack 021. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (8) One (1) diesel emergency identified as Unit 023, installed in 1971, with a maximum capacity of 54 BHP, firing #2 fuel only, using no control and exhausting to stack 023. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (9) One (1) diesel emergency generator identified as Unit 024, installed in 1971, with a maximum capacity of 150 BHP, firing #2 fuel only, using no control and exhausting to stack 024. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (10) One (1) diesel emergency identified as Unit 025, installed in 1958, with a maximum capacity of 54 BHP, firing #2 fuel only, using no control and exhausting to stack 025. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.

Under 40 CFR 63, Subpart ZZZZ, these emergency generators are considered affected sources.

- (l) Stationary fire pumps, consisting of the following:

- (1) One (1) diesel emergency fire pump, identified as Unit 011, installed in 1971, with a maximum capacity of 255 HP, using No. 2 diesel fuel only, using no controls; and
- (2) One (1) diesel emergency fire pump, identified as Unit 026, installed in 1986, with a maximum capacity of 225 HP, using No. 2 diesel fuel only, using no controls.

Under 40 CFR 63, Subpart ZZZZ, these pumps are considered affected sources.

(m) Other insignificant activities, including:

- (1) Tank T1 - 550 gallon No.2 fuel oil storage tank, with potential emissions less than five pounds per year.
- (2) Tank T2 - 5,000 gallon No.2 fuel oil storage tank, with potential emissions less than five pounds per year.
- (3) Tank T3 - 5,000 gallon No.2 fuel oil storage tank, with potential emissions less than five pounds per year.
- (4) One (1) Photoresist Coater, consisting of two process:
  - (A) Photoresist of Mastering process, containing no VOC materials.
  - (B) Photoresist Screening process, containing no VOC materials.
- (5) One nickel plating operation, consisting of one (1) electroplating tank operation and one (1) electroless tank operation, with a combined potential to emit VOC of less than three pounds per hour.

Under 40 CFR Part 63, Subpart WWWW—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, this is considered an affected facility.

- (6) One Screen Washing 3181 process, using VOC materials.
- (7) One (1) injection molding process, installed before 2010, using non-VOC materials to manufacture polycarbonate optical discs. This process has no expected VOC emissions.

#### A.5 FESOP Applicability [326 IAC 2-8-2]

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

## SECTION B GENERAL CONDITIONS

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

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

### B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

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- (a) This permit, F167-28489-00032, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

### B.3 Term of Conditions [326 IAC 2-1.1-9.5]

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Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

### B.4 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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

### B.5 Severability [326 IAC 2-8-4(4)]

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

### B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

### B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

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- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

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- (a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

- (1) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and
  - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
  - (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

**B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]**

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- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]**

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

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

- (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 PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

**B.12 Emergency Provisions [326 IAC 2-8-12]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

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

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or  
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)  
Facsimile Number: 317-233-6865

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

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

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

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
- (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
- (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

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

- (a) All terms and conditions of permits established prior to F167-28489-00032 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.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]**

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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 nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

**B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]**

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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

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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 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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 IGCM 1003

Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months 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 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
  - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permit Administration and Support Section, 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, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

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

- (b) **Emission Trades [326 IAC 2-8-15(c)]**  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) **Alternative Operating Scenarios [326 IAC 2-8-15(d)]**  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

**B.19 Source Modification Requirement [326 IAC 2-8-11.1]**

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

**B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][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 FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:  
  
Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
  
Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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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 2-8-4(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 Overall Source Limit [326 IAC 2-8]

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

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

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

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

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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]

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

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- (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. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana 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.

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

#### **C.8 Performance Testing [326 IAC 3-6]**

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- (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. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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

#### **C.9 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 2-8-4][326 IAC 2-8-5(a)(1)]**

#### **C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]**

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Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

#### **C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]**

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- (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.
- (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 [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]**

#### **C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]**

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

#### **C.13 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]**

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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 [326 IAC 2-8-4][326 IAC 2-8-5]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

**C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The

records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, 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.16 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]**

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- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:  
  
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) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

**Stratospheric Ozone Protection**

**C.17 Compliance with 40 CFR 82 and 326 IAC 22-1**

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

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) One (1) Printing operation, consisting of three silk screen printer and thirty-one offset printers, installed between 2005 and 2010, with a combined maximum throughput capacity of 225,120 units per hour, using no VOC control.
- (b) One (1) jig cleaning process, consisting of the following:
  - (1) One (1) jig cleaner, utilizing a chemical process using phosphoric acid and sodium hydroxide. This process has negligible potential to emit any regulated pollutants and uses non-VOC materials.
  - (2) One (1) Blast operation, with a totally enclosed dust collector, consisting of two blast units, utilizing plastic beads and alumina as media at a maximum flow rate of 1,050 pounds of media per hour each, installed in 2000, exhausting inside the building.
  - (3) One (1) dry ice blast operation, totally enclosed, using dry ice under pressure to clean parts. This process has negligible potential to emit any regulated pollutants.
  - (4) Two (2) IPA dip tanks, each having a maximum capacity of five (5) gallons, and each having VOC emissions potential of less than 15 pounds per day.
  - (5) One (1) graphite jig coating unit with solvent, having VOC emissions potential of less than 15 pounds per day.
- (c) Fourteen (14) boilers, consisting of the following:
  - (1) Kewanee Boiler Corp. boiler, installed before 1983, identified as Unit 001, with a maximum heat input capacity of 10.462 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack S19.
  - (2) Kewanee Boiler Corp. boiler, installed before 1983, identified as Unit 002, with a maximum heat input capacity of 10.462 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack S13.
  - (3) Burnham Corp. boiler, installed in 1986, identified as Unit 003, with a maximum heat input capacity of 9.863 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack S4.
  - (4) Burnham Corp. boiler, installed in 1986, identified as Unit 004, with a maximum heat input capacity of 9.863 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack S3.
  - (5) Superior Boiler Works boiler, installed in 1992, identified as Unit 005, with a maximum heat input capacity of 16.8 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack 001.  
  
Under 40CFR 60, Subpart Dc, this is considered an affected facility.
  - (6) Superior Boiler Works boiler, installed in 1992, identified as Unit 006, with a maximum

heat input capacity of 16.8 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack 002.

Under 40CFR 60, Subpart Dc, this is considered an affected facility.

- (7) Cleaver Brooks Corp. boiler, installed in 1997, identified as Unit 012, with a maximum heat input capacity of 6.0 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 012.
  - (8) One (1) boiler, installed in 1971, identified as Unit 014, with a maximum heat input capacity of 4.19 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 014.
  - (9) One (1) boiler, installed in 1971, identified as Unit 015, with a maximum heat input capacity of 4.50 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 015.
  - (10) One (1) boiler, installed in 1974, identified as Unit 016, with a maximum heat input capacity of 4.00 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 016.
  - (11) One (1) boiler, installed in 1971, identified as Unit 017, with a maximum heat input capacity of 8.36 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 017.
  - (12) One (1) boiler, installed in 1971, identified as Unit 018, with a maximum heat input capacity of 8.36 million BTU per hour, firing natural gas and utilizing #2 fuel oil as back-up, using no control, and exhausting to stack 018.
  - (13) One (1) boiler, installed in 2008, identified as Unit 019, with a maximum heat input capacity of 7.19 million BTU per hour, firing natural gas only, using low NO<sub>x</sub> burners, and exhausting to stack 019.
  - (14) One (1) boiler, installed in 2008, identified as Unit 020, with a maximum heat input capacity of 8.80 million BTU per hour, firing natural gas only, using low NO<sub>x</sub> burner, and exhausting to stack 020.
- (d) Two (2) plastic scrap shredders, with one installed prior to 1996, and one installed in 2009, with cyclone and baghouse for particulate control, used to grind non-conforming material for recycling.

The following Insignificant Activities:

- a) Space heaters, process heaters, or boilers using the following fuels: Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) BTU per hour.
- b) The following VOC and HAP storage containers:
  - (1) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids; and
  - (2) Packaging lubricants and greases.
- c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

- d) Closed loop heating and cooling systems.
- e) Exposure chambers, for curing of ultraviolet inks and ultraviolet coatings where heat is the intended discharge.
- f) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- g) Replacement or repair of electrostatic precipitators, bags in baghouse, and filters in other air filtration equipment.
- h) Paved and unpaved roads and parking lots with public access.
- i) Enclosed systems for conveying plastic raw materials and plastic finished goods.
- j) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling towers.
- (k) Emergency generators as follows: Diesel generators not exceeding 1600 horsepower including:
  - (1) Onan Corp. diesel emergency generator, installed in 1983, identified as Unit 007, with a maximum capacity of 115 BHP, firing #2 fuel only, using no control, and exhausting to stack 007. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (2) Onan Corp. diesel emergency generator, installed in 1986, identified as Unit 008, with a maximum capacity of 122 BHP, firing #2 fuel only, using no control, and exhausting to stack 008. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (3) Onan Corp. diesel emergency generator, installed in 1992, identified as Unit 009, with a maximum capacity of 188 BHP, firing #2 fuel only, using no control, and exhausting to stack 009. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (4) Caterpillar Corp. diesel emergency, installed in 1986, identified as Unit 010, with a maximum capacity of 200 BHP, firing #2 fuel only, using no control, and exhausting to stack 010. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (5) Onan Corp. diesel emergency generator, installed in 1998, with a maximum capacity of 620 BHP, firing #2 fuel only, using no control, and exhausting to stack 013. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (6) One (1) diesel emergency generator identified as Unit 021, installed in 2004, with a maximum capacity of 150 BHP, firing #2 fuel only, using no control and exhausting to stack 022. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (7) One (1) diesel emergency generator identified as Unit 022, installed in 2004, with a maximum capacity of 884 BHP, firing #2 fuel only, using no control and exhausting to stack 021. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (8) One (1) diesel emergency identified as Unit 023, installed in 1971, with a maximum capacity of 54 BHP, firing #2 fuel only, using no control and exhausting to stack 023. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (9) One (1) diesel emergency generator identified as Unit 024, installed in 1971,

- with a maximum capacity of 150 BHP, firing #2 fuel only, using no control and exhausting to stack 024. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
- (10) One (1) diesel emergency identified as Unit 025, installed in 1958, with a maximum capacity of 54 BHP, firing #2 fuel only, using no control and exhausting to stack 025. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.

Under 40 CFR 63, Subpart ZZZZ, these emergency generators are considered affected sources.

- l) Stationary emergency fire pumps, consisting of the following:
- (1) One (1) diesel emergency fire pump, identified as Unit 011, installed in 1971, with a maximum capacity of 255 HP, using No. 2 diesel fuel only, using no controls; and
- (2) One (1) diesel emergency fire pump, identified as Unit 026, installed in 1986, with a maximum capacity of 225 HP, using No. 2 diesel fuel only, using no controls.

Under 40 CFR 63, Subpart ZZZZ, these pumps are considered affected sources.

- m) Other insignificant activities, including:
- (1) Tank T1 - 550 gallon No.2 fuel oil storage tank, with potential emissions less than five pounds per year.
- (2) Tank T2 - 5,000 gallon No.2 fuel oil storage tank, with potential emissions less than five pounds per year.
- (3) Tank T3 - 5,000 gallon No.2 fuel oil storage tank, with potential emissions less than five pounds per year.
- (4) One (1) Photoresist Coater, consisting of two process:
- (A) Photoresist of Mastering process, containing no VOC materials.
- (B) Photoresist Screening process, containing no VOC materials.
- (5) One nickel plating operation, consisting of one (1) electroplating tank operation and one (1) electroless tank operation, with a combined potential to emit VOC of less than three pounds per hour.

Under 40 CFR Part 63, Subpart WWWW—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, this is considered an affected facility.

- (6) One Screen Washing 3181 process, using VOC materials.
- (7) One (1) injection molding process, installed before 2010, using non-VOC materials to manufacture polycarbonate optical discs. This process has no expected VOC emissions.

(The information describing the process contained in this emissions unit description box is descriptive

information and does not constitute enforceable conditions.)

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

#### **D.1.1 Particulate Matter Limitation (PM) [326 IAC 6.5]**

- (a) Pursuant to 326 IAC 6.5 (Particulate Emissions Limitations), particulate matter emissions from the blast unit shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (b) Particulate emissions from the boiler units when using No. 2 fuel oil shall not exceed twenty-seven hundredths (0.27) grams per million kcal (fifteen-hundredths (0.15) pound per million Btu.
- (c) Particulate emissions from the boiler units when using natural gas shall not exceed one-hundredth (0.01) per dry standard cubic foot (dscf).

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

Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) :

- (a) The SO<sub>2</sub> emissions from the boiler units 003, 004, 005, and 006 shall not exceed five tenths (0.5) pounds per million Btu heat input each; and
- (b) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight.

#### **D.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-4-3][326 IAC 7-2-1]**

Pursuant to 326 IAC 7-4-3 (SO<sub>2</sub> Emissions Limitations) the SO<sub>2</sub> emissions from the Kewanee Boilers (Boiler Units 001 and 002) shall not exceed thirty-six hundredths (0.36) pounds per MMBtu heat input, each. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

#### **D.1.4 Fuel Use Limitation [326 IAC 2-8-4]**

Pursuant to 326 IAC 2-8-4, the following limits shall apply:

- (a) The usage of No. 2 fuel oil in the boilers (Units 001, 002, 003, 004, 005, 006, and 018) shall be limited to 2,467,500 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The SO<sub>2</sub> emissions from the boilers (Units 001, 002, 003, 004, 005, 006, and 018) shall not exceed 0.071 pounds SO<sub>2</sub> per gallon of No. 2 Fuel Oil used.

Compliance with this limit, combined with all other SO<sub>2</sub> emissions at this source, shall limit the source-wide potential to emit SO<sub>2</sub> to less than 100 tons per year and render the requirements of 326 IAC 2-7 (Part 70 Permits) not applicable.

#### **D.1.5 VOC Rules: Degreasing Operations [326 IAC 8-3-2]**

Pursuant to 326 IAC 8-3-2, the Permittee shall perform the following actions for the Screen Washing 3181 operation:

- (a) equip the cleaner with a cover;
- (b) equip the cleaner with a facility for draining cleaned parts;
- (c) close the degreaser cover whenever parts are not being handled in the cleaner;

- (d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) provide a permanent, conspicuous label summarizing the operating requirements;
- (f) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

#### D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for the fourteen boilers, identified as Units 001 through 006, 012, and 014 through 020. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

### **Compliance Determination Requirements**

#### D.1.7 Particulate Matter

In order to determine the compliance status with Condition D.1.1, the internal dust collection system shall be in operation at all times the blast units are in operation, and in accordance with manufacturer's specifications, in order to comply with this limit.

#### D.1.8 Sulfur Dioxide Emissions and Sulfur Content

Compliance with the fuel oil sulfur limitation in Conditions D.1.2, D.1.3 and D.1.4 shall be determined utilizing one of the following options for the boiler units 001, 002, 003, 004, 005, 006, 012, 014, 015, 016, 017, 018, 019, and 020:

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

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

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

#### D.1.9 Visible Emissions Notations

- (a) Visible emission notations of each boiler (units 001, 002, 003, 004, 005, and 006) stack exhaust shall be performed once per day during normal daylight operations when combusting fuel oil, in accordance with the following:

- (1) A trained employee shall record whether emissions are normal or abnormal.
- (2) 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.
- (3) 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.
- (4) 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.
- (5) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

#### **D.1.10 Record Keeping Requirements**

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- (a) To document the compliance status with Conditions D.1.4, the Permittee shall maintain records in accordance with (1) through (6) below.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
  - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period. The natural gas fired boiler certification does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1); and

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

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

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.
- (b) To document compliance with Condition D.1.9, the Permittee shall maintain records of visible emission notations of each boiler (units 001, 002, 003, 004, 005, and 006) stack

exhausts while combusting fuel oil. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process was burning natural gas or the process did not operate that day).

- (c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to records required by this condition.

#### D.1.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.1.4 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require the certification that meets the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

## SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (c) Boilers, consisting of the following:
- (5) Superior Boiler Works boiler, installed in 1992, identified as Unit 005, with a maximum heat input capacity of 16.8 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack 001.
- Under 40CFR 60, Subpart Dc, this is considered an affected facility.
- (6) Superior Boiler Works boiler, installed in 1992, identified as Unit 006, with a maximum heat input capacity of 16.8 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack 002.
- Under 40CFR 60, Subpart Dc, this is considered an affected facility.

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

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

#### E.1.1 General Provisions Relating to NSPS [326 IAC 12][40 CFR 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated under 326 IAC 12, apply to the two (2) Superior boilers (Units 005 and 006) except when otherwise specified in 40 CFR Part 60, Subpart Dc.

- (a) The following provisions of 40 CFR Part 60, Subpart Dc shall apply:
- (1) 60.40c
  - (2) 60.41c
  - (3) 60.42c
  - (4) 60.43c
  - (5) 60.44c
  - (6) 60.45c
  - (7) 60.46c
  - (8) 60.47c, and
  - (9) 60.48b

NSPS 40 CFR Part 60, Subpart Dc is shown in its entirety as Attachment A to the permit.

## SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (5) One nickel plating operation, consisting of one (1) electroplating tank operation and one (1) electroless tank operation, with a combined potential to emit VOC of less than three pounds per hour.

Under 40 CFR Part 63, Subpart WWWW—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, this is considered an affected facility.

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

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

#### E.2.1 General Provisions Relating to NESHAP [326 IAC 20][40 CFR 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated under 326 IAC 12, apply to the nickel plating operation, except when otherwise specified in 40 CFR Part 63, Subpart WWWW.

- (a) The following provisions of 40 CFR Part 63, Subpart WWWW shall apply:

- (1) 63.6580
- (2) 63.6585
- (3) 63.6590(a)(1)(iii)
- (4) 63.6595(a)(1), (b), and (c)
- (5) 63.6603(a)
- (6) 63.6605
- (7) 63.6625(e)(3), (f), (h) and (i)
- (8) 63.6640
- (9) 63.6645(a)(5)
- (10) 63.6655(a), (d), (e), and (f)
- (11) 63.6660
- (12) 63.6665
- (13) 63.6670
- (14) 63.6675
- (15) Table 2d (item 4)
- (16) Table 6 (item 9)
- (17) Table 8

NESHAP 40 CFR Part 63, Subpart WWWW is shown in its entirety as Attachment B to the permit.

### SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

#### Emissions Unit Description:

- (k) Emergency generators as follows: Diesel generators not exceeding 1600 horsepower including:
- (1) Onan Corp. diesel emergency generator, installed in 1983, identified as Unit 007, with a maximum capacity of 115 BHP, firing #2 fuel only, using no control, and exhausting to stack 007. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (2) Onan Corp. diesel emergency generator, installed in 1986, identified as Unit 008, with a maximum capacity of 122 BHP, firing #2 fuel only, using no control, and exhausting to stack 008. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (3) Onan Corp. diesel emergency generator, installed in 1992, identified as Unit 009, with a maximum capacity of 188 BHP, firing #2 fuel only, using no control, and exhausting to stack 009. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (4) Caterpillar Corp. diesel emergency, installed in 1986, identified as Unit 010, with a maximum capacity of 200 BHP, firing #2 fuel only, using no control, and exhausting to stack 010. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (5) Onan Corp. diesel emergency generator, installed in 1998, with a maximum capacity of 620 BHP, firing #2 fuel only, using no control, and exhausting to stack 013. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (6) One (1) diesel emergency generator identified as Unit 021, installed in 2004, with a maximum capacity of 150 BHP, firing #2 fuel only, using no control and exhausting to stack 022. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (7) One (1) diesel emergency generator identified as Unit 022, installed in 2004, with a maximum capacity of 884 BHP, firing #2 fuel only, using no control and exhausting to stack 021. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (8) One (1) diesel emergency identified as Unit 023, installed in 1971, with a maximum capacity of 54 BHP, firing #2 fuel only, using no control and exhausting to stack 023. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (9) One (1) diesel emergency generator identified as Unit 024, installed in 1971, with a maximum capacity of 150 BHP, firing #2 fuel only, using no control and exhausting to stack 024. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (10) One (1) diesel emergency identified as Unit 025, installed in 1958, with a maximum capacity of 54 BHP, firing #2 fuel only, using no control and exhausting to stack 025. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.

Under 40 CFR 63, Subpart ZZZZ, these emergency generators are considered affected sources.

- l) Stationary fire pumps, consisting of the following:
- (1) One (1) diesel fire pump, identified as Unit 011, installed in 1971, with a maximum capacity of 255 HP, using No. 2 diesel fuel only, using no controls; and

- (2) One (1) diesel fire pump, identified as Unit 026, installed in 1986, with a maximum capacity of 225 HP, using No. 3 diesel fuel only, using no controls.

Under 40 CFR 63, Subpart ZZZZ, these pumps are considered affected sources.

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

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

#### E.3.1 General Provisions Relating to NESHAP [326 IAC 20][40 CFR 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated under 326 IAC 12, apply to the emergency generators and fire pumps, except when otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

(a) The following provisions of 40 CFR Part 63, Subpart ZZZZ shall apply:

- (1) 63.6580
- (2) 63.6585
- (3) 63.6590(a)(1)(iii)
- (4) 63.6595(a)(1), (b), and (c)
- (5) 63.6603(a)
- (6) 63.6605
- (7) 63.6625(e)(3), (f), (h) and (i)
- (8) 63.6640
- (9) 63.6645(a)(5)
- (10) 63.6655(a), (d), (e), and (f)
- (11) 63.6660
- (12) 63.6665
- (13) 63.6670
- (14) 63.6675
- (15) Table 2d (item 4)
- (16) Table 6 (item 9)
- (17) Table 8

NESHAP 40 CFR Part 63, Subpart ZZZZ is shown in its entirety as Attachment C to the permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
CERTIFICATION**

Source Name: Sony DADC  
Source Address: 1800 North Fruitridge Avenue, Terre Haute, Indiana 47804  
FESOP Permit No.: F167-28489-00032

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
Phone: (317) 233-0178  
Fax: (317) 233-6865**

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

Source Name: Sony DADC  
Source Address: 1800 North Fruitridge Avenue, Terre Haute, Indiana 47804  
FESOP Permit No.: F167-28489-00032

**This form consists of 2 pages**

**Page 1 of 2**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none"><li>• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and</li><li>• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16</li></ul> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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

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

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

Page 2 of 2

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

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

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

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

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

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

**FESOP Usage Report**  
(Submit Report Quarterly)

Source Name: Sony DADC  
Source Address: 1800 North Fruitridge Avenue, Terre Haute, Indiana 47804  
FESOP Permit No.: F167-28489-00032  
Facility: Boilers (Units 001, 002, 003, 004, 005, 006, 018, 019, and 020)  
Parameter: No. 2 fuel oil usage limit to limit SO<sub>2</sub> emissions  
Limit: The usage of No. 2 fuel oil with a sulfur content of 0.5% and No. 2 fuel oil equivalents in the boilers (001, 002, 003, 004, 005, 006, and 018) shall be limited to 2,467,500 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

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

Month	Column 1	Column 2	Column 1 + Column 2
	No. 2 fuel oil usages this month (gallons)	No. 2 fuel oil usages previous 11 months (gallons)	No. 2 fuel oil usages 12 month total (gallons)
Month 1			
Month 2			
Month 3			

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

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

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

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

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

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE AND ENFORCEMENT BRANCH  
 FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Sony DADC  
 Source Address: 1800 North Fruitridge Avenue, Terre Haute, Indiana 47804  
 FESOP Permit No.: F167-28489-00032

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

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

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

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

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

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

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

## ATTACHMENT A

New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc).

*Pursuant to 40 CFR 60.42c(d) (Standard for sulfur dioxide)*

No owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 215 ng/J (0.50 lb/million BTU) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

*Pursuant to 40 CFR 60.42c(h) (Standard for sulfur dioxide)*

For affected facilities firing distillate oil and having heat input capacities between 10 and 100 million BTU per hour, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier as described under 40 CFR 60.48c(f)(1).

*Pursuant to 40 CFR 60.42c(i) (Standard for sulfur dioxide)*

The SO<sub>2</sub> emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

*Pursuant to 40 CFR 60.43c(c) Standard for particulate matter)*

This provision does not apply because the Superior Boilers are less than the minimum capacity requirement of 30 million (MM) Btu per hour.

*Pursuant to 40 CFR 60.44c(b) (Compliance and performance test methods and procedures for sulfur dioxide)*

The first day of the initial performance test shall be scheduled within 30 days after the facility achieves the maximum production rate, but not more than 180 days after initial startup.

*Pursuant to 40 CFR 60.44c(h) (Compliance and performance test methods and procedures for sulfur dioxide)*

For affected facilities subject to 40 CFR 60.42c(h)(1) where the owner or operator seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f)(1).

*Pursuant to 40 CFR 60.46c(e) (Emission monitoring for sulfur dioxide)*

The monitoring requirements of paragraphs (a) and (d) of this section do not apply to affected facilities subject to 40 CFR 60.42c(h)(1) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, as described under 40 CFR 60.48c(f)(1).

*Pursuant to 40 CFR 60.48c(a) (Reporting and recordkeeping requirements)*

The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7. This notification shall include:

- (a) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

- (b) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c or 40 CFR 60.43c.
- (c) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
- (d) Notification if an emerging technology will be used for controlling SO<sub>2</sub> emissions. The Administrator will examine the description of the control device and determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of 40 CFR 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

*Pursuant to 40 CFR 60.48c(b) (Reporting and recordkeeping requirements)*

The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits of 40 CFR 60.42c, or the PM or opacity limits of 40 CFR 60.43c, shall submit to the IDEM, OAQ the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS using the applicable performance specifications in Appendix B of 40 CFR 60.

*Pursuant to 40 CFR 60.48c(d) (Reporting and recordkeeping requirements)*

The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall submit quarterly reports to the IDEM, OAQ. The initial quarterly report shall be postmarked by the 30<sup>th</sup> day of the third month following the completion of the initial performance test. Each subsequent quarterly report shall be postmarked by the 30<sup>th</sup> day following the end of the reporting period.

*Pursuant to 40 CFR 60.48c(e) (Reporting and recordkeeping requirements)*

The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.43c shall keep records and submit quarterly reports as required above, including the following information:

- (b) Calendar dates covered in the reporting period.
- (c) Each 30-day average SO<sub>2</sub> emission rate (ng/J or lb/million BTU), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
- (d) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1) of this section, as applicable. In addition to records of fuel supplier certifications, the quarterly report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the quarter.

*Pursuant to 40 CFR 60.48c(f) (Reporting and recordkeeping requirements)*

Fuel supplier certification shall include the following information: (for distillate oil)

1. The name of the oil supplier; and
2. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c.

*Pursuant to 40 CFR 60.48c(g) (Reporting and recordkeeping requirements)*

The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted each day.

*Pursuant to 40 CFR 60.48c(i) (Reporting and recordkeeping requirements)*

All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

## ATTACHMENT B

### Subpart WWWW—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations

**Source:** 73 FR 37741, July 1, 2008, unless otherwise noted.

#### Applicability and Compliance Dates

#### § 63.11504 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a plating and polishing facility that is an area source of hazardous air pollutant (HAP) emissions and meets the criteria specified in paragraphs (a)(1) through (3) of this section.

(1) A plating and polishing facility is a plant site that is engaged in one or more of the processes listed in paragraphs (a)(1)(i) through (vi) of this section.

(i) Electroplating other than chromium electroplating (i.e., non-chromium electroplating).

(ii) Electroless or non-electrolytic plating.

(iii) Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.

(iv) Dry mechanical polishing of finished metals and formed products after plating.

(v) Electroforming.

(vi) Electropolishing.

(2) An area source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that does not have the potential to emit any single HAP at a rate of 9.07 megagrams per year (Mg/yr) (10 tons per year (tpy)) or more and any combination of HAP at a rate of 22.68 Mg/yr (25 tpy) or more.

(3) Your plating and polishing facility uses or has emissions of compounds of one or more plating and polishing metal HAP, which means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, as defined in §63.11511, "What definitions apply to this subpart?" With the exception of lead, plating and polishing metal HAP also include any of these metals in the elemental form.

(b) [Reserved]

#### § 63.11505 What parts of my plant does this subpart cover?

(a) This subpart applies to each new or existing affected source, as specified in paragraphs (a)(1) through (3) of this section, at all times. A new source is defined in §63.11511, "What definitions apply to this subpart?"

(1) Each tank that contains one or more of the plating and polishing metal HAP, as defined in §63.11511, "What definitions apply to this subpart?", and is used for non-chromium electroplating; electroforming; electropolishing; electroless plating or other non-electrolytic metal coating operations, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

(2) Each thermal spraying operation that applies one or more of the plating and polishing metal HAP, as defined in §63.11511, "What definitions apply to this subpart?"

(3) Each dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP, as defined in §63.11511, "What definitions apply to this subpart?"

(b) An affected source is existing if you commenced construction or reconstruction of the affected source on or before March 14, 2008.

(c) An affected source is new if you commenced construction or reconstruction of the affected source after March 14, 2008.

(d) This subpart does not apply to any of the process units or operations described in paragraphs (d)(1) through (6) of this section.

(1) Process units that are subject to the requirements of 40 CFR part 63, subpart N (National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks).

- (2) Research and development process units, as defined in §63.11511, "What definitions apply to this subpart?"
- (3) Process units that are used strictly for educational purposes.
- (4) Thermal spraying conducted to repair surfaces.
- (5) Dry mechanical polishing conducted to restore the original finish to a surface to apply to restoring the original finish.
- (6) Any plating or polishing process that does not use any material that contains cadmium, chromium, lead, or nickel in amounts of 0.1 percent or more by weight, or that contains manganese in amounts of 1.0 percent or more by weight, as reported on the Material Safety Data Sheet for the material.
- (e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, "Title V," provided you are not otherwise required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

### **§ 63.11506 What are my compliance dates?**

- (a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than July 1, 2010.
- (b) If you own or operate a new affected source for which the initial startup date is on or before July 1, 2008, you must achieve compliance with the provisions of this subpart no later than July 1, 2008.
- (c) If you own or operate a new affected source for which the initial startup date is after July 1, 2008, you must achieve compliance with the provisions of this subpart upon initial startup of your affected source.

## **Standards and Compliance Requirements**

### **§ 63.11507 What are my standards and management practices?**

(a) If you own or operate an affected new or existing non-cyanide electroplating, electroforming, or electropolishing tank (hereafter referred to as an "electrolytic" process tank, as defined in §63.11511, "What definitions apply to this subpart?") that contains one or more of the plating and polishing metal HAP and operates at a pH of less than 12, you must comply with the requirements in paragraph (a)(1), (2), or (3) of this section, and implement the applicable management practices in paragraph (g) of this section, as practicable.

(1) You must use a wetting agent/fume suppressant, as defined in §63.11511, "What definitions apply to this subpart?", in the bath of the affected tank according to paragraphs (a)(1)(i) through (iii) of this section.

(i) You must initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for the specific type of electrolytic process.

(ii) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank.

(iii) If a wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressants to the tank to comply with this rule.

(2) You must capture and exhaust emissions from the affected tank to any one of the following emission control devices: composite mesh pad, packed bed scrubber, or mesh pad mist eliminator, according to paragraphs (a)(2)(i) and (ii) of this section.

(i) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.

(ii) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(3) You must cover the tank surface according to paragraph (a)(3)(i) or (ii) of this section.

(i) For batch electrolytic process tanks, as defined in §63.11511, "What definitions apply to this subpart?", you must use a tank cover, as defined in §63.11511, over all of the effective surface area of the tank for at least 95 percent of the electrolytic process operating time.

(ii) For continuous electrolytic process tanks, as defined in §63.11511, "What definitions apply to this subpart?", you must cover at least 75 percent of the surface of the tank, as defined in §63.11511, whenever the electrolytic process tank is in operation.

(b) If you own or operate an affected new or existing "flash" or short-term electroplating tank, as defined in §63.11511, "What definitions apply to this subpart?", that uses or emits one or more of the plating and polishing metal HAP, you must comply with the requirements specified in paragraph (b)(1) or (b)(2), and implement the applicable management practices in paragraph (g) of this section, as practicable.

(1) You must limit short-term or "flash" electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(2) You must use a tank cover, as defined in §63.11511, "What definitions apply to this subpart?", for at least 95 percent of the plating time.

(c) If you own or operate an affected new or existing process tank that is used both for short-term electroplating and for electrolytic processing of longer duration (i.e., processing that does not meet the definition of short-term or flash electroplating) and contains one or more of the plating and polishing metal HAP, you must meet the requirements specified in paragraph (a) or (b) of this section, whichever apply to the process operation, and implement the applicable management practices in paragraph (g) of this section, as practicable.

(d) If you own or operate an affected new or existing electroplating tank that uses cyanide in the plating bath, operates at pH greater than or equal to 12, and contains one or more of the plating and polishing metal HAP, you must comply with the requirements in paragraphs (d)(1) and (2) of this section:

(1) You must measure and record the pH of the tank upon start-up. No additional pH measurements are required.

(2) You must implement the applicable management practices in paragraph (g) of this section, as practicable.

(e) If you own or operate an affected new or existing dry mechanical polishing equipment that emits one or more of the plating and polishing metal HAP, you must operate a capture system that captures particulate matter (PM) emissions from the dry mechanical polishing process and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter, according to paragraphs (e)(1) and (2) of this section.

(1) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.

(2) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(f) If you own or operate an affected thermal spraying operation that applies one or more of the plating and polishing metal HAP, you must meet the applicable requirements specified in paragraphs (f)(1) through (3) of this section, and the applicable management practices in paragraph (g) of this section.

(1) For existing permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a water curtain, fabric filter, or HEPA filter, according to paragraphs (f)(1)(i) and (ii) of this section.

(i) You must operate all capture and control devices according to the manufacturer's specifications and instructions.

(ii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(2) For new permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a fabric or HEPA filter, according to paragraphs (f)(2)(i) and (ii) of this section.

(i) You must operate all capture and control devices according to the manufacturer's specifications and instructions.

(ii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(3) For temporary thermal spraying operations, as defined in §63.11511 "What definitions apply to this subpart?", you must meet the applicable requirements specified in paragraphs (f)(3)(i) and (ii) of this section.

(i) You must document the amount of time the thermal spraying occurs each day, and where it is conducted.

(ii) You must implement the applicable management practices specified in paragraph (g) of this section, as practicable.

(g) If you own or operate an affected new or existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAP, you must implement the applicable management practices in paragraphs (g)(1) through (12) of this section, as practicable.

(1) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.

(2) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.

(3) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.

(4) Use tank covers, if already owned and available at the facility, whenever practicable.

(5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).

(6) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.

(7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.

(8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.

(9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.

(10) Minimize spills and overflow of tanks, as practicable.

(11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.

(12) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

## § 63.11508 What are my compliance requirements?

(a) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with §63.11509(b) of "What are my notification, reporting, and recordkeeping requirements?"

(b) You must be in compliance with the applicable management practices and equipment standards in this subpart at all times.

(c) To demonstrate initial compliance, you must satisfy the requirements specified in paragraphs (c)(1) through (11) of this section.

(1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(1)(i) through (iv) of this section.

(i) You must add wetting agent/fume suppressant to the bath of each affected tank according to manufacturer's specifications and instructions.

(ii) You must state in your Notification of Compliance Status that you add wetting agent/fume suppressant to the bath according to manufacturer's specifications and instructions.

(iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(2) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a control system, as defined in §63.11511, "What definitions apply to this subpart?", to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(2)(i) through (v) of this section.

(i) You must install a control system designed to capture emissions from the affected tank and exhaust them to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator.

(ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.

(iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(v) You must follow the manufacturer's specifications and operating instructions for the control systems at all times.

(3) If you own or operate an affected batch electrolytic process tank, as defined in §63.11511, "What definitions apply to this subpart?", that contains one or more of the plating and polishing metal HAP and which is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a tank cover, as defined in §63.11511, to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(3)(i) through (iv) of this section.

(i) You must install a tank cover on the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.

(iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(4) If you own or operate an affected continuous electrolytic process tank, as defined in §63.11511, "What definitions apply to this subpart?", that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you cover the tank surface to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(4)(i) through (iv) of this section.

(i) You must cover at least 75 percent of the surface area of the affected tank.

- (ii) You must state in your Notification of Compliance Status that you operate the tank with the surface cover in place whenever the continuous electrolytic process is in operation.
- (iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time of the affected tank, you must demonstrate initial compliance according to paragraphs (c)(5)(i) through (iii) of this section.
- (i) You must state in your Notification of Compliance Status that you limit short-term or flash electroplating to no more than 1 cumulative hour per day, or 3 cumulative minutes per hour of plating time.
- (ii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (6) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must demonstrate initial compliance according to paragraphs (c)(6)(i) through (iv) of this section.
- (i) You must install a tank cover on the affected tank.
- (ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the plating time.
- (iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (7) If you own or operate an affected tank that contains one or more of the plating and polishing metal HAP, uses cyanide in the bath, and is subject to the management practices specified in §63.11507(d), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(7)(i) through (iii) of this section.
- (i) You must report in your Notification of Compliance Status the pH of the bath solution that was measured at start-up, according to the requirements of §63.11507(d)(1).
- (ii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.
- (8) If you own or operate an affected dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(e), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(8)(i) through (iii) of this section.
- (i) You must install a control system that is designed to capture PM emissions from the polishing operation and exhaust them to a cartridge, fabric, or HEPA filter.
- (ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.
- (iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (9) If you own or operate an existing affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(f)(1), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(9)(i) through (iii) of this section.
- (i) You must install a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a water curtain, fabric filter, or HEPA filter.
- (ii) You must state in your Notification of Compliance Status that you have installed and are operating the control system according to the manufacturer's specifications and instructions.
- (iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (10) If you own or operate a new affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(f)(2), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(10)(i) through (iii) of this section.

- (i) You must install and operate a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a fabric or HEPA filter.
  - (ii) You must state in your Notification of Compliance Status that you have installed and operate the control system according to the manufacturer's specifications and instructions.
  - (iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (11) If you own or operate an affected temporary thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(f)(3), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(11)(i) and (ii) of this section.
- (i) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
  - (ii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (d) To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, you must satisfy the requirements specified in paragraphs (d)(1) through (8) of this section.
- (1) You must always operate and maintain your affected source, including air pollution control equipment.
  - (2) You must prepare an annual compliance certification according to the requirements specified in §63.11509(c), "Notification, Reporting, and Recordkeeping," and keep it in a readily-accessible location for inspector review.
  - (3) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate continuous compliance according to paragraphs (d)(3)(i) through (iii) of this section.
    - (i) You must record that you have added the wetting agent/fume suppressant to the tank bath in the original make-up of the tank.
    - (ii) For tanks where the wetting agent/fume suppressant is a separate purchased ingredient from the other tank additives, you must demonstrate continuous compliance according to paragraphs (d)(3)(ii) (A) and (B) this section.
      - (A) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank.
      - (B) You must record each addition of wetting agent/fume suppressant to the tank bath.
    - (iii) You must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.
  - (4) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a control system to comply with this subpart; an affected dry mechanical polishing operation that is subject to §63.11507(e); or an affected thermal spraying operation that is subject to §63.11507(f)(1) or (2), you must demonstrate continuous compliance according to paragraphs (d)(4)(i) through (v) of this section.
    - (i) You must operate and maintain the control system according to the manufacturer's specifications and instructions.
    - (ii) Following any malfunction or failure of the capture or control devices to operate properly, you must take immediate corrective action to return the equipment to normal operation according to the manufacturer's specifications and operating instructions.
    - (iii) You must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.
    - (iv) You must record the results of all control system inspections, deviations from proper operation, and any corrective action taken.
    - (v) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
  - (5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time for the affected tank, you must demonstrate continuous compliance according to paragraphs (d)(5)(i) through (iii) of this section.
    - (i) You must limit short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
    - (ii) You must record the times that the affected tank is operated each day.
    - (iii) You must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(6) If you own or operate an affected batch electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements of §63.11507(a), "What are my standards and management practices?", or a flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), and you comply by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(6)(i) through (iii) of this section.

- (i) You must operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.
- (ii) You must record the times that the tank is operated and the times that the tank is covered on a daily basis.
- (iii) You must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.

(7) If you own or operate an affected continuous electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you cover your tanks to comply with this subpart, you must demonstrate continuous compliance according to paragraphs (d)(7)(i) and (ii) of this section.

- (i) You must operate the tank with at least 75 percent of the surface covered during all periods of electrolytic process operation.
- (ii) You must state in your annual certification that you have operated the tank with 75 percent of the surface covered during all periods of electrolytic process operation.

(8) If you own or operate an affected tank or other operation that is subject to the management practices specified in §63.11507(g), "What are my standards and management practices?", you must demonstrate continuous compliance according to paragraphs (d)(8)(i) and (ii) of this section.

- (i) You must implement the applicable management practices during all times that the affected tank or process is in operation.
- (ii) You must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

## § 63.11509 What are my notification, reporting, and recordkeeping requirements?

(a) If you own or operate an affected source, as defined in §63.11505(a), "What parts of my plant does this subpart cover?", you must submit an Initial Notification in accordance with paragraphs (a)(1) through (4) of this section by the dates specified.

- (1) The Initial Notification must include the information specified in §63.9(b)(2)(i) through (iv) of the General Provisions of this part.
- (2) The Initial Notification must include a description of the compliance method (e.g., use of wetting agent/fume suppressant) for each affected source.
- (3) If you start up your affected source on or before July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after July 1, 2008.
- (4) If you start up your new affected source after July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.
- (b) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with paragraphs (b)(1) and (2) of this section.

(1) The Notification of Compliance Status must be submitted before the close of business on the compliance date specified in §63.11506, "What are my compliance dates?"

(2) The Notification of Compliance Status must include the items specified in paragraphs (b)(2)(i) through (iv) of this section.

- (i) List of affected sources and the plating and polishing metal HAP used in, or emitted by, those sources.
- (ii) Methods used to comply with the applicable management practices and equipment standards.
- (iii) Description of the capture and emission control systems used to comply with the applicable equipment standards.
- (iv) Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements.

(c) If you own or operate an affected source, you must prepare an annual certification of compliance report according to paragraphs (c)(1) through (7) of this section. These reports do not need to be submitted unless a deviation from the requirements of this subpart has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report.

(1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that is subject to the requirements in §63.11507(a)(1), "What are my standards and management practices?", you must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.

(2) If you own or operate any one of the affected sources listed in paragraphs (c)(2)(i) through (iii) of this section, you must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.

(i) Electroplating, electroforming, or electropolishing tank that is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a control system to comply with this subpart;

(ii) Dry mechanical polishing operation that is subject to §63.11507(e); or

(iii) Permanent thermal spraying operation that is subject to §63.11507(f)(1) or (2).

(3) If you own or operate an affected flash or short-term electroplating tank that is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time of the affected tank, you must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(4) If you own or operate an affected batch electrolytic process tank that is subject to the requirements of §63.11507(a) or a flash or short-term electroplating tank that is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.

(5) If you own or operate an affected continuous electrolytic process tank that is subject to the requirements of §63.11507(a), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must state in your annual certification that you have covered at least 75 percent of the surface area of the tank during all periods of electrolytic process operation.

(6) If you own or operate an affected tank that is subject to the management practices specified in §63.11507(g), "What are my standards and management practices?", you must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

(7) Each annual compliance report must be prepared no later than January 31 of the year immediately following the reporting period and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period.

(d) If you own or operate an affected source, and any deviations from the compliance requirements specified in this subpart occurred during the year, you must report the deviations, along with the corrective action taken, and submit this report to the delegated authority.

(e) You must keep the records specified in paragraphs (e)(1) through (3) of this section.

(1) A copy of any Initial Notification and Notification of Compliance Status that you submitted and all documentation supporting those notifications.

(2) The records specified in §63.10(b)(2)(i) through (iii) and (xiv) of the General Provisions of this part.

(3) The records required to show continuous compliance with each management practice and equipment standard that applies to you, as specified in §63.11508(d), "What are my compliance requirements?"

(f) You must keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1) of the General Provisions to part 63. You may keep the records offsite for the remaining 3 years.

## Other Requirements and Information

### § 63.11510 What General Provisions apply to this subpart?

If you own or operate a new or existing affected source, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 1 of this subpart.

### § 63.11511 What definitions apply to this subpart?

Terms used in this subpart are defined in this section.

*Batch electrolytic process tank* means a tank used for an electrolytic process in which a part or group of parts, typically mounted on racks or placed in barrels, is placed in the tank and immersed in an electrolytic process solution as a single unit (i.e., as a batch) for a predetermined period of time, during which none of the parts are removed from the tank and no other parts are added to the tank, and after which the part or parts are removed from the tank as a unit.

*Bath* means the liquid contents of a tank that is used for electroplating, electroforming, electropolishing, or other metal coating processes at a plating and polishing facility.

*Capture system* means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device, as part of a complete control system. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

*Cartridge filter* means a type of control device that uses perforated metal cartridges containing a pleated paper or non-woven fibrous filter media to remove PM from a gas stream by sieving and other mechanisms. Cartridge filters can be designed with single use cartridges, which are removed and disposed after reaching capacity, or continuous use cartridges, which typically are cleaned by means of a pulse-jet mechanism.

*Composite mesh pad* means a type of control device similar to a mesh pad mist eliminator except that the device is designed with multiple pads in series that are woven with layers of material with varying fiber diameters, which produce a coalescing effect on the droplets or PM that impinge upon the pads.

*Continuous electrolytic process tank* means a tank that uses an electrolytic process and in which a continuous metal strip or other type of continuous substrate is fed into and removed from the tank continuously. This process is also called reel-to-reel electrolytic plating.

*Control device* means equipment that is part of a control system that collects and/or reduces the quantity of a pollutant that is emitted to the air. The control device receives emissions that are transported from the process by the capture system.

*Control system* means the combination of a capture system and a control device. The capture system is designed to collect and transport air emissions from the affected source to the control device. The overall control efficiency of any control system is a combination of the ability of the system to capture the air emissions (i.e., the capture efficiency) and the control device efficiency. Consequently, it is important to achieve good capture to ensure good overall control efficiency. Capture devices that are known to provide high capture efficiencies include hoods, enclosures, or any other duct intake devices with ductwork, dampers, manifolds, plenums, or fans.

*Cyanide plating* means plating processes performed in tanks that use cyanide as a major bath ingredient and that operate at pH of 12 or more, and use or emit any of the plating and polishing metal HAP, as defined in this section. Electroplating and electroforming are performed with or without cyanide. The cyanide in the bath works to dissolve the HAP metal added as a cyanide compound (e.g., cadmium cyanide) and creates free cyanide in solution, which helps to corrode the anode. These tanks are self-regulating to a pH of 12 due to the caustic nature of the cyanide bath chemistry. The cyanide in the bath is a major bath constituent and not an additive; however, the self-regulating chemistry of the bath causes the bath to act as if wetting agents/fume suppressants are being used and to ensure an optimum plating process. All cyanide plating baths at pH greater than or equal to 12 have cyanide-metal complexes in solution. The metal HAP to be plated is not emitted because it is either bound in the metal-cyanide complex or reduced at the cathode to elemental metal, and plated onto the immersed parts. Cyanide baths are not intentionally operated at pH less 12 since unfavorable plating conditions would occur in the tank, among other negative effects.

*Deviation* means any instance in which an affected source or an owner or operator of such an affected source:

- (1) Fails to meet any requirement or obligation established by this rule including, but not limited to, any equipment standard (including emissions and operating limits), management practice, or operation and maintenance requirement;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this rule and that is included in the operating permit for any affected facility required to obtain such a permit; or
- (3) Fails to meet any equipment standard (including emission and operating limits), management standard, or operation and maintenance requirement in this rule during startup, shutdown, or malfunction.

*Dry mechanical polishing* means a process used for removing defects from and smoothing the surface of finished metals and formed products after plating with any of the plating and polishing metal HAP, as defined in this section, using hard-faced abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles.

*Electroforming* means an electrolytic process using or emitting any of the plating and polishing metal HAP, as defined in this section, that is used for fabricating metal parts. This process is essentially the same as electroplating except that the plated substrate (mandrel) is removed, leaving only the metal plate. In electroforming, the metal plate is self-supporting and generally thicker than in electroplating.

*Electroless plating* means a non-electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Electroless plating is also called non-electrolytic plating. Examples include, but are not limited to, chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

*Electrolytic plating processes* means electroplating and electroforming that use or emit any of the plating and polishing metal HAP, as defined in this section, where metallic ions in a plating bath or solution are reduced to form a metal coating on the surface of parts and products using electrical energy.

*Electroplating* means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metal ions in solution are reduced onto the surface of the work piece (the cathode) via an electrical current. The metal ions in the solution are usually replenished by the dissolution of metal from solid metal anodes fabricated of the same metal being plated, or by direct replenishment of the solution with metal salts or oxides; electroplating is also called electrolytic plating.

*Electropolishing* means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a work piece is attached to an anode immersed in a bath, and the metal substrate is dissolved electrolytically, thereby removing the surface contaminant; electropolishing is also called electrolytic polishing.

*Fabric filter* means a type of control device used for collecting PM by filtering a process exhaust stream through a filter or filter media. A fabric filter is also known as a baghouse.

*Flash electroplating* means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or no more than 1 cumulative hour per day.

*General Provisions of this part (40 CFR part 63, subpart A)* means the section of the Code of Federal Regulations (CFR) that addresses air pollution rules that apply to all HAP sources addressed in part 63, which includes the National Emission Standards for Hazardous Air Pollutants (NESHAP).

*HAP* means hazardous air pollutant as defined from the list of 188 chemicals and compounds specified in the CAA Amendments of 1990; HAP are also called "air toxics." The five plating and polishing metal HAP, as defined in this section, are on this list of 188 chemicals.

*High efficiency particulate air (HEPA) filter* means a type of control device that uses a filter composed of a mat of randomly arranged fibers and is designed to remove at least 99.97 percent of airborne particles that are 0.3 micrometers or larger in diameter.

*Mesh pad mist eliminator* means a type of control device, consisting of layers of interlocked filaments densely packed between two supporting grids that remove liquid droplets and PM from the gas stream through inertial impaction and direct interception.

*Metal coating operation* means any process performed either in a tank that contains liquids or as part of a spraying operation that applies one or more plating and polishing metal HAP, as defined in this section, to parts and products used in manufacturing. These processes include but are not limited to: Non-chromium electroplating; electroforming;

electropolishing; other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.

*New source* means any affected source for which you commenced construction or reconstruction after March 14, 2008.

*Non-cyanide electrolytic plating and electropolishing processes* means electroplating, electroforming, and electropolishing that uses or emits any of the plating and polishing metal HAP, as defined in this section, performed without cyanide in the tank. These processes do not use cyanide in the tank and operate at pH values less than 12. These processes use electricity and add or remove metals such as metal HAP from parts and products used in manufacturing. Both electroplating and electroforming can be performed with cyanide as well.

*Non-electrolytic plating* means a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Non-electrolytic plating is also called electroless plating. Examples include chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

*Packed-bed scrubber* means a type of control device that includes a single or double packed bed that contains packing media on which PM and droplets impinge and are removed from the gas stream. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.

*Plating and polishing facility* means a facility engaged in one or more of the following processes that uses or emits any of the plating and polishing metal HAP, as defined in this section: Electroplating processes other than chromium electroplating (i.e., non-chromium electroplating); electroless plating; other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; thermal spraying; and the dry mechanical polishing of finished metals and formed products after plating.

*Plating and polishing metal HAP* means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form, with the exception of lead. Any material that does not contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight, and does not contain manganese in amounts greater than or equal to 1.0 percent by weight, as reported on the Material Safety Data Sheet for the material, is not considered to be a plating and polishing metal HAP.

*Plating and polishing process tanks* means any tank in which a process is performed at an affected plating and polishing facility that uses or has the potential to emit any of the plating and polishing metal HAP, as defined in this section. The processes performed in plating and polishing tanks include the following: Electroplating processes other than chromium electroplating (i.e., non-chromium electroplating) performed in a tank; electroless plating; and non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and electropolishing. This term does not include tanks containing solutions that are used to rinse or wash parts prior to placing the parts in a plating and polishing process tank, or subsequent to removing the parts from a plating and polishing process tank. This term also does not include thermal spraying or dry polishing with machines.

*PM* means solid or particulate matter that is emitted into the air.

*Research and development process unit* means any process unit that is used for conducting research and development for new processes and products and is not used to manufacture products for commercial sale, except in a *de minimis* manner.

*Short-term plating* means an electroplating process that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or 1 hour cumulative per day.

*Tank cover for batch process units* means a solid structure made of an impervious material that is designed to cover the entire open surface of a tank or process unit that is used for plating or other metal coating processes.

*Tank cover for continuous process units*, means a solid structure or combination of structures, made of an impervious material that is designed to cover at least 75 percent of the open surface of the tank or process unit that is used for continuous plating or other continuous metal coating processes.

*Temporary thermal spraying* means a thermal spraying operation that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that lasts no more than 1 hour in duration during any one day and is conducted in situ. Thermal spraying that is conducted in a dedicated thermal spray booth or structure is not considered to be temporary thermal spraying.

*Thermal spraying* (also referred to as metal spraying or flame spraying) is a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a metallic coating is applied by projecting molten or semi-molten metal particles onto a substrate. Commonly-used thermal spraying methods include high velocity oxy-fuel (HVOF) spraying, flame spraying, electric arc spraying, plasma arc spraying, and detonation gun spraying.

*Water curtain* means a type of control device that draws the exhaust stream through a continuous curtain of moving water to scrub out suspended PM.

*Wetting agent/fume suppressant* means any chemical agent that reduces or suppresses fumes or mists from a plating and polishing tank by reducing the surface tension of the tank bath.

## § 63.11512 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by EPA or a delegated authority 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, in addition to EPA, 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 paragraph (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 emissions standard under 40 CFR 63.6(g), of the General Provisions of this part.
- (2) Approval of an alternative opacity emissions standard under §63.6(h)(9), of the General Provisions of this part.
- (3) Approval of a major change to test methods under §63.7(e)(2)(ii) and (f), of the General Provisions of this part. A "major change to test method" is defined in §63.90.
- (4) Approval of a major change to monitoring under §63.8(f), of the General Provisions of this part. A "major change to monitoring" is defined in §63.90.
- (5) Approval of a major change to recordkeeping and reporting under §63.10(f), of the General Provisions of this part. A "major change to recordkeeping/reporting" is defined in §63.90.

**§ 63.11513 [Reserved]**

## ATTACHMENT C

### Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

**Source:** 69 FR 33506, June 15, 2004, unless otherwise noted.

#### What This Subpart Covers

#### § 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

#### § 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

#### § 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

- (i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- (ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- (iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- (iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- (v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
- (vi) Existing residential emergency stationary RICE located at an area source of HAP emissions;
- (vii) Existing commercial emergency stationary RICE located at an area source of HAP emissions; or
- (viii) Existing institutional emergency stationary RICE located at an area source of HAP emissions.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

- (1) A new or reconstructed stationary RICE located at an area source;
- (2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;
- (4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
- (6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010]

#### **§ 63.6595 When do I have to comply with this subpart?**

- (a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE,

with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

## **Emission and Operating Limitations**

**§ 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?**

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

**§ 63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?**

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

**§ 63.6602 What emission limitations must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?**

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

[75 FR 51589, Aug. 20, 2010]

**§ 63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

#### **§ 63.6604 What fuel requirements must I meet if I own or operate an existing stationary CI RICE?**

If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Existing non-emergency CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or at area sources in areas of Alaska not accessible by the FAHS are exempt from the requirements of this section.

[75 FR 51589, Aug. 20, 2010]

#### **General Compliance Requirements**

#### **§ 63.6605 What are my general requirements for complying with this subpart?**

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

(b) 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 which 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.

[75 FR 9675, Mar. 3, 2010]

#### **Testing and Initial Compliance Requirements**

#### **§ 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?**

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must

demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

**§ 63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?**

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 51589, Aug. 20, 2010]

**§ 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?**

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

### **§ 63.6615 When must I conduct subsequent performance tests?**

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

### **§ 63.6620 What performance tests and other procedures must I use?**

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 1})$$

Where:

$C_i$  = concentration of CO or formaldehyde at the control device inlet,

$C_o$  = concentration of CO or formaldehyde at the control device outlet, and

R = percent reduction of CO or formaldehyde emissions.

(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO<sub>2</sub>). If pollutant concentrations

are to be corrected to 15 percent oxygen and CO<sub>2</sub> concentration is measured in lieu of oxygen concentration measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific F<sub>o</sub> value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 2})$$

Where:

F<sub>o</sub> = Fuel factor based on the ratio of oxygen volume to the ultimate CO<sub>2</sub> volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F<sub>d</sub> = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup>/J (dscf/10<sup>6</sup> Btu).

F<sub>c</sub> = Ratio of the volume of CO<sub>2</sub> produced to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup>/J (dscf/10<sup>6</sup> Btu).

(ii) Calculate the CO<sub>2</sub> correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

Where:

X<sub>CO<sub>2</sub></sub> = CO<sub>2</sub> correction factor, percent.

5.9 = 20.9 percent O<sub>2</sub> - 15 percent O<sub>2</sub>, the defined O<sub>2</sub> correction value, percent.

(iii) Calculate the NO<sub>x</sub> and SO<sub>2</sub> gas concentrations adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 4})$$

Where:

%CO<sub>2</sub> = Measured CO<sub>2</sub> concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally ( e.g., operator adjustment, automatic controller adjustment, etc.) or unintentionally ( e.g., wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

### **§ 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?**

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO<sub>2</sub> at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO<sub>2</sub> concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (8) of this section.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any 15-minute period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(4) Determine the 3-hour block average of all recorded readings, except as provided in paragraph (b)(3) of this section.

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

(6) You must develop a site-specific monitoring plan that addresses paragraphs (b)(6)(i) through (vi) of this section.

(i) Installation of the CPMS sampling probe or other interface at the appropriate location to obtain representative measurements;

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

(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), (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), (e)(1), and (e)(2)(i).

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

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

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start landfill or digester gas stationary RICE located at an area source of HAP emissions;

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP

located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (g)(2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska not accessible by the FAHS do not have to meet the requirements of paragraph (g) of this section.

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(k) If you have an operating limitation that requires the use of a temperature measurement device, you must meet the requirements in paragraphs (k)(1) through (4) of this section.

(1) Locate the temperature sensor and other necessary equipment in a position that provides a representative temperature.

(2) Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 1.0 percent of the temperature value, whichever is larger, for a noncryogenic temperature range.

(3) Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 2.5 percent of the temperature value, whichever is larger, for a cryogenic temperature range.

(4) Conduct a temperature measurement device calibration check at least every 3 months.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

### **§ 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?**

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

### **Continuous Compliance Requirements**

#### **§ 63.6635 How do I monitor and collect data to demonstrate continuous compliance?**

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

#### **§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?**

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) [Reserved]

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur

during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) *Requirements for emergency stationary RICE.* (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

(2) If you own or operate an emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed prior to June 12, 2006, you must operate the engine according to the conditions described in paragraphs (f)(2)(i) through (iii) of this section. If you do not operate the engine according to the requirements in paragraphs (f)(2)(i) through (iii) of this section, the engine will not be considered an emergency engine

under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance.

(iii) You may operate your emergency stationary RICE for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010]

## **Notifications, Reports, and Records**

### **§ 63.6645 What notifications must I submit and when?**

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in

accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010]

#### **§ 63.6650 What reports must I submit and when?**

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010]

### **§ 63.6655 What records must I keep?**

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation ( *i.e.*, process equipment) or the air pollution control and monitoring equipment.

- (3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
- (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
- (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.
- (1) Records described in §63.10(b)(2)(vi) through (xi).
- (2) Previous ( *i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
- (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.
- (c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.
- (d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.
- (e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;
- (1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.
- (2) An existing stationary emergency RICE.
- (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.
- (f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.
- (1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.
- (2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010]

**§ 63.6660 In what form and how long must I keep my records?**

- (a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

## **Other Requirements and Information**

### **§ 63.6665 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. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

### **§ 63.6670 Who implements and enforces this subpart?**

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether 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 paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

### **§ 63.6675 What definitions apply to this subpart?**

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

*Area source* means any stationary source of HAP that is not a major source as defined in part 63.

*Associated equipment* as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

*Black start engine* means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.*, as amended by Public Law 101–549, 104 Stat. 2399).

*Commercial emergency stationary RICE* means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

*Compression ignition* means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

*Custody transfer* means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

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

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;
- (2) 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; or
- (3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless of whether or not such failure is permitted by this subpart.
- (4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

*Diesel engine* means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

*Diesel fuel* means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties ( e.g. biodiesel) that is suitable for use in compression ignition engines.

*Digester gas* means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO<sub>2</sub>.

*Dual-fuel engine* means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

*Emergency stationary RICE* means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationary RICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under §63.6640(f). All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

*Engine startup* means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

*Four-stroke engine* means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

*Gaseous fuel* means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

*Gasoline* means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

*Glycol dehydration unit* means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes "rich" glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The "lean" glycol is then recycled.

*Hazardous air pollutants (HAP)* means any air pollutants listed in or pursuant to section 112(b) of the CAA.

*Institutional emergency stationary RICE* means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

*ISO standard day conditions* means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

*Landfill gas* means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO<sub>2</sub>.

*Lean burn engine* means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

*Limited use stationary RICE* means any stationary RICE that operates less than 100 hours per year.

*Liquefied petroleum gas* means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

*Liquid fuel* means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

*Major Source*, as used in this subpart, shall have the same meaning as in §63.2, except that:

- (1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;
- (2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;
- (3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and
- (4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

*Natural gas* means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

*Non-selective catalytic reduction (NSCR)* means an add-on catalytic nitrogen oxides (NO<sub>x</sub>) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO<sub>x</sub>, CO, and volatile organic compounds (VOC) into CO<sub>2</sub>, nitrogen, and water.

*Oil and gas production facility* as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded ( *i.e.*, remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

*Oxidation catalyst* means an add-on catalytic control device that controls CO and VOC by oxidation.

*Peaking unit or engine* means any standby engine intended for use during periods of high demand that are not emergencies.

*Percent load* means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

*Potential to emit* means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the

maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

*Production field facility* means those oil and gas production facilities located prior to the point of custody transfer.

*Production well* means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

*Propane* means a colorless gas derived from petroleum and natural gas, with the molecular structure  $C_3H_8$ .

*Residential emergency stationary RICE* means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

*Responsible official* means responsible official as defined in 40 CFR 70.2.

*Rich burn engine* means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for  $NO_x$  (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

*Site-rated HP* means the maximum manufacturer's design capacity at engine site conditions.

*Spark ignition* means relating to either: A gasoline-fueled engine; or any other type of engine a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

*Stationary reciprocating internal combustion engine (RICE)* means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

*Stationary RICE test cell/stand* means an engine test cell/stand, as defined in subpart P of this part, that tests stationary RICE.

*Stoichiometric* means the theoretical air-to-fuel ratio required for complete combustion.

*Storage vessel with the potential for flash emissions* means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

*Subpart* means 40 CFR part 63, subpart ZZZZ.

*Surface site* means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

*Two-stroke engine* means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010]

**Table 1ato Subpart ZZZZ of Part 63— Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions**

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup>
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub>	

<sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010, as amended at 75 FR 51592, Aug. 20, 2010]

**Table 1bto Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed Spark Ignition 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions and Existing Spark Ignition 4SRB Stationary RICE >500 HP Located at an Area Source of HAP Emissions**

As stated in §§63.6600, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions and existing 4SRB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

For each . . .	You must meet the following operating limitation . . .
1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus; 10 percent from the pressure drop across the catalyst measured during the initial performance test and
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub> and using	b. maintain the temperature of your stationary RICE exhaust so the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.

NSCR; or	
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O <sub>2</sub> and using NSCR.	
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub> and not using NSCR; or	
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O <sub>2</sub> and using NSCR.	

[75 FR 51592, Aug. 20, 2010]

**Table 2 to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions**

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

<b>For each . . .</b>	<b>You must meet the following emission limitation, except during periods of startup . . .</b>	<b>During periods of startup you must . . .</b>
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O <sub>2</sub> . If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O <sub>2</sub> until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup>
2. 4SLB stationary	a. Reduce CO emissions by 93 percent or more; or	

RICE		
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O <sub>2</sub>	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O <sub>2</sub>	

<sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

**Table 2bto Subpart ZZZZ of Part 63— Operating Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing Compression Ignition Stationary RICE >500 HP, and Existing 4SLB Stationary RICE >500 HP Located at an Area Source of HAP Emissions**

As stated in §§63.6600, 63.6601, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and compression ignition stationary RICE located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; existing compression ignition stationary RICE >500 HP; and existing 4SLB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

For each . . .	You must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. <sup>1</sup>
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the	Comply with any operating limitations approved by the Administrator.

<p>concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst</p>	
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<sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

[75 FR 51593, Aug. 20, 2010]

**Table 2cto Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions**

As stated in §§63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

<p><b>For each . . .</b></p>	<p><b>You must meet the following requirement, except during periods of startup . . .</b></p>	<p><b>During periods of startup you must . . .</b></p>
<p>1. Emergency stationary CI RICE and black start stationary CI RICE.<sup>1</sup></p>	<p>a. Change oil and filter every 500 hours of operation or annually, whichever comes first;<sup>2</sup>                      b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;                      c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.<sup>3</sup></p>	<p>Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.<sup>3</sup></p>
<p>2. Non-Emergency, non-black start stationary CI RICE &lt;100 HP</p>	<p>a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;<sup>2</sup></p>	
	<p>b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;</p>	
	<p>c. Inspect all hoses and belts every 500 hours of operation</p>	

	or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O <sub>2</sub>	
4. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start stationary CI RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE. <sup>1</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>2</sup>	
	b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>2</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts	

	every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; <sup>2</sup>	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O <sub>2</sub>	
10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O <sub>2</sub>	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O <sub>2</sub>	
12. Non-emergency, non-black start landfill or digester gas-fired stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O <sub>2</sub>	

<sup>1</sup>If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

<sup>2</sup>Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2c of this subpart.

<sup>3</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 51593, Aug. 20, 2010]

**Table 2d to Subpart ZZZZ of Part 63— Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions**

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

<b>For each . . .</b>	<b>You must meet the following requirement, except during periods of startup . . .</b>	<b>During periods of startup you must . . .</b>
1. Non-Emergency, non-black start CI stationary RICE $\leq 300$ HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; <sup>1</sup>	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
2. Non-Emergency, non-black start CI stationary RICE $300 < \text{HP} \leq 500$	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE $> 500$ HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O <sub>2</sub> ; or	

	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE. <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year. <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup> b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 4,320 hours	

	of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE $\leq$ 500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB stationary RICE $>$ 500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 93 percent or more.	
9. Non-emergency, non-black start 4SRB stationary RICE $\leq$ 500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
10. Non-emergency, non-black start 4SRB stationary RICE $>$ 500 HP	a. Limit concentration of formaldehyde in the	

	stationary RICE exhaust to 2.7 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce formaldehyde emissions by 76 percent or more.	
11. Non-emergency, non-black start landfill or digester gas-fired stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

<sup>1</sup>Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

<sup>2</sup>If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[75 FR 51595, Aug. 20, 2010]

**Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests**

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each . . .	Complying with the requirement to . . .	You must . . .
1. New or reconstructed 2SLB stationary RICE with a brake horsepower >500 located at major sources; new or reconstructed 4SLB stationary RICE with a brake	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually. <sup>1</sup>

horsepower $\geq 250$ located at major sources; and new or reconstructed CI stationary RICE with a brake horsepower $> 500$ located at major sources		
2. 4SRB stationary RICE with a brake horsepower $\geq 5,000$ located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually. <sup>1</sup>
3. Stationary RICE with a brake horsepower $> 500$ located at major sources and new or reconstructed 4SLB stationary RICE with a brake horsepower $250 \leq HP \leq 500$ located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually. <sup>1</sup>
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower $> 500$ that are not limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower $> 500$ that are operated more than 24 hours per calendar year that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower $> 500$ that are limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower $> 500$ that are operated more than 24 hours per calendar year and are limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 5 years, whichever comes first.

<sup>1</sup>After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[75 FR 51596, Aug. 20, 2010]

**Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests**

As stated in §§63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB,	a. Reduce CO	i. Measure the O <sub>2</sub> at	(1) Portable CO and	(a) Using ASTM D6522–00

4SLB, and CI stationary RICE	emissions	the inlet and outlet of the control device; and	O <sub>2</sub> analyzer	(2005) <sup>a</sup> (incorporated by reference, see §63.14). Measurements to determine O <sub>2</sub> must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device	(1) Portable CO and O <sub>2</sub> analyzer	(a) Using ASTM D6522–00 (2005) <sup>ab</sup> (incorporated by reference, see §63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O <sub>2</sub> , dry basis.
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O <sub>2</sub> at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00m (2005)	(a) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for formaldehyde concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348– 03, <sup>c</sup> provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde or	i. Select the sampling port location and the	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) If using a control device, the sampling site must be located at the outlet of the

	CO in the stationary RICE exhaust	number of traverse points; and		control device.
		ii. Determine the O <sub>2</sub> concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (2005)	(a) Measurements to determine O <sub>2</sub> concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, <sup>c</sup> provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. Measure CO at the exhaust of the stationary RICE	(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005), <sup>a</sup> Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03	(a) CO Concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour longer runs.

<sup>a</sup>You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM-D6522-00 (2005) may be used to test both CI and SI stationary RICE.

<sup>b</sup>You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

<sup>c</sup>You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

**Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations and Operating Limitations**

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

<b>For each . . .</b>	<b>Complying with the requirement to . . .</b>	<b>You have demonstrated initial compliance if . . .</b>
<p>1. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE &gt;500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</p>	<p>a. Reduce CO emissions and using oxidation catalyst, and using a CPMS</p>	<p>i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p>
<p>2. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE &gt;500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</p>	<p>a. Reduce CO emissions and not using oxidation catalyst</p>	<p>i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.</p>
<p>3. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, existing non-</p>	<p>a. Reduce CO emissions, and using a CEMS</p>	<p>i. You have installed a CEMS to continuously monitor CO and either O<sub>2</sub> or CO<sub>2</sub> at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B;</p>

<p>emergency stationary CI RICE &gt;500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE &gt;500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</p>		<p>and iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.</p>
<p>4. Non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP, and existing non-emergency 4SRB stationary RICE &gt;500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</p>	<p>a. Reduce formaldehyde emissions and using NSCR</p>	<p>i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p>
<p>5. Non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP, and existing non-emergency 4SRB stationary RICE &gt;500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</p>	<p>a. Reduce formaldehyde emissions and not using NSCR</p>	<p>i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.</p>
<p>6. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE <math>250 \leq HP \leq 500</math> located at a major source of HAP, and existing non-emergency 4SRB stationary RICE &gt;500 HP</p>	<p>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR</p>	<p>i. The average formaldehyde concentration, corrected to 15 percent O<sub>2</sub>, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the</p>

		requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
8. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Reduce CO or formaldehyde emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
9. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

[75 FR 51598, Aug. 20, 2010]

**Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices**

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. New or reconstructed non-emergency 2SLB stationary RICE	a. Reduce CO emissions and using an oxidation	i. Conducting semiannual performance tests for CO to demonstrate that the

<p>&gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE          ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE          &gt;500 HP located at a major source of HAP</p>	<p>catalyst, and using a CPMS</p>	<p>required CO percent reduction is achieved;<sup>a</sup>and          ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and          iii. Reducing these data to 4-hour rolling averages; and          iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</p>
		<p>v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.</p>
<p>2. New or reconstructed non-emergency 2SLB stationary RICE          &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE          ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE          &gt;500 HP located at a major source of HAP</p>	<p>a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS</p>	<p>i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved;<sup>a</sup>and          ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and          iii. Reducing these data to 4-hour rolling averages; and          iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</p>
<p>3. New or reconstructed non-emergency 2SLB stationary RICE          &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE          ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE          &gt;500 HP located at a major source of HAP, existing non-emergency stationary CI RICE          &gt;500 HP, existing non-emergency 4SLB stationary RICE          &gt;500 HP located at an area source of</p>	<p>a. Reduce CO emissions and using a CEMS</p>	<p>i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to §63.6620; and          ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; and          iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks</p>

HAP that are operated more than 24 hours per calendar year		in accordance with 40 CFR part 60, appendix F, procedure 1.
4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to §63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. Non-emergency 4SRB stationary RICE with a brake HP $\geq 5,000$ located at a major source of HAP	a. Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved. <sup>a</sup>
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; <sup>a</sup> and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and

		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; <sup>a</sup> and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing emergency and black start stationary RICE $\leq 500$ HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE $\leq 300$ HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE $\leq 500$ HP located at an area	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

<p>source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE &gt;500 HP located at an area source of HAP that operate 24 hours or less per calendar year</p>		
<p>10. Existing stationary CI RICE &gt;500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE &gt;500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE</p>	<p>a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using oxidation catalyst or NSCR</p>	<p>i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and</p>
		<p>ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and</p>
		<p>iii. Reducing these data to 4-hour rolling averages; and</p>
		<p>iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</p>
		<p>v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.</p>
<p>11. Existing stationary CI RICE &gt;500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE &gt;500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE</p>	<p>a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR</p>	<p>i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and</p>
		<p>ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and</p>

		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
12. Existing limited use CI stationary RICE >500 HP and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using an oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
13. Existing limited use CI stationary RICE >500 HP and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using an oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to

		§63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

<sup>a</sup>After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[75 FR 51600, Aug. 20, 2010]

**Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports**

As stated in §63.6650, you must comply with the following requirements for reports:

<b>For each ...</b>	<b>You must submit a ...</b>	<b>The report must contain ...</b>	<b>You must submit the report ...</b>
1. Existing non-emergency, non-black start stationary RICE $100 \leq \text{HP} \leq 500$ located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE $>500$ HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE $>500$ HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE $>300$ HP located at an area source of HAP; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE $>500$ HP located at an area source of HAP and operated more than 24 hours per calendar year; new or reconstructed non-emergency stationary RICE $>500$ HP located at a major source of HAP; and new or	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in	i. Semiannually according to the requirements in §63.6650(b)(1)–(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)–(9) for engines that are limited use stationary RICE subject to numerical emission limitations. i. Semiannually according to the requirements in §63.6650(b). i. Semiannually according to the requirements in

reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP		§63.8(c)(7), the information in §63.6650(e); or c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4)	§63.6650(b).
2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in §63.6650.
		b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 2.a.i.
		c. Any problems or errors suspected with the meters.	i. See item 2.a.i.

[75 FR 51603, Aug. 20, 2010]

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

As stated in §63.6665, you must comply with the following applicable general provisions.

<b>General provisions citation</b>	<b>Subject of citation</b>	<b>Applies to subpart</b>	<b>Explanation</b>
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)–(4)	Compliance dates for new and	Yes.	

	reconstructed sources		
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)–(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)–(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)–(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.

§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)–(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	Yes.	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes.	
§63.8(c)(2)–(3)	Monitoring system installation	Yes.	

§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)–(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
		Except that §63.8(e) only applies as specified in §63.6645.	
§63.8(f)(1)–(5)	Alternative monitoring method	Yes	Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that §63.8(f)(6) only applies as specified in §63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)–(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
		Except that §63.9(b) only applies as specified in §63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that §63.9(c) only applies as specified in §63.6645.
§63.9(d)	Notification of special compliance requirements for new	Yes	Except that §63.9(d) only applies as specified in §63.6645.

	sources		
§63.9(e)	Notification of performance test	Yes	Except that §63.9(e) only applies as specified in §63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that §63.9(g) only applies as specified in §63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that §63.9(g) only applies as specified in §63.6645.	
§63.9(h)(1)–(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
			Except that §63.9(h) only applies as specified in §63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes.	
§63.10(b)(2)(i)–(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)–(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting	Yes.	

	documentation		
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)–(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

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

Addendum to the Technical Support Document (ATSD) for a  
FESOP Renewal

**Source Background and Description**

<b>Source Name:</b>	<b>Sony DADC</b>
<b>Source Location:</b>	<b>1800 North Fruitridge Avenue, Terre Haute, Indiana 47804</b>
<b>County:</b>	<b>Vigo</b>
<b>SIC Code:</b>	<b>3652</b>
<b>Operation Permit No.:</b>	<b>F167-28489-00032</b>
<b>Permit Reviewer:</b>	<b>Jack Harmon</b>

On January 24, 2011, the Office of Air Quality (OAQ) had a notice published in the Tribune Star, Terre Haute, Indiana, stating that Sony DADC had applied for a Renewal to its Federally Enforceable State Operating Permit (FESOP). The notice also stated that the OAQ proposed to issue a FESOP Renewal for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

**Comments and Responses**

On February 22, 2011, Sony DADC, through its consultant Keramida Environmental Incorporated, submitted comments to IDEM, OAQ on the draft FESOP Renewal.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

**Comment 1:**

The source has requested to change emission unit descriptions in Section D.1 of the permit to be consistent with the descriptions listed in Section A.3 of the permit. Specifically:

- (a) The blast operation described in Section D.1 does not exhaust to the outdoors, but, rather, to atmosphere within the building, as described in Section A.3(b)(2);
- (b) Emission Unit 019 described in Section D.1 of the permit should be changed to be the same as is described in Section A.3(c)(13); and
- (c) The plastic shredders described in Section D.1 of the permit should be changed to be the same as is described in Section A.3(d).

**Response to Comment 1:**

IDEM agrees with the recommended changes. The permit has been revised as follows:

SECTION D.1

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(b)

- (2) One (1) Blast operation, with a totally enclosed dust collector, consisting of two blast units, utilizing plastic beads and alumina as media at a maximum flow rate of 1,050 pounds of media per hour each, installed in 2000, exhausting to the atmosphere inside the building.

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(c) ---

- (13) One (1) boiler, installed in 2008, identified as Unit 019, with a maximum heat input capacity of 7.19 million BTU per hour, firing natural gas **only** and utilizing #2 fuel oil as back-up, using low NO<sub>x</sub> burners, and exhausting to stack 019.

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- (d) Two (2) plastic scrap shredders, with one installed prior to 1996, and one installed in 2009, with cyclone and baghouse for particulate control, used ~~sporadically~~ to grind non-conforming material for recycling.

#### Comment 2:

The source has requested to delete the description of the injection molding process in Section D.1(e), since the emission unit was moved to the insignificant activity list, and, therefore, is a duplication.

#### Response to Comment 2:

IDEM agrees with the recommended changes and removed the duplicated listing. The permit has been revised as follows:

#### SECTION D.1

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- ~~(e) One (1) injection molding process, referred to as stamping, consisting of several machines, installed before 2010, using non-VOC materials to manufacture polycarbonate optical discs. This process has no expected VOC emissions.~~

#### Comment 3:

The source has requested to remove two provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) Part 63, Subpart ZZZZ, provisions 40 CFR 63.6635 and 40 CFR 63.6650, claiming these requirements are not applicable to the emergency generators and fire pumps at an area source. These provisions are shown in Section E.3 in the permit.

#### Response to Comment 3:

IDEM agrees with the recommended changes. Provision 40 CFR 63.6635 describes compliance methods for 40 CFR 63.6630, which does not apply to the emergency generators and fire pumps; therefore, the requirements of 40 CFR 63.6635 do not apply. Provision 40 CFR 63.6650 describes reporting requirements for those facilities described in its Table 7, which do not apply to the emergency generators and fire pumps; therefore, the requirements of 40 CFR 63.6650 do not apply. The permit has been revised as follows to remove those two requirements.

#### E.3.1 General Provisions Relating to NESHAP [326 IAC 20][40 CFR 63, Subpart A]

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(a) The following provisions of 40 CFR Part 63, Subpart ZZZZ shall apply:

- (1) 63.6580
- (2) 63.6585
- (3) 63.6590(a)(1)(iii)
- (4) 63.6595(a)(1), (b), and (c)
- (5) 63.6603(a)
- (6) 63.6605
- (7) 63.6625(e)(3), (f), (h) and (i)
- ~~(8) 63.6635~~
- (98)** 63.6640
- ~~(109)~~ 63.6645(a)(5)
- ~~(11)~~ ~~63.6650~~
- ~~(1210)~~ 63.6655(a), (d), (e), and (f)
- ~~(1311)~~ 63.6660
- ~~(1412)~~ 63.6665
- ~~(1513)~~ 63.6670
- ~~(1614)~~ 63.6675
- ~~(1715)~~ Table 2d (item 4)
- ~~(1816)~~ Table 6 (item 9)
- ~~(1917)~~ Table 8

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**Comment 4:**

The source has requested to remove the requirements for 326 IAC 8-3-2 (Cold Cleaner Operation) from Condition D.1.5 from the permit, claiming that it is not applicable because the screen washing operation at the source is not a degreasing operation, since its process removes ink and does not remove oil or grease, and, therefore, should be removed.

**Response to Comment 4:**

IDEM does not agree with the recommended changes.

Pursuant to 326 IAC 1-2-18.5, a cold cleaner degreaser means as a tank an organic solvent at a temperature below the boiling point of the solvent which is used to spray, brush, flush, or immerse an article for the purposes of cleaning or degreasing the article.

Information provided by the source indicated that the screen washing 3181 operation contains a VOC material at a density of 7.8 pounds per gallon, and is used for the purpose of cleaning articles. Since it has the purpose of cleaning an article, and it contains VOC materials, it fits the definition as a cold cleaner degreaser, as defined in 326 IAC 1-2-18.5, and, therefore, 326 IAC 8-3-2 applies to the screen washing 3181 operation.

No changes were made as a result of this comment.

<b>IDEM Contact</b>
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(a) Questions regarding this proposed FESOP Renewal can be directed to Jack Harmon at the 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) 233-4228 or toll free at 1-800-451-6027 extension 3-4228.

- (b) A copy of the permit 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's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

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

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

**Source Background and Description**

<b>Source Name:</b>	<b>Sony DADC</b>
<b>Source Location:</b>	<b>1800 North Fruitridge Avenue, Terre Haute, Indiana 47804</b>
<b>County:</b>	<b>Vigo</b>
<b>SIC Code:</b>	<b>3652</b>
<b>Permit Renewal No.:</b>	<b>167-28489-00032</b>
<b>Permit Reviewer:</b>	<b>Jack Harmon</b>

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Sony DADC received September 22, 2009, relating to the operation of a stationary manufacturing plant for optical discs. Additional information was received on numerous occasions until November 10, 2010.

**Source Definition**

This Source Definition from the FESOP Renewal was incorporated into this permit as follows:

During the review of this source's renewal application, this stationary manufacturing plant for optical discs was determined to consist of five (5) plants:

- (a) Plant 3181 is located at 3181 North Fruitridge Avenue, Terre Haute, Indiana 47804;
- (b) Plant 1800 is located at 1800 North Fruitridge Avenue, Terre Haute, Indiana 47804;
- (c) Plant 1700 is located at 1700 North Fruitridge Avenue, Terre Haute, Indiana 47804;
- (d) Plant 1600 is located at 1600 North Fruitridge Avenue, Terre Haute, Indiana 47804; and
- (e) Plant 1400 is located at 1400 North Fruitridge Avenue, Terre Haute, Indiana 47804.

These plants are located on one or more contiguous or adjacent properties, have the same two-digit SIC code and are under common ownership and control, therefore they are considered one (1) source, as defined by 326 IAC 2-7-1(22).

Note: The 1800 North Fruitridge Avenue, Terre Haute, Indiana 47804 will be considered the main address for this plant.

**Permitted Emission Units and Pollution Control Equipment**

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

Note: The units will not identified in terms of Plants to provide the source the flexibility of moving permitted units or operations without amending the existing permit.

- (a) One (1) printing operation, consisting of three silk screen printer and thirty-one offset printers, installed between 2005 and 2010, with a combined maximum throughput capacity of 225,120 units per hour, using no VOC control.
- (b) One (1) jig cleaning process, consisting of the following:

- (1) One (1) jig cleaner, utilizing a chemical process using phosphoric acid and sodium hydroxide. This process has negligible potential to emit any regulated pollutants and uses non-VOC materials.
  - (2) One (1) Blast operation, with a totally enclosed dust collector, consisting of two blast units, utilizing plastic beads and alumina as media at a maximum flow rate of 1,050 pounds of media per hour each, installed in 2000, exhausting inside the building.
  - (3) One (1) dry ice blast operation, totally enclosed, using dry ice under pressure to clean parts. This process has negligible potential to emit any regulated pollutants.
  - (4) Two (2) IPA dip tanks, each having a maximum capacity of five (5) gallons, and each having VOC emissions potential of less than 15 pounds per day.
  - (5) One (1) graphite jig coating unit with solvent, having VOC emissions potential of less than 15 pounds per day.
- (c) Fourteen (14) boilers, consisting of the following:
- (1) Kewanee Boiler Corp. boiler, installed before 1983, identified as Unit 001, with a maximum heat input capacity of 10.462 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack S19.
  - (2) Kewanee Boiler Corp. boiler, installed before 1983, identified as Unit 002, with a maximum heat input capacity of 10.462 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack S13.
  - (3) Burnham Corp. boiler, installed in 1986, identified as Unit 003, with a maximum heat input capacity of 9.863 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack S4.
  - (4) Burnham Corp. boiler, installed in 1986, identified as Unit 004, with a maximum heat input capacity of 9.863 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack S3.
  - (5) Superior Boiler Works boiler, installed in 1992, identified as Unit 005, with a maximum heat input capacity of 16.8 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack 001.  
  
Under 40CFR 60, Subpart Dc, this is considered an affected facility.
  - (6) Superior Boiler Works boiler, installed in 1992, identified as Unit 006, with a maximum heat input capacity of 16.8 million BTU per hour, firing natural gas with #2 fuel oil for backup, using no control, and exhausting to stack 002.  
  
Under 40CFR 60, Subpart Dc, this is considered an affected facility.
  - (7) Cleaver Brooks Corp. boiler, installed in 1997, identified as Unit 012, with a maximum heat input capacity of 6.0 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 012.
  - (8) One (1) boiler, installed in 1971, identified as Unit 014, with a maximum heat input capacity of 4.19 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 014.

- (9) One (1) boiler, installed in 1971, identified as Unit 015, with a maximum heat input capacity of 4.50 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 015.
  - (10) One (1) boiler, installed in 1974, identified as Unit 016, with a maximum heat input capacity of 4.00 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 016.
  - (11) One (1) boiler, installed in 1971, identified as Unit 017, with a maximum heat input capacity of 8.36 million BTU per hour, firing natural gas only, using no control, and exhausting to stack 017.
  - (12) One (1) boiler, installed in 1971, identified as Unit 018, with a maximum heat input capacity of 8.36 million BTU per hour, firing natural gas and utilizing #2 fuel oil as back-up, using no control, and exhausting to stack 018.
  - (13) One (1) boiler, installed in 2008, identified as Unit 019, with a maximum heat input capacity of 7.19 million BTU per hour, firing natural gas only, using low NO<sub>x</sub> burners, and exhausting to stack 019.
  - (14) One (1) boiler, installed in 2008, identified as Unit 020, with a maximum heat input capacity of 8.80 million BTU per hour, firing natural gas only, using low NO<sub>x</sub> burner, and exhausting to stack 020.
- (d) Two (2) plastic scrap shredders, with one installed prior to 1996, and one installed in 2009, with cyclone and baghouse for particulate control, used to grind non-conforming material for recycling.

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

The following emission units have been removed from the facility:

- (a) One (1) diesel generator fire pump, identified as Unit 022, installed in 2007, with a maximum capacity of 150 BHP, firing No. 2 fuel only, using no control and exhausting to stack 022.

**Insignificant Activities**

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

- (a) Space heaters, process heaters, or boilers using the following fuels: Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) BTU per hour.
- (b) The following VOC and HAP storage containers:
  - (1) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids; and
  - (2) Packaging lubricants and greases.
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

- (d) Closed loop heating and cooling systems.
- (e) Exposure chambers, for curing of ultraviolet inks and ultraviolet coatings where heat is the intended discharge.
- (f) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (g) Replacement or repair of electrostatic precipitators, bags in baghouse, and filters in other air filtration equipment.
- (h) Paved and unpaved roads and parking lots with public access.
- (i) Enclosed systems for conveying plastic raw materials and plastic finished goods.
- (j) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling towers.
- (k) Emergency generators as follows: Diesel generators not exceeding 1600 horsepower including:
  - (1) Onan Corp. diesel emergency generator, installed in 1983, identified as Unit 007, with a maximum capacity of 115 BHP, firing #2 fuel only, using no control, and exhausting to stack 007. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (2) Onan Corp. diesel emergency generator, installed in 1986, identified as Unit 008, with a maximum capacity of 122 BHP, firing #2 fuel only, using no control, and exhausting to stack 008. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (3) Onan Corp. diesel emergency generator, installed in 1992, identified as Unit 009, with a maximum capacity of 188 BHP, firing #2 fuel only, using no control, and exhausting to stack 009. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (4) Caterpillar Corp. diesel emergency, installed in 1986, identified as Unit 010, with a maximum capacity of 200 BHP, firing #2 fuel only, using no control, and exhausting to stack 010. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (5) Onan Corp. diesel emergency generator, installed in 1998, with a maximum capacity of 620 BHP, firing #2 fuel only, using no control, and exhausting to stack 013. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (6) One (1) diesel emergency generator identified as Unit 021, installed in 2004, with a maximum capacity of 150 BHP, firing #2 fuel only, using no control and exhausting to stack 022. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (7) One (1) diesel emergency generator identified as Unit 022, installed in 2004, with a maximum capacity of 884 BHP, firing #2 fuel only, using no control and exhausting to stack 021. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (8) One (1) diesel emergency identified as Unit 023, installed in 1971, with a maximum capacity of 54 BHP, firing #2 fuel only, using no control and exhausting to stack 023. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.
  - (9) One (1) diesel emergency generator identified as Unit 024, installed in 1971, with a maximum capacity of 150 BHP, firing #2 fuel only, using no control and

exhausting to stack 024. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.

- (10) One (1) diesel emergency identified as Unit 025, installed in 1958, with a maximum capacity of 54 BHP, firing #2 fuel only, using no control and exhausting to stack 025. This generator is a compression ignition reciprocating internal combustion engine, and is not considered a fire pump.

Under 40 CFR 63, Subpart ZZZZ, these emergency generators are considered affected sources.

- (l) Stationary emergency fire pumps, consisting of the following:

- (1) One (1) diesel emergency fire pump, identified as Unit 011, installed in 1971, with a maximum capacity of 255 HP, using No. 2 diesel fuel only, using no controls; and
- (2) One (1) diesel emergency fire pump, identified as Unit 026, installed in 1986, with a maximum capacity of 225 HP, using No. 2 diesel fuel only, using no controls.

Under 40 CFR 63, Subpart ZZZZ, these pumps are considered affected sources.

- (m) Other insignificant activities, including:

- (1) Tank T1 - 550 gallon No.2 fuel oil storage tank, with potential emissions less than five pounds per year.
- (2) Tank T2 - 5,000 gallon No.2 fuel oil storage tank, with potential emissions less than five pounds per year.
- (3) Tank T3 - 5,000 gallon No.2 fuel oil storage tank, with potential emissions less than five pounds per year.
- (4) One (1) Photoresist Coater, consisting of two process:
- (A) Photoresist of Mastering process, containing no VOC materials.
- (B) Photoresist Screening process, containing no VOC materials.
- (5) One nickel plating operation, consisting of one (1) electroplating tank operation and one (1) electroless tank operation, with a combined potential to emit VOC of less than three pounds per hour.

Under 40 CFR Part 63, Subpart WWWW—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, this is considered an affected facility.

- (6) One Screen Washing 3181 process, using VOC materials.
- (7) One (1) injection molding process, installed before 2010, using non-VOC materials to manufacture polycarbonate optical discs. This process has no expected VOC emissions.

### Existing Approvals

Since the issuance of the FESOP No. 167-15123-00032 on February 1, 2005 the source has been operating under the following approvals as well:

- (a) Administrative Amendment No. 167-21955-00032 issued on November 7, 2005;
- (b) Administrative Amendment No. 167-24913-00032 issued on August 17, 2007; and
- (c) Administrative Amendment No. 167-27748-00032 issued on April 23, 2009.

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**

In accordance with 326 IAC 2-8-3(h) a timely renewal application is one that is submitted at least nine (9) months prior to the expiration date of the source's existing operating permit. This source's existing permit expired on February 1, 2010. The source's permit renewal application was not received by IDEM until date September 22, 2009, which was due on May 1, 2009. IDEM has reviewed this matter and has taken appropriate action.

**Emission Calculations**

See Appendix A of this document for detailed emission calculations. Calculations in this FESOP Renewal have been changed from the previous FESOP and include emissions calculations from emissions units representing its core business. Previous calculations included boiler units only. The permit level, however, did not change with the inclusion of the other units.

**County Attainment Status**

The source is located in Vigo County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Attainment effective February 6, 2006, for the Terre Haute area, including Vigo County, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.

<sup>1</sup>Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

Unclassifiable or attainment effective April 5, 2005, for PM<sub>2.5</sub>.

- (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. Vigo 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) Vigo County has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub> emissions. These rules became effective on July 15, 2008. Indiana has three years from

the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM<sub>10</sub> emissions as a surrogate for PM<sub>2.5</sub> emissions until 326 IAC 2-2 is revised.

- (c) **Other Criteria Pollutants**  
 Vigo County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

**Fugitive Emissions**

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard 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.

**Unrestricted Potential Emissions**

This table reflects the unrestricted potential emissions of the source.

<b>Unrestricted Potential Emissions</b>	
Pollutant	Tons/year
PM	53.15
PM <sub>10</sub>	54.47
PM <sub>2.5</sub>	54.47
SO <sub>2</sub>	185.84
NO <sub>x</sub>	90.99
VOC	23.48
CO	54.27
Single HAP	1.63E+00 (Nickel)
Total HAP	2.73E+00

<b>HAPs</b>	<b>tons/year</b>
Nickel	1.63E+00
Hexane	6.99E-01
Selenium	5.43E-03
<b>Total</b>	<b>2.73E+00</b>

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of SO<sub>2</sub> is equal to or greater than 100 tons per year. However, the Permittee has agreed to limit the source's SO<sub>2</sub> emissions to less than Title V levels, therefore the Permittee will be issued a FESOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.



Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM <sup>10*</sup>	PM2.5**	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Worst Single HAP
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA

\*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".  
 \*\* PM2.5 presumed to be equal to PM10.  
 \*\*\* The worst case for these Boilers is the highest PTE per pollutant.

- (a) This existing stationary source is not major for PSD because the emissions of each regulated pollutant are less than two hundred fifty (<250) tons per year, and it is not in one of the twenty-eight (28) listed source categories.

**Federal Rule Applicability**

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

New Source Performance Standards (NSPS)

- (a) The source is not subject to the New Source Performance Standards, 40 CFR 60, Subpart T, NSPS for the Phosphate Fertilizer Industry, because the source does not produce fertilizer or phosphoric acids.
- (b) The emergency generators are not subject to the provisions of 40 CFR 60, Subpart IIII, NSPS for Stationary Compression Ignition Internal Combustion Engines because all of the generators were installed before the applicability date of July 11, 2005. All of the generators were installed between 1958 and 2004, and are not considered fire pumps. Therefore, the requirements of 40 CFR 60, Subpart IIII do not apply.
- (c) The two fire pumps, identified as Unit 011 and Unit 026, are not subject to the requirements of 40 CFR 60, Subpart IIII, NSPS for Stationary Compression Ignition Internal Combustion Engines because the units were installed in 1971 and 1986, respectively, which was before the applicability date of 2005 stated in this rule. Therefore, the requirements of 40 CFR 60, Subpart IIII do not apply.
- (c) The two (2) Superior Boilers (Units 005 and 006) are subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc) because they were constructed after June 9, 1989 and have a maximum heat input capacity of greater than 10 MMBtu and less than 100 MMBtu per hour. Units 005 and 006 were each constructed in 1992 and each have a maximum heat input capacity of 16.8 MMBtu per hour; therefore, the following requirements of 40 CFR Part 60, Subpart Dc apply to these units:
  - (1) 60.40c
  - (2) 60.41c
  - (3) 60.42c
  - (4) 60.43c
  - (5) 60.44c
  - (6) 60.45c
  - (7) 60.46c
  - (8) 60.47c, and
  - (9) 60.48b

NSPS 40 CFR Part 60, Subpart Dc is shown in its entirety as Attachment A to the permit.

- (d) The remaining twelve (12) boiler units at this source are not subject to 40 CFR 60, Subpart Dc because they were either constructed before the applicability date of June 9, 1989, or have a maximum heat input capacity of less than 10 MMBtu per hour.
- (e) None of the boiler units at this source are subject to the requirements of 40 CFR 60, Subpart KKKK because they are not heat recovery units. Therefore, the boilers are not subject to 40 CFR 60, Subpart KKKK.
- (f) The CD printing operations at this source are not subject to the requirements of 40 CFR 60, Subpart QQ because the printing processes are not printing on saleable paper products. Therefore, the requirements of 40 CFR 60, Subpart QQ do not apply.
- (g) The CD printing operations at this source are not subject to the requirements of 40 CFR 60, Subpart RR because the source does not manufacture pressure sensitive labels. Therefore, the requirements of 40 CFR 60, Subpart RR do not apply.
- (h) The CD printing operations at this source are not subject to the requirements of 40 CFR 60, Subpart FFF because the process at this source does not involve the rotogravure printing process. Therefore, the requirements of 40 CFR 60, Subpart FFF do not apply.
- (i) There are no other New Source Performance standards applicable to this source.

#### National Emissions Standards for Hazardous Air Pollutants (NESHAP)

- (a) The source is not subject to the requirements of 40 CFR 63, Subpart HHHHH, NESHAP for Miscellaneous Coating Manufacturing, because the source does not manufacture coatings. Therefore, the provisions of 40 CFR 63, Subpart HHHHH do not apply.
- (b) The electroplating operation is not subject to the requirements of 40 CFR 63, Subpart HHHHHH, NESHAP for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources because the source does not perform paint stripping activities containing Methylene Chloride, does not perform spray application of coatings to motor vehicles or mobile equipment and does not perform spray application of coatings that contain chromium, lead, manganese, nickel, or cadmium to a plastic and/or metal substrate. The plating operations at this source apply nickel through a plating process and not a spray application. Therefore, the requirements of 40 CFR 63, Subpart HHHHHH do not apply.
- (c) The emergency generators and fire pumps at this source are subject to the requirements of 40 CFR Part 63, Subpart ZZZZ for Reciprocating Internal Combustion Engines because they are existing reciprocating internal combustion engines; therefore, the following requirements of 40 CFR Part 63, Subpart ZZZZ shall apply:
  - (1) 63.6580
  - (2) 63.6585
  - (3) 63.6590(a)(1)(iii)
  - (4) 63.6595(a)(1), (b), and (c)
  - (5) 63.6603(a)
  - (6) 63.6605
  - (7) 63.6625(e)(3), (f), (h) and (i)
  - (8) 63.6635
  - (9) 63.6640
  - (10) 63.6645(a)(5)
  - (11) 63.6650
  - (12) 63.6655(a), (d), (e), and (f)

- (13) 63.6660
- (14) 63.6665
- (15) 63.6670
- (16) 63.6675
- (17) Table 2d (item 4)
- (18) Table 6 (item 9)
- (19) Table 8

NESHAP 40 CFR Part 63, Subpart ZZZZ is shown in its entirety as Attachment C to the permit.

- (d) Natural gas-fired combustion boiler Units 003, 004, 012, 014, 015, 016, 017, 018, 019, and 020 are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. On June 8, 2007, the United States Court of appeals for the District of Columbia Circuit (in NRDC v. EPA, no. 04-1386) vacated in its entirety the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. Additionally, since the state rule at 326 IAC 20-95 incorporated the requirements of the NESHAP 40 CFR 63, Subpart DDDDD by reference, the requirements of 326 IAC 20-95 are no longer effective. Therefore, the requirements of 40 CFR 63, Subpart DDDDD and 326 IAC 20-95 are not included in the permit.
- (e) The CD printing operations at this source are not subject to the requirements of 40 CFR 63, Subpart KK (Printing and Publishing Industry) because the source is not a major source of HAP. Therefore, the requirements of 40 CFR 63, Subpart KK do not apply.
- (f) The CD printing operations at this source are not subject to the requirements of 40 CFR 63, Subpart JJJJ Paper and Other Web Coating because the source is not a major source of HAP. Therefore, the requirements of 40 CFR 63, Subpart JJJJ do not apply.
- (g) The CD printing operations at this source are not subject to the requirements of 40 CFR 63, Subpart PPPP Surface Coating of Plastic Parts and Products because the source is not a major source of HAP. Therefore, the requirements of 40 CFR 63, Subpart PPPP do not apply.
- (h) The nickel plating operation, consisting of one electroplating operation and one (1) electroless tank operation, is subject to 40 CFR 63, Subpart WWWW, National Emissions Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations because it is an area source of HAPs and performs plating operation as specified in the criteria of the rule. The nickel plating operation is subject to the following applicable sections of the rule:
  - (1) 63.11504(a)(1)(i) and (ii)
  - (2) 63.11504(a)(2) and (a)(3)
  - (3) 63.11050(a)(1)
  - (4) 63.11505(b)
  - (5) 63.11505(e)
  - (6) 63.11506(a)
  - (7) 63.11507(a)
  - (8) 63.11507(g)
  - (9) 63.11508(a)
  - (10) 63.11508(b)
  - (11) 63.11508(c)(1) through (4)
  - (12) 63.11508(d)(1) through (4)
  - (13) 63.11508(d)(5) through (8)

- (14) 63.11509(a)(1) through (3)
- (15) 63.11509(b) through (f)
- (16) 63.11510
- (17) 63.11511
- (18) 63.11512

NESHAP 40 CFR Part 63, Subpart WWWW is shown in its entirety as Attachment B to the permit.

- (i) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAP) included in this permit renewal.

<b>State Rule Applicability - Entire Source</b>
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**326 IAC 2-2 (Prevention of Significant Deterioration PSD))**

PSD applicability is discussed under the PTE of the Entire Source After Issuance of the Renewal section above.

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

The operation of this manufacturing plant for optical discs will emit less than ten (10) tons per year for any 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 5-1 (Opacity Limitations)**

This source is located in Vigo County, but is not located within a five-tenths kilometer radius circle centered at UTM Coordinates Zone 16 East four hundred sixty-four and fifty-two hundredths (464.52) kilometers North four thousand three hundred sixty-nine and twenty-one hundredths (4369.21) kilometers. Therefore, pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

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

**326 IAC 6.5 (PM Limitations Except Lake County)**

- (a) Particulate matter emissions from the abrasive blast operations shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf). The internal dust collection system, with a minimum control efficiency of 90%, is capable of complying with this limit, and shall be in operation at all times the blast units are in operation, and in accordance with manufacturer's specifications, in order to comply with this limit.
- (b) Particulate emissions from the boiler units when using No. 2 fuel oil shall not exceed twenty-seven hundredths (0.27) grams per million kcal (fifteen-hundredths (0.15) pound per million Btu.

- (c) Particulate emissions from the boiler units when using natural gas shall not exceed one-hundredth (0.01) per dry standard cubic foot (dscf).

<b>State Rule Applicability – Individual Facilities</b>
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326 IAC 2-8 (Federally Enforceable State Operating Permit Program (FESOP))

Pursuant to this rule, the following fuel usage limits shall apply:

- (a) The usage of No. 2 fuel oil with a sulfur content of 0.5% in the boilers (units 001, 002, 003, 004, 005, 006, and 018) shall be limited to 2,467,500 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, based on the limit of 0.071 pound of SO<sub>2</sub> per gallon. Compliance with this limit, combined with all other SO<sub>2</sub> emissions at this source, shall limit the overall source-wide potential to emit SO<sub>2</sub> to less than 100 tons per year and render the requirements of 326 IAC 2-7 (Part 70 Permits) not applicable. This No. 2 fuel limit is an increase from the existing limit of 200,000 U.S. gallons per consecutive twelve (12) month period.
- (b) The fuel usage limits for the emergency generators EU007, EU008, EU009, EU010, the BHP generator, units EU021-025, and emergency fire pumps 011 and 026 in the existing permit have been removed because the source has indicated that these emergency generators each operate less than 500 hours per year. Therefore, the calculations have been revised, and fuel limitations for the generators are no longer needed for the source to remain a minor source.

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

This source is subject to the more stringent limits contained in 326 IAC 6.5, and, therefore, is not subject to the requirements of 326 IAC 6-2.

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

This source is subject to the more stringent limits contained in 326 IAC 6.5, and, therefore, is not subject to the requirements of 326 IAC 6-3.

326 IAC 7-1.1 Sulfur Dioxide Emission Limitations

All combustion units which have the potential to emit either 25 tons per year or 10 pounds per hour of sulfur dioxide must comply with either this provision or any unit-specific limitations in 326 IAC 7-4-3 (for Vigo County, see below). Therefore, the two Burnham Boilers identified as Units 003 and 004 and the two (2) Superior Boilers, identified as Units 005 and 006 shall comply with this provision. The SO<sub>2</sub> limitation for boiler unit 003, 004, 005, and 006, while firing No. 2 fuel oil, shall not exceed 0.5 pounds of SO<sub>2</sub> per million BTu.

326 IAC 7-4-3 (Vigo County Sulfur Dioxide Emission Limits)

The two Kewanee Boilers, identified as Units 001 and 002 are specifically listed under 326 IAC 7-4-3 as #1 Kewanee Boiler and #2 Kewanee Boiler. Pursuant to 326 IAC 7-4-3, the SO<sub>2</sub> emissions for Kewanee Boilers 001 and 002 shall not exceed 0.36 pounds of SO<sub>2</sub> per million BTu.

326 IAC 8-1-6 (VOC Rules: Genral Reduction Requirements)

The printing operations at this source are not subject to 326 IAC 8-1-6 because the process emissions potential to emit (PTE) before control are less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply.

326 IAC 8-2-1 (Surface Coating Emission Limitations)

The printing operations at this source are not subject to 326 IAC 8-2-1 because the source is not of the type specifically listed in any of the rules under 326 8-2-2 through 326 IAC 8-2-12. Therefore, the requirements of 326 IAC 8-2-1 do not apply.

326 IAC 8-3-2 (Organic Solvent Degreasing Operations)

The Screen Washing 3181 process is subject to the requirements of 326 IAC 8-3-2 because it uses solvents containing VOCs in its operation and, fits the definition of a cold cleaning degreasing operation as defined in 326 IAC 1-2-18.5. Therefore, the following shall apply:

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

### **Compliance Determination and Monitoring Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

#### Compliance Determination

The compliance determination requirements applicable to this source are as follows:

- (a) The enclosed dust collector on the blast operation has applicable compliance determination conditions as specified below:
  - (1) The enclosed dust collector on the blast operation shall operate at all times that the blast operation is running and shall operate within manufacturer's specifications at all times in order to ensure compliance with the limits specified.
- (b) In order to demonstrate compliance with the SO<sub>2</sub> emissions limits on the boilers, the source shall do one of the following:
  - (1) The source shall demonstrate that the SO<sub>2</sub> emissions from Boilers 001 and 002 do not exceed 0.36 lb/MMBtu input, and that Boilers 003, 004, 005, and 006 do not exceed 0.5 lb/MMBtu input by:
    - (A) Providing a vendor analysis of the fuel delivered, if accompanied by a vendor certification; or
    - (B) Analyzing the fuel oil sample to determine the sulfur content of the fuel oil via the procedures in 40 CFR 60, Appendix A, Method 19. Oil samples may be collected from the fuel tank immediately after the tank is

filled and before any fuel is combusted, or, if a partially empty tank is refilled, a new sample and analysis would be required upon filling.

- (2) The source may also determine compliance by conducting a stack test for SO<sub>2</sub> emissions from the boilers 001, 002, 003, 004, 005, and 006, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

#### Compliance Monitoring

The compliance monitoring requirements applicable to this source are as follows:

<b>Emission Unit</b>	<b>Parameter</b>	<b>Frequency</b>	<b>Range</b>	<b>Excursions and Exceedances</b>
Boilers 001, 002, 003, 004, 005, and 006	Visible Emissions Notation when using No.2 fuel only	Once per day	Normal/Abnormal	Response Steps

These monitoring conditions are necessary in order to ensure compliance with 326 IAC 6-2 (Sources of Indirect Heating), 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

#### **Recommendation**

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 22, 2009. Additional information was received on numerous dates until November 10, 2010.

#### **Conclusion**

The operation of this stationary manufacturing plant for optical discs shall be subject to the conditions of the attached FESOP Renewal No. 167-28489-00032.

#### **IDEM Contact**

- (a) Questions regarding this proposed permit can be directed to Jack Harmon at the 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) 233-4228 or toll free at 1-800-451-6027 extension 3-4228.
- (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's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

Emissions Summary

Company Name: Sony DADC  
 Address City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804  
 Permit Number: 167-28489-00032  
 Pit ID: 167-00032  
 Reviewer: Jack Harmon  
 Date: September 1, 2010

Emissions Summary - Entire Source

Unlimited/Uncontrolled Potential to Emit

		Unlimited/Uncontrolled Potential Emissions (tons/year)									
		Criteria Pollutants						Hazardous Air Pollutants			
Emissions Units	Description	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Worst Case HAP	
Printing Operations	Silk Screening	0.00	0.00	0.00	0.00	0.00	1.64	0.00	0.00	0.00	
	Offset Printing	0.00	0.00	0.00	0.00	0.00	11.04	0.00	0.00	0.00	
Abrasive Blast Operations	Plastic Bead and Alumina	45.99	45.99	45.99	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Boilers and Generators</b>											
EU001,002,003,004,005,006,018	Nat Gas Boilers w/ No. 2 Fuel backup alternate fuel	0.69	2.75	2.75	0.22	36.18	1.99	30.39	6.83E-01	6.51E-01	Hexane
	No. 2 Fuel Oil	5.17	5.17	5.17	183.50	51.70	0.90	12.90	1.77E-02	5.43E-03	Selenium
<b>Worst Case For Boilers with Alternate Fuels</b>		<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>183.50</b>	<b>51.70</b>	<b>1.99</b>	<b>30.39</b>	<b>6.83E-01</b>	<b>6.51E-01</b>	<b>Hexane</b>
EU012,014,015,016,017	Natural Gas Boilers - no backup fuel	0.31	1.23	1.23	0.10	16.23	0.89	13.63	3.49E-02	3.34E-02	Hexane
EU019,020	Natural Gas Boilers - Low Nox Burners	0.13	0.53	0.53	0.04	3.50	0.39	5.88	1.50E-02	1.44E-02	Hexane
EU007,008,009,010,023,024,025	Emergency Generators Output less than 600 HP	0.49	0.49	0.49	0.45	6.84	0.55	1.47	2.60E-04	1.82E-03	Formaldehyde
EU013,021	Emergency Generators Output greater than 600 HP	0.30	0.30	0.30	1.50	9.00	0.30	2.10			
Emergency Fire Pumps 011, 026		0.26	0.26	0.26	0.25	3.72	0.30	0.80	3.11E-03	9.91E-04	Formaldehyde
Electroplating Operations	Nickel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63E+00	1.63E+00	Nickel
Plasma Cleaning Operations		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.81E-08	1.81E-08	Flourine
Graphite Coating Operations		0.50	0.50	0.50	0.00	0.00	0.96	0.00	0.00E+00	0.00E+00	
Misc. VOC Operations		0.00	0.00	0.00	0.00	0.00	5.42	0.00	0.00E+00	0.00E+00	
<b>Totals Uncontrolled Emissions</b>		<b>53.15</b>	<b>54.47</b>	<b>54.47</b>	<b>185.84</b>	<b>90.99</b>	<b>23.48</b>	<b>54.27</b>	<b>2.37E+00</b>	<b>1.63E+00</b>	<b>Nickel</b>

Limited/Controlled Emissions

		Limited/Controlled Potential Emissions (tons/year)									
		Criteria Pollutants						Hazardous Air Pollutants			
Emissions Units	Description	PM*	PM10	PM2.5	SO2**	NOx	VOC	CO	Total HAPs	Worst Case HAP	
Printing Operations	Silk Screening	0.00	0.00	0.00	0.00	0.00	1.64	0.00	0.00	0.00	
	Offset Printing	0.00	0.00	0.00	0.00	0.00	11.04	0.00	0.00	0.00	
Abrasive Blast Operations	Plastic Bead and Alumina	45.99	45.99	45.99	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Boilers and Generators</b>											
EU001,002,003,004,005,006,018	Nat Gas Boilers w/ No. 2 Fuel backup	0.69	2.75	2.75	0.22	36.18	1.99	30.39	6.83E-01	6.51E-01	Hexane
	No. 2 Fuel Oil	5.17	5.17	5.17	87.60	51.70	0.90	12.90	1.77E-02	5.43E-03	Selenium
<b>Worst Case For Boilers with Alternate Fuels</b>		<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>87.60</b>	<b>51.70</b>	<b>1.99</b>	<b>30.39</b>	<b>6.83E-01</b>	<b>6.51E-01</b>	<b>Hexane</b>
EU012,014,015,016,017	Natural Gas Boilers - no backup fuel	0.31	1.23	1.23	0.10	16.23	0.89	13.63	3.49E-02	3.34E-02	Hexane
EU019,020	Natural Gas Boilers - Low Nox Burners	0.13	0.53	0.53	0.04	3.50	0.39	5.88	1.50E-02	1.44E-02	Hexane
EU007,008,009,010,023,024,025	Emergency Generators Output less than 600 HP***	0.49	0.49	0.49	0.45	6.84	0.55	1.47	2.60E-04	1.82E-03	Formaldehyde
EU013,021	Emergency Generators Output greater than 600 HP***	0.30	0.30	0.30	1.50	9.00	0.30	2.10			
Emergency Fire Pumps 011, 026		0.26	0.26	0.26	0.25	3.72	0.30	0.80	3.11E-03	9.91E-04	Formaldehyde
Electroplating Operations		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63E+00	1.63E+00	Nickel
Plasma Cleaning Operations		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.81E-08	1.81E-08	Flourine
Graphite Coating Operations		0.50	0.50	0.50	0.00	0.00	0.96	0.00	0.00E+00	0.00E+00	
Misc. VOC Operations		0.00	0.00	0.00	0.00	0.00	5.42	0.00	0.00E+00	0.00E+00	
<b>Totals Controlled/Limited Emissions</b>		<b>53.15</b>	<b>54.47</b>	<b>54.47</b>	<b>89.94</b>	<b>90.99</b>	<b>23.48</b>	<b>54.27</b>	<b>2.37E+00</b>	<b>1.63E+00</b>	<b>Nickel</b>

Notes:

\* PM not limited because well under threshold limits.

\*\* No. 2 Fuel Oil emission limits based on source's request to limit No. 2 Fuel Oil usage to 2,467,500 gallons per twelve (12) consecutive month period.

\*\*\*Emergency Generators emissions are not limited, due to operational limits of 500 hours per year already in place.

**Appendix A: Emissions Calculations**

**Printing Operations**

**Company Name: Sony DADC**  
**Address City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804**  
**Permit Number: 167-28489-00032**  
**Pit ID: 167-00032**  
**Reviewer: Jack Harmon**  
**Date: March 1, 2010**

Emission Unit	Position	Max throughput units/minute	Ink Usage gr/unit	VOC content of ink	VOC emissions gr/hr	VOC Emissions		
						lb/hr	lb/day	ton/yr
Empty	1							0.0
Kammann Screen	2	75	0.18	0.07	56.7	0.125	3.000	0.548
Kammann Screen	3	75	0.18	0.07	56.7	0.125	3.000	0.548
Kammann Screen	4	75	0.18	0.07	56.7	0.125	3.000	0.548
Screen Total							9.000	1.643
Kammann Offset	5	90	0.18	0.03	29.16	0.064	1.543	0.282
Kammann Offset	6	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	7	90	0.18	0.03	29.16	0.064	1.543	0.282
Kammann Offset	8	90	0.18	0.03	29.16	0.064	1.543	0.282
Kammann Offset	9	135	0.18	0.03	43.74	0.096	2.314	0.422
Metronic Offset	10	120	0.18	0.03	38.88	0.086	2.057	0.375
Kammann Offset	11	83	0.18	0.03	26.892	0.059	1.423	0.260
Kammann Offset	12	90	0.18	0.03	29.16	0.064	1.543	0.282
Metronic Offset	13	120	0.18	0.03	38.88	0.086	2.057	0.375
Kammann Offset	15	90	0.18	0.03	29.16	0.064	1.543	0.282
Metronic Offset	16	120	0.18	0.03	38.88	0.086	2.057	0.375
Kammann Offset	17	83	0.18	0.03	26.892	0.059	1.423	0.260
Kammann Offset	18	83	0.18	0.03	26.892	0.059	1.423	0.260
Kammann Offset	19	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	20	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	21	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	22	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	23	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	24	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	25	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	26	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	27	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	28	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	29	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	30	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	31	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	32	135	0.18	0.03	43.74	0.096	2.314	0.422
Kammann Offset	33	83	0.18	0.03	26.892	0.059	1.423	0.260
Kammann Offset	34	90	0.18	0.03	29.16	0.064	1.543	0.282
Kammann Offset	35	135	0.18	0.03	43.74	0.096	2.314	0.422
Offset Total							60.464	11.035
Grand Total		3752						12.677

Methodology:

- VOC emissions grams per hour = Maximum throughput/minute x ink usage grams/unit x VOC content.
- Emissions lb/hr = grams per hour x conversion factor
- Emissions tons per year = lb/hr x 24 hours /day x 365 days per yr / 2000 lbs/ton

**NOTES:**

VOC content of ink is based on worst case scenario, using highest VOC-content ink used by source.  
 Silk Screen printers are considered one printing operation, since CDs and DVDs can be printed on any of the silk screen printers.  
 Offset printers are considered one printing operation, since CDs and DVDs can be printed on any of the offset printers.

**Appendix A: Emissions Calculations  
Confined Abrasive Blast Operations**

Company Name: Sony DADC  
Address City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804  
Permit Number: 167-28489-00032  
Pit ID: 167-00032  
Reviewer: Jack Harmon  
Date: March 1, 2010

**Abrasive Blasting - Confined**

**Table 1 - Emission Factors for Abrasives**

Abrasive	Emission Factor	
	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

**Table 2 - Density of Abrasives (lb/ft3)**

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Steel	487

**Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)**

Flow rate of Sand Through a Blasting Nozzle as a Function of Nozzle pressure and Internal Diameter

Internal diameter, inches	Nozzle Pressure (psig)							
	30	40	50	60	70	80	90	100
1/8	28	35	42	49	55	63	70	77
3/16	65	80	94	107	122	135	149	165
1/4	109	138	168	195	221	255	280	309
5/16	205	247	292	354	377	420	462	507
3/8	285	355	417	477	540	600	657	720
7/16	385	472	560	645	755	820	905	940
1/2	503	615	725	835	945	1050	1160	1265
5/8	820	990	1170	1336	1510	1680	1850	2030
3/4	1140	1420	1670	1915	2160	2400	2630	2880
1	2030	2460	2900	3340	3780	4200	4640	5060

**Calculations**

**Plastic Bead**

*Adjusting Flow Rates for Different Abrasives and Nozzle Diameters*

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)  
FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =  
D = Density of abrasive (lb/ft3) From Table 2 =  
D1 = Density of sand (lb/ft3) =  
ID = Actual nozzle internal diameter (in) =  
ID1 = Nozzle internal diameter (in) from Table 3 =

1050
99
99
0.5
0.5

**Flow Rate (FR) (lb/hr) = 1050.000** per nozzle

**Uncontrolled Emissions (E, lb/hr)**

EF = emission factor (lb PM / lb abrasive) From Table 1 =  
FR = Flow Rate (lb/hr) =  
w = fraction of time of wet blasting =  
N = number of nozzles =

0.010
1050.000
0
1

<b>Uncontrolled Emissions</b>	<b>10.50 lb/hr</b>
	<b>45.99 ton/yr</b>

based on max jig

**Alumina**

*Adjusting Flow Rates for Different Abrasives and Nozzle Diameters*

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)  
FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =  
D = Density of abrasive (lb/ft3) From Table 2 =  
D1 = Density of sand (lb/ft3) =  
ID = Actual nozzle internal diameter (in) =  
ID1 = Nozzle internal diameter (in) from Table 3 =

1050
99
99
0.5
0.5

**Flow Rate (FR) (lb/hr) = 1050.000** per nozzle

**Uncontrolled Emissions (E, lb/hr)**

EF = emission factor (lb PM / lb abrasive) From Table 1 =  
FR = Flow Rate (lb/hr) =  
w = fraction of time of wet blasting =  
N = number of nozzles =

0.010
1050.000
0
1

<b>Uncontrolled Emissions</b>	<b>10.50 lb/hr</b>
	<b>45.99 ton/yr</b>

based on max jig cleaning capacity

**METHODOLOGY**

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. 1, Section 3 "Abrasive Blasting" (1991 edition)  
Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lbs  
Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)² x (D/D1)  
E = EF x FR x (1-w/200) x N  
w should be entered in as a whole number (if w is 50%, enter 50)  
400 jigs per day; 2 minutes per jig = 800  
PTE based on 24 hours per day, 365 days per year

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Small Industrial Boiler with Regular Nox Burners - Natural Gas with No. 2 Fuel oil Backup**

**Company Name: Sony DADC**  
**Address City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804**  
**Permit Number: 167-28489-00032**  
**Plt ID: 167-00032**  
**Reviewer: Jack Harmon**  
**Date: March, 2010**

Emission Unit	MMBtu/hr
001	10.462
002	10.462
003	9.863
004	9.863
005	16.80
006	16.80
018	<u>8.36</u>

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
82.61 ***	723.7

		Pollutant					
		PM*	PM10*	SO2	NOx	VOC	CO
Total MMBtu/hr	82.61				100.0	5.5	84.0
Emission Factor in lb/MMCF		1.9	7.6	0.6	**see below		
Potential Emission in tons/yr		Emission Unit					
	001	0.09	0.35	0.03	4.58	0.25	3.85
	002	0.09	0.35	0.03	4.58	0.25	3.85
	003	0.08	0.33	0.03	4.32	0.24	3.63
	004	0.08	0.33	0.03	4.32	0.24	3.63
	005	0.14	0.56	0.04	7.36	0.40	6.18
	006	0.14	0.56	0.04	7.36	0.40	6.18
	018	0.07	0.28	0.02	3.66	0.20	3.08
Total		0.69	2.75	0.22	36.18	1.99	30.39

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

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

\*\*\* Total MMBtu/hr is summation of all applicable emission units listed in table to the left on this worksheet.

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 M

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 (SUPPLEMENT D 3/98)

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

Emission Unit	MMBtu/hr
001	10.462
002	10.462
003	9.863
004	9.863
005	16.80
006	16.80
018	<u>8.36</u>
	82.61

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Small Industrial Boiler with Regular Nox Burners - Natural Gas with No. 2 Fuel oil Backup**

**HAPs Emissions**

**Company Name: Sony DADC**  
**Address City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804**  
**Permit Number: 167-28489-00032**  
**Plt ID: 167-00032**  
**Reviewer: Jack Harmon**  
**Date: March, 2010**

Total MMBtu/hr from previous worksheet  
82.61

HAPs - Organics						
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total
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	7.598E-04	4.342E-04	2.714E-02	<b>6.513E-01</b>	1.230E-03	6.809E-01

HAPs - Metals						
	Lead	Cadmium	Chromium	Manganese	Nickel	
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	1.809E-04	3.980E-04	5.066E-04	1.375E-04	7.598E-04	1.983E-03

Total HAP **6.828E-01**

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

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Small Industrial Boiler with Regular Nox Burners - Natural Gas Only**

**Company Name: Sony DADC**

**Address City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804**

**Permit Number: 167-28489-00032**

**Plt ID: 167-00032**

**Reviewer: Jack Harmon**

**Date: March, 2010**

Emission Unit	MMBtu/hr
012	6.00
014	4.19
015	4.50
016	4.00
017	8.36
Insign. Heaters	10.00

Heat Input Capacity  
MMBtu/hr

37.05 \*\*\*

Potential Throughput  
MMCF/yr

324.6

Total MMBtu/hr		Pollutant					
		PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	37.05	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	Emission Unit						
	012	0.05	0.20	0.02	2.63	0.14	2.21
	014	0.03	0.14	0.01	1.84	0.10	1.54
	015	0.04	0.15	0.01	1.97	0.11	1.66
	016	0.03	0.13	0.01	1.75	0.10	1.47
	017	0.07	0.28	0.02	3.66	0.20	3.08
	Insign. Heaters	0.08	0.33	0.03	4.38	0.24	3.68
	Total	0.31	1.23	0.10	16.23	0.89	13.63

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

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

\*\*\* Total MMBTU/hr is summation of all applicable emission units listed in table to the left on this worksheet.

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 I

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 (SUPPLEMENT D 3/98)

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

Emission Unit	MMBtu/hr
012	6.00
014	4.19
015	4.50
016	4.00
017	8.36
Insign. Heaters	10.00
	37.05

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**Small Industrial Boiler with Regular Nox Burners - Natural Gas Only**  
**HAPs Emissions**  
**Company Name: Sony DADC**  
**Address City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804**  
**Permit Number: 167-28489-00032**  
**Plt ID: 167-00032**  
**Reviewer: Jack Harmon**  
**Date: March, 2010**

Total MMBtu/hr from previous worksheet  
 37.05

HAPs - Organics						
	Benzene	Dichloroben zene	Formaldeh de	Hexane	Toluene	Total
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	3.890E-05	2.223E-05	1.389E-03	<b>3.335E-02</b>	6.299E-05	3.486E-02

HAPs - Metals						
	Lead	Cadmium	Chromium	Manganese	Nickel	
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	9.263E-06	2.038E-05	2.594E-05	7.040E-06	3.890E-05	1.015E-04

**3.496E-02**

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

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Small Industrial Boiler with Low-Nox Burners**

**Company Name: Sony DADC**

**Address City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804**

**Permit Number: 167-28489-00032**

**Pit ID: 167-00032**

**Reviewer: Jack Harmon**

**Date: March, 2010**

Emission Unit	MMBtu/hr
019	7.19
020	8.80
<b>Total MMBtu/hr</b>	<b>15.99</b>

Heat Input Capacity  
MMBtu/hr

15.99 \*\*\*

Potential Throughput  
MMCF/yr

140.1

		Pollutant					
		PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF		1.9	7.6	0.6	50.0 ***see below	5.5	84.0
Potential Emission in tons/yr	Emission Unit						
	019	0.06	0.24	0.02	1.57	0.17	2.65
	020	0.07	0.29	0.02	1.93	0.21	3.24
Total		0.13	0.53	0.04	3.50	0.39	5.88

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

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

\*\*\* Total MMBTU/hr is summation of all applicable emission units listed in table to the left on this worksheet.

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 M

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 1-03-00 (SUPPLEMENT D 3/98)

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

Emission Unit	MMBtu/hr
019	7.19
;020	8.8
Total	15.99

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Small Industrial Boiler with Low-Nox Burners**

**HAPs Emissions**

**Company Name: Sony DADC**

**Address City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804**

**Permit Number: 167-28489-00032**

**Plt ID: 167-00032**

**Reviewer: Jack Harmon**

**Date: March, 2010**

Total MMBtu/hr from previous worksheet  
15.99

HAPs - Organics						Total
Emission Factor in lb/MMcf	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.679E-05	9.594E-06	5.996E-04	<b>1.439E-02</b>	2.718E-05	1.504E-02

HAPs - Metals						Total
Emission Factor in lb/MMcf	Lead	Cadmium	Chromium	Manganese	Nickel	
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	3.998E-06	8.795E-06	1.119E-05	3.038E-06	1.679E-05	4.381E-05

**1.509E-02**

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

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)**  
**#2 Fuel Oil For Boilers Having No. 2 Fuel Oil as Backup**

**Company Name: Sony DADC**  
**Address, City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804**  
**Permit Number: 167-28489-00032**  
**Plt ID: 167-00032**  
**Reviewer: Jack Harmon**  
**Date: March, 2010**

Heat Input Capacity  
MMBTu/hr

Potential Throughput      S = Weight % Sulfur  
kgals/year                      0.5

82.61

5169.0

Emission Factor in lb/kgal		Pollutant					
		PM*	SO2	NOx	VOC	CO	
		2.0	71 (142.0S)	20.0	0.34	5.0	
Potential Emission in tons/yr	Emission Unit	MMBTu/hr					
	001	10.462	0.7	23.2	6.5	0.1	1.6
	002	10.462	0.7	23.2	6.5	0.1	1.6
	003	9.863	0.6	21.9	6.2	0.1	1.5
	004	9.863	0.6	21.9	6.2	0.1	1.5
	005	16.8	1.1	37.3	10.5	0.2	2.6
	006	16.8	1.1	37.3	10.5	0.2	2.6
	018	8.36	0.5	18.6	5.2	0.1	1.3
<b>Total</b>		82.61	5.2	183.5	51.7	0.9	12.9

**Methodology**

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

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

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

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

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

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)**  
**#2 Fuel Oil For Boilers Having No. 2 Fuel Oil as Backup**  
**HAPs Emissions**

**Company Name:** Sony DADC  
**Address, City IN Zip:** 1800 N. Fruitridge Ave. Terre Haute, IN 47804  
**Permit Number:** 167-28489-00032  
**Plt ID:** 167-00032  
**Reviewer:** Jack Harmon  
**Date:** March, 2010

82.61

HAPs - Metals						
Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06	Total
Potential Emission in tons/yr	1.45E-03	1.09E-03	1.09E-03	1.09E-03	3.26E-03	7.96E-03

HAPs - Metals (continued)					
Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05	
Potential Emission in tons/yr	1.09E-03	2.17E-03	1.09E-03	<b>5.43E-03</b>	9.77E-03

**Methodology** **1.77E-02**

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

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

**Appendix A: Emission Calculations  
 Reciprocating Internal Combustion Engines - Diesel Fuel  
 Output Rating (<=600 HP)  
 Emergency Generators with Output Less Than 600 HP**

**Company Name:** Sony DADC  
**Address, City IN Zip:** 1800 N. Fruitridge Ave. Terre Haute, IN 47804  
**Permit Number:** 167-28489-00032  
**Plt ID:** 167-00032  
**Reviewer:** Jack Harmon  
**Date:** March, 2010

<u>EU No.</u>	<u>HP</u>
007	115
008	122
009	188
010	200
023	54
024	150
025	54
Total	883

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

Output Horsepower Rating (hp)	883.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	441,500

	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	0.49	0.49	0.49	0.45	6.84	0.55	1.47

\*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							Total PAH HAPs***
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	
Emission Factor in lb/hp-hr****	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 tons/yr	1.44E-03	6.32E-04	4.40E-04	6.04E-05	<b>1.82E-03</b>	1.19E-03	1.43E-04	<b>2.60E-04</b>

\*\*\*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>5.99E-03</b>
---------------------------------------------------	-----------------

**Methodology**

Emission Factors are from AP42 (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]

This generator is an emergency generator. Therefore, operating hours are based on 500 hours per year.



Appendix A: Emissions Calculations

Fuel Equivalency Calculations

Company Name: Sony DADC  
 Address City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804  
 Permit Number: 167-28489-00032  
 Plt ID: 167-00032  
 Reviewer: Jack Harmon  
 Date: March 1, 2010

Existing Potential to Emit

Natural Gas Limitation =	1,048	
No. 2 Fuel Oil Limitation =	5,165,000	0.50 % sulfur

Limited Potential to Emit After Issuance

Equivalent Natural Gas Limitation =	723.7	MMCF/yr
Equivalent No. 2 Fuel Oil Limitation =	2,467,500	gal/yr, and 0.50 % sulfur

Fuel Equivalency (Based on SO2 Emissions)

Natural Gas SO2 Emission Factor =	0.6	lb/MMCF
No. 2 Fuel Oil SO2 Emission Factor =	71.0	lb/kgal at 0.5% sulfur content
No. 2 Fuel Oil to Natural Gas Equivalency =	8.45	gal No. 2 Fuel Oil / MMCF of Nat Gas

Criteria Pollutant	Emission Factor (units)		Limited Potential to Emit (tons/yr)		
	Natural Gas (lb/MMCF)	No. 2 Fuel Oil (lb/kgal)	Natural Gas (tons/yr)	No. 2 Fuel Oil (tons/yr)	Total (tons/yr)
PM	1.9	2	1.00	5.17	6.16
PM10	7.6	3.3	3.98	8.52	12.51
SO2	0.6	71.0	0.31	183.36	183.67
NOx	100	20.0	52.42	51.65	104.07
VOC	5.5	0.34	2.88	0.88	3.76
CO	84	5.0	44.0286	12.91	56.94
Hazardous Air Pollutant					
Arsenic	2.0E-04	5.6E-04	1.0E-04	1.45E-03	1.6E-03
Beryllium	1.2E-05	4.2E-04	6.3E-06	1.08E-03	1.1E-03
Cadmium	1.1E-03	4.2E-04	5.8E-04	1.08E-03	1.7E-03
Chromium	1.4E-03	4.2E-04	7.3E-04	1.08E-03	1.8E-03
Cobalt	8.4E-05		4.4E-05		4.4E-05
Lead	5.0E-04	1.3E-03	2.6E-04	3.25E-03	0.00
Manganese	3.8E-04	8.4E-04	2.0E-04	2.17E-03	0.00
Mercury	2.6E-04	4.2E-04	1.4E-04	1.08E-03	1.2E-03
Nickel	2.1E-03	4.2E-04	1.1E-03	1.08E-03	0.002
Selenium	2.4E-05	2.1E-03	1.3E-05	5.42E-03	5.4E-03
1,3-Butadiene					0.0E+00
Acetaldehyde					0.0E+00
Acrolein					0.0E+00
Benzene	2.1E-03		1.1E-03		1.1E-03
Dichlorobenzene	1.2E-03		6.3E-04		6.3E-04
Formaldehyde	7.5E-02	6.10E-02	3.9E-02	1.58E-01	0.197
Hexane	1.8E+00		0.94		0.943
Toluene	3.4E-03		1.8E-03		1.8E-03
Total PAH Haps	negl		negl		0.0E+00
Polycyclic Organic Matter		3.30E-03		8.52E-03	8.5E-03
Xylene					0.0E+00
			0.99	0.18	1.17

Criteria Pollutant	Emission Factor (units)		Limited Potential to Emit (tons/yr)			
	Natural Gas (lb/MMCF)	No. 2 Fuel Oil (lb/kgal)	Natural Gas (tons/yr)	No. 2 Fuel Oil (tons/yr)	Worst Case PTE (tons/yr)	
PM	1.9	2	0.69	2.47	2.47	
PM10	7.6	3.3	2.75	4.07	4.07	
SO2	0.6	71.0	0.22	87.60	87.60	
NOx	100	20.0	36.19	24.68	36.19	
VOC	5.5	0.34	1.99	0.42	1.99	
CO	84	5.0	30.3954	6.17	30.40	
Hazardous Air Pollutant						
Arsenic	2.0E-04	5.6E-04	7.2E-05	6.91E-04	6.9E-04	
Beryllium	1.2E-05	4.2E-04	4.3E-06	5.18E-04	5.2E-04	
Cadmium	1.1E-03	4.2E-04	4.0E-04	5.18E-04	5.2E-04	
Chromium	1.4E-03	4.2E-04	5.1E-04	5.18E-04	5.2E-04	
Cobalt	8.4E-05		3.0E-05		3.0E-05	
Lead	5.0E-04	1.3E-03	1.8E-04	1.55E-03	0.00	
Manganese	3.8E-04	8.4E-04	1.4E-04	1.04E-03	0.00	
Mercury	2.6E-04	4.2E-04	9.4E-05	5.18E-04	5.2E-04	
Nickel	2.1E-03	4.2E-04	7.6E-04	5.18E-04	0.001	
Selenium	2.4E-05	2.1E-03	8.7E-06	2.59E-03	2.6E-03	
1,3-Butadiene					0.0E+00	
Acetaldehyde					0.0E+00	
Acrolein					0.0E+00	
Benzene	2.1E-03		7.6E-04		7.6E-04	
Dichlorobenzene	1.2E-03		4.3E-04		4.3E-04	
Formaldehyde	7.5E-02	6.10E-02	2.7E-02	7.53E-02	7.526E-02	
Hexane	1.8E+00		0.65		6.513E-01	
Toluene	3.4E-03		1.2E-03		1.2E-03	
Total PAH Haps	negl		negl		0.0E+00	
Polycyclic Organic Matter		3.30E-03		4.07E-03	4.1E-03	
Xylene					0.0E+00	
			Total HAPS	0.68	0.09	7.42E-01

Methodology

Natural Gas: Limited Potential to Emit (tons/yr) = (Natural Gas Limitation (MMCF/yr)) \* (Emission Factor (lb/MMCF)) \* (ton/2000) **Abbreviations**

All Other Fuels: Limited Potential to Emit (tons/yr) = (Fuel Limitation (gals/yr)) \* (Emission Factor (lb/kgal)) \* (kgal/1000 gal) \* (tc PM = Particulate Matter

Sources of AP-42 Emission Factors for fuel combustion:

Natural Gas : AP-42 Chapter 1.4 (dated 7/98), Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4

No. 2 Fuel Oil: AP-42 Chapter 1.3 (dated 9/98), Tables 1.3-1, 1.3-2, 1.3-3, 1.3-8, 1.3-9, 1.3-10, and 1.3-11

Diesel Engine Oil: AP-42 Chapter 3.3 (dated 10/96), Tables 3.3-1 and 3.3-2

PM10 = Particulate Matter (<10 um)

SO2 = Sulfur Dioxide

NOx = Nitrous Oxides

VOC - Volatile Organic Compounds

CO = Carbon Monoxide

HAP = Hazardous Air Pollutant

HCl = Hydrogen Chloride

PAH = Polyaromatic Hydrocarbon

**Appendix A: Emissions Calculations**

**Electroplating Operations**

**Company Name:** Sony DADC  
**Address City IN Zip:** 1800 N. Fruitridge Ave. Terre Haute, IN 47804  
**Permit Number:** 167-28489-00032  
**Plt ID:** 167-00032  
**Reviewer:** Jack Harmon  
**Date:** March 1, 2010

**Nickel Electroplating**

	Max Capacity	Emission Factor	Emission factor	A hr/unit	Nickel Emissions	
	units/yr	gr/A-hr	lb/A-hr		lb/yr	ton/yr
Masters	100,000	0.63	0.00009	55.00	495	0.25
Mothers	200,000	0.63	0.00009	53.33	960	0.48
Stampers	400,000	0.63	0.00009	50.00	1800	0.90

1.63

**Methodology:**

- Emission factor from Table 12.20-4 of AP-42 Chapter 12.20 (SCC 3-09-010-68)
- Emissions lb/hr = grams per hour x conversion factor
- Emissions tons per year = lb/hr x 24 hours /day x 365 days per yr / 2000 lbs/ton

**Nickel Electroless Plating**

Negligible emissions from two small tanks

**Appendix A: Emissions Calculations****Plasma Cleaning Operations**

**Company Name:** Sony DADC  
**Address City IN Zip:** 1800 N. Fruitridge Ave. Terre Haute, IN 47804  
**Permit Number:** 167-28489-00032  
**Plt ID:** 167-00032  
**Reviewer:** Jack Harmon  
**Date:** March 1, 2010

## Flourine Emissions from Plasma cleaner

ppm	l/hr	Usage per million	density (g/l)	g/hr	lb/hr	ton/year
1	1.1	0.0000011	1.7	0.00000187	4.12257E-09	1.80569E-08

ppm	l/hr	Usage per million	g/l	g/hr	F:HF	lb/hr	ton/year
3	1.1	0.0000033	1.15	0.000003795	0.95	7.94808E-09	3.48126E-08

## Methodology:

Emissions lb/hr = Density x Usage x conversion factor to pounds/hr.

Emissions tons/yr = lbs/hr x 8760 hrs=yr/2000 lbs/ton

Based on manufacturer specifications - less than 1 ppm F and less than 3 ppm HF in exhaust

**Appendix A: Emissions Calculations**

**Graphite Coating Operations**

**Company Name: Sony DADC**  
**Address City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804**  
**Permit Number: 167-28489-00032**  
**Plt ID: 167-00032**  
**Reviewer: Jack Harmon**  
**Date: March 1, 2010**

Material	Density (Lb/Gal)	Weight % Volatile Organics	Weight Percent Solids	Pounds of Mat. (lbs/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency
Molykote	8.1	65.0%	40.0%	0.02028	16.700	5.26	0.22	5.28	0.96	0.50	15%

Methodology:

Lbs VOC/gal = density x weight % VOC

PTE VOC lb/hr = wt % VOC x Usage lb/unit x Units/hr

PTE VOC lb/day = PTE VOC lb/hr x 24 hr/day

PTE VOC tons/yr = VOC lb/day x 8760 hr/yr / 2000 lb/ton

PTE PM tons/yr = wt % solids x usage lb/unit x throughput units/hr x (1- transfer efficiency) x 8760 hrs/yr / 2000 lbs/hr

**Based on:**

- 400 jigs per day maximum throughput
- 40 grams of molykote per cycle
- 5 jigs per cycle

**Pounds of Material per unit:**

0.017637

increased by 15% for calculations above

**Appendix A: Emissions Calculations**

**Misc VOC Operations**

**Company Name: Sony DADC**  
**Address City IN Zip: 1800 N. Fruitridge Ave. Terre Haute, IN 47804**  
**Permit Number: 167-28489-00032**  
**Plt ID: 167-00032**  
**Reviewer: Jack Harmon**  
**Date: March 1, 2010**

**VOC Emitting Units**

Use	Material	Density lb/gal	VOC content	Max usage gal/yr	VOC emissions	
					lbs/yr	tons/yr
screen washing 3181	hydrite	7.8	100%	1000	7800	3.90
Jig Washing	IPA dip tanks (2)	6.6	100%	156	1029.6	0.51
Offset Plate Making - Cleaning	IPA	6.6	100%	156	1029.6	0.51
Graphite coating part cleaner	naphtha-graphite coating	6.314	100%	156	985	0.49

Methodology:

VOC Emissions lb/yr = Density lbs/gal x VOC content % x Max usage gal/yr

VOC Emissions tons/yr - VOC emissions lb/yr / 2000 lbs/ton

Total            5.42

**Processes with VOC potential - but negligible (less than 3 lb/hr and 15 lb/day)**

Ink Jet Printing in Screen Making

**Other cleaning processes where non-VOC containing materials are used:**

Process	Material
Stamper Washer Cleaner	P3
Jig Washing	various acids
Mastering	CD-30 Developer
Cleaning throughout the plant	Acetone based solvent
Screen Printing	Photo Resist

**Appendix A: Emission Calculations  
 Reciprocating Internal Combustion Engines - Diesel Fuel  
 Output Rating (<=600 HP)  
 Emergency Fire Pumps with Output Less Than 600 HP**

**Company Name:** Sony DADC  
**Address, City IN Zip:** 1800 N. Fruitridge Ave. Terre Haute, IN 47804  
**Permit Number:** 167-28489-00032  
**Plt ID:** 167-00032  
**Reviewer:** Jack Harmon  
**Date:** March, 2010

Fire Pumps	
<u>EU No.</u>	<u>HP</u>
011	255
026	225
<b>Total</b>	<b>480</b>

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

Output Horsepower Rating (hp)	480.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	240,000

	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	0.26	0.26	0.26	0.25	3.72	0.30	0.80

\*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							Total HAPs
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	
Emission Factor in lb/hp-hr****	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 tons/yr	7.84E-04	3.44E-04	2.39E-04	3.28E-05	<b>9.91E-04</b>	6.44E-04	7.77E-05	<b>3.11E-03</b>

\*\*\*\*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>3.11E-03</b>
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**Methodology**

Emission Factors are from AP42 (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]

These fire pumps are emergency fire pumps. Therefore, operating hours are based on 500 hours per year.



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
**Governor**

*Thomas W. Easterly*  
**Commissioner**

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

## **SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED**

**TO:** Ken Walker  
Sony DADC  
1800 N. Fruitridge Ave  
Terre Haute, IN 47804

**DATE:** February 25, 2011

**FROM:** Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

**SUBJECT:** Final Decision  
FESOP - Renewal  
167-28489-00032

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
Michael Mitchell (Sony DADC)  
Amanda Hennessy (Keramida Enviromental, Inc)  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 11/30/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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[www.idem.IN.gov](http://www.idem.IN.gov)

February 25, 2011

TO: Vigo County Public Library

From: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

**Applicant Name: Sony DADC**  
**Permit Number: 167-28489-00032**

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or 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.

Enclosures  
Final Library.dot 11/30/07

# Mail Code 61-53

IDEM Staff	MIDENNEY 2/25/2011 Sony DADC 167-28489-00032 (final)		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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1		Ken Walker Sony DADC 1800 N Fruitridge Ave Terre Haute IN 47804 (Source CAATS) via confirm delivery										
2		Michael Mitchell Exec VP - Chief Tech Officer Sony DADC 1800 N Fruitridge Ave Terre Haute IN 47804 (RO CAATS)										
3		Mr. Charles L. Berger Berger & Berger, Attorneys at Law 313 Main Street Evansville IN 47700 (Affected Party)										
4		Keramida Environmental, Inc. 401 N. College Ave Indianapolis IN 46032 (Consultant)										
5		Vigo County Board of Commissioners County Annex, 121 Oak Street Terre Haute IN 47807 (Local Official)										
6		Terre Haute City Council and Mayors Office 17 Harding Ave Terre Haute IN 47807 (Local Official)										
7		Vigo County Health Department 147 Oak Street Terre Haute IN 47807 (Health Department)										
8		Vigo Co Public Library 1 Library Square Terre Haute IN 47807-3609 (Library)										
9		J.P. Roehm PO Box 303 Clinton IN 47842 (Affected Party)										
10		Deb Reeves Vigo County Air Pollution Control 121 Oak Terre Haute IN 47807 (Local Official)										
11		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 (Affected Party)										
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