INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant

DATE: July 10, 2013

RE: Saint-Gobain Containers, Inc. (Verallia) / 075-32997-00004

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 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) 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.

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

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

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

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

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Kimberly Pratt
524 East Center Street
Saint-Gobain Containers
Dunkirk, IN 47336

July 10, 2013

Re: 075-32997-00004
Significant Permit Modification to
Part 70 Operating Permit No. T 075-17108-00004

Dear Kimberly Pratt:

Saint-Gobain Containers was issued Part 70 Operating Permit Renewal No. T075-17108-00004 on July 9, 2007, for a stationary glass container manufacturing plant, located at 524 East Center Street, Dunkirk, Indiana. An application requesting changes to this permit was received on March 25, 2013. Pursuant to the provisions of 326 IAC 2-7-12, a significant permit modification is hereby approved as described in the attached Technical Support Document.

All other conditions of the permit shall remain unchanged and in effect. Please find attached the entire Part 70 Operating Permit as modified.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Madhurima Moulik, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Madhurima Moulik or extension 3-0868, or dial (317) 233-0868.

Sincerely,

For CAW

Chrystal A. Wagner, Section Chief
Permits Branch
Office of Air Quality

Attachments
Modified Permit
Technical Support Document (TSD)

MDM

cc: File - Jay County
U.S. EPA, Region V
Jay County Health Department
Compliance & Enforcement Branch

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PART 70 OPERATING PERMIT RENEWAL
OFFICE OF AIR QUALITY

Saint-Gobain Containers
524 East Center Street
Dunkirk, Indiana 47336

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

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

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

Operation Permit No.: T075-17108-00004	
Original signed by: *Nisha Sizemore*, Chief Permits Branch Office of Air Quality	Issuance Date: July 9, 2007 Expiration Date: July 9, 2012

Administrative Amendment No. 075-25583-00004, issued January 10, 2008
Significant Permit Modification No. 075-25052-00004, issued December 11, 2009

Significant Source Modification No. 075-29643-00004, issued March 31, 2011;
Significant Permit Modification No. 075-29645-00004, issued April 21, 2011

Significant Permit Modification No. 075-30629-00004, issued October 10, 2011.
Significant Permit Modification No. 075-32271-00004, issued on December 11, 2012

Significant Permit Modification No.: 075-32997-00004	
Issued by: For CAW Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: July 10, 2013

TABLE OF CONTENTS

SECTION D.4 FACILITY OPERATION CONDITIONS

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

D.4.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM_{10} [326 IAC 2-2]
D.4.2 Particulate [326 IAC 6-3-2]
D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.4.4 Particulate Control
D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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

D.4.6 Visible Emissions Notations
D.4.7 Parametric Monitoring
D.4.8 Broken or Failed Cartridge Detection

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

D.4.9 Record Keeping Requirements

SECTION E.1 FACILITY OPERATION CONDITIONS

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to NSPS CC [326 IAC 12] [40 CFR Part 60, Subpart A]
E.1.2 Standards of Performance for Glass Manufacturing Plants [326 IAC 12] [40 CFR Part 60, Subpart CC]

SECTION E.2 FACILITY OPERATION CONDITIONS

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to NSPS IIII [326 IAC 12] [40 CFR Part 60, Subpart A]
E.2.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [326 IAC 12] [40 CFR Part 60, Subpart IIII]

SECTION E.3 FACILITY OPERATION CONDITIONS

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.3.1 General Provisions Relating to NESHAP ZZZZ [326 IAC 20-1] [40 CFR Part 60, Subpart A]
E.3.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [326 IAC 20-82] [40 CFR Part 63, Subpart ZZZZ]

Part 70 Operating Permit Certification
Part 70 Operating Permit Emergency Occurrence Report
Part 70 Operating Permit Quarterly Deviation And Compliance Monitoring Report

Attachment A Definitions to Terms Used in the Consent Decree

Attachment B 40 CFR 60, Subpart CC - Standards of Performance for Glass Manufacturing Plants

Attachment C 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Attachment D 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary glass container manufacturing plant.

Source Address:	524 East Center Street, Dunkirk, Indiana 47336
General Source Phone Number:	(765) 768-7891
SIC Code:	3221
County Location:	Jay
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD; Minor Source, Section 112 of the Clean Air Act Not in 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(14)]

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

(a) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 1, constructed in 1993, and approved in 2012 for cold rebuild, with a maximum throughput capacity of 570 tons of glass per day and a maximum heat input capacity of 84 MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and semi-dry scrubber, identified as scrubber No. 1, exhausting through stack No.3. [40 CFR 60, Subpart CC]

(b) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 2, constructed in 1998 and approved in 2011 for cold rebuild, with a maximum throughput capacity of 600 tons of glass per day and a maximum heat input capacity of 150 MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and a semi-dry scrubber, identified as Scrubber No. 1, exhausting through Stack No. 3. [40 CFR 60, Subpart CC]

(c) One (1) grinding operation, installed in 1994, located in the mold shop, controlled by a dust collector (identified as Wheelabrator), and exhausting outside.

(d) One (1) soda ash silo, identified as Silo No. 1, approved in 2011 for construction, with a maximum throughput rate of 20 tons per hour, equipped with a dust collector for particulate control, exhausting at stack No. S1. The soda ash is conveyed to a scrubber via a transport system with a maximum throughput rate of 1,100 lbs/hr.

(e) One (1) ESP dust silo, identified as Silo No. 2, approved in 2011 for construction, with a maximum throughput rate of 20 tons per hour, equipped with a dust collector for particulate control, exhausting at stack No. S2. The ESP dust is transferred from the silo via a transport system with a maximum throughput rate of 1,100 lbs/hr.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)]

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

(a) One (1) hot end treatment facility, consisting of five (5) individual treatment locations (identified as shops 11, 12, 13, 14, and 15), servicing melting furnace No. 1, constructed in 1993, and having a maximum throughput capacity of 4.0 pounds per hour and exhausting through building ventilation system. [326 IAC 6-3]

(b) One (1) hot end treatment facility, consisting of three (3) individual treatment locations (identified as shops 21, 22, and 23), servicing melting furnace No. 2, constructed in 1993, and having a maximum throughput capacity of 4.0 pounds per hour and exhausting through building ventilation system. [326 IAC 6-3]

(c) One (1) batch handling facility servicing melting furnace No. 1, constructed in 1993, with a maximum capacity of 26.04 tons of raw material per hour, venting inside the building. [326 IAC 6-3]

(d) One (1) batch handling facility servicing melting furnace No. 2, constructed in 1993, with a maximum capacity of 31.25 tons of raw material per hour, venting inside the building. [326 IAC 6-3]

(e) One (1) raw material handling process consisting of one (1) raw material storage bin, constructed in 2003, with a maximum throughput rate of 620 pounds of iron oxide per hour, controlled by one (1) dust collector, and venting inside the silo. The raw material is transferred to the storage bin using a pneumatic conveyance system. [326 IAC 6-3]

(f) One (1) mold swabbing facility consisting of five (5) individual treatment locations (identified as shops 11, 12, 13, 14, and 15), servicing melting furnace No. 1, constructed in 1993, and having a maximum combined capacity of 4.0 pounds of swabbing material per hour and exhausting through building ventilation system. [326 IAC 6-3]

(g) One (1) mold swabbing facility consisting of three (3) individual treatment locations (identified as shops 21, 22, and 23), servicing melting furnace No. 2, constructed in 1993, and having a maximum combined capacity of 4.5 pounds of swabbing material per hour and exhausting through building ventilation system. [326 IAC 6-3]

(h) One (1) sandblaster, installed in 2007, located in the mold shop, controlled by a dust collector (identified as Empire), and exhausting outside. [326 IAC 6-3]

(i) One (1) sandblaster, installed in 2006, located in the mold shop, controlled by a dust collector (identified as Econoline), and exhausting outside. [326 IAC 6-3]

(j) One (1) sandblaster, installed in 2001, located in the mold shop, controlled by a dust collector (identified as Empire), and exhausting outside. [326 IAC 6-3]

(k) Two (2) diesel-fired emergency generators, identified as GEN4 and GEN5, approved in 2011 for construction, each with a maximum rating of 750 kW. [40 CFR 60, Subpart IIII] [40 CFR 63, Subpart ZZZZ]

(l) Three (3) diesel-fired emergency generators, identified as GEN1, GEN2, and GEN3, each with a maximum rating not to exceed one thousand six hundred (1,600) horsepower (Hp). [40 CFR 63, Subpart ZZZZ]

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

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

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

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

SECTION B GENERAL CONDITIONS

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

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

B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

(a) This permit, T075-17108-00004, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date 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, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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 2-7-7] [IC 13-17-12]

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 2-7-5(5)]

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

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

(a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), 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) A "responsible official" is defined at 326 IAC 2-7-1(34).

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

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted 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

and

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

(a) 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 326 IAC 2-7-2(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

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

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

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, 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 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

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

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

(e) 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 2-7-4(c)(9) be revised in response to an emergency.

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

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

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

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

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

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

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

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

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

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

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

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

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

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T075-17108-00004 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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

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

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

(1) That this permit contains a material mistake.

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

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

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

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

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

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

(1) Submitted at least 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 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if,

subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

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

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

Indiana Department of Environmental Management
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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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

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

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

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

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

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

(3) The changes do not result in emissions which exceed the 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 2-7-20(b),(c), or (e). 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 2-7-20(b)(1), (c)(1), and (e)(2).

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

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(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 2-7-20(c).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Indiana Department of Environmental Management
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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [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 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.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

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

C.5 Fugitive Dust Emissions [326 IAC 6-4]

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

C.6 Stack Height [326 IAC 1-7]

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

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least

thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue

MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to

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

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

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

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(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 2-7-5][326 IAC 2-7-6]

C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval 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 180 days from the date on which this source commences operation.

The ERP does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

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

C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

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

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

Pursuant to 326 IAC 2-6-3(b)(2), starting in 2008 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

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

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

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

(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) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

(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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). 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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

(f) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part 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

(g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 1, constructed in 1993, and approved in 2012 for cold rebuild, with a maximum throughput capacity of 570 tons of glass per day and a maximum heat input capacity of 84 MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and semi-dry scrubber, identified as scrubber No. 1, exhausting through stack No.3. [40 CFR 60, Subpart CC]

(b) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 2, constructed in 1998 and approved in 2011 for cold rebuild, with a maximum throughput capacity of 600 tons of glass per day and a maximum heat input capacity of 150 MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and a semi-dry scrubber, identified as Scrubber No. 1, exhausting through Stack No. 3. [40 CFR 60, Subpart CC]

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

Emission Limitations and Standards

D.1.1 NOx Limit [326 IAC 2-1.1-5]

As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.) and 326 IAC 2-1.1-5 (Air Quality Requirements), for Furnace No. 1 and Furnace No. 2, the Permittee shall comply with the following:

(a) For Furnace No. 2: on and after the first Operating Day after completion of the Furnace Startup Period associated with the cold rebuild project and NOx CEMS certification, but no later than December 31, 2012, the 30-day rolling average NOx emissions from Furnace No. 2 shall not exceed 1.3 lb/ton glass produced, except during the following periods: Abnormally Low Production Rate Days, Furnace Startup, Malfunction of the Furnace, and Maintenance of the Furnace.

(b) For Furnace No. 1: on and after, the first Operating Day after completion of the Furnace Startup Period associated with the cold rebuild project and NOx CEMS Certification Event following a next major rebuild of Furnace No. 1, but no later than December 31, 2013, the 30-day rolling average NOx emissions from Furnace No. 1 shall not exceed 1.3 lb/ton glass produced, except during the following periods: Abnormally Low Production Rate Days, Furnace Startup, Malfunction of the Furnace, and Maintenance of the Furnace.

(c) For any Abnormally Low Production Rate Days, the Permittee may elect to exclude the emissions generated during that Day from the 30-day rolling average. During these days the Permittee shall comply with the following $NO_{X\ OXY\ ABN}$ limit (24-hour Block Average):

(A) For Furnace No. 1, $NO_{X\ OXY\ ABN}$ = 743 lb NOx/day; and,

(B) For Furnace No. 2, $NO_{X\ OXY\ ABN}$ = 780 lb NOx/day.

The following equation was used to determine the $NO_{X\ OXY\ ABN}$ limitations:

$NOx_{\ OXY\ ABN}$ = 1.3 (lb NOx/ton glass produced) x P/0.35

Where:

$NOx_{OXY\ ABN}$ = NOx emission limit for an Oxyfuel Furnace during an Abnormally Low Production Rate Day in pounds per day
P = Abnormally Low Production Rate (tons glass produced)
For Furnace No. 1: P = 200 (tons/day)
For Furnace No. 2: P = 210 (tons/day)

(d) Furnace Startup limitations:

(1) During the Initial Heating Phase, the input of natural gas to the respective furnace shall not exceed five million standard cubic feet (5.0 MMscf).

(2) During the Refractory Soak and Seal Phase:

(A) The input of natural gas to the respective furnace shall be no more than sixty million standard cubic feet (60 MMscf).

(B) The excess oxygen at the respective furnace exhaust flue shall remain below five percent (5.0%).

(C) The Hot Spot Temperature at the respective furnace shall not exceed 2900 degrees F.

(D) Thermal blankets or similar techniques shall be utilized at the respective furnace to minimize air filtration until expansion joints are sufficiently closed.

(3) During Furnace Stabilization Phase:

(A) The input of natural gas to the respective furnace shall be no more than ninety million standard cubic feet (90 MMscf).

(B) The excess oxygen at the respective furnace exhaust flue shall remain below five percent (5.0%).

(C) The Hot Spot Temperature at the respective furnace shall not exceed 2900 degrees F.

(e) For any Operating Day where a Malfunction of a furnace occurs for any period of time, the Permittee may elect to exclude the emissions generated during that Operating Day(s) from the 30-day rolling average for the respective furnace. During the Malfunction Days, the Permittee shall comply with the following $NO_{X\ OXY\ MALF}$ limit (24-hour Block Average):

(A) For Furnace No. 1, $NO_{X\ OXY\ MALF}$ = 2,972 lb NOx/day; and,

(B) For Furnace No. 2, $NO_{X\ OXY\ MALF}$ = 3,120 lb NOx/day.

The following equation was used to determine the $NO_{X\ OXY\ MALF}$ limitations:

$$NOx_{OXY\ MALF} = 4.0 \times NOx_{OXY\ ABN}$$

Where:

$NOx_{OXY\ MALF}$ = NOx emission limit for an Oxyfuel Furnace during a Malfunction Day, in pounds per day.

$NOx_{OXY\ ABN}$ = As defined in Condition D.1.1(c), NOx emission limit for an Oxyfuel Furnace during an Abnormally Low Production Rate Day, in pounds per day.
For Furnace No. 1: $NOx_{OXY\ ABN}$ = 743 (tons/day)
For Furnace No. 2: $NOx_{OXY\ ABN}$ = 780 (tons/day)

(f) For any Operating Day where Maintenance activities on a furnace are performed, the Permittee may elect to exclude the Maintenance Day from the 30-day rolling average for the respective furnace. During the Maintenance Day, the Permittee shall comply with the following $NOx_{OXY\ MAINT}$ limit (24-hour Block Average):

$$NOx_{OXY\ MAINT} = [MH \times (4 \times NOx_{OXY\ ABN})) / 24] + [(NH \times NOx_{OXY\ ABN}) / 24]$$

Where:

$NOx_{OXY\ MAINT}$ = NOx emission limit for an Oxyfuel Furnace during a Maintenance Day, in pounds per day.
$NOx_{OXY\ ABN}$ = As defined in Condition D.1.1(c), NOx emission limit for an Oxyfuel Furnace during an Abnormally Low Production Rate Day, in pounds per day.
For Furnace No. 1: $NOx_{OXY\ ABN}$ = 743 (tons/day)
For Furnace No. 2: $NOx_{OXY\ ABN}$ = 780 (tons/day)
MH = hours of Maintenance
NH = normal hours = 24 - MH

(g) Compliance with the 1.3 lb/ton glass produced NOx emission limit (30-day rolling average) for Furnace No. 1 and Furnace No. 2, each, may be determined by averaging the emissions from each furnace.

(h) Upon completion of the cold rebuild of the Oxyfuel glass melting furnace, identified as Furnace No. 2, but no later than December 31, 2012, the Permittee shall operate Furnace No. 2 using Oxyfuel technology and the gas that provides the oxidant for combustion of the fuel shall be composed of equal to or greater than ninety percent (90%) oxygen.

(i) Upon completion of the cold rebuild of the glass melting furnace, identified as Furnace No. 1, but no later than December 31, 2013, the Permittee shall operate Furnace No. 1 using Oxyfuel technology with propane fuel as a back up fuel and the gas that provides the oxidant for combustion of the fuel shall be composed of equal to or greater than ninety percent (90%) oxygen.

D.1.2 SO_2 and Sulfuric Acid Mist (H_2SO_4) Limit [326 IAC 2-1.1-5]

As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.) and 326 IAC 2-1.1-5 (Air Quality Requirements), for Furnace No. 1 and Furnace No. 2, the Permittee shall comply with the following:

(a) Upon completion of the cold rebuild project associated with Furnace No. 2, but no later than December 31, 2012, all stack gases from Furnace No. 2 shall be captured and controlled by a semi-dry scrubber (Scrubber No. 1) except during periods of Control Device Startup, up to the first seven (7) days of the Furnace Startup, and during Malfunction of the emission control system (Scrubber No. 1 and ESP No. 1), and Maintenance on the emission control system (Scrubber No. 1 and ESP No. 1).

(b) After the cold rebuild project associated with Furnace No. 1, but no later than December 31, 2012, all stack gases from Furnace No. 1 shall be captured and controlled by a semi-

dry scrubber (Scrubber No. 1), except during periods of Control Device Startup, up to the first seven (7) days of the Furnace Startup, and during Malfunction of the emission control system (Scrubber No. 1 and ESP No. 1), and Maintenance on the emission control system (Scrubber No. 1 and ESP No. 1).

(c) On and after the first Operating Day after completion of the Control Device Startup and CEMS Certification, but no later than December 31, 2012, Furnace No. 1 and Furnace No. 2 shall comply with the following requirements, except during periods of Control Device Startup, Furnace Startup, Malfunction of the emission control system (Scrubber No. 1 and ESP No. 1), and Maintenance on the emission control system (Scrubber No. 1 and ESP No. 1).

(1) No dilution air will be intentionally added to the stack gases between the Scrubber System (Scrubber No. 1) and the SO_2 CEMS. When determining compliance with all Scrubber System (Scrubber No. 1) limits, there shall be no oxygen correction, as per vendor guarantee.

(2) The Permittee shall determine a daily SO_2 Inlet 24-hour Block Average. The SO_2 30-day rolling average compliance limit for each Operating Day will depend on the daily SO_2 Inlet 24-hour Block Average and will either be as defined in Condition D.1.2(c)(3) or Condition D.1.2(c)(4), but not both.

(3) If the average daily SO_2 Inlet calculated in Condition D.1.2(c)(2) is equal to or greater than 300 parts per million by volume dry (ppmvd) then the SO_2 Removal Efficiency on a 24-hour Block Average for that Day and a SO_2 Removal Efficiency 30-day Rolling Average shall be calculated. The Permittee shall operate the Semi-dry Scrubber (Scrubber No. 1) such that the SO_2 Removal Efficiency 30-day Rolling Average is greater than or equal to 85 percent.

(4) If the average daily SO_2 Inlet calculated in Condition D.1.2(c)(2) is less than 300 ppmvd, then the Scrubber (Scrubber No. 1) SO_2 Outlet 24-hour Block Average concentration for that Day and Scrubber SO_2 Outlet 30-day Rolling Average shall be calculated. The Permittee shall operate the Semi-dry Scrubber such that the Scrubber SO_2 Outlet 30-day Rolling Average is less than or equal to 45 ppmvd.

(d) During Control Device Startup or up to the first seven (7) Days of Furnace Startup, the Permittee shall comply with the following.

(1) During the startup period, the amount of sulfur added to the batch materials shall not exceed 2.6 pounds per ton of total batch material (including cullet) or less.

(2) During no more than the first seven (7) Days of Furnace Startup, the Furnace exhaust may bypass the Scrubber System (Scrubber No. 1) to avoid having the operating inlet temperature of the Scrubber System fall below its operational range.

(3) During these bypass Days, as specified in Condition D.1.2(d)(2), the furnace shall burn no more than 15.0 million standard cubic feet (MMscf) of natural gas.

(e) For any Operating Day where a Malfunction of the Scrubber System (Scrubber No. 1) or ESP (ESP No. 1) occurs for any period of time, the Permittee may elect to exclude the emissions generated during that Operating Day (or Operating Days if the event covers more than one Operating Day) from the SO_2 Removal Efficiency 30-day Rolling Average and Scrubber SO_2 Outlet 30-day Rolling Average emission rates. During the Malfunction Days excluded from the SO_2 Removal Efficiency 30-day Rolling Average and Scrubber

SO_2 Outlet 30-day Rolling Average emission rates, the SO_2 emissions (as a 24-hour Block Average) shall be limited as follows:

(A) For the combined emissions of Furnace No. 1, and Furnace No. 2 from stack No. 3, $SO_{2\ SCRUB\ MALF}$ = 2,929 lb SO_2/day;

The following equation was used to determine the $SO_{2\ SCRUB\ MALF}$ limitations:

$SO_{2\ SCRUB\ MALF}$ = 2.5 lb SO_2/ton glass x (P/0.35)

Where:

$SO_{2\ SCRUB\ MALF}$ = SO_2 emission limit for a Furnace with a Semi-dry Scrubber (Scrubber No. 1) during a Malfunction Day, in pounds per day.
P = Sum of the Abnormally Low Production Rates (tons glass produced)
For Furnace No. 1: P = 200 (tons/day)
For Furnace No. 2: P = 210 (tons/day)

The individual Malfunction limits are:

1,429 lbs/day for Furnace 1
1,500 lbs/day for Furnace 2

The individual limit applies if one of the furnaces is not operating.

(f) For any Operating Day where Maintenance activities on the Scrubber System (Scrubber No. 1) or ESP (ESP No. 1) are performed, the Permittee may elect to exclude the Maintenance Day from the SO_2 Removal Efficiency 30-day Rolling Average and Scrubber SO_2 Outlet 30-day Rolling Average emission rates. For any Day which is excluded from the SO_2 30-day Rolling Average, the SO_2 emissions (as a 24-hour Block Average) shall be limited as follows:

$SO_{2\ SCRUB\ MAINT}$ = [[MH x (2.5 lb SO_2/ton glass x (P/0.35))] / 24] +
[[NH x ((1/3) x 2.5 lb SO_2/ton glass x (P/0.35))] / 24]

Where:

$SO_{2\ SCRUB\ MAINT}$ = SO_2 emission limit for a Furnace with a Semi-Dry Scrubber during a Maintenance Day, in pounds per day.
P = Sum of the Abnormally Low Production Rates (tons glass produced)
For Furnace No. 1: P = 200 tons per day
For Furnace No. 2: P = 210 tons per day
MH = Hours of Maintenance
NH = Normal Hours = 24 – MH

(g) The emissions of Sulfuric Acid Mist (H_2SO_4) from Furnace No. 1 and Furnace No. 2 shall, each, not exceed 1.0 pound per ton of glass produced.

(h) When both Furnace No. 1 and Furnace No. 2 are subject to the same emission limit, compliance with the 30-day rolling average limits set forth in Condition D.1.2 may be determined by averaging the emissions from both furnaces subject to the same emission limit.

D.1.3 PM (Filterable) and Total PM Limit [326 IAC 2-1.1-5]

As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.) and 326 IAC 2-1.1-5 (Air Quality Requirements), for Furnace No. 1 and Furnace No. 2, the Permittee shall comply with the following:

(a) For Furnace No. 2: on and after the first seven (7) Operating Day(s) of the Furnace Startup following the completion of the cold rebuild project, but no later than December 31, 2012, all stack gases from Furnace No. 2 shall be captured and controlled by an electrostatic precipitator (ESP No. 1), except during periods of Control Device Startup, up to the first seven (7) Days of the Furnace Startup, and during Malfunction of the electrostatic precipitator (ESP No. 1), and Maintenance on the electrostatic precipitator (ESP No. 1).

(b) For Furnace No. 1: on and after the first seven (7) Operating Day(s) of the Furnace Startup following the completion of the cold rebuild project, but no later than December 31, 2012, all stack gases from Furnace No. 1 shall be captured and controlled by an electrostatic precipitator (ESP No. 1), except during periods of Control Device Startup, up to the first seven (7) Days of the Furnace Startup, and during Malfunction of the electrostatic precipitator (ESP No. 1), and Maintenance on the electrostatic precipitator (ESP No. 1).

(c) The emissions from Furnace No. 1 and Furnace No. 2 shall, each, not exceed 0.2 pound of filterable PM per ton of glass produced and 0.45 pound of total PM per ton of glass produced, once the emissions from the respective furnace are controlled by an electrostatic precipitator (ESP No. 1).

(d) When both Furnace No. 1 and Furnace No. 2 are routed to the same stack and subject to the same emission limits, compliance with the limits on each Furnace set forth in Condition D.1.3 shall be determined using the following equation:

$$PM_{EMISSION\ RATE}\ (lb/ton\ glass) = [(Lbs\ of\ PM\ from\ ST) / (Daily\ production)] \times [(24\ hrs) / (Source\ test\ length)]$$

Where:

$PM_{EMISSION\ RATE}$ (lb/ton glass) = PM Emissions rate (lb PM/ton glass)

Lbs of PM from ST = The pounds of PM measured during the entire length of the source test (including all runs).

Daily production = The amount of glass produced on all Furnaces during the Day of the source test in tons.

Source test length = Length of the entire source test (including all runs), in hours.

If the resulting number is below the limit set forth on each Furnace individually, then both furnaces are in compliance.

If the resulting number is above the limits set forth on each Furnace individually, then both furnaces are in noncompliance.

D.1.4 Particulate [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from the two (2) Oxyfuel glass melting furnaces (identified as Furnace No. 1 and 2) using Propane as a back-up fuel, shall not exceed 39.8 and 40.3 pounds per hour when operating at a process weight rate of 59,375 and 62,500 pounds per hour, respectively.

The pounds per hour limitations were calculated with the following equation:

(a) Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$

where

E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

(b) Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and the associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

D.1.6 Maintenance

As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), the Permittee shall comply with the following Maintenance requirements.

(a) Maintenance Days that SGCI elects to exclude from the Emission Rate 30-day Rolling Average shall not include more than 96 hours of Maintenance annually for Furnace #1 and #2 each. Maintenance shall mean activities necessary to keep the system or equipment working in its normal operating condition, including checker burning and raking.

(1) After the cold rebuild project associated with Furnace No. 1, but no later than December 31, 2012, ESP No. 1 and Scrubber No. 1 shall be in operation and controlling emissions from Furnace No. 1 at all times when scheduled or preventive furnace Maintenance is conducted.

(2) Upon completion of the cold rebuild project associated with Furnace No. 2, but no later than December 31, 2012, ESP No. 1 and Scrubber No. 1 shall be in operation and controlling emissions from Furnace No. 2 at all times when scheduled or preventive furnace Maintenance is conducted.

(b) Scheduled or preventative Maintenance of the emission control system shall occur when the Furnace No. 1 and Furnace No. 2 are not in operation. However, for any Calendar Year which is a Continuous Operating Year, scheduled or preventative Maintenance may be conducted while the one (1) or both of the furnaces are in operation. During these Continuous Operating Year, Maintenance lasting greater than twenty-four (24) consecutive hours, shall occur only during Abnormally Low Production Rate Days. Control system Maintenance must be done in compliance with the following:

(1) Bypass of ESP No. 1 shall not exceed one-hundred forty-four (144) hours annually in any Calendar Year. Furthermore if ESP No. 1 is bypassed, Scrubber No. 1 must be bypassed as well.

(2) Bypass of Scrubber No. 1 shall not exceed one-hundred forty-four (144) hours annually in any Calendar Year. Bypass of Scrubber No. 1 required by the bypass of ESP No. 1 shall be included in the one-hundred forty-four (144) hours.

Compliance Determination Requirements

D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), the Permittee shall comply with the following stack test requirements:

(1) On or before December 31, 2011, in order to demonstrate compliance with Condition D1.2(g), the Permittee shall perform Sulfuric Acid Mist (H_2SO_4) testing of the stack exhausts of Furnace No. 1 and Furnace No. 2. The stack test(s) shall be performed using Conditional Test Method 13A or B. After the initial valid compliance demonstration, this testing shall be performed at least once during the life of each Title V permit renewal combusting oxy-fuel.

(2) No later than December 31, 2013, in order to demonstrate compliance with Condition D.1.3, the Permittee shall perform PM testing on the stack exhaust of Furnace No. 1 and Furnace No. 2. Testing shall be conducted at least once every Calendar Year thereafter.

(A) Filterable PM shall be determined using EPA Method 5 (40 CFR Part 60 Appendix A).

(B) Total PM shall be determined using Method 5 (40 CFR Part 60 Appendix A) and EPA Method 202 (40 CFR Part 51 Appendix M).

(b) If the Permittee elects to perform PM testing on the stack exhaust of Furnace No. 1 and Furnace No. 2 (stack No. 3), in order to demonstrate compliance with Condition D.1.3, with only one furnace operational and less than the full number of T-R sets in service, the following shall apply:

(1) Filterable PM shall be determined using EPA Method 5 (40 CFR Part 60 Appendix A).

(2) Total PM shall be determined using Method 5 (40 CFR Part 60 Appendix A) and EPA Method 202 (40 CFR Part 51 Appendix M).

(3) Results of a valid compliance test will expire thirty (30) consecutive months upon completion of the test.

(4) The first compliance test shall be performed on Furnace No. 2. Subsequent testing shall be conducted on the furnace not previously tested.

Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.1.8 Definition of Terminology

As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), the definitions, included as Attachment A to this permit, shall apply to the following terms when used throughout Conditions D.1.1, D.1.2, D.1.3, D.1.6, D.1.7, D.1.9 (a) through (e), D.1.10(a), D.1.11, D.1.12, and D.1.16 of this permit.

(a) "24-hour Block Average"
(b) "Affected State(s)"
(c) "Abnormally Low Production Rate"
(d) "Abnormally Low Production Rate Day"
(e) "Calendar Year"
(f) "CEMS"
(g) "CEMS Certification"
(h) "CEMS Certification Event"
(i) "Color Transition"
(j) "COMS"
(k) "Continuous Operating Year"
(l) "Control Device Startup"
(m) "Day"
(n) "Emission Rate 30-day Rolling Average"
(o) "First Control Device Startup"
(p) "Furnace"
(q) "Furnace Startup"
    (i) "Initial Heating Phase"
    (ii) "Refractory Soak and Seal Phase"
    (iii) "Furnace Stabilization Phase"
(r) "Hot Spot Temperature"
(s) "Inlet"
(t) "Maintenance"
(u) "Major Rebuild"
(v) "Malfunction"
(w) "Month"
(x) "NOx"
(y) "Operate", "Operation", "Operating", and "Operated"
(z) "Operating Day"
(aa) "Outlet"
(bb) "Outlet 30-day Rolling Average"
(cc) "Oxyfuel Furnace"
(dd) "Particulate Matter" and "PM"
(ee) "Removal Efficiency"
(ff) "Removal Efficiency 30-day Rolling Average"
(gg) "Scrubber System"
(hh) "SO_2"
(ii) "Ton" or "tons"
(jj) "TSP" 6.13

D.1.9 Continuous Emissions Monitoring Systems (CEMS) [326 IAC 3-5]

(a) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), upon completion of the cold rebuild of Furnace No. 2, but no later than December 31, 2012, the Permittee shall comply with the following:

    (1) A continuous emission monitoring system (CEMS) for NOx shall be installed, calibrated, maintained, and operated for measuring Furnace No. 2 NOx emissions at stack No. 2 for the purpose of demonstrating compliance with the NOx limitations of Condition D.1.1.

    The NOx CEMS shall monitor continuously and record the hourly NOx emission concentration (parts per million) during each Operating Day from Furnace No. 2. The CEMS shall calculate and record in units of parts per million of NOx emitted.

(2) A continuous emission monitoring systems (CEMS) for SO_2 shall be installed, calibrated, maintained and operated for measuring SO_2 emissions at the inlet and the outlet of the emission control system (consisting of ESP No. 1 and Scrubber No. 1) for measuring Furnace No. 2 SO_2 emissions at stack No. 3 for the purpose of demonstrating compliance with the SO_2 limitations of Condition D.1.2.

The SO_2 CEMS shall monitor continuously and record the hourly SO_2 emission concentration (parts per million) during each Operating Day from Furnace No. 2. The CEMS shall calculate and record in units of parts per million of SO_2 emitted.

(b) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), after the cold rebuild of Furnace No. 1, but no later than December 31, 2012, the Permittee shall comply with the following:

(1) A continuous emission monitoring system (CEMS) for NOx shall be installed, calibrated, maintained, and operated for measuring Furnace No. 1 NOx emissions at stack No. 1 for the purpose of demonstrating compliance with the NOx limitations of Condition D.1.1.

The NOx CEMS shall monitor continuously and record the hourly NOx emission concentration (parts per million) during each Operating Day from Furnace No. 1. The CEMS shall calculate and record in units of parts per million of NOx emitted.

(2) The continuous emission monitoring systems (CEMS) for SO_2 installed, calibrated, maintained, and operated at the inlet and outlet of the emission control system, as required by Condition D.1.9(a)(2), shall monitor continuously and record the hourly SO_2 emission concentration (parts per million) during each Operating Day from Furnace No. 1 and Furnace No. 2. The CEMS shall calculate and record in units of parts per million of SO_2 emitted.

(c) 40 CFR Part 60 Appendix B (Performance Specification 2) and 40 CFR Part 60 Appendix F (Quality Assurance Procedures).

(d) During periods of CEMS Certification Events, the requirement to demonstrate compliance continuously as required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.) will be suspended until the Certification is completed (provided the seven-day test required for Certification is commenced the first Operating Day following the conclusion of the CEMS Certification Event).

(e) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), where CEMS is required to determine an emission rate (pound per ton or ton per year), the Permittee shall install, calibrate, certify, maintain, and operate NOx and SO_2 Continuous Emission Rate Monitoring System (CERMS) as follows:

(1) The CERMS shall be installed, calibrated, certified, maintained, and operated in accordance with 40 CFR 60.13, 40 CFR Part 60 Appendix B (Performance Specification 6), and 40 CFR Part 60 Appendix F (Quality Assurance Procedures);

(2) SGCI must comply with all monitoring, record keeping and reporting requirements in 40 CFR 60.13 and 40 CFR Part 60 Appendix B (Performance Specification 6); and

(3) In conjunction with the flow rate monitoring device, the data acquisition and handling system for the CEMS shall convert the ppm values into pound per hour values where the limit is expressed in pounds of pollutant per ton of glass produced. At the end of each Operating Day, the data acquisition and handling system shall divide the total daily emissions in pounds per day for valid CEMS hourly data by the total tons of glass produced during the Operating Day (reduced proportionally based on the valid CEMS data hours) to describe the pound per ton emission rate for the Operating Day. This number shall be recorded in units of pounds of pollutant per ton of glass produced for the applicable Day.

(f) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.

D.1.10 Continuous Opacity Monitoring Systems (COMS) [326 IAC 3-5]

(a) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), the following shall apply:

(1) Until commencement of the cold rebuild of Furnace No. 2, the Permittee shall install, calibrate, certify, maintain, and operate a continuous opacity monitoring system (COMS) at stack No. 2. The Stack 2 COMS will be permanently removed during the cold rebuild.

(2) Upon completion of the cold rebuild of the Furnace No. 2, the Permittee shall install, calibrate, certify, maintain, and operate a continuous opacity monitoring system (COMS) at stack No. 3.

(3) Until Furnace No. 1 exhaust is routed to the emission control system (Scrubber No. 1 and ESP No. 1), the Permittee shall install, calibrate, certify, maintain, and operate a continuous opacity monitoring system (COMS) at stack No. 1. The Stack 1 COMS will be permanently removed after the Furnace No. 1 exhaust is routed to the emission control system (Scrubber No. 1 and ESP No. 1). Upon routing the Furnace 1 exhaust to the emission control system, the Permittee shall use the continuous opacity monitoring system (COMS) at stack No. 3.

(4) Each COMS shall be operated continuously during each associated furnace(s) Operating Day in accordance with Performance Specification 1 of 40 CFR Part 60 Appendix B; and in compliance with all monitoring, record keeping and reporting requirements in 40 CFR 60.13 and 40 CFR Part 60 Appendix B (Performance Specification 1).

(b) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.

D.1.11 Furnace Exhaust Flue Excess Oxygen

As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), and in order to determine the compliance status with Condition D.1.1(d)(2)(B) and D.1.1(d)(3)(B), the Permittee shall record the excess oxygen at the furnace exhaust flue, once per shift, during a Furnace Startup - Refractory Soak and Seal Phase and a Furnace Startup - Furnace Stabilization Phase. The measurement shall be taken with a handheld monitor.

When for any one (1) reading, the excess oxygen is above five percent (5.0%), the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition.

The handheld instrument used for determining the excess oxygen shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

For Furnace No. 1: the Permittee shall comply with this condition upon completion of the cold rebuild project, but no later than December 31, 2013.

For Furnace No. 2: the Permittee shall comply with this condition upon completion of the cold rebuild project, but no later than December 31, 2012.
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D.1.12 Furnace Hot Spot Temperature

As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), and in order to determine the compliance status with Condition D.1.1(d)(2)(C) and D.1.1(d)(3)(C), the Permittee shall record the furnace Hot Spot Temperature, once per shift, during a Furnace Startup - Refractory Soak and Seal Phase and a Furnace Startup - Furnace Stabilization Phase.

When for any one (1) reading, the Hot Spot Temperature is above 2,900 ^{0}F, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition.

The handheld instrument used for determining the temperature shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

For Furnace No. 1: the Permittee shall comply with this condition upon completion of the cold rebuild project, but no later than December 31, 2013.

For Furnace No. 2: the Permittee shall comply with this condition upon completion of the cold rebuild project, but no later than December 31, 2012.

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

D.1.13 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR Part 64]

(a) The ability of ESP No. 1 to control particulate emissions shall be monitored once per day, when the electrostatic precipitator is required to be in operation in accordance with Condition D.1.3 - Particulate Matter (PM) Limit, by measuring and recording the secondary kV (Kilovolt) of each of the T-R sets.

(b) When for any reading the secondary kV (Kilovolt) of a set falls below ninety percent (90%) of the normal value of 13.3 kV, or a value established during the latest stack test, the Permittee shall take reasonable response steps. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is below the above mentioned value is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instrument used for determining the total power shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.1.14 Maintenance of Continuous Opacity Monitoring Equipment and COMS Downtime [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(b) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.

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

(2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.

(3) Method 9 readings may be discontinued once a COMS is online.

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

(c) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60, Subpart CC

D.1.15 Maintenance of Continuous Emissions Monitoring Equipment and NOx and SO_2 CEMS Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

(a) In the event that a breakdown of a CEMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(b) Whenever a NOx continuous emission monitoring system (CEMS) is malfunctioning or down for repairs or adjustments for less than twenty-four (24) hours, the Permittee shall substitute an average of the quality-assured data from the hour immediately before and the hour immediately after the missing data period for each hour of missing data.

(c) Whenever a SO_2 continuous emission monitoring system (CEMS) is malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO_2 emissions:

(1) If the CEMS is down for less than twenty-four (24) hours, the Permittee shall substitute an average of the quality-assured data from the hour immediately before and the hour immediately after the missing data period for each hour of missing data.

(2) If the CEMS is down for twenty-four (24) hours or more, the Permittee shall monitor and record the slurry recirculation pH and sorbent injection rate, to demonstrate that the operation of the semi-dry scrubber (Scrubber No. 1) continues in a manner typical for the glass produced and sulfur added to the batch materials.

Scrubber No. 1 parametric readings shall be recorded at least twice per day, with at least four (4) hours between each set of readings, until the primary CEMS or backup CEMS is brought online.

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

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

D.1.16 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.1 - NOx Limit, the Permittee shall maintain records in accordance with (1) through (3) below, Records shall be complete and sufficient to determine compliance with the NOx limitations established in Condition D.1.1 (a), (b), (c), (e), and (f).

(1) Data and results from the most recent performance specifications tests, pursuant to 326 IAC 3-5-3.

(2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5.

(3) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), for any Operating Day that NOx emissions are excluded from the NOx Emission Rate 30-day rolling average, the Permittee shall maintain the following records.

(A) The date of the exclusion.
(B) The exception (Abnormally Low Production Rate Day, Furnace Startup, Furnace Malfunction, or Maintenance) under which it is excluded.
(C) For any Operating Day excluded for Maintenance, the total number of hours during which the Maintenance occurred.
(D) A calculation of the applicable limit in pounds per day.
(E) The recorded emissions according to the CEMS in pounds per day.

(b) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), to document the compliance status with Condition D.1.1 - NOx Limit, the Permittee shall maintain records in accordance with (1) through (5) below, Records shall be complete and sufficient to determine compliance with the NOx limitations established in Condition D.1.1(d)(1), D.1.1(d)(2)(A), and D.1.1(d)(3)(A).

(1) Natural gas usage in million standard cubic feet (MMscf) during a Furnace Startup - Initial Heating Phase.

(2) Natural gas usage in million standard cubic feet (MMscf) during a Furnace Startup - Refractory Soak and Seal Phase.

(3) Natural gas usage in million standard cubic feet (MMscf) during a Furnace Startup - Furnace Stabilization Phase.

(4) The date of the qualifying event.

(5) The qualifying event (Furnace Startup - Initial Heating Phase, Furnace Startup - Refractory Soak and Seal Phase, or Furnace Startup - Furnace Stabilization Phase) under which the record is being kept.

(c) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), to document the compliance status with Condition D.1.1(d)(2)(D), the Permittee shall maintain a certified statement asserting whether thermal blankets of similar techniques were used during a Furnace Startup - Refractory Soak and Seal Phase. A certified statement shall be maintained for each a Furnace Startup - Refractory Soak and Seal Phase. The certifications shall meet the requirements of 326 IAC 2-7-6(1) and by signed by a "responsible official" as defined by 326 IAC 2-7-1(34).

(d) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), to document the compliance status with Condition D.1.1(d)(2)(B), D.1.1(d)(3)(B), and D.1.11 , the Permittee shall maintain once per shift records of the excess oxygen readings, required during a Furnace Startup - Refractory Soak and Seal Phase and a Furnace Startup - Furnace Stabilization Phase. The Permittee shall include in its daily record when an excess oxygen reading is not taken and the reason for the lack of an excess oxygen reading.

(e) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), to document the compliance status with Condition D.1.1(d)(2)(C), D.1.1(d)(3)(C), and D.1.12 , the Permittee shall maintain once per shift records of the Hot Spot Temperature readings, required during a Furnace Startup - Refractory Soak and Seal Phase and a Furnace Startup - Furnace Stabilization Phase. The Permittee shall include in its daily record when a Hot Spot Temperature reading is not taken and the reason for the lack of a Hot Spot Temperature reading.

(f) To document the compliance status with Condition D.1.2 - SO_2 Limit, the Permittee shall maintain records in accordance with (1) through (4) below, Records shall be complete and sufficient to determine compliance with the SO_2 limitations established in D.1.2 (c), (e), and (f).

(1) Data and results from the most recent performance specifications tests, pursuant to 326 IAC 3-5-3.

(2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5.

(3) Records of all parametric readings taken during any periods of SO_2 CEMS downtime. Condition D.1.15 contains the readings required by this condition.

(4) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), for any Operating Day that SO_2 emissions are excluded from the SO_2 Emission Rate 30-day rolling average, the Permittee shall maintain the following records.

(A) The date of the exclusion.
(B) The exception (Control Device Startup, Furnace Startup, Control Device Malfunction, or Control Device Maintenance) under which it is excluded.
(C) For any Operating Day excluded for Maintenance, the total number of hours during which the Maintenance occurred.
(D) A calculation of the applicable limit in pounds per day.
(E) The recorded emissions according to the CEMS in pounds per day.

(g) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), to document the compliance status with Condition D.1.2(d)(1) and D.1.2(d)(2), during Control Device

Startup or up the first seven (7) days of Furnace Startup, the Permittee shall maintain records in accordance with (1) through (3) below. The records shall be complete and sufficient to determine compliance with Condition D.1.2(d)(1) and D.1.2(d)(2).

(1) The amount of sulfur added to the batch materials in pounds per ton of total batch material (including cullet).

(2) The date of the qualifying event.

(3) The qualifying event (Control Device Startup or up to the first seven (7) days of a Furnace Startup) under which the record is being kept.

(h) To document the compliance status with Condition D.1.2(d)(3), during Control Device Startup or up the first seven (7) days of Furnace Startup, the Permittee shall maintain records of the amount of natural gas combusted (MMscf) in the furnace on days when the furnace exhaust is bypassing the Scrubber System (Scrubber No. 1).

(i) To document the compliance status with Condition D.1.3 - PM (Filterable) and Total PM Limit, the Permittee shall maintain records in accordance with (1) through (4) below, Records shall be complete and sufficient to determine compliance with the PM limitations established in D.1.3 (c) and (d).

(1) When only one furnace is operational, the number of T-R sets in service.

(2) Pounds of PM measured from the entire length of the most recent valid compliance test as required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.) and the length of the test (including all runs).

(3) A calculation of the daily $PM_{EMISSION\ RATE}$ in pounds per ton glass.

(4) If the Permittee elects to perform PM testing on stack No. 3 with only one furnace running and less than the full number of T-R sets in service, in accordance with Condition D.1.7(b), the pounds of PM measured from the entire length of the most recent valid compliance test, the length of the test (including all runs), and the date the test was conducted.

(j) To document the compliance status with Condition D.1.6 - Maintenance, the Permittee shall maintain records in accordance with (1) through (3) below, Records shall be complete and sufficient to determine compliance with the PM limitations established in D.1.6.

(1) Annual hours of scheduled or preventive maintenance for each Furnace.

(2) Number of hours, per Calendar year, ESP No. 1 is bypassed during control system maintenance.

(3) Number of hours, per Calendar year, Scrubber No. 1 is bypassed during control system maintenance.

(k) To document the compliance status with Condition D.1.13, the Permittee shall maintain daily records of the secondary kV (Kilovolt) for each of the T-R sets. The Permittee shall include in its daily record when a recording is not taken and the reason for the lack of a recording, (i.e., the process did not operate that day).

(l) To document the compliance status with Condition D.1.14, the Permittee shall maintain the following records:

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

(2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5.

(3) The results of Method 9 visible emission readings taken during periods of COM downtime.

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

Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.1.17 Reporting Requirements

(a) A quarterly report and a quarterly summary of the information to document the compliance status with Condition D.1.1 (a), (b), (c), (d)(1), (d)(2)(A), (d)(3)(A), (e), and (f) - NOx Limit shall be submitted not later than thirty (30) days after the end of the quarter being reported.

(b) A quarterly report and a quarterly summary of the information to document the compliance status with Condition D.1.2 (c), (d), (e), and (f) - SO_2 Limit shall be submitted not later than thirty (30) days after the end of the quarter being reported.

(c) An annual report and an annual summary of the information to document the compliance status with Condition D.1.6 - Maintenance shall be submitted not later than March 1st of the subsequent calendar of the calendar year being reported.

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

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

(e) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), performance standards, emissions limits, and other quantitative standards as required by the Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. The Permittee shall report data to the number of significant digits in which the standard or limit is expressed.

(f) Section C – General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(a) One (1) hot end treatment facility, consisting of five (5) individual treatment locations (identified as shops 11, 12, 13, 14, and 15), servicing melting furnace No. 1, and having a maximum throughput capacity of 4.0 pounds per hour and exhausting through building ventilation system.

(b) One (1) hot end treatment facility consisting of three (3) individual treatment locations (identified as shops 21, 22, and 23), servicing melting furnace No. 2, and having a maximum throughput capacity of 4.0 pounds per hour and exhausting through building ventilation system.

(c) One (1) mold swabbing facility consisting of five (5) individual treatment locations (identified as shops 11, 12, 13, 14, and 15), servicing melting furnace No. 1, and having a maximum combined capacity of 4.0 pounds of swabbing material per hour and exhausting through building ventilation system.

(d) One (1) mold swabbing facility consisting of three (3) individual treatment locations (identified as shops 21, 22, and 23), servicing melting furnace No. 2, and having a maximum combined capacity of 4.5 pounds of swabbing material per hour and exhausting through building ventilation system.

(e) One (1) sandblaster, installed in 2007, located in the mold shop, controlled by a dust collector (identified as Empire), and exhausting outside.

(f) One (1) sandblaster, installed in 2006, located in the mold shop, controlled by a dust collector (identified as Econoline), and exhausting outside.

(g) One (1) sandblaster, installed in 2001, located in the mold shop, controlled by a dust collector (identified as Empire), and exhausting outside.

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

Emission Limitations and Standards

D.2.1 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from each of the two (2) mold swabbing facilities and two (2) hot end treatment facilities shall not exceed 0.551 pounds per hour, when operating at a process weight rate of less than 100 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2, the particulate matter emissions from the three (3) sandblasters shall not exceed 1.39 pounds per hour each when operating at a process weight rate of 0.20 tons per hour each. The pound per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(c) One (1) batch handling facility servicing melting furnace No. 1, constructed in 1993, with a maximum capacity of 29.69 tons of raw material per hour, venting inside the building.

(d) One (1) batch handling facility servicing melting furnace No. 2, constructed in 1993, with a maximum capacity of 31.25 tons of raw material per hour, venting inside the building.

(e) One (1) raw material handling process consisting of one (1) raw material storage bin, constructed in 2003, with a maximum throughput rate of 620 pounds of iron oxide per hour, controlled by one (1) dust collector, and venting inside the silo. The raw material is transferred to the storage bin using a pneumatic conveyance system.

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

Emission Limitations and Standards

D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the two (2) batching handling facilities and one (1) raw storage bin shall not exceed the exceed the particulate emission limit as shown in the table below.

Emission Units	Process Weight (lbs/hour)	Process Weight (tons/hour)	Particulate Emission Limit (lbs/hour)
Batch handling facility servicing furnace No. 1	59,375	29.69	39.8
Batch handling facility servicing furnace No. 2	62,500	31.25	40.3
Raw material handling used in conjunction with raw material storage bin	620	0.31	1.87

The pounds per hour limitation was calculated with the following equation:

(a) Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour, and P = process weight rate in tons per hour.

(b) Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and one (1) dust collector controlling the raw storage bin. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.3.3 Visible Emissions Notations

(a) Visible emission notations of the two (2) batch handling facilities (servicing furnace No. 1 and 2) stack exhaust shall be performed once per week during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

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

(e) 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. An abnormal reading is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.3.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.3, the Permittee shall maintain weekly records of visible emission notations of the two (2) batch handling facilities (servicing furnace No. 1 and 2) stack exhaust. The Permittee shall include in its weekly record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day, or was not venting to atmosphere).

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

SECTION D.4 FACILITY OPERATION CONDITIONS

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

(c) One (1) grinding operation, installed in 1994, located in the mold shop, controlled by a dust collector (identified as Wheelabrator), and exhausting outside.

(d) One (1) soda ash silo, identified as Silo No. 1, approved in 2011 for construction, with a maximum throughput rate of 20 tons per hour, equipped with a dust collector for particulate control, exhausting at stack No. S1. The soda ash is conveyed to a scrubber via a transport system with a maximum throughput rate of 1,100 lbs/hr.

(e) One (1) ESP dust silo, identified as Silo No. 2, approved in 2011 for construction, with a maximum throughput rate of 20 tons per hour, equipped with a dust collector for particulate control, exhausting at stack No. S2. The ESP dust is transferred from the silo via a transport system with a maximum throughput rate of 1,100 lbs/hr.

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

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

D.4.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM_{10} [326 IAC 2-2]

The source shall comply with the following limits:

Process/Emission Units	Year of Construction	PM (lbs/hour)	PM10 (lbs/hour)
Grinding Operation	1994	5.70	3.42

Compliance with the above limits shall limit the potential to emit of PM and PM_{10} from the grinding operation to less than 25 and 15 tons per year, respectively, and will render the provisions of 326 IAC 2-2 (PSD) not applicable to the 1994 modification.

D.4.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the soda ash silo (Silo No. 1) and the ESP dust silo (Silo No. 2) shall not exceed the particulate emission limit as shown in the table below.

Emission Units	Process Weight (lbs/hour)	Process Weight (tons/hour)	Particulate Emission Limit (lbs/hour)
Soda ash silo	40,000	20.0	30.51
ESP dust silo	40,000	20.0	30.51

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and P = process weight rate in tons per hour.

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

A Preventive Maintenance Plan is required for these facilities and the associated control devices. 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.4.4 Particulate Control

(a) In order to comply with Condition D.4.1(a), the dust collectors for particulate control shall be in operation and control emissions from the mold shop machine operations at all times that the mold shop machine facilities are in operation.

(b) In the event that control failure is observed, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

No later than 180 days of the issuance of Part 70 permit (T075-17108-00004), in order to demonstrate compliance with Condition D.4.1, the Permittee shall perform PM and PM_{10} testing for the grinding operation utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.4.6 Visible Emissions Notations

(a) Daily visible emission notations of the Wheelabrator dust collector's exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

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

(e) 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. An abnormal reading is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.4.7 Parametric Monitoring

The Permittee shall record the pressure drop across the dust collectors used in conjunction with the mold shop machine operations, at least once per day when the mold shop machine

operations is in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.4.8 Broken or Failed Cartridge Detection

(a) For dust collectors controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For dust collectors controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Failure can be indicated by a significant drop in pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.4.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.6, the Permittee shall maintain daily records of the visible emission notations of the mold shop machine facilities dust collectors' exhausts. 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, (i.e. the process did not operate that day).

(b) To document the compliance status with Condition D.4.8, the Permittee shall maintain daily records of the pressure drop. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).

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

SECTION E.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 1, constructed in 1993, and approved in 2012 for cold rebuild, with a maximum throughput capacity of 570 tons of glass per day and a maximum heat input capacity of 84 MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and semi-dry scrubber, identified as scrubber No. 1, exhausting through stack No.3. [40 CFR 60, Subpart CC]

(b) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 2, constructed in 1998 and approved in 2011 for cold rebuild, with a maximum throughput capacity of 600 tons of glass per day and a maximum heat input capacity of 150 MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and a semi-dry scrubber, identified as Scrubber No. 1, exhausting through Stack No. 3. [40 CFR 60, Subpart CC]

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

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

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12, except as otherwise specified in 40 CFR 60, Subpart CC.

E.1.2 Standards of Performance for Glass Manufacturing Plants [326 IAC 12] [40 CFR Part 60, Subpart CC]

The Permittee who owns/operates glass melting furnace for which construction, reconstruction, or modification is commenced after June 15, 1979 shall, prior to the connection of each furnace to the ESP, comply with the following provisions of 40 CFR Part 60, Subpart CC (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.290 (a) and (b)
(2) 40 CFR 60.291
(3) 40 CFR 60.293
(4) 40 CFR 60.296

After each furnace is connected to the ESP, the Permittee who owns/operates glass melting furnace for which construction, reconstruction, or modification is commenced after June 15, 1979 shall comply with the following provisions of 40 CFR 60, Subpart CC (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12 for that respective furnace, and specified as follows:

(5) 40 CFR 60.290 (and) and (b)
(6) 40 CFR 60.291
(7) 40 CFR 60.292
(8) 40 CFR 60.296

SECTION E.2 FACILITY OPERATION CONDITIONS

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

(k) Two (2) diesel-fired emergency generators, identified as GEN4 and GEN5, approved in 2011 for construction, each with a maximum rating of 750 kW. [40 CFR 60, Subpart IIII] [40 CFR 63, Subpart ZZZZ]

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to NSPS IIII [326 IAC 12] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12, except as otherwise specified in 40 CFR 60, Subpart IIII.

E.2.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [326 IAC 12] [40 CFR Part 60, Subpart IIII]

Pursuant to 40 CFR Part 60, Subpart IIII, the Permittee shall comply with the provisions of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (included as Attachment C of this permit), which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.4200 (a)(2)(i) and (c)
(2) 40 CFR 60.4205(b)
(3) 40 CFR 60.4206
(4) 40 CFR 60.4207(b)
(5) 40 CFR 60.4208
(6) 40 CFR 60.4209(a)
(7) 40 CFR 60.4211 (a), (c), (e), and (f)
(8) 40 CFR 60.4214 (b)
(9) 40 CFR 60.4218
(10) 40 CFR 60.4219
(11) Table 8 to Subpart IIII of Part 60 - Applicability of General Provisions to Subpart IIII

SECTION E.3 FACILITY OPERATION CONDITIONS

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

(k) Two (2) diesel-fired emergency generators, identified as GEN4 and GEN5, approved in 2011 for construction, each with a maximum rating of 750 kW. [40 CFR 60, Subpart IIII] [40 CFR 63, Subpart ZZZZ]

(l) Three (3) diesel-fired emergency generators, identified as GEN1, GEN2, and GEN3, each with a maximum rating not to exceed one thousand six hundred (1,600) horsepower (Hp). [40 CFR 63, Subpart ZZZZ]

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.3.1 General Provisions Relating to NESHAP ZZZZ [326 IAC 20-1] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 63, Subpart ZZZZ, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, except as otherwise specified in 40 CFR 63, Subpart ZZZZ.

E.3.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [326 IAC 20-82] [40 CFR Part 63, Subpart ZZZZ]

Pursuant to 40 CFR Part 63, Subpart ZZZZ, the Permittee shall comply with the provisions of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (included as Attachment D of this permit), which are incorporated by reference as 326 IAC 20-82, as specified as follows:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b), (c), and (d)
(3) 40 CFR 63.6590(a)(1)(iii), (a)(1)(iv), (a)(2)(iii), and (c)(1)
(4) 40 CFR 63.6595(a)(1), (a)(7), (b), and (c)
(5) 40 CFR 63.6603(a)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625(e)(3), (f), (h), and (i)
(8) 40 CFR 63.6640(a), (b), (e), (f)
(9) 40 CFR 63.6645(a)(5)
(10) 40 CFR 63.6650(f)
(11) 40 CFR 63.6655(e)(2), (e)(3), (f)(2)
(12) 40 CFR 63.6660
(13) 40 CFR 63.6665
(14) 40 CFR 63.6670
(15) 40 CFR 63.6675
(16) Table 2d to Subpart ZZZZ of Part 63 - Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions
(17) Table 6 to Subpart ZZZZ of Part 63 - Continuous Compliance with Emission Limitations, Work Practices, and Management Practices
(18) Table 8 to Subpart ZZZZ of Part 63 - Applicability of General Provisions to Subpart ZZZZ

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Saint-Gobain Containers
Source Address: 524 East Center Street, Dunkirk, Indiana 47336
Part 70 Permit No.: T075-17108-00004

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:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Saint-Gobain Containers
Source Address: 524 East Center Street, Dunkirk, Indiana 47336
Part 70 Permit No.: T075-17108-00004

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

☐ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- 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.

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Saint-Gobain Containers
Source Address: 524 East Center Street, Dunkirk, Indiana 47336
Part 70 Permit No.: T075-17108-00004

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attachment A

Source Name:	Saint-Gobain Containers
Source Location:	524 East Center Street, Dunkirk, IN 47336
County:	Jay
SIC Code:	3221
Operation Permit No.:	T075-17108-00004

Definitions

Pursuant to the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), terms used throughout the Consent Decree that are defined in the Act or in federal regulations promulgated pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in the Consent Decree. Whenever the terms set forth below are used in the Consent Decree, the following definitions shall apply:

a. *"24-hour Block Average"* shall be calculated by averaging the twenty-four (24) one-hour relevant data outputs (concentration or pounds) for a given Day and using the daily glass production rates (tons) on that Operating Day where applicable.

b. *"Affected State(s)"* shall mean any local agency Plaintiff-Intervenor or State Plaintiff-Intervenor and its agencies and political subdivisions having jurisdiction over a Facility addressed in the Consent Decree, which includes the State of Indiana and the Indiana Department of Environmental Management.

c. *"Abnormally Low Production Rate"* shall mean a glass production rate at or below the production rate set forth in definition d below.

d. *"Abnormally Low Production Rate Day"* shall mean any Operating Day where production falls into the range of Abnormally Low Production Rate, for at least one continuous hour.

"Abnormally Low Production Rate" (P) shall mean a glass production rate at or below the following:

(a) Furnace No. 1; P = 200 tons of glass per day *
(b) Furnace No. 2; P = 193 tons of glass per day *

* Unless capacity subsequently increases as authorized by a revised permit. If production is increased by a permit, the *"Abnormally Low Production Rate"* (P) shall be thirty-five percent (35%) of the new permitted production (or design production, where there is no permitted production) as determined on a daily basis (for the purpose of defining the *"Abnormally Low Production Rate")*

e. *"Calendar Year"* shall mean the period commencing on January 1 and ending on December 31 of the same year.

f. *"CEMS"* means Continuous Emission Monitoring System.

g. *"CEMS Certification"* means the certification of the CEMS required by 40 C.F.R. § 60.13, 40 C.F.R. Part 60 Appendix B (Performance Specification 2) and 40 C.F.R. Part 60 Appendix F (Quality Assurance Procedures).

h. *"CEMS Certification Event"* shall mean an event that triggers the requirement to complete a first or subsequent CEMS Certification. The first CEMS Certification shall not be required until December 31, 2012 for the NO_X and SO_2 CEMS for Furnaces 1 and 2. Events that will trigger

subsequent CEMS Certification include a Furnace Startup or a First Control Device Startup. SGCI shall commence such recertification no later than thirty (30) days after the Furnace Startup period concludes (but no later than seventy (70) Days after Furnace Startup commences) or First Control Device Startup period concludes. If a Furnace Startup and a First Control Device Startup happen at the same time, then the recertification shall not be conducted until the first Operating Day after the conclusion of the later startup event.

i. *"Color Transition"* shall mean the period of not more than seven Days from the time when a glass color of an oxidation state different from that previously melted in the Furnace, is introduced to the Furnace, to the time when saleable glass bottles are being produced in the new color.

j. *"COMS"* shall mean a Continuous Opacity Monitoring System.

k. *"Continuous Operating Year"* shall mean a Calendar Year during which, on every day of the year, at least one of the Furnaces connected to a control system is Operating.

l. *"Control Device Startup"* shall mean the period of time from commencement of operation of a Scrubber System, ESP, or similar add-on control device until the operation of the device has been stabilized and the device has achieved normal operating conditions. Such period shall not exceed thirty (30) Days.

m. *"Day"* shall mean a calendar day unless expressly stated to be a working day or unless a State rule requires that CEMs data be reported on Standard time (with no change for Daylight Savings Time). In computing any period of time for determining reporting deadlines under the Consent Decree, where the last day would fall on a Saturday, Sunday, or federal or State holiday, in the State where the Facility is located, the period shall run until the close of business of the next working day.

n. *"Emission Rate 30-day Rolling Average"* shall be expressed as pounds of pollutant per ton of glass produced calculated at the Furnace in question in accordance with the following formula and Subparagraphs i. and ii below:

30 - day average (lb E/ton) = $[COD_E (lbs) + P29D_E (lbs)] / [COD_{PROD} (tons) + P29D_{PROD} (tons)]$

Where: 30-day average (lb E/ton) = The Emission Rate 30-day Rolling Average E = Emissions of the pollutant in question (NO_X or SO_2)
COD = Current Operating Day where the relevant Emission Rate 30-day Rolling Average is the applicable limit.
COD_E = The daily Emissions as measured by a CEMS on the COD, in pounds.
COD_{PROD} = Daily glass production on the COD, in tons of glass.
P29D = The Previous 29 Operating Days where the relevant Emission Rate 30-day Rolling Average is the applicable limit.
$P29D_E$ = The sum of the daily NOx or SO_2 Emissions as measured by a CEMS during the P29D, in pounds.
$P29D_{Prod}$ = The sum of the daily glass production during the P29D, in tons of glass.

i. A new Emission Rate 30-day Rolling Average shall be calculated for each new Operating Day where the Emission Rate 30-day Rolling Average is the applicable standard. Any Operating Day where the newly calculated Emission Rate 30-day Rolling Average exceeds the limit is a separate one Day violation; and
ii. As specified in Paragraphs 7-9 of the Consent Decree, some Operating Days will be excluded from the Emission Rate 30-day Rolling Average.

o. *"First Control Device Startup"* shall only refer to the first startup of the relevant add-on control device (a Scrubber System, ESP, or similar add-on control). First Control Device Startup shall represent the period of time from commencement of operation of the device until the operation of

the device has been stabilized and the device has achieved normal operating conditions, but shall not exceed thirty (30) Days.

p. *"Furnace"* means for the purposes of NSPS only, a refractory vessel in which raw materials are charged, melted at high temperature, refined, and conditioned to produce molten glass which includes foundations, superstructure and retaining walls, raw material charger systems, heat exchangers, melter cooling system, exhaust system, refractory brick work, fuel supply and electrical boosting equipment, integral control systems and instrumentation, and appendages for conditioning and distributing molten glass to forming apparatuses. For all other purposes, "Furnace" means a unit comprised of a refractory-lined vessel in which raw materials are charged and melted at high temperature to produce molten glass.

q. *"Furnace Startup"* means the period of time while a Furnace's refractory is being heated up from ambient temperature and includes the Initial Heating Phase, Refractory Soak and Seal Phase, and Furnace Stabilization Phase.

i. *"Initial Heating Phase"* means the slow heating of the Furnace refractory using portable natural-gas burners placed in the openings in the Furnace. This phase typically lasts no longer than four (4) Days and ends when the main Furnace burners commence operation.

ii. *"Refractory Soak and Seal Phase"* means the phase of the furnace Startup following the Initial Heating Phase when the Furnace is filled with molten glass, the temperature of the Furnace reaches operating conditions, and the refractory components reach thermal equilibrium. This phase typically lasts no longer than twenty-one (21) Days and ends when the joints between the refractory components are sealed and the Furnace is closed to the atmosphere.

iii. *"Furnace Stabilization Phase"* means the phase of Furnace Startup following the Refractory Soak and Seal Phase when the Furnace Operation is being stabilized. This phase will end no later than seventy (70) Days after the beginning of the Initial Heating Phase.

r. *"Hot Spot Temperature"* shall mean the highest temperature of the Furnace breastwall refractory. Breastwall refractory is the refractory sidewall between the tuck stone (about 18" above glass line) and the crown skew (where the Furnace crown meets the Furnace sidewall).

s. *"Inlet"* shall be the emission concentration (in parts per million by volume dry) measured prior to the control device.

t. *"Maintenance"* shall mean activities necessary to keep the system or equipment working in its normal operating condition as set forth in below:

i. Scheduled or preventative Furnace Maintenance, including checker raking and burning, shall not exceed ninety-six (96) Operating hours annually and shall be conducted only when any downstream control devices required by the Consent Decree (Scrubber or ESP), if applicable, are operating.

ii. Control system scheduled or preventative Maintenance – Scheduled or preventative Maintenance of the emission control system shall occur when the Furnace(s) connected to the control system are not Operating. However, for any Calendar Year which is a Continuous Operating Year, scheduled or preventative maintenance may be conducted while the Furnace(s) are Operating. During these Continuous Operating Years, Maintenance lasting greater than twenty-four consecutive hours shall occur only during Abnormally Low Production Rate Days. Control system Maintenance must be done in compliance with the following:

A. Bypass of the ESP shall not exceed 144 hours annually in any Calendar Year. Furthermore if the ESP is bypassed, the Scrubber System must be bypassed as well.

B. Bypass of the Scrubber System shall not exceed 144 hours annually in any Calendar Year. Bypass of the Scrubber System required by the bypass of the ESP shall be included in the 144 hours.

u. *"Major Rebuild"* shall refer to the process of stopping glass production, stopping the flow of fuel, fully cooling down a Furnace, replacing some or all of the refractory in the Furnace, the crown and/or the regenerators (if applicable), and beginning a new campaign by starting up the Furnace again by firing fuel again and starting the production of glass. A Major Rebuild, for the purposes of the Consent Decree, does not include any refractory repairs conducted when the Furnace is still hot, emergency cold repairs, repairs solely required for restart of a Furnace which has temporarily ceased Operation due to economic reasons.

v. *"Malfunction"* shall mean, consistent with 40 C.F.R. § 60.2, 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, but shall not include failures that are caused in part by poor Maintenance or careless operation.

w. *"Month"* shall mean calendar month.

x. *"NOx"* shall mean the sum of oxides of nitrogen in the flue gas, collectively expressed as NO_2.

y. *"Operate"*, *"Operation"*, *"Operating"*, *and "Operated"* shall mean when fuel is fired in the Furnace.

z. *"Operating Day"* shall mean any Day where any fuel is fired into the Furnace. The Day starts at 12:00 am and ends at 11:59 pm.

aa. *"Outlet"* shall mean the emission concentration (in parts per million by volume dry) measured after a control device.

bb. *"Outlet 30-day Rolling Average"* is a term which applies only to SO_2 and shall be calculated by determining the Outlet 24-hour Block Average concentration from each Furnace (or combined stack, if applicable) during an Operating Day and previous twenty-nine (29) Operating Days when Outlet 30-day Rolling Average was the applicable standard. A new Outlet 30-day Rolling Average shall be calculated for each Operating Day. Any Operating Day where the newly calculated Outlet 30-day Rolling Average exceeds the limit is a separate one Day violation. As specified in the Consent Decree, the following Operating Days are exempt from this average: Control Device Startup, Malfunction of the control device (Scrubber System, CCSS, or ESP) and Maintenance on the control device (Scrubber System, CCSS, or ESP).

cc. "*Oxyfuel Furnace"* shall mean a Furnace in which the gas that provides the oxidant for combustion of the fuel is composed of greater than or equal to 90 percent oxygen.

dd. *"Particulate Matter"* and *"PM"* shall mean any finely divided solid or liquid material, other than uncombined water, as measured by the reference methods specified below:

i. Filterable Particulate is the particulate measured using EPA Method 5 (40 C.F.R. Part 60 Appendix A).
ii. Total particulate is the combination of filterable plus condensable PM and is measured using Method 5 (40 C.F.R. Part 60 Appendix A) and EPA Method 202: (40 C.F.R. Part 51 Appendix M).

ee. *"Removal Efficiency"* for SO_2 means the percent reduction in concentration of that pollutant achieved by a Furnace's pollution control device. This percent reduction shall be calculated by subtracting the Outlet from the Inlet, dividing by the Inlet and then multiplying by 100.

ff. *"Removal Efficiency 30-day Rolling Average"* is a term which applies to SO_2 emissions and shall be calculated by summing the Removal Efficiency 24-hour Block Averages from each Furnace (or combined stack, if applicable) for each Operating Day and previous twenty-nine (29) Operating Days when Removal Efficiency 30-day Rolling Average was the applicable standard and then dividing by 30. A new Removal Efficiency 30- day Rolling Average shall be calculated for each new Operating Day. As specified in the Consent Decree, the following Operating Days are exempt from this average: Control Device Startup of the Scrubber System or ESP; Malfunction of the Scrubber System or ESP; and Maintenance on the Scrubber System or ESP.

gg. *"Scrubber System"* shall mean a type of system known sometimes as a sorbent injection system which involves the addition of an alkaline material into the gas stream to react with the acid gases. The acid gases react with the alkaline sorbents to form solid salts.

i. Semi-dry Scrubber System – The system described above with the sorbent in an aqueous phase which improves collection efficiency.

hh. *"SO_2"* shall mean the pollutant sulfur dioxide.

ii. *"Ton"* or *"tons"* shall mean short ton or short tons (equal to 2000 pounds).

jj. *"TSP"* shall mean total suspended particulate.

Attachment B

Source Name:	Saint-Gobain Containers
Source Location:	524 East Center Street, Dunkirk, IN 47336
County:	Jay
SIC Code:	3221
Operation Permit No.:	T075-17108-00004

Title 40: Protection of Environment
PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart CC—Standards of Performance for Glass Manufacturing Plants

§ 60.290 Applicability and designation of affected facility.

(a) Each glass melting furnace is an affected facility to which the provisions of this subpart apply.

(b) Any facility under paragraph (a) of this section that commences construction or modification after June 15, 1979, is subject to the requirements of this subpart.

(c) This subpart does not apply to hand glass melting furnaces, glass melting furnaces designed to produce less than 4.55 Mg (5 tons) of glass per day and all-electric melters.

[45 FR 66751, Oct. 7, 1980, as amended at 65 FR 61759, Oct. 17, 2000]

§ 60.291 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part, unless otherwise required by the context.

All-electric melter means a glass melting furnace in which all the heat required for melting is provided by electric current from electrodes submerged in the molten glass, although some fossil fuel may be charged to the furnace as raw material only.

Borosilicate recipe means glass product composition of the following approximate ranges of weight proportions: 60 to 80 percent silicon dioxide, 4 to 10 percent total R_2O (e.g., Na_2O and K_2O), 5 to 35 percent boric oxides, and 0 to 13 percent other oxides.

Container glass means glass made of soda-lime recipe, clear or colored, which is pressed and/or blown into bottles, jars, ampoules, and other products listed in Standard Industrial Classification 3221 (SIC 3221).

Experimental furnace means a glass melting furnace with the sole purpose of operating to evaluate glass melting processes, technologies, or glass products. An experimental furnace does not produce glass that is sold (except for further research and development purposes) or that is used as a raw material for nonexperimental furnaces.

Flat glass means glass made of soda-lime recipe and produced into continuous flat sheets and other products listed in SIC 3211.

Flow channels means appendages used for conditioning and distributing molten glass to forming apparatuses and are a permanently separate source of emissions such that no mixing of emissions occurs with emissions from the melter cooling system prior to their being vented to the atmosphere.

Glass melting furnace means a unit comprising a refractory vessel in which raw materials are charged, melted at high temperature, refined, and conditioned to produce molten glass. The unit includes foundations, superstructure and retaining walls, raw material charger systems, heat exchangers, melter cooling system, exhaust system, refractory brick work, fuel supply and electrical boosting equipment, integral control systems and instrumentation, and appendages for conditioning and distributing molten glass to forming apparatuses. The forming apparatuses, including the float bath used in flat glass manufacturing and flow channels in wool fiberglass and textile fiberglass manufacturing, are not considered part of the glass melting furnace.

Glass produced means the weight of the glass pulled from the glass melting furnace.

Hand glass melting furnace means a glass melting furnace where the molten glass is removed from the furnace by a glassworker using a blowpipe or a pontil.

Lead recipe means glass product composition of the following ranges of weight proportions: 50 to 60 percent silicon dioxide, 18 to 35 percent lead oxides, 5 to 20 percent total R_2O (e.g., Na_2O and K_2O), 0 to 8 percent total R_2O_3 (e.g., Al_2O_3), 0 to 15 percent total RO (e.g., CaO, MgO), other than lead oxide, and 5 to 10 percent other oxides.

Pressed and blown glass means glass which is pressed, blown, or both, including textile fiberglass, noncontinuous flat glass, noncontainer glass, and other products listed in SIC 3229. It is separated into:

(1) Glass of borosilicate recipe.

(2) Glass of soda-lime and lead recipes.

(3) Glass of opal, fluoride, and other recipes.

Rebricking means cold replacement of damaged or worn refractory parts of the glass melting furnace. Rebricking includes replacement of the refractories comprising the bottom, sidewalls, or roof of the melting vessel; replacement of refractory work in the heat exchanger; replacement of refractory portions of the glass conditioning and distribution system.

Soda-lime recipe means glass product composition of the following ranges of weight proportions: 60 to 75 percent silicon dioxide, 10 to 17 percent total R_2O (e.g., Na_2O and K_2O), 8 to 20 percent total RO but not to include any PbO (e.g., CaO, and MgO), 0 to 8 percent total R_2O_3 (e.g., Al_2O_3), and 1 to 5 percent other oxides.

Textile fiberglass means fibrous glass in the form of continuous strands having uniform thickness.

With modified-processes means using any technique designed to minimize emissions without the use of add-on pollution controls.

Wool fiberglass means fibrous glass of random texture, including fiberglass insulation, and other products listed in SIC 3296.

[45 FR 66751, Oct. 7, 1980, as amended at 49 FR 41035, Oct. 19, 1984; 65 FR 61759, Oct. 17, 2000]

§ 60.292 Standards for particulate matter.

(a) On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator of a glass melting furnace subject to the provisions of this subpart shall cause to be discharged into the atmosphere—

(1) From any glass melting furnace fired exclusively with either a gaseous fuel or a liquid fuel, particulate matter at emission rates exceeding those specified in table CC-1, Column 2 and Column 3, respectively, or

(2) From any glass melting furnace, fired simultaneously with gaseous and liquid fuels, particulate matter at emission rates exceeding STD as specified by the following equation:

STD=X [1.3(Y)+(Z)]

Where:

STD=Particulate matter emission limit, g of particulate/kg (lb of particulate/ton) of glass produced.

X=Emission rate specified in table CC-1 for furnaces fired with gaseous fuel (Column 2).

Y=Decimal fraction of liquid fuel heating value to total (gaseous and liquid) fuel heating value fired in the glass melting furnaces as determined in § 60.296(b). (joules/joules).

Z=(1-Y).

(b) Conversion of a glass melting furnace to the use of liquid fuel is not considered a modification for the purposes of § 60.14.

(c) Rebricking and the cost of rebricking is not considered a reconstruction for the purposes of § 60.15.

(d) An owner or operator of an experimental furnace is not subject to the requirements of this section.

(e) During routine maintenance of add-on pollution controls, an owner or operator of a glass melting furnace subject to the provisions of paragraph (a) of this section is exempt from the provisions of paragraph (a) of this section if:

(1) Routine maintenance in each calendar year does not exceed 6 days;

(2) Routine maintenance is conducted in a manner consistent with good air pollution control practices for minimizing emissions; and

(3) A report is submitted to the Administrator 10 days before the start of the routine maintenance (if 10 days cannot be provided, the report must be submitted as soon as practicable) and the report contains an explanation of the schedule of the maintenance.

TABLE CC-1—*EMISSION RATES*

[g of particulate/kg of glass produced]

Col. 1—Glass manufacturing plant industry segment	Col. 2—Furnace fired with gaseous fuel	Col. 3—Furnace fired with liquid fuel
Container glass	0.1	0.13
Pressed and blown glass		
(a) Borosilicate Recipes	0.5	0.65
(b) Soda-Lime and Lead Recipes	0.1	0.13
(c) Other-Than Borosilicate, Soda-Lime, and Lead Recipes (including opal, fluoride, and other recipes)	0.25	0.325
Wool fiberglass	0.25	0.325
Flat glass	0.225	0.225

[45 FR 66751, Oct. 7, 1980, as amended at 49 FR 41035, Oct. 19, 1984; 54 FR 6674, Feb. 14, 1989; 65 FR 61759, Oct. 17, 2000]

§ 60.293 Standards for particulate matter from glass melting furnace with modified-processes.

(a) An owner or operator of a glass melting furnaces with modified-processes is not subject to the provisions of § 60.292 if the affected facility complies with the provisions of this section.

(b) On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator of a glass melting furnace with modified-processes subject to the provisions of this subpart shall cause to be discharged into the atmosphere from the affected facility:

(1) Particulate matter at emission rates exceeding 0.5 gram of particulate per kilogram of glass produced (g/kg) as measured according to paragraph (e) of this section for container glass, flat glass, and pressed and blown glass with a soda-lime recipe melting furnaces.

(2) Particulate matter at emission rates exceeding 1.0 g/kg as measured according to paragraph (e) of this section for pressed and blown glass with a borosilicate recipe melting furnace.

(3) Particulate matter at emission rates exceeding 0.5 g/kg as measured according to paragraph (e) of this section for textile fiberglass and wool fiberglass melting furnaces.

(c) The owner or operator of an affected facility that is subject to emission limits specified under paragraph (b) of this section shall:

(1) Install, calibrate, maintain, and operate a continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the affected facility.

(2) During the performance test required to be conducted by § 60.8, conduct continuous opacity monitoring during each test run.

(3) Calculate 6-minute opacity averages from 24 or more data points equally spaced over each 6-minute period during the test runs.

(4) Determine, based on the 6-minute opacity averages, the opacity value corresponding to the 99 percent upper confidence level of a normal distribution of average opacity values.

(5) For the purposes of § 60.7, report to the Administrator as excess emissions all of the 6-minute periods during which the average opacity, as measured by the continuous monitoring system installed under paragraph (c)(1) of this section, exceeds the opacity value corresponding to the 99 percent upper confidence level determined under paragraph (c)(4) of this section.

(d)(1) After receipt and consideration of written application, the Administrator may approve alternative continuous monitoring systems for the measurement of one or more process or operating parameters that is or are demonstrated to enable accurate and representative monitoring of an emission limit specified in paragraph (b) of this section.

(2) After the Administrator approves an alternative continuous monitoring system for an affected facility, the requirements of paragraphs (c) (1) through (5) of this section will not apply for that affected facility.

(e) An owner or operator may redetermine the opacity value corresponding to the 99 percent upper confidence level as described in paragraph (c)(4) of this section if the owner or operator:

(1) Conducts continuous opacity monitoring during each test run of a performance test that demonstrates compliance with an emission limit of paragraph (b) of this section,

(2) Recalculates the 6-minute opacity averages as described in paragraph (c)(3) of this section, and

(3) Uses the redetermined opacity value corresponding to the 99 percent upper confidence level for the purposes of paragraph (c)(5) of this section.

(f) Test methods and procedures as specified in § 60.296 shall be used to determine compliance with this section except that to determine compliance for any glass melting furnace using modified processes and fired with either a gaseous fuel or a liquid fuel containing less than 0.50 weight percent sulfur, Method 5 shall be used with the probe and filter holder heating system in the sampling train set to provide a gas temperature of 120 ±14 °C (248 ±25 °F).

[49 FR 41036, Oct. 19, 1984, as amended at 64 FR 7466, Feb. 12, 1999; 65 FR 61759, Oct. 17, 2000]

§§ 60.294-60.295 [Reserved]

§ 60.296 Test methods and procedures.

(a) If a glass melting furnace with modified processes is changed to one without modified processes or if a glass melting furnace without modified processes is changed to one with modified processes, the owner or operator shall notify the Administrator at least 60 days before the change is scheduled to occur.

(b) When gaseous and liquid fuels are fired simultaneously in a glass melting furnace, the owner or operator shall determine the applicable standard under § 60.292(a)(2) as follows:

(1) The ratio (Y) of liquid fuel heating value to total (gaseous and liquid) fuel heating value fired in the glass melting furnaces shall be computed for each run using the following equation:

$Y=(H_l\ L)/(H_l\ L+H_g\ G)$

where:

Y=decimal fraction of liquid fuel heating value to total fuel heating value.

H_l =gross calorific value of liquid fuel, J/kg.

H_g =gross calorific value of gaseous fuel, J/kg.

L=liquid flow rate, kg/hr.

G=gaseous flow rate, kg/hr.

(2) Suitable methods shall be used to determine the rates (L and G) of fuels burned during each test period and a material balance over the glass melting furnace shall be used to confirm the rates.

(3) ASTM Method D240-76 or 92 (liquid fuels) and D1826-77 or 94 (gaseous fuels) (incorporated by reference—see § 60.17), as applicable, shall be used to determine the gross calorific values.

(c) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(d) The owner or operator shall determine compliance with the particulate matter standards in §§ 60.292 and 60.293 as follows:

(1) The emission rate (E) of particulate matter shall be computed for each run using the following equation:

$E=(c_s\ Q_{sd}\ -A)/P$

where:

E=emission rate of particulate matter, g/kg.

c_s =concentration of particulate matter, g/dsm.

Q_{sd} =volumetric flow rate, dscm/hr.

A=zero production rate correction

=227 g/hr for container glass, pressed and blown (soda-lime and lead) glass, and pressed and blown (other than borosilicate, soda-lime, and lead) glass.

=454 g/hr for pressed and blown (borosilicate) glass, wool fiberglass, and flat glass.

P=glass production rate, kg/hr.

(2) Method 5 shall be used to determine the particulate matter concentration (c_s) and volumetric flow rate (Q_{sd}) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf). The probe and filter holder heating system may be set to provide a gas temperature no greater than 177 ±14 °C (350 ±25 °F), except under the conditions specified in § 60.293(e).

(3) Direct measurement or material balance using good engineering practice shall be used to determine the amount of glass pulled during the performance test. The rate of glass produced is defined

as the weight of glass pulled from the affected facility during the performance test divided by the number of hours taken to perform the performance test.

(4) Method 9 and the procedures in § 60.11 shall be used to determine opacity.

[54 FR 6674, Feb. 14, 1989; 54 FR 21344, May 17, 1989, as amended at 65 FR 61759, Oct. 17, 2000]

Attachment C

Source Name:	Saint-Gobain Containers
Source Location:	524 East Center Street, Dunkirk, IN 47336
County:	Jay
SIC Code:	3221
Operation Permit No.:	T075-17108-00004

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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SOURCE: 71 FR 39172, July 11, 2006, unless otherwise noted.

What This Subpart Covers

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines;

(ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

(i) Manufactured after April 1, 2006, and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.

(4) The provisions of § 60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 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 applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

Emission Standards for Manufacturers

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.

(d) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(3) Their 2013 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(e) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards and other requirements for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(f) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary non-emergency CI ICE identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 1 to 40 CFR 1042.1 identifies 40 CFR part 1042 as being applicable, 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Areas of Alaska not accessible by the Federal Aid Highway System (FAHS); and

(2) Marine offshore installations.

(g) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power, and displacement of the reconstructed stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

(c) [Reserved]

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

(e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;

(3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and

(4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power less than 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI internal combustion engines identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 2 to 40 CFR 1042.101 identifies Tier 3 standards as being applicable, the requirements applicable to Tier 3 engines in 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Areas of Alaska not accessible by the FAHS; and

(2) Marine offshore installations.

(h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

§ 60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§ 60.4201 and 60.4202 during the certified emissions life of the engines.

[76 FR 37968, June 28, 2011]

Emission Standards for Owners and Operators

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in § 60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hr (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm);

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) For engines installed on or after January 1, 2016, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $9.0 \cdot n^{-0.20}$ g/KW-hr ($6.7 \cdot n^{-0.20}$ g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and

(iii) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.

(4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

(d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in § 60.4212.

(e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in § 60.4212.

(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engine.

[76 FR 37969, June 28, 2011]

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

(c) [Reserved]

(d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder are no longer subject to the requirements of paragraph (a) of this section, and must use fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).

(e) Stationary CI ICE that have a national security exemption under § 60.4200(d) are also exempt from the fuel requirements in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.

(h) In addition to the requirements specified in §§ 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not

meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in § 60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

Compliance Requirements

§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in § 60.4201(a) through (c) and § 60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in § 60.4201(d) and (e) and § 60.4202(e) and (f) using the certification procedures required in 40 CFR part 94, subpart C, or 40 CFR part 1042, subpart C, as applicable, and must test their engines as specified in 40 CFR part 94 or 1042, as applicable.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89, 40 CFR part 94 or 40 CFR part 1042 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as

appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate, but the words “stationary” must be included instead of “nonroad” or “marine” on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR parts 89, 94, 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.

(e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words “and stationary” after the word “nonroad” or “marine,” as appropriate, to the label.

(f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in § 60.4202 but does not meet all the emission standards for non-emergency engines in § 60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as “Fire Pump Applications Only”.

(h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §§ 60.4201 or 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§ 60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in § 60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(b) or § 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must comply by purchasing an engine certified to the emission standards in § 60.4204(b), or § 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

(d) If you are an owner or operator and must comply with the emission standards specified in § 60.4204(c) or § 60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in § 60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

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

(iii) 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;

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

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

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in § 60.4213.

(e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(e) or § 60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in § 60.4204(e) or § 60.4205(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in § 60.4212 or § 60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

(f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. 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 ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand

response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

(2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to

demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

Testing Requirements for Owners and Operators

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \qquad \text{(Eq. 1)}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in § 60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in § 60.4204(a), § 60.4205(a), or § 60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in § 60.4204(a), § 60.4205(a), or § 60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in § 60.4204(a), § 60.4205(a), or § 60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in § 60.4204(a), § 60.4205(a), or § 60.4205(c) may follow the testing procedures specified in § 60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted according to the requirements in § 60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in § 60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 2)}$$

Where:

C_i = concentration of NO_x or PM at the control device inlet,

C_o = concentration of NO_x or PM at the control device outlet, and

R = percent reduction of NO_x or PM emissions.

(2) You must normalize the NO_x or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \%\ O_2} \qquad \text{(Eq. 3)}$$

Where:

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O_2 .

C_d = Measured concentration of NO_x or PM, uncorrected.

5.9 = 20.9 percent O_2 −15 percent O_2 , the defined O_2 correction value, percent.

$\%O_2$ = Measured O_2 concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \qquad \text{(Eq. 4)}$$

Where:

F_o = Fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O_2 , percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3 /J ($dscf/10^6$ Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3 /J ($dscf/10^6$ Btu).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2 , as follows:

$$X_{co_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 5)}$$

Where:

X_{CO2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O_2 −15 percent O_2 , the defined O_2 correction value, percent.

(iii) Calculate the NO_x and PM gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2} \qquad \text{(Eq. 6)}$$

Where:

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O_2 .

C_d = Measured concentration of NO_x or PM, uncorrected.

$\%CO_2$ = Measured CO_2 concentration, dry basis, percent.

(e) To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{KW\text{-hour}} \quad (Eq. 7)$$

Where:

ER = Emission rate in grams per KW-hour.

C_d = Measured NO_x concentration in ppm.

$1.912x10^{-3}$ = Conversion constant for ppm NO_x to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{KW\text{-hour}} \quad (Eq. 8)$$

Where:

ER = Emission rate in grams per KW-hour.

C_{adj} = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

Notification, Reports, and Records for Owners and Operators

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in § 60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

(d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in § 60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

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

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in § 60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 60.4211(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purposes specified in § 60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 60.4.

[71 FR 39172, July 11, 2006, as amended at 78 FR 6696, Jan. 30, 2013]

Special Requirements

§ 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

(a) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §§ 60.4202 and 60.4205.

(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in § 60.4207.

(c) Stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the following emission standards:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§ 60.4216 What requirements must I meet for engines used in Alaska?

(a) Prior to December 1, 2010, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder located in areas of Alaska not accessible by the FAHS should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.

(b) Except as indicated in paragraph (c) of this section, manufacturers, owners and operators of stationary CI ICE with a displacement of less than 10 liters per cylinder located in areas of Alaska not accessible by the FAHS may meet the requirements of this subpart by manufacturing and installing engines meeting the requirements of 40 CFR parts 94 or 1042, as appropriate, rather than the otherwise applicable requirements of 40 CFR parts 89 and 1039, as indicated in sections §§ 60.4201(f) and 60.4202(g) of this subpart.

(c) Manufacturers, owners and operators of stationary CI ICE that are located in areas of Alaska not accessible by the FAHS may choose to meet the applicable emission standards for emergency engines in § 60.4202 and § 60.4205, and not those for non-emergency engines in § 60.4201 and § 60.4204, except that for 2014 model year and later non-emergency CI ICE, the owner or operator of any such engine that was not certified as meeting Tier 4 PM standards, must meet the applicable requirements for PM in § 60.4201 and § 60.4204 or install a PM emission control device that achieves PM emission reductions of 85 percent, or 60 percent for engines with a displacement of greater than or equal to 30 liters per cylinder, compared to engine-out emissions.

(d) The provisions of § 60.4207 do not apply to owners and operators of pre-2014 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS.

(e) The provisions of § 60.4208(a) do not apply to owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS until after December 31, 2009.

(f) The provisions of this section and § 60.4207 do not prevent owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS from using fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel. The sulfur content of the used lubricating oil must be less than 200 parts per million. The used lubricating oil must meet the on-specification levels and properties for used oil in 40 CFR 279.11.

[76 FR 37971, June 28, 2011]

§ 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

Owners and operators of stationary CI ICE that do not use diesel fuel may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in § 60.4204 or § 60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

[76 FR 37972, June 28, 2011]

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

DEFINITIONS

§ 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

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

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

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 number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in § 60.4211(f) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in § 60.4211(f), then it is not considered to be an emergency stationary ICE under this subpart.

(1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE 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 ICE used to pump water in the case of fire or flood, etc.

(2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 60.4211(f).

(3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 60.4211(f)(2)(ii) or (iii) and § 60.4211(f)(3)(i).

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means the calendar year in which an engine is manufactured (see “date of manufacture”), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see “date of manufacture”), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see “date of manufacture”).

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with 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 internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011; 78 FR 6696, Jan. 30, 2013]

Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in §§ 60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007-2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC + NO_X	HC	NO_X	CO	PM
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75 (75≤HP<100)			9.2 (6.9)		

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007-2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC + NO_X	HC	NO_X	CO	PM
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in § 60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model year(s)	NO_X+ NMHC	CO	PM
KW<8 (HP<11)	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

As stated in § 60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to § 60.4202(d)[1]
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560	2008

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to § 60.4202(d)[1]
(HP>750)	

[1]Manufacturers of fire pump stationary CI ICE with a maximum engine power greater than or equal to 37 kW (50 HP) and less than 450 KW (600 HP) and a rated speed of greater than 2,650 revolutions per minute (rpm) are not required to certify such engines until three model years following the model year indicated in this Table 3 for engines in the applicable engine power category.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011]

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§ 60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NO_X	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011+	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011+	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011+	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+ [1]	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+ [1]	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010+ [2]	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ [3]	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ [3]	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008+	6.4 (4.8)		0.20 (0.15)

[1] For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

[2] For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

[3] In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in § 60.4210(f) and the recordkeeping requirements in § 60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

[As stated in § 60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed [1]	Torque (percent) [2]	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

[1] Engine speed: ±2 percent of point.

[2] Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder

[As stated in § 60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:]

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of ≥30 liters per cylinder	a. Reduce NO_X emissions by 90 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_X concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO_X concentration.
		iv. Measure NO_X at the inlet and outlet of the control device	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(d) NO_X concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of NO_X in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location; and,	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2 concentration must be made at the same time as the measurement for NO_X concentration.
		iii. If necessary, measure moisture	(3) Method 4 of 40 CFR part 60,	(c) Measurements to determine moisture

For each	Complying with the requirement to	You must	Using	According to the following requirements
		content of the stationary internal combustion engine exhaust at the sampling port location; and,	appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	content must be made at the same time as the measurement for NO_Xconcentration.
		iv. Measure NO_Xat the exhaust of the stationary internal combustion engine	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(d) NO_Xconcentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the inlet and outlet of the control device	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2concentration of the	(2) Method 3, 3A, or 3B of 40 CFR part	(b) Measurements to determine

For each	Complying with the requirement to	You must	Using	According to the following requirements
		stationary internal combustion engine exhaust at the sampling port location; and	60, appendix A	O_2concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in § 60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1	General applicability of the General Provisions	Yes	
§ 60.2	Definitions	Yes	Additional terms defined in § 60.4219.
§ 60.3	Units and abbreviations	Yes	
§ 60.4	Address	Yes	
§ 60.5	Determination of construction or modification	Yes	
§ 60.6	Review of plans	Yes	
§ 60.7	Notification and Recordkeeping	Yes	Except that § 60.7 only applies as specified in § 60.4214(a).
§ 60.8	Performance tests	Yes	Except that § 60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§ 60.9	Availability of information	Yes	
§ 60.10	State Authority	Yes	

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§ 60.12	Circumvention	Yes	
§ 60.13	Monitoring requirements	Yes	Except that § 60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§ 60.14	Modification	Yes	
§ 60.15	Reconstruction	Yes	
§ 60.16	Priority list	Yes	
§ 60.17	Incorporations by reference	Yes	
§ 60.18	General control device requirements	No	
§ 60.19	General notification and reporting requirements	Yes	

Attachment D

Source Name:	Saint-Gobain Containers
Source Location:	524 East Center Street, Dunkirk, IN 47336
County:	Jay
SIC Code:	3221
Operation Permit No.:	T075-17108-00004

Title 40: Protection of Environment
PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

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

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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.

(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in § 63.6675, which includes operating according to the provisions specified in § 63.6640(f).

(1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]

§ 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 that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(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 that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(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;

(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; 78 FR 6700, Jan. 30, 2013]

§ 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, operating limitations and other requirements 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, operating limitations, and other requirements 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, operating limitations, and other requirements 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; 78 FR 6701, Jan. 30, 2013]

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 and other requirements 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 and other requirements 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.

[78 FR 6701, Jan. 30, 2013]

§ 63.6603 What emission limitations, operating limitations, and other requirements 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 that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

(1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

(2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

(i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

(1) Change oil every 1,000 hours of operation or annually, whichever comes first. 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.

(2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in § 63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in § 63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

(f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in § 63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in § 63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in § 63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6701, Jan. 30, 2013]

§ 63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?

(a) 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.

(b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in § 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either § 63.6603(b)(1) or § 63.6603(b)(2), or are on offshore vessels that meet § 63.6603(c) are exempt from the requirements of this section.

[78 FR 6702, Jan. 30, 2013]

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, operating limitations, and other requirements 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, as amended at 78 FR 6702, Jan. 30, 2013]

Back to Top

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. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.

(1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.

(3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(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, unless otherwise specified in this subpart.

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

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

Where:

C_i = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

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

R = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, 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_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

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

Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

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

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu)

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2 , as follows:

$$X_{CO2} = \frac{5.9}{F_o} \quad (Eq.\ 3)$$

Where:

X_{CO2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O_2 —15 percent O_2 , the defined O_2 correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO2}}{\%CO_2} \quad (Eq.\ 4)$$

Where:

C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O_2.

C_d = Measured concentration of CO, THC, or formaldehyde, uncorrected.

X_{CO2} = CO_2 correction factor, percent.

$\%CO_2$ = Measured CO_2 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.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010; 78 FR 6702, Jan. 30, 2013]

§ 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 O_2 or CO_2 according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

(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_2 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 (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in § 63.8(d). As specified in § 63.8(f)(4), you may request approval of

monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface (*e.g.,* thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in § 63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in § 63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also § 63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your 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 stationary RICE located at an area 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.

(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 (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 that meet either § 63.6603(b)(1) or § 63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet § 63.6603(c) do not have to meet the requirements of this paragraph (g).

(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 business 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 business 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 business 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 business 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.

[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; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013]

§ 63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement 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.

(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least three test runs.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

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, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE 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.

(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.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements 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) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(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) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. 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 calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, 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.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[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; 78 FR 6704, Jan. 30, 2013]

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).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in

§ 63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in § 63.6603(d) and identifying the state or local regulation that the engine is subject to.

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6705, Jan. 30, 2013]

§ 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.

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in § 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

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

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

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

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013]

§ 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) through (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 engine is used for the purposes specified in § 63.6640(f)(2)(ii) or (iii) or § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(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; 78 FR 6706, Jan. 30, 2013]

§ 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:

Alaska Railbelt Grid means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

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.

Backup power for renewable energy means an engine that provides backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(l)(5) (incorporated by reference, see § 63.14).

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 or 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_2 .

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 reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. 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.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. 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.

(2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 63.6640(f).

(3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 63.6640(f)(2)(ii) or (iii) and § 63.6640(f)(4)(i) or (ii).

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_2 .

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_x) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_x, CO, and volatile organic compounds (VOC) into CO_2, 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 $C_3 H_8$.

Remote stationary RICE means stationary RICE meeting any of the following criteria:

(1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

(2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

(i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

(iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

(3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

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 with 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 PPPPP 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; 76 FR 12867, Mar. 9, 2011; 78 FR 6706, Jan. 30, 2013]

Table 1 a **to 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	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced	Minimize the engine's time spent at idle and minimize the engine's startup time at startup

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
RICE	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	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.[1]
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2	

[1]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 1 b **to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions**

As stated in §§ 63.6600, 63.6603, 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:

TABLE 1B TO SUBPART ZZZZ OF PART 63—OPERATING LIMITATIONS FOR EXISTING, NEW, AND RECONSTRUCTED SI 4SRB STATIONARY RICE >500 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions 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 existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent $O_2$and using NSCR;	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 b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.[1]
2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions 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.
existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent $O_2$and not	

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
using NSCR.	

[1] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6706, Jan. 30, 2013]

Table 2 a **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:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
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_2. 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_2until 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.[1]
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2	
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_2	

[1] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices

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[75 FR 9680, Mar. 3, 2010]

Table 2 b **to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and CI 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 CI Stationary RICE >500 HP**

As stated in §§ 63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and CI 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; and existing CI stationary RICE >500 HP:

TABLE 2B TO SUBPART ZZZZ OF PART 63—OPERATING LIMITATIONS FOR NEW AND RECONSTRUCTED 2SLB AND CI 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 CI STATIONARY RICE >500 HP

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde 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.[1]
2. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce 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 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.[1]
3. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and	Comply with any operating limitations approved by the Administrator.
New and reconstructed 2SLB and CI stationary RICE	

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
>500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and	
existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst.	

[1] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6707, Jan. 30, 2013]

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:

TABLE 2C TO 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

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency stationary CI RICE and black start stationary CI RICE [1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first.[2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	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.[3]
2. Non-Emergency, non-black start stationary CI RICE <100 HP	a. Change oil and filter every 1,000 hours of	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	operation or annually, whichever comes first.[2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
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_2.	
4. Non-Emergency, non-black start CI stationary RICE 300>HP≤500." is corrected to read "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_2; 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_2; or b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE.[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2] b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
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;[2] b. Inspect spark plugs	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	every 1,440 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
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;[2] b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
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_2.	
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_2.	
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_2.	
12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O_2.	

[1] 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.

[2] Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

[3] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[78 FR 6708, Jan. 30, 2013, as amended at 78 FR 14457, Mar. 6, 2013]

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:

TABLE 2D TO SUBPART ZZZZ OF PART 63—REQUIREMENTS FOR EXISTING STATIONARY RICE LOCATED AT AREA SOURCES OF HAP EMISSIONS

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;[1] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	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.
2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O_2; 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	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	RICE exhaust to 23 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; 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.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; 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;[1]	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	necessary; 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 ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; 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 remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
9. Non-emergency, non-black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.	
10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
11. Non-emergency, non-black start 4SRB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
12. Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install NSCR to reduce HAP emissions from the stationary RICE.	
13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1] b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

[1] Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

[2] 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.

[78 FR 6709, Jan. 30, 2013]

Subsequent Performance Tests

As stated in §§ 63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

TABLE 3 TO SUBPART ZZZZ OF PART 63—SUBSEQUENT PERFORMANCE TESTS

For each . . .	Complying with the requirement to . . .	You must . . .
1. New or reconstructed 2SLB stationary RICE >500 HP located at major sources; new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually.[1]
2. 4SRB stationary RICE ≥5,000 HP located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually.[1]
3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually.[1]
4. Existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.

For each . . .	Complying with the requirement to . . .	You must . . .
5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.

[1] 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.

[78 FR 6711, Jan. 30, 2013]

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:

TABLE 4 TO SUBPART ZZZZ OF PART 63. REQUIREMENTS FOR PERFORMANCE TESTS

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE	a. reduce CO emissions	i. Measure the O_2at 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 D6522-00 (Reapproved 2005).[a c]	(a) Measurements to determine O_2must 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) ASTM D6522-00 (Reapproved 2005) [a b c]or Method 10 of 40 CFR part 60, appendix A	(a) The CO concentration must be at 15 percent O_2, 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_2at 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 D6522-00 (Reapproved 2005).[a]	(a) measurements to determine O_2concentration must be made at the same time as the measurements for formaldehyde or THC 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	(a) measurements to determine moisture content must be made at the same time and

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
			6348-03.[a]	location as the measurements for formaldehyde or THC concentration.
		iv. If demonstrating compliance with the formaldehyde percent reduction requirement, 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,[a]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_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device	(1) Method 25A, reported as propane, of 40 CFR part 60, appendix A	(a) THC concentration must be at 15 percent O_2, 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 CO in the stationary RICE exhaust	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) if using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2concentration 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 (Reapproved 2005).[a]	(a) measurements to determine O_2concentration must be made at the same time and location as the measurements for formaldehyde or CO 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]	(a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO 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,[a]provided in ASTM D6348-03 Annex A5	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
			(Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	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),[a] [c]Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.[a]	(a) CO concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[a] Incorporated by reference, see 40 CFR 63.14. You may also obtain copies from University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[b] You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

[c] ASTM-D6522-00 (2005) may be used to test both CI and SI stationary RICE.

[78 FR 6711, Jan. 30, 2013]

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements

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:

TABLE 5 TO SUBPART ZZZZ OF PART 63—INITIAL COMPLIANCE WITH EMISSION LIMITATIONS, OPERATING LIMITATIONS, AND OTHER REQUIREMENTS

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >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 >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	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.
2. Non-emergency stationary CI RICE >500 HP located at a major source of	a. Limit the concentration of CO,	i. The average CO concentration determined from the initial performance

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	using oxidation catalyst, and using a CPMS	test is less than or equal to the CO emission limitation; 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.
3. New or reconstructed non-emergency 2SLB stationary RICE >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 >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and not using oxidation catalyst	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.
4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and not using oxidation catalyst	i. The average CO concentration determined from the initial performance test is less than or equal to the CO 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.
5. New or reconstructed non-emergency 2SLB stationary RICE >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 >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2or CO_2at 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; and
		iii. The average reduction of CO calculated using § 63.6620 equals or exceeds the required percent reduction.

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
		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.
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2or CO_2at the 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; and
		iii. The average concentration of CO calculated using § 63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	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, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; 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.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	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 or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
		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.
9. 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 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. The average formaldehyde concentration, corrected to 15 percent O_2, 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 requirements in § 63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
10. 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 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. The average formaldehyde concentration, corrected to 15 percent O_2, 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.
11. 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 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.
12. 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_2, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.
13. Existing non-emergency 4SLB	a. Install an oxidation	i. You have conducted an initial

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	catalyst	compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O_2;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.
14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O_2, or the average reduction of emissions of THC is 30 percent or more;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F.

[78 FR 6712, Jan. 30, 2013]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements

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:

TABLE 6 TO SUBPART ZZZZ OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION LIMITATIONS, AND OTHER REQUIREMENTS

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved [a]; and

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP		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.
2. New or reconstructed non-emergency 2SLB stationary RICE >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 >500 HP located at a major source of HAP	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved [a]; 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.
3. New or reconstructed non-emergency 2SLB stationary RICE >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 >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS	i. Collecting the monitoring data according to § 63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration 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, or that the emission remain at or below the CO concentration limit; 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 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	a. Reduce formaldehyde	i. Collecting the catalyst inlet temperature data according to

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
HAP	emissions and using NSCR	§ 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 ≥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, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent.[a]
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≤HP≤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 [a]; 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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		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≤HP≤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 [a]; 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 ≤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 ≤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 stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE	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.
10. Existing stationary CI RICE >500 HP	a. Reduce CO	i. Conducting performance tests every

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
that are not limited use stationary RICE	emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst	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
		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.
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst	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
		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.
12. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst	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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		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	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst	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.
14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O_2; and either ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.
15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O_2,or the average reduction of emissions of THC is 30 percent or more; and either ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.

[a] 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.

[78 FR 6715, Jan. 30, 2013]

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:

TABLE 7 TO SUBPART ZZZZ OF PART 63—REQUIREMENTS FOR REPORTS

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start	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	i. Semiannually according to the requirements in § 63.6650(b)(1)-(5) for engines that are not

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
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; 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≤HP≤500 located at a major source of HAP		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	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.
		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 § 63.8(c)(7), the information in § 63.6650(e); or	i. Semiannually according to the requirements in § 63.6650(b).
		c. If you had a malfunction during the reporting period, the information in § 63.6650(c)(4).	i. Semiannually according to the requirements in § 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.
3. Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are	Compliance report	a. The results of the annual compliance demonstration, if conducted during the reporting period.	i. Semiannually according to the requirements in § 63.6650(b)(1)-(5).

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
not remote stationary RICE and that operate more than 24 hours per calendar year			
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in § 63.6640(f)(4)(ii)	Report	a. The information in § 63.6650(h)(1)	i. annually according to the requirements in § 63.6650(h)(2)-(3).

[78 FR 6719, Jan. 30, 2013]

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.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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 reconstructed sources	Yes.	
§ 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	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
	area sources that become major sources		
§ 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	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
	provisions		
§ 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	No	
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§ 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.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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 sources	Yes	Except that § 63.9(d) only applies as specified in § 63.6645.
§ 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.

General provisions citation	Subject of citation	Applies to subpart	Explanation
			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	Except that the most recent 2 years of data do not have to be retained on site.
§ 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 documentation	Yes.	
§ 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.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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.	

[75 FR 9688, Mar. 3, 2010, as amended at 78 FR 6720, Jan. 30, 2013]

Appendix A—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines

1.0 SCOPE AND APPLICATION. WHAT IS THIS PROTOCOL?

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O_2) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

1.1 Analytes. What does this protocol determine?

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O_2).

Analyte	CAS No.	Sensitivity
Carbon monoxide (CO)	630-08-0	Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.
Oxygen (O_2)	*7782-44-7*	

1.2 Applicability. When is this protocol acceptable?

This protocol is applicable to 40 CFR part 63, subpart ZZZZ. Because of inherent cross sensitivities of EC cells, you must not apply this protocol to other emissions sources without specific instruction to that effect.

1.3 Data Quality Objectives. How good must my collected data be?

Refer to Section 13 to verify and document acceptable analyzer performance.

1.4 Range. What is the targeted analytical range for this protocol?

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O_2 , or no more than twice the permitted CO level.

1.5 Sensitivity. What minimum detectable limit will this protocol yield for a particular gas component?

The minimum detectable limit depends on the nominal range and resolution of the specific EC cell used, and the signal to noise ratio of the measurement system. The minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.

2.0 SUMMARY OF PROTOCOL

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and O_2 gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You may use additions to, or modifications of vendor supplied measurement systems (e.g., heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

3.0 DEFINITIONS

3.1 Measurement System. The total equipment required for the measurement of CO and O_2 concentrations. The measurement system consists of the following major subsystems:

3.1.1 Data Recorder. A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.

3.1.2 Electrochemical (EC) Cell. A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.

3.1.3 Interference Gas Scrubber. A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.

3.1.4 Moisture Removal System. Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.

3.1.5 Sample Interface. The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.

3.2 Nominal Range. The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several nominal ranges can be used for any given cell so long as the calibration and repeatability checks for that range remain within specifications.

3.3 Calibration Gas. A vendor certified concentration of a specific analyte in an appropriate balance gas.

3.4 Zero Calibration Error. The analyte concentration output exhibited by the EC cell in response to zero-level calibration gas.

3.5 Up-Scale Calibration Error. The mean of the difference between the analyte concentration exhibited by the EC cell and the certified concentration of the up-scale calibration gas.

3.6 Interference Check. A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.

3.7 Repeatability Check. A protocol for demonstrating that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated exposure to that gas.

3.8 Sample Flow Rate. The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.

3.9 Sampling Run. A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O_2 and moisture in the electrolyte reserve and provides a mechanism to de-gas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre- sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.

3.10 Sampling Day. A time not to exceed twelve hours from the time of the pre-sampling calibration to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.

3.11 Pre-Sampling Calibration/Post-Sampling Calibration Check. The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.

3.12 Performance-Established Configuration. The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.

4.0 INTERFERENCES.

When present in sufficient concentrations, NO and NO_2 are two gas species that have been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

5.0 SAFETY. [RESERVED]

6.0 EQUIPMENT AND SUPPLIES.

6.1 What equipment do I need for the measurement system?

The system must maintain the gas sample at conditions that will prevent moisture condensation in the sample transport lines, both before and as the sample gas contacts the EC cells. The essential components of the measurement system are described below.

6.2 Measurement System Components.

6.2.1 Sample Probe. A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.

6.2.2 Sample Line. Non-reactive tubing to transport the effluent from the sample probe to the EC cell.

6.2.3 Calibration Assembly (optional). A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.

6.2.4 Particulate Filter (optional). Filters before the inlet of the EC cell to prevent accumulation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.

6.2.5 Sample Pump. A leak-free pump to provide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.8 Sample Flow Rate Monitoring. An adjustable rotameter or equivalent device used to adjust and maintain the sample flow rate through the analyzer as prescribed.

6.2.9 Sample Gas Manifold (optional). A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.10 EC cell. A device containing one or more EC cells to determine the CO and O_2 concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.

6.2.11 Data Recorder. A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O_2 ; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.

6.2.12 Interference Gas Filter or Scrubber. A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer's recommendations.

7.0 REAGENTS AND STANDARDS. WHAT CALIBRATION GASES ARE NEEDED?

7.1 Calibration Gases. CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and O_2. Use CO calibration gases with labeled concentration values certified by the manufacturer to be within ± 5 percent of the label value. Dry ambient air (20.9 percent O_2) is acceptable for calibration of the O_2 cell. If needed, any lower percentage O_2 calibration gas must be a mixture of O_2 in nitrogen.

7.1.1 Up-Scale CO Calibration Gas Concentration. Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.

7.1.2 Up-Scale O_2 Calibration Gas Concentration.

Select an O_2 gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent O_2 . When the average exhaust gas O_2 readings are above 6 percent, you may use dry ambient air (20.9 percent O_2) for the up-scale O_2 calibration gas.

7.1.3 Zero Gas. Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO_2).

8.0 SAMPLE COLLECTION AND ANALYSIS

8.1 Selection of Sampling Sites.

8.1.1 Control Device Inlet. Select a sampling site sufficiently downstream of the engine so that the combustion gases should be well mixed. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.1.2 Exhaust Gas Outlet. Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.2 Stack Gas Collection and Analysis. Prior to the first stack gas sampling run, conduct that the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the “sample conditioning phase” once per minute until constant readings are obtained. Then begin the “measurement data phase” and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the “refresh phase” by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the “measurement data phase” readings to calculate the average stack gas CO and O_2 concentrations.

8.3 EC Cell Rate. Maintain the EC cell sample flow rate so that it does not vary by more than ± 10 percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check.

Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that does not affect the gas concentration readings by more than ± 3 percent, as instructed by the EC cell manufacturer.

9.0 Quality Control (Reserved)

10.0 Calibration and Standardization

10.1 Pre-Sampling Calibration. Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer's recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.

10.1.1 Zero Calibration. For both the O_2 and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

10.1.2 Zero Calibration Tolerance. For each zero gas introduction, the zero level output must be less than or equal to ± 3 percent of the up-scale gas value or ± 1 ppm, whichever is less restrictive, for the CO channel and less than or equal to ± 0.3 percent O_2 for the O_2 channel.

10.1.3 Up-Scale Calibration. Individually introduce each calibration gas to the measurement system (e.g., at the calibration assembly) and record the start time. Record all EC cell output responses and the flow rate during this “sample conditioning phase” once per minute until readings are constant for at least two minutes. Then begin the “measurement data phase” and record readings every 15 seconds for a total of two minutes, or as otherwise required. Finally, perform the “refresh phase” by introducing dry air, free from CO and other combustion gases, until readings are constant for at least two consecutive minutes. Then repeat the steps in this section at least once to verify the calibration for each component gas. Introduce all gases to flow through the entire sample handling system (i.e., at the exit end of the sampling probe or the calibration assembly).

10.1.4 Up-Scale Calibration Error. The mean of the difference of the “measurement data phase” readings from the reported standard gas value must be less than or equal to ± 5 percent or ± 1 ppm for CO or ± 0.5 percent O_2 , whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single “measurement data phase” reading must be less than or equal to ± 2 percent or ± 1 ppm for CO or ± 0.5 percent O_2 , whichever is less restrictive, respectively.

10.2 Post-Sampling Calibration Check. Conduct a stack gas post-sampling calibration check after the stack gas sampling run or set of runs and within 12 hours of the initial calibration. Conduct up-scale and zero calibration checks using the protocol in Section 10.1. Make no changes to the sampling system or EC cell calibration until all post-sampling calibration checks have been recorded. If either the zero or up-scale calibration error exceeds the respective specification in Sections 10.1.2 and 10.1.4 then all measurement data collected since the previous successful calibrations are invalid and re-calibration and re-sampling are required. If the sampling system is disassembled or the EC cell calibration is adjusted, repeat the calibration check before conducting the next analyzer sampling run.

11.0 Analytical Procedure

The analytical procedure is fully discussed in Section 8.

12.0 Calculations and Data Analysis

Determine the CO and O_2 concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the "measurement data phase".

13.0 PROTOCOL PERFORMANCE

Use the following protocols to verify consistent analyzer performance during each field sampling day.

13.1 Measurement Data Phase Performance Check. Calculate the mean of the readings from the "measurement data phase". The maximum allowable deviation from the mean for each of the individual readings is ± 2 percent, or ± 1 ppm, whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must conform to the specification in Section 8.3.

Example: A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than ± 2 percent *or ± 1 ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed*).

13.2 Interference Check. Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO_2 gas standards that are generally recognized as representative of diesel-fueled engine NO and NO_2 emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.

13.2.1 Interference Response. The combined NO and NO_2 interference response should be less than or equal to ± 5 percent of the up-scale CO calibration gas concentration.

13.3 Repeatability Check. Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest up-scale gas concentration.

13.3.1 Repeatability Check Procedure. Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.

13.3.2 Repeatability Check Calculations. Determine the highest and lowest average "measurement data phase" CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than ± 3 percent or ± 1 ppm of the up-scale gas value, whichever is less restrictive.

14.0 POLLUTION PREVENTION (RESERVED)

15.0 WASTE MANAGEMENT (RESERVED)

16.0 ALTERNATIVE PROCEDURES (RESERVED)

17.0 REFERENCES

(1) “Development of an Electrochemical Cell Emission Analyzer Test Protocol”, Topical Report, Phil Juneau, Emission Monitoring, Inc., July 1997.

(2) “Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers, and Process Heaters Using Portable Analyzers”, EMC Conditional Test Protocol 30 (CTM-30), Gas Research Institute Protocol GRI-96/0008, Revision 7, October 13, 1997.

(3) “ICAC Test Protocol for Periodic Monitoring”, EMC Conditional Test Protocol 34 (CTM-034), The Institute of Clean Air Companies, September 8, 1999.

(4) “Code of Federal Regulations”, Protection of Environment, 40 CFR, Part 60, Appendix A, Methods 1-4; 10.

TABLE 1: APPENDIX A—SAMPLING RUN DATA.

Facility_____ Engine I.D._____ Date_____				
Run Type:	(_)	(_)	(_)	(_)
(X)	Pre-Sample Calibration	Stack Gas Sample	Post-Sample Cal. Check	Repeatability Check

.

Run #	1	1	2	2	3	3	4	4	Time	Scrub. OK	Flow- Rate
Gas	O_2	CO	O_2	CO	O_2	CO	O_2	CO			
Sample Cond. Phase											
″											
″											
″											
″											
Measurement Data Phase											
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Refresh Phase											
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[78 FR 6721, Jan. 30, 2013]

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (TSD) for
a Part 70 Significant Permit Modification

Source Background and Description

Source Name:	Saint-Gobain Containers
Source Location:	524 East Center Street, Dunkirk, IN 47336
County:	Jay
SIC Code:	3221
Operation Permit No.:	T075-17108-00004
Operation Permit Issuance Date:	July 9, 2007
Significant Permit Modification No.:	075-32997-00004
Permit Reviewer:	Madhurima Moulik

Public Notice Information

On May 20, 2013, the Office of Air Quality (OAQ) had a notice published in the Commercial Review in Portland, Indiana stating that Saint-Gobain Containers had applied for a Part 70 Significant Permit Modification No. 075-32997-00004 to its Part 70 permit. The notice also stated that OAQ proposed to issue a Part 70 Significant Permit Modification 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.

OAQ received comments from the following:

o Saint-Gobain Containers

The comments have been summarized and the responses have been detailed below (**bold** to show additions and ~~strikethrough~~ to show deletions).

Comments from Saint-Gobain Containers

Comment No. 1

The emission unit description for Furnace No. 1 and Furnace No. 2 in Section D.1 should be updated to match the revised heat input capacities listed in Section A.2.

Response No. 1

The facility descriptions in Section D.1 have been updated:

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 1, constructed in 1993, and approved in 2012 for cold rebuild, with a maximum throughput capacity of 570 tons of glass per day and a maximum heat input capacity of ~~80~~ **84** MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and semi-dry scrubber, identified as scrubber No. 1, exhausting through stack No.3. [40 CFR 60, Subpart CC]

(b) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 2, constructed in 1998 and approved in 2011 for cold rebuild, with a maximum throughput capacity of 600 tons of glass per day and a maximum heat input capacity of ~~84.8~~ **150** MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and a semi-dry scrubber, identified as Scrubber No. 1, exhausting through Stack No. 3. [40 CFR 60, Subpart CC]

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

Comment No. 2

The emission unit description for the Mold Swabbing Facility (shops 11, 12, 13, 14, and 15) and the Mold Swabbing Facility (shops 21, 22, and 23) in Section D.2 should be updated to reflect the changes in the capacities to match the revisions in Section A.3.

Response No. 2

Section D.2 has been updated as follows:

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(a) One (1) hot end treatment facility, consisting of five (5) individual treatment locations (identified as shops 11, 12, 13, 14, and 15), servicing melting furnace No. 1, and having a maximum throughput capacity of 4.0 pounds per hour and exhausting through building ventilation system.

(b) One (1) hot end treatment facility consisting of three (3) individual treatment locations (identified as shops 21, 22, and 23), servicing melting furnace No. 2, and having a maximum throughput capacity of 4.5 pounds per hour and exhausting through building ventilation system.

(f) One (1) mold swabbing facility consisting of five (5) individual treatment locations (identified as shops 11, 12, 13, 14, and 15), servicing melting furnace No. 1, and having a maximum combined capacity of ~~4.5~~ **4.0** pounds of swabbing material per hour and exhausting through building ventilation system.

(g) One (1) mold swabbing facility consisting of three (3) individual treatment locations (identified as shops 21, 22, and 23), servicing melting furnace No. 2, and having a maximum combined capacity of ~~4.0~~ **4.5** pounds of swabbing material per hour and exhausting through building ventilation system.

...

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

Comment No. 3

The greenhouse gas (CO2e) emissions summarized in the TSD should be updated to reflect the updated emissions calculations submitted by the Permittee.

Response No. 3

IDEM prefers that the Technical Support Document reflect the draft permit that was on public notice. Therefore, changes have not been made to the Technical Support Document. The comment submitted by the Permittee is hereby noted in this addendum to the Technical Support Document. The updated Actual-to-Projected-Actual (ATPA) analysis has been included below (***Note: The changes in the ATPA analysis have no effect on permit level or rule applicabilities***):

Significant Permit Modification No. (SPM) 075-32997-00004)
There is no physical or operational change at Furnace No. 2 or any associated activities at this source. An approval for cold rebuild of Furnace No. 2 was issued in Significant Source Modification No. 075-29643-00004 on March 31, 2011. The PSD analysis from this modification was amended in Significant Permit Modification No. 075-30629-00004, issued on October 12, 2011 (project emissions increases based on Actual-to-Projected Actual test (ATPA) for Furnace No. 2 was amended and potential emissions for the soda ash and ESP dust silo were amended).

The Permittee has provided information as part of the application for this approval that based on Actual to Projected Actual test in 326 IAC 2-2-2(d)(3), this modification at a major stationary source will not be major for Prevention of Significant Deterioration under 326 IAC 2-2-1. IDEM, OAQ has not reviewed this information and will not be making any determination in this regard as part of this approval. The applicant will be required to keep records and report in accordance with Source obligation in 326 IAC 2-2-8. See Appendix A of this Technical Support Document for detailed emission calculations.

This proposed permit action will modify the PSD project emissions increase calculations for the Furnace No. 2 cold rebuild project originally approved under SSM No. 075-29643-00004 and re-calculated in SPM No. 075-30629-00004. Changes to the calculations of the project emissions increases are as follows: (bold to show additions and strike-through to show deletions):

	PM	PM_{10}/PM2.5	SO_2	NOx	VOC	CO	CO_2e
PTE (tpy) New Units							
Soda Ash Silo	1.73	1.73/1.73	0	0	0	0	0
ESP Dust Silo	1.73	1.73/1.73	0	0	0	0	0
GEN4 & GEN5	0.17	0.17/0.17	0.02	5.29	1.07	2.89	~~224.25~~ **247.24**
PTE of New Units (tpy)	3.63	3.63/3.63	0.02	5.29	1.07	2.89	~~224.25~~ **247.24**
Actual to Projected Actual (ATPA) (tpy) #2 Furnace							
Baseline [1]	~~37.62~~ **45.14**	~~43.56~~ **43.26/41.76**	182.16	134.64	19.80	19.80	**53,554.48** ~~53,671.33~~
Could Have Accommodated	~~0.45~~**0.54**	0.52/**0.50**	2.19	1.62	0.24	0.24	644.06
Projected Actuals	~~20.08~~ **49.28**	~~45.17~~ **43.80/39.42**	~~60.23~~ **65.70**	~~130.49~~ **142.35**	~~20.08~~ **21.90**	~~20.08~~ **21.90**	~~65,367.40~~ **68,059.01**

	PM	PM_{10}/PM2.5	SO_2	NOx	VOC	CO	CO_2e
ATPA (tpy)	~~< 0~~ **3.59**	~~1.08~~ **0.02**	< 0	< 0	~~0.04~~ **6.09**	~~0.04~~ **1.86**	~~11,168.85~~ **13,860.46**
Actual to Projected Actual (ATPA) (tpy) - Distributor							
Baseline	0.17	0.17	0.01	2.20	0.12	1.85	~~2,664.02~~ **2,646.61**
Could Have Accommodated	0.00	0.00	0.00	0.05	0.00	0.04	60.15
Projected Actuals	~~0.17~~ **0.18**	~~0.17~~ **0.18/0.18**	0.01	~~2.20~~ **2.43**	~~0.12~~ **0.13**	~~1.85~~ **2.04**	2,646.61
ATPA (tpy)	~~< 0~~ **0.01**	~~< 0~~ **0.01/0.01**	~~< 0~~**0.0**	~~< 0~~ **0.18**	~~< 0~~ **0.01**	~~< 0~~ **0.15**	< 0
Actual to Projected Actual (ATPA) (tpy) - Forehearths							
Baseline	0.27	0.27	0.02	3.60	0.20	3.02	4,330.82
Could Have Accommodated	0.00	0.00	0.00	0.05	0.00	0.04	60.15
Projected Actuals	~~0.28~~ **0.30**	~~0.28~~ **0.30/0.30**	0.02	~~3.65~~ **3.98**	~~0.20~~ **0.22**	~~3.07~~ **3.34**	4,390.97
ATPA (tpy)	~~< 0~~ **0.03**	~~< 0~~ **0.03/0.03**	~~< 0~~ **0.0**	~~< 0~~ **0.33**	~~< 0~~ **0.02**	~~< 0~~ **0.28**	< 0
Actual to Projected Actual (ATPA) (tpy) - Lehrs							
Baseline	0.20	0.20	0.02	2.65	0.15	2.23	3,187.96
Could Have Accommodated	0.00	0.00	0.00	0.05	0.00	0.04	60.15
Projected Actuals[2]	0.20 **0.22**	~~0.20~~ **0.22/0.22**	0.02	~~2.65~~ **2.93**	~~0.15~~ **0.16**	~~2.23~~ **2.46**	3,187.96
ATPA (tpy)	~~< 0~~ **0.02**	~~< 0~~ **0.02/0.02**	~~< 0~~ **0.0**	~~< 0~~ **0.23**	~~< 0~~ **0.01**	~~< 0~~ **0.19**	< 0
Actual to Projected Actual (ATPA) (tpy) - Mold Swab							
Baseline	11.01	11.01	0	0	0	0	0
Could Have Accommodated	0.13	0.13	0	0	0	0	0
Projected Actuals	~~11.16~~ **12.17**	~~11.16~~ **12.17/12.17**	0	0	0	0	0
ATPA (tpy)	~~0.03~~ **1.03**	~~0.03~~ **1.03/1.03**	0	0	0	0	0

	PM	PM_{10}/PM2.5	SO_2	NOx	VOC	CO	CO_2e
Actual to Projected Actual (ATPA) (tpy) - Hot End Coating							
Baseline	3.11	3.11	0	0	0	0	0
Could Have Accommodated	0.04	0.04	0	0	0	0	0
Projected Actuals	~~3.16~~ **3.45**	~~3.16~~ **3.45/3.45**	0	0	0	0	0
ATPA (tpy)	~~0.01~~ **0.29**	~~0.01~~ **0.29/0.29**	0	0	0	0	0
Actual to Projected Actual (ATPA) (tpy) - Batchhouse							
Baseline [3]	~~0.04~~ **0.42**	~~0.04~~ **0.42/0.42**	0	0	0	0	0
Could Have Accommodated	0.00	0.00	0	0	0	0	0
Projected Actuals	~~0.45~~ **0.47**	~~0.45~~ **0.47/0.47**	0	0	0	0	0
ATPA (tpy)	~~0.41~~ **0.04**	~~0.41~~ **0.04/0.04**	0	0	0	0	0
Hybrid Test (tpy)							
PTE of New Units (tpy)	3.63	3.63	0.02	5.29	1.07	2.89	~~224.25~~ **247.24**
Sum of ATPA Increases (tpy)	~~0.44~~ **5.02**	~~1.52~~ **1.44/1.43**	0	~~0~~ **6.83**	~~0.04~~ **1.90**	~~0.04~~ **2.49**	~~11,168.85~~ **13,860.46**
Furnace 1 ATPA[4] Increases (tpy)	**2.68**	**2.68/2.68**	**0.01**	**5.22**	**3.89**	**5.38**	**16,312.97**
Hybrid Test Emissions Increase (tpy)	~~4.07~~ **11.33**	~~4.07~~ **7.76/7.74**	~~0.02~~ **0.04**	~~5.29~~ **17.35**	~~1.11~~ **6.87**	~~2.93~~ **10.76**	~~11,393.10~~ **30,420.67**
Significant Level	25	15/10	40	40	40	100	75,000

Notes:
[1] The emission factor for PM used in the SSM No. 075-29643-00004 issued on March 31, 2011, for the Furnace 2 rebuild project was 0.38 lb/ton, which was based on the filterable PM fraction from the most recent stack test.

In the current application, the Permittee has used a total PM emission factor (including condensible emissions).

The PM10 emission factor (0.44 lb/ton) for Furnace 2 in SSM No. 075-29643-00004 was based on the same stack test, using the assumption that 95% of the total filterable PM was PM10 (per AP-42). In addition, condensible PM10 emissions have been included.

The PM2.5 emission factor for Furnace 2 is based on the same stack test, with the assumption that 91% of the total filterable PM is PM2.5 (per AP-42). In addition, condensable PM10 emissions have been included.

[2] In SSM No. 075-29643-00004, it was assumed that there would be a negligible increase in fuel usage for natural gas fired units downstream of the furnace. The amount of natural gas used in these units is not directly tied to the amount of glass produced.

In the current application, the conservative assumption was made that the projected natural gas usage for these units would increase with increased glass production. Therefore, projected actual emissions are greater than baseline emissions for natural gas fired units in the updated table.

[3] The calculation of baseline emissions from the batchhouse in the TSD for SSM No. 075-29643-00004 was found to have contained an error, which appeared to underestimate baseline emissions. The formula used the emission factor for the batchhouse, but incorrectly multiplied it by the Mold Swab baseline usage. The mold swab usage was 24,458 tpy versus the batchhouse throughput of 235,186 tpy. This calculation has been corrected as follows:

[4] The Furnace 1 cold rebuild project permitted in MSM No. 075-32269-00004 issued on October 12, 2012 is considered as a single project with the Furnace 2 cold rebuild, originally permitted in SSM No. 075-29643-00004. SSM No. 075-29643-00004 for the Furnace 2 rebuild did not include the Furnace 1 rebuild emission increases because the Furnace 1 rebuild was applied for and permitted after the SSM for the Furnace 2 rebuild was issued. The emissions increases from the Furnace 1 rebuild were added to the revised calculations for the Furnace 2 rebuild.

Based on this analysis, this modification will not be major for Prevention of Significant Deterioration under 326 IAC 2-2-1.

Comment No. 4

In the section titled “Proposed Changes” in the Technical Support Document, the change in the throughput for the mold swabbing facility servicing Furnace 2 has not been included as part of the description of changes.

Response No. 4

IDEM prefers that the Technical Support Document reflect the draft permit that was on public notice. Therefore, changes have not been made to the Technical Support Document. The comment submitted by the Permittee is hereby noted in this addendum to the Technical Support Document. The permit language has been updated as indicated above to correct the inadvertent errors in the draft permit related to throughput capacities of affected units.

No change has been made as a result of this comment.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for
a Part 70 Significant Permit Modification

Source Description and Location

Source Name:	Saint-Gobain Containers
Source Location:	524 East Center Street, Dunkirk, IN 47336
County:	Jay
SIC Code:	3221
Operation Permit No.:	T075-17108-00004
Operation Permit Issuance Date:	July 9, 2007
Significant Permit Modification No.:	075-32999-00004
Permit Reviewer:	Madhurima Moulik

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. 075-17108-00004 on July 9, 2007. The source has since received the following approvals:

(a) Administrative Amendment No. 075-25583-00004, issued on January 10, 2008;
(b) Significant Permit Modification No. 075-25052-00004, issued on December 11, 2009;
(c) Significant Source Modification No. 075-29643-00004, issued on March 31, 2011;
(d) Significant Permit Modification No. 075-29645-00004, issued on April 21, 2011; and
(e) Significant Permit Modification No. 075-32271-00004, issued on December 11, 2012.

County Attainment Status

The source is located in Jay County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]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 PM2.5.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Jay County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Jay County has been classified as attainment for $PM_{2.5}$. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ 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 PM10 emissions as a surrogate for $PM_{2.5}$ emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants
Jay 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.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70

The modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because the modification includes a case-by-case determination of an emission limitation and pursuant to 326 IAC 2-7-12(b)(1)(C)(i) does not qualify for a minor permit modification.

Permit Level Determination – PSD Actual to Projected Actual Test

Significant Source Modification (SSM) No. 075-29643-00004 (issued March 31, 2011) and Significant Permit Modification (SPM) No. 075-29645-00004 (issued April 21, 2011)
The Office of Air Quality (OAQ) reviewed a modification application, submitted by Saint-Gobain Containers on September 7, 2010, relating to the installation of new control devices, and associated new equipment, and the incorporation of requirements pursuant to the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ (W.D. Wash). As part of the permitting action, calculations for PSD emissions increases were conducted which included an Actual-to-Projected Actual test (ATPA) for the Furnace No. 2 rebuild.

Significant Permit Modification (SPM) No. 075-30629-00004 (issued October 12, 2011)
This permitting action (075-30629-00004) modified the potential to emit (PTE) of units included in the calculations for PSD emissions increases conducted under SSM 075-29643-00004 and SPM 075-29645-00004. There are no physical changes or changes in the method of operation as a result of this modification. Furthermore, the proposed changes did not result in any upstream or downstream increased utilization. Therefore, under 326 IAC 2-2 (PSD), this modification was considered to be one project with SSM 075-29643-00004 and SPM 075-29645-00004. The PSD analysis for determining project emissions increases was revised.

Significant Permit Modification No. (SPM) 075-32997-00004)
There is no physical or operational change at Furnace No. 2 or any associated activities at this source. An approval for cold rebuild of Furnace No. 2 was issued in Significant Source Modification No. 075-29643-00004 on March 31, 2011. The PSD analysis from this modification was amended in Significant Permit Modification No. 075-30629-00004, issued on October 12, 2011 (project emissions increases based on Actual-to-Projected Actual test (ATPA) for Furnace No. 2 was amended and potential emissions for the soda ash and ESP dust silo were amended).

The Permittee has provided information as part of the application for this approval that based on Actual to Projected Actual test in 326 IAC 2-2-2(d)(3), this modification at a major stationary source will not be major for Prevention of Significant Deterioration under 326 IAC 2-2-1. IDEM, OAQ has not reviewed this information and will not be making any determination in this regard as part of this approval. The applicant will be required to keep records and report in accordance with Source obligation in 326 IAC 2-2-8. See Appendix A of this Technical Support Document for detailed emission calculations.

This proposed permit action will modify the PSD project emissions increase calculations for the Furnace No. 2 cold rebuild project originally approved under SSM No. 075-29643-00004 and re-calculated in SPM No. 075-30629-00004. Changes to the calculations of the project emissions increases are as follows: (bold to show additions and strike-through to show deletions):

	PM	PM_{10}/PM2.5	SO_2	NOx	VOC	CO	CO_2e
PTE (tpy) New Units							
Soda Ash Silo	1.73	1.73/1.73	0	0	0	0	0
ESP Dust Silo	1.73	1.73/1.73	0	0	0	0	0
GEN4 & GEN5	0.17	0.17/0.17	0.02	5.29	1.07	2.89	224.25
PTE of New Units (tpy)	3.63	3.63/3.63	0.02	5.29	1.07	2.89	224.25
Actual to Projected Actual (ATPA) (tpy) #2 Furnace							
Baseline [1]	~~37.62~~ **45.14**	~~43.56~~ **43.26/41.76**	182.16	134.64	19.80	19.80	53,671.33
Could Have Accommodated	~~0.45~~**0.54**	0.52/**0.50**	2.19	1.62	0.24	0.24	644.06
Projected Actuals	~~20.08~~ **49.28**	~~45.17~~ **43.80/39.42**	~~60.23~~ **65.70**	~~130.49~~ **142.35**	~~20.08~~ **21.90**	~~20.08~~ **21.90**	~~65,367.40~~ **68,059.01**
ATPA (tpy)	~~< 0~~ **3.59**	~~1.08~~ **0.02**	< 0	< 0	~~0.04~~ **6.09**	~~0.04~~ **1.86**	~~11,168.85~~ **13,860.46**
Actual to Projected Actual (ATPA) (tpy) - Distributor							
Baseline	0.17	0.17	0.01	2.20	0.12	1.85	2,664.02
Could Have Accommodated	0.00	0.00	0.00	0.05	0.00	0.04	60.15
Projected Actuals	~~0.17~~ **0.18**	~~0.17~~ **0.18/0.18**	0.01	~~2.20~~ **2.43**	~~0.12~~ **0.13**	~~1.85~~ **2.04**	2,646.61
ATPA (tpy)	~~< 0~~ **0.01**	~~< 0~~ **0.01/0.01**	~~< 0~~**0.0**	~~< 0~~ **0.18**	~~< 0~~ **0.01**	~~< 0~~ **0.15**	< 0

	PM	PM_{10}/PM2.5	SO_2	NOx	VOC	CO	CO_2e
Actual to Projected Actual (ATPA) (tpy) - Forehearths							
Baseline	0.27	0.27	0.02	3.60	0.20	3.02	4,330.82
Could Have Accommodated	0.00	0.00	0.00	0.05	0.00	0.04	60.15
Projected Actuals	~~0.28~~ **0.30**	~~0.28~~ **0.30/0.30**	0.02	~~3.65~~ **3.98**	~~0.20~~ **0.22**	~~3.07~~ **3.34**	4,390.97
ATPA (tpy)	~~< 0~~ **0.03**	~~< 0~~ **0.03/0.03**	~~< 0~~ **0.0**	~~< 0~~ **0.33**	~~< 0~~ **0.02**	~~< 0~~ **0.28**	< 0
Actual to Projected Actual (ATPA) (tpy) - Lehrs							
Baseline	0.20	0.20	0.02	2.65	0.15	2.23	3,187.96
Could Have Accommodated	0.00	0.00	0.00	0.05	0.00	0.04	60.15
Projected Actuals[2]	0.20 **0.22**	~~0.20~~ **0.22/0.22**	0.02	~~2.65~~ **2.93**	~~0.15~~ **0.16**	~~2.23~~ **2.46**	3,187.96
ATPA (tpy)	~~< 0~~ **0.02**	~~< 0~~ **0.02/0.02**	~~< 0~~ **0.0**	~~< 0~~ **0.23**	~~< 0~~ **0.01**	~~< 0~~ **0.19**	< 0
Actual to Projected Actual (ATPA) (tpy) - Mold Swab							
Baseline	11.01	11.01	0	0	0	0	0
Could Have Accommodated	0.13	0.13	0	0	0	0	0
Projected Actuals	~~11.16~~ **12.17**	~~11.16~~ **12.17/12.17**	0	0	0	0	0
ATPA (tpy)	~~0.03~~ **1.03**	~~0.03~~ **1.03/1.03**	0	0	0	0	0
Actual to Projected Actual (ATPA) (tpy) - Hot End Coating							
Baseline	3.11	3.11	0	0	0	0	0
Could Have Accommodated	0.04	0.04	0	0	0	0	0
Projected Actuals	~~3.16~~ **3.45**	~~3.16~~ **3.45/3.45**	0	0	0	0	0
ATPA (tpy)	~~0.01~~ **0.29**	~~0.01~~ **0.29/0.29**	0	0	0	0	0

	PM	PM_{10}/PM2.5	SO_2	NOx	VOC	CO	CO_2e
Actual to Projected Actual (ATPA) (tpy) - Batchhouse							
Baseline [3]	~~0.04~~ **0.42**	~~0.04~~ **0.42/0.42**	0	0	0	0	0
Could Have Accommodated	0.00	0.00	0	0	0	0	0
Projected Actuals	~~0.45~~ **0.47**	~~0.45~~ **0.47/0.47**	0	0	0	0	0
ATPA (tpy)	~~0.41~~ **0.04**	~~0.41~~ **0.04/0.04**	0	0	0	0	0
Hybrid Test (tpy)							
PTE of New Units (tpy)	3.63	3.63	0.02	5.29	1.07	2.89	224.25
Sum of ATPA Increases (tpy)	~~0.44~~ **5.02**	~~1.52~~ **1.44/1.43**	0	~~0~~ **6.83**	~~0.04~~ **1.90**	~~0.04~~ **2.49**	~~11,168.85~~ **13,860.46**
Furnace 1 ATPA[4] Increases (tpy)	**2.68**	**2.68/2.68**	**0.01**	**5.22**	**3.89**	**5.38**	**16,312.97**
Hybrid Test Emissions Increase (tpy)	~~4.07~~ **11.33**	~~4.07~~ **7.76/7.74**	~~0.02~~ **0.04**	~~5.29~~ **17.35**	~~1.11~~ **6.87**	~~2.93~~ **10.76**	~~11,393.10~~ **30,430.67**
Significant Level	25	15/10	40	40	40	100	75,000

Notes:
[1] The emission factor for PM used in the SSM No. 075-29643-00004 issued on March 31, 2011, for the Furnace 2 rebuild project was 0.38 lb/ton, which was based on the filterable PM fraction from the most recent stack test.

In the current application, the Permittee has used a total PM emission factor (including condensible emissions).

The PM10 emission factor (0.44 lb/ton) for Furnace 2 in SSM No. 075-29643-00004 was based on the same stack test, using the assumption that 95% of the total filterable PM was PM10 (per AP-42). In addition, condensible PM10 emissions have been included.

The PM2.5 emission factor for Furnace 2 is based on the same stack test, with the assumption that 91% of the total filterable PM is PM2.5 (per AP-42). In addition, condensable PM10 emissions have been included.

[2] In SSM No. 075-29643-00004, it was assumed that there would be a negligible increase in fuel usage for natural gas fired units downstream of the furnace. The amount of natural gas used in these units is not directly tied to the amount of glass produced.

In the current application, the conservative assumption was made that the projected natural gas usage for these units would increase with increased glass production. Therefore, projected actual emissions are greater than baseline emissions for natural gas fired units in the updated table.

[3] The calculation of baseline emissions from the batchhouse in the TSD for SSM No. 075-29643-00004 was found to have contained an error, which underestimated baseline emissions. The formula used the emission factor for the batchhouse, but incorrectly multiplied by the Mold Swab baseline usage. The mold swab usage was 24,458 tpy versus the batchhouse throughput of 235,186 tpy. This calculation has been corrected in the current application.

[4] The Furnace 1 cold rebuild project permitted in MSM No. 075-32269-00004 issued on October 12, 2012 is considered as a single project with the Furnace 2 cold rebuild, originally permitted in SSM No. 075-29643-00004. SSM No. 075-29643-00004 for the Furnace 2 rebuild did not include the Furnace 1 rebuild emission increases because the Furnace 1 rebuild was applied for and permitted after the SSM for the Furnace 2 rebuild was issued. The emissions increases from the Furnace 1 rebuild were added to the revised calculations for the Furnace 2 rebuild.

Based on this analysis, this modification will not be major for Prevention of Significant Deterioration under 326 IAC 2-2-1.

Federal Rule Applicability Determination

NSPS:

(a) The diesel-fired emergency generators at this source, GEN4 and GEN5 are subject to the Standards for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart IIII, which is incorporated by reference as 326 IAC 12. The emission units subject to this rule include the following:

Two (2) diesel-fired emergency generators, identified as GEN4 and GEN5, approved in 2011 for construction, each with a maximum rating of 750 kW.

40 CFR 60, Subpart IIII has been amended, effective April 1, 2013. The amended rule has been included as Attachment B to the permit.

Nonapplicable portions of the NSPS will not be included in the permit. The generators GEN4 and Gen5 are subject to the following portions of Subpart IIII:

(1) 40 CFR 60.4200 (a)(2)(i) and (c)
(2) 40 CFR 60.4205(b)
(3) 40 CFR 60.4206
(4) 40 CFR 60.4207(b)
(5) 40 CFR 60.4208
(6) 40 CFR 60.4209(a)
(7) 40 CFR 60.4211 (a), (c), (e), and (f)
(8) 40 CFR 60.4214 (b)
(9) 40 CFR 60.4218
(10) 40 CFR 60.4219
(11) Table 8 to Subpart IIII of Part 60

NESHAP:

(b) The emergency generators at this source, identified as GEN1, GEN2,GEN3, GEN4, and GEN5 are subject to the Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines which is incorporated by reference as 326 IAC 20-82. The emission units subject to this rule include the following:

(a) Two (2) diesel-fired emergency generators, identified as GEN4 and GEN5, approved in 2011 for construction, each with a maximum rating of 750 kW.

(b) Three (3) diesel-fired emergency generators, identified as GEN1, GEN2, and GEN3, each with a maximum rating not to exceed one thousand six hundred (1,600) horsepower (HP).

Nonapplicable portions of the NESHAP will not be included in the permit. The emission units GEN1, GEN2, GEN3, GEN4, and GEN5 are subject to the following portions of Subpart ZZZZ:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b), (c), and (d)
(3) 40 CFR 63.6590(a)(1)(iii), (a)(1)(iv), (a)(2)(iii), and (c)(1)
(4) 40 CFR 63.6595(a)(1), (a)(7), (b), and (c)
(5) 40 CFR 63.6603(a)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625(e)(3), (f), (h), and (i)
(8) 40 CFR 63.6640(a), (b), (e), (f)
(9) 40 CFR 63.6645(a)(5)
(10) 40 CFR 63.6650(f)
(11) 40 CFR 63.6655(e)(2), (e)(3), (f)(2)
(12) 40 CFR 63.6660
(13) 40 CFR 63.6665
(14) 40 CFR 63.6670
(15) 40 CFR 63.6675
(16) Table 2d to Subpart ZZZZ of Part 63 - Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions
(17) Table 6 to Subpart ZZZZ of Part 63 - Continuous Compliance with Emission Limitations, Work Practices, and Management Practices
(18) Table 8 to Subpart ZZZZ of Part 63 - Applicability of General Provisions to Subpart ZZZZ

State Rule Applicability Determination

326 IAC 2-2 (PSD)
PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD section.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The particulate matter emission limitations under 326 IAC 6-3-2 for Furnace No. 2, the associated batch handling facility and the iron oxide raw material storage bin have been modified due to the increase in the process weight rate.

(a) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the Furnace No. 2 shall not exceed 40.3 pounds per hour when operating at a process weight rate of 31.25 tons per hour (62,500 pounds per hour).
(b) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the batch handling facility for Furnace No. 2 shall not exceed 40.3 pounds per hour when operating at a process weight rate of 31.25 tons per hour (62,500 pounds per hour).
(c) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the iron oxide raw material storage bin shall not exceed 1.87 pounds per hour when operating at a process weight rate of 0.31 tons per hour.

The pound per hour limitations was calculated with the following equations:

(a) Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

where

E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

(b) Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 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 2-7-5. 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.

The compliance determination requirements applicable to this modification are as follows:

The compliance determination requirements remain unchanged as a result of this modification.

The compliance monitoring requirements applicable to this modification are as follows:

The compliance monitoring requirements remain unchanged as a result of this modification.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit (Renewal) No.: T075-17108-00004. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

(a) The facility descriptions in Sections A.2 and D.1 have been modified to increase the stated maximum rated throughput capacity of Furnace No. 2 from 550 tons per day to 600 tons per day.

(b) The maximum heat input capacities of Furnace No. 1 and Furnace No. 2 in Sections A.2, D.1 and E.1 have been changed from 80 mmBTU/hr to 84 mmBTU/hr, and 84.8 mmBTU/hr to 150 mmBTU/hr. (*Note: the increase in maximum heat input capacities were initially reported during the cold building project application in 2010, and are descriptive changes only; the increase in potential to emit was already included in the ATPA calculations, which includes both the process emissions and fuel combustion emissions*)

(c) Section D.0, which included interim emission limitations for Furnace 1 and Furnace 2 under the Consent Decree has been deleted in its entirety because the furnaces are now subject to final emission limitations under the Consent Decree. All references to Section D.0 have been deleted from the permit.

(d) The facility descriptions in Sections A.3 and D.3 have been modified to increase the throughput rate for the iron oxide raw material storage bin from 560 pounds per hour to

620 pounds per hour and that of the batch handling facility associated with Furnace No. 2 from 28.65 tons per hour to 31.25 tons per hour. In addition, the throughput for the hot end treatment facility servicing Furnace No. 2 has been modified to 4.5 lb/hr in Sections A.3 and D.2.

(e) Condition D.1.1 - NOx Limit [326 IAC 2-1.1-5] has been modified to change the NOx emission limitation for abnormally low production rate days for Furnace No. 2.

(f) Condition D.1.2 SO2 and Sulfuric Acid Mist (H2SO4) Limit has been updated for the increase in the throughput for Furnace No. 2.

(g) Condition D.1.4 Particulate [326 IAC 6-3] has been updated to increase the limitation for Furnace No. 2 due to the increase in the process weight rate.

(h) Condition D.3.1 – Particulate Matter has been modified to update the PM emission limitations for emission sources associated with Furnace No. 2 due to increases in process weight rates.

(i) The NSPS and NESHAP for Stationary IC engines (40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ) have been amended effective April 1, 2013. Conditions E.2.2 and E.3.2 have been updated accordingly.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(14)]

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

(a) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 1, constructed in 1993, and approved in 2012 for cold rebuild, with a maximum throughput capacity of 570 tons of glass per day and a maximum heat input capacity of ~~80~~ **84** MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and semi-dry scrubber, identified as scrubber No. 1, exhausting through stack No.3. [40 CFR 60, Subpart CC]

(b) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 2, constructed in 1998 and approved in 2011 for cold rebuild, with a maximum throughput capacity of ~~550~~ **600** tons of glass per day and a maximum heat input capacity of ~~84.8~~ **150** MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and a semi-dry scrubber, identified as Scrubber No. 1, exhausting through Stack No. 3. [40 CFR 60, Subpart CC]

(c) …

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)]

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

(a) One (1) hot end treatment facility, consisting of five (5) individual treatment locations (identified as shops 11, 12, 13, 14, and 15), servicing melting furnace No. 1, constructed in 1993, and having a maximum throughput capacity of 4.0 pounds per hour and exhausting through building ventilation system. [326 IAC 6-3]

(b) One (1) hot end treatment facility, consisting of three (3) individual treatment locations (identified as shops 21, 22, and 23), servicing melting furnace No. 2, constructed in 1993, and having a maximum throughput capacity of 4.0 pounds per hour and exhausting through building ventilation system. [326 IAC 6-3]

….

(d) One (1) batch handling facility servicing melting furnace No. 2, constructed in 1993, with a maximum capacity of ~~28.65~~ **31.25** tons of raw material per hour, venting inside the building. [326 IAC 6-3]

(e) One (1) raw material handling process consisting of one (1) raw material storage bin, constructed in 2003, with a maximum throughput rate of ~~560~~ **620** pounds of iron oxide per hour, controlled by one (1) dust collector, and venting inside the silo. The raw material is transferred to the storage bin using a pneumatic conveyance system. [326 IAC 6-3]

(g) One (1) mold swabbing facility consisting of three (3) individual treatment locations (identified as shops 21, 22, and 23), servicing melting furnace No. 2, constructed in 1993, and having a maximum combined capacity of ~~4.0~~ **4.5** pounds of swabbing material per hour and exhausting through building ventilation system. [326 IAC 6-3]

~~SECTION D.0 FACILITY OPERATION CONDITIONS~~

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

~~(a) One (1) Oxy-fuel glass melting furnace, identified as Furnace No. 1, constructed in 1993, with a maximum throughput capacity of 500 tons of glass per day while interim limits are in effect and a maximum heat input capacity of 80 MMBtu per hour, and exhausting at stack No.1. [40 CFR 60, Subpart CC]~~

~~No later than December 31, 2012, or after the cold rebuild of Furnace No. 1, the stack No. 1 exhaust will be routed to an emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and a semi-dry scrubber, identified as Scrubber No. 1, which will exhaust at stack No. 3.~~

~~(b) One (1) Oxyfuel glass melting furnace, identified as Furnace No. 2, constructed in 1998 and approved in 2011 for cold rebuild, with a maximum throughput capacity of 550 tons of glass per day and a maximum heat input capacity of 84.8 MMBtu per hour, and exhausting at stack No. 2.~~

~~Upon completion of the cold rebuild, the stack No. 2 exhaust will be routed to an emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and a semi-dry scrubber, identified as Scrubber No. 1, which will exhaust at stack No. 3.~~

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

~~Emission Limitations and Standards~~

~~D.0.1 Interim NOx Limit [326 IAC 2-1.1-5]~~

~~As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.) and 326 IAC 2-1.1-5 (Air Quality Requirements), the Permittee shall comply with the following interim limits:~~

~~(a) NOx emissions from Furnace No. 1 shall not exceed 146 tons per Calendar Year.~~

~~(b) NOx emissions from Furnace No. 2 shall not exceed 160.6 tons per Calendar Year.~~

~~(c) Compliance with the NOx Calendar Year interim limits (Conditions D.0.1 (a) and (b)) shall be calculated by using the following equation:~~

~~NOx = [(PastTest x 1stprod) / 2000] + [(NewTest x 2ndprod) / 2000]~~

~~Where:~~

~~NOx = NOx Emissions (tpy)~~
~~PastTest = Last source test result (lb/ton). If no source test has been conducted as required by the Consent Decree, an emission factor of 1.6 lbs NOx/ton glass produced shall be used.~~

~~NewTest = New test from the year for which emissions are being calculated (lb/ton).~~
~~1stprod = Production from January 1st through the Day prior to the Day the new source test is commenced (tons of glass).~~
~~2ndprod = Production from the Day of the new source test through the end of that same Calendar Year (tons of glass).~~

~~Note: If SGCI elects to do more than one test in a year, emissions calculated on the Days following the second test, will be based on that second test.~~

~~(d) For each furnace: upon NOx CEMS installation and certification compliance with the interim NOx emission limits shall be demonstrated using emissions data generated by the NOx CEMS in order to calculate all subsequent daily emission rates that are used to calculate the annual emission rate for the Calendar Year.~~

~~For the first Calendar Year during which CEMS are installed and certified, the annual emissions calculated will be the sum of the tons of NOx emitted on the Days when the emissions were determined from source test data (as calculated above in Condition D.0.1(c)) and the tons of NOx emitted on the Days when emissions were determined by CEMS data.~~

~~(e) For each furnace: the limits set forth in D.0.1(a) and D.0.1(b) shall remain in effect through December 31st of the Calendar Year in which the furnace is required to comply with the NOx emission limitation of 1.3 lb/ton of glass produced as required by Condition D.1.1(a).~~

~~Section D.1 of this permit contains the Permittee's obligations with regard to the NOx CEMS referenced by this condition.~~

~~D.0.2 Interim SO_2 Limit [326 IAC 2-1.1-5]~~

~~As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.) and 326 IAC 2-1.1-5 (Air Quality Requirements), the Permittee shall comply with the following interim limits:~~

~~(a) For each furnace: on and after the first stack test after May 7, 2010, SO_2 emissions from the respective furnace shall not exceed 2.5 pounds per ton of glass produced, except during periods of Abnormally Low Production Rate Days, Furnace Startup, Malfunction, Maintenance, and Color Transition.~~

~~(b) Compliance with any the interim limit in Condition D.0.2 may be determined by averaging the emissions from Furnace No. 1 and Furnace No. 2.~~

~~These limits shall remain in effect for each furnace, respectively, until the furnace is required to comply with the SO_2 emission limits required by Condition D.1.2(c).~~

~~Section D.1 of this permit contains the Permittee's obligations with regard to the SO_2 CEMS referenced by this condition.~~

~~D.0.3 Interim PM (Filterable) Limit [326 IAC 2-1.1-5]~~

~~As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.) and 326 IAC 2-1.1-5 (Air Quality Requirements), the Permittee shall comply with the following interim limits:~~

~~(a) For each furnace: on and after the first respective stack test following May 7, 2010, PM (Filterable) emissions from the furnace shall each not exceed 1.0 pound of PM per ton of glass produced.~~

(b) This interim PM (Filterable) emission limit shall remain in effect for each Furnace until the Furnace is required to comply with a PM emission limit specified in Condition D.1.3 - PM (Filterable) and Total PM Limit.

(1) Furnace No. 1 is required to comply with a PM emission limit specified in Condition D.1.3 - PM (Filterable) and Total PM Limit, no later than December 31, 2012.

(2) Furnace No. 2, is required to comply with a PM emission limit specified in Condition D.1.3 - PM (Filterable) and Total PM Limit, on and after the first seven (7) Operating Day(s) of the Furnace Startup following the completion of the cold rebuild project associated with Furnace No. 2, but no later than December 31, 2012.

Compliance Determination Requirements

D.0.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), the Permittee shall comply with the following stack test requirements:

(a) For each furnace, compliance with the interim NOx emission limits (Condition D.0 - Interim NOx Limit) shall be demonstrated by conducting an EPA Method 7E (40 CFR Part 60 Appendix A) source test. Testing shall be conducted initially no later than May 7, 2011 and once each Calendar Year thereafter until NOx CEMS are installed and certified. A source test is not required the year that a NOx CEMS is installed.

(b) Prior to SO_2 CEMS installation and Certification, compliance with the SO_2 interim limits in Condition D.0.2 shall be demonstrated by conducting an EPA Method 6C (40 CFR Part 60 Appendix A) source test. Testing shall be conducted initially no later than May 7, 2011 and once each Calendar Year thereafter until SO_2 CEMS are installed and certified. A source test is not required the year that a SO_2 CEMS is installed.

(c) For each Furnace, compliance with the interim PM (Filterable) limits (Condition D.0.3 - Interim PM (Filterable) Limit) shall be demonstrated by conducting an EPA Method 5 (40 CFR Part 60 Appendix A) source test. Testing shall be conducted initially no later than May 7, 2011 and once each Calendar Year thereafter. This stack test shall not be required in a Calendar Year during which compliance with limits determined under Condition D.1.3 - PM (Filterable) and Total PM Limit is demonstrated.

Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.0.5 Definition of Terminology

As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), the definitions, included as Attachment A to this permit, shall apply to the following terms when used throughout Section D.0 of this permit.

(a) "24-hour Block Average"
(b) "Affected State(s)"
(c) "Abnormally Low Production Rate"
(d) "Abnormally Low Production Rate Day"
(e) "Calendar Year"
(f) "CEMS"
(g) "CEMS Certification"
(h) "CEMS Certification Event"
(i) "Color Transition"

(j) "COMS"
(k) "Continuous Operating Year"
(l) "Control Device Startup"
(m) "Day"
(n) "Emission Rate 30-day Rolling Average"
(o) "First Control Device Startup"
(p) "Furnace"
(q) "Furnace Startup"
  (i) "Initial Heating Phase"
  (ii) "Refractory Soak and Seal Phase"
  (iii) "Furnace Stabilization Phase"
(r) "Hot Spot Temperature"
(s) "Inlet"
(t) "Maintenance"
(u) "Major Rebuild"
(v) "Malfunction"
(w) "Month"
(x) "NOx"
(y) "Operate", "Operation", "Operating", and "Operated"
(z) "Operating Day"
(aa) "Outlet"
(bb) "Outlet 30-day Rolling Average"
(cc) "Oxyfuel Furnace"
(dd) "Particulate Matter" and "PM"
(ee) "Removal Efficiency"
(ff) "Removal Efficiency 30-day Rolling Average"
(gg) "Scrubber System"
(hh) "SO_2"
(ii) "Ton" or "tons"
(jj) "TSP"

D.0.6 Continuous Emissions Monitoring Systems (CEMS)

Section D.1 contains the Permittee's obligation with regard to the Compliance Determination Requirements for the CEMS referenced in Section D.0.

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

D.0.7 NOx and SO_2 Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Section D.1 contains the Permittee's obligation with regard to the Compliance Monitoring Requirements for the CEMS referenced in Section D.0.

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

D.0.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.0.1 - Interim NOx Limit, the Permittee shall maintain records for each furnace in accordance with (1) through (5) below, Records shall be complete and sufficient to determine compliance with the NOx limitations established in Condition D.0.1.

  (1) Data and results from all valid compliance source tests for NOx.

  (2) Glass production (1stprod) from January 1 through the Day prior to the Day the new source test (NewTest) commenced in tons of glass produced.

  (3) Glass production (2ndprod) from the Day of the new source test (NewTest) through the end of that Calendar Year in tons of glass produced.

  (4) A calculation of the NOx emissions in tons per year.

~~(5) For a furnace that has a NOx CEMS, the recorded emissions according to the CEMS in pounds per day.~~

~~(b) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), to document the compliance status with Condition D.0.2 - Interim SO_2 Limit, the Permittee shall maintain records in accordance with (1) and (4) below, Records shall be complete and sufficient to determine compliance with the SO_2 limitations established in Condition D.0.2.~~

~~(1) Data and results from all valid compliance source tests for SO_2.~~

~~(2) For any Operating Day that SO_2 emissions are excluded from the SO_2 Emission Rate 30-day rolling average, the Permittee shall maintain the following records.~~

~~(A) The date of the exclusion.~~
~~(B) The exception (Abnormally Low Production Rate Day, Furnace Startup, Furnace Malfunction, Furnace Maintenance, or Color Transition) under which it is excluded.~~
~~(C) A calculation of the applicable limit in pounds per day.~~

~~(c) To document the compliance status with Condition D.0.3- Interim PM (Filterable) Limit, the Permittee shall maintain records of the data and results from all valid compliance source tests for PM.~~

~~Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.~~

~~D.0.9 Reporting Requirements~~

~~(a) An annual report and an annual summary of the information to document the compliance status with Condition D.0.1- Interim NOx Limit shall be submitted not later than thirty (30) days after the end of the Calendar year being reported.~~

~~(b) Section C – General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).~~

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 1, constructed in 1993, and approved in 2012 for cold rebuild, with a maximum throughput capacity of 570 tons of glass per day and a maximum heat input capacity of ~~80~~ **84** MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and semi-dry scrubber, identified as scrubber No. 1, exhausting through stack No.3. [40 CFR 60, Subpart CC]

(b) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 2, constructed in 1998 and approved in 2011 for cold rebuild, with a maximum throughput capacity of ~~550~~ **600** tons of glass per day and a maximum heat input capacity of ~~84.8~~ **150** MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and a semi-dry scrubber, identified as Scrubber No. 1, exhausting through Stack No. 3. [40 CFR 60, Subpart CC]

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

D.1.1 NOx Limit [326 IAC 2-1.1-5]

As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.) and 326 IAC 2-1.1-5 (Air Quality Requirements), for Furnace No. 1 and Furnace No. 2, the Permittee shall comply with the following:

(a) For Furnace No. 2: on and after the first Operating Day after completion of the Furnace Startup Period associated with the cold rebuild project and NOx CEMS certification, but no later than December 31, 2012, the 30-day rolling average NOx emissions from Furnace No. 2 shall not exceed 1.3 lb/ton glass produced, except during the following periods: Abnormally Low Production Rate Days, Furnace Startup, Malfunction of the Furnace, and Maintenance of the Furnace.

(b) For Furnace No. 1: on and after, the first Operating Day after completion of the Furnace Startup Period associated with the cold rebuild project and NOx CEMS Certification Event following a next major rebuild of Furnace No. 1, but no later than December 31, 2013, the 30-day rolling average NOx emissions from Furnace No. 1 shall not exceed 1.3 lb/ton glass produced, except during the following periods: Abnormally Low Production Rate Days, Furnace Startup, Malfunction of the Furnace, and Maintenance of the Furnace.

(c) For any Abnormally Low Production Rate Days, the Permittee may elect to exclude the emissions generated during that Day from the 30-day rolling average. During these days the Permittee shall comply with the following $NO_{X\ OXY\ ABN}$ limit (24-hour Block Average):

(A) For Furnace No. 1, $NO_{X\ OXY\ ABN}$ = 743 lb NOx/day; and,

(B) For Furnace No. 2, $NO_{X\ OXY\ ABN}$ = ~~717~~ **780** lb NOx/day.

The following equation was used to determine the $NO_{X\ OXY\ ABN}$ limitations:

$NOx_{OXY\ ABN}$ = 1.3 (lb NOx/ton glass produced) x P/0.35

Where:

$NOx_{OXY\ ABN}$ = NOx emission limit for an Oxyfuel Furnace during an Abnormally Low Production Rate Day in pounds per day

P = Abnormally Low Production Rate (tons glass produced)
For Furnace No. 1: P = 200 (tons/day)
For Furnace No. 2: P = ~~193~~ **210** (tons/day)

(d) Furnace Startup limitations:

…

(e) For any Operating Day where a Malfunction of a furnace occurs for any period of time, the Permittee may elect to exclude the emissions generated during that Operating Day(s) from the 30-day rolling average for the respective furnace. During the Malfunction Days, the Permittee shall comply with the following $NO_{X\ OXY\ MALF}$ limit (24-hour Block Average):

(A) For Furnace No. 1, $NO_{X\ OXY\ MALF}$ = 2,972 lb NOx/day; and,

(B) For Furnace No. 2, $NO_{X\ OXY\ MALF}$ = ~~2,868~~ **3,120** lb NOx/day.

The following equation was used to determine the $NO_{X\ OXY\ MALF}$ limitations:

$NOx_{OXY\ MALF} = 4.0 \times NOx_{OXY\ ABN}$

Where:

$NOx_{OXY\ MALF}$ = NOx emission limit for an Oxyfuel Furnace during a Malfunction Day, in pounds per day.

$NOx_{OXY\ ABN}$ = As defined in Condition D.1.1(c), NOx emission limit for an Oxyfuel Furnace during an Abnormally Low Production Rate Day, in pounds per day.
For Furnace No. 1: $NOx_{OXY\ ABN}$ = 743 (tons/day)
For Furnace No. 2: $NOx_{OXY\ ABN}$ = ~~717~~ **780** (tons/day)

(f) For any Operating Day where Maintenance activities on a furnace are performed, the Permittee may elect to exclude the Maintenance Day from the 30-day rolling average for the respective furnace. During the Maintenance Day, the Permittee shall comply with the following $NOx_{OXY\ MAINT}$ limit (24-hour Block Average):

$$NOx_{OXY\ MAINT} = [MH \times (4 \times NOx_{OXY\ ABN})) / 24] + [(NH \times NOx_{OXY\ ABN}) / 24]$$

Where:

$NOx_{OXY\ MAINT}$ = NOx emission limit for an Oxyfuel Furnace during a Maintenance Day, in pounds per day.

$NOx_{OXY\ ABN}$ = As defined in Condition D.1.1(c), NOx emission limit for an Oxyfuel Furnace during an Abnormally Low Production Rate Day, in pounds per day.
For Furnace No. 1: $NOx_{OXY\ ABN}$ = 743 (tons/day)
For Furnace No. 2: $NOx_{OXY\ ABN}$ = ~~717~~ **780** (tons/day)

MH = hours of Maintenance

NH = normal hours = 24 - MH

(g) ….

D.1.2 SO_2 and Sulfuric Acid Mist (H_2SO_4) Limit [326 IAC 2-1.1-5]

As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.) and 326 IAC 2-1.1-5 (Air Quality Requirements), for Furnace No. 1 and Furnace No. 2, the Permittee shall comply with the following:

(a) Upon completion of the cold rebuild project associated with Furnace No. 2, but no later than December 31, 2012, all stack gases from Furnace No. 2 shall be captured and controlled by a semi-dry scrubber (Scrubber No. 1) except during periods of Control Device Startup, up to the first seven (7) days of the Furnace Startup, and during Malfunction of the emission control system (Scrubber No. 1 and ESP No. 1), and Maintenance on the emission control system (Scrubber No. 1 and ESP No. 1).

(b) …

(e) For any Operating Day where a Malfunction of the Scrubber System (Scrubber No. 1) or ESP (ESP No. 1) occurs for any period of time, the Permittee may elect to exclude the emissions generated during that Operating Day (or Operating Days if the event covers more than one Operating Day) from the SO_2 Removal Efficiency 30-day Rolling Average and Scrubber SO_2 Outlet 30-day Rolling Average emission rates. During the Malfunction Days excluded from the SO_2 Removal Efficiency 30-day Rolling Average and Scrubber SO_2 Outlet 30-day Rolling Average emission rates, the SO_2 emissions (as a 24-hour Block Average) shall be limited as follows:

(A) For the combined emissions of Furnace No. 1, and Furnace No. 2 from stack No. 3, $SO_{2\ SCRUB\ MALF}$ = ~~2,808~~ **2,929** lb SO_2/day;

The following equation was used to determine the $SO_{2\ SCRUB\ MALF}$ limitations:

$SO_{2\ SCRUB\ MALF}$ = 2.5 lb SO_2/ton glass x (P/0.35)

Where:

$SO_{2\ SCRUB\ MALF}$ = SO_2 emission limit for a Furnace with a Semi-dry Scrubber (Scrubber No. 1) during a Malfunction Day, in pounds per day.
P = Sum of the Abnormally Low Production Rates (tons glass produced)
For Furnace No. 1: P = 200 (tons/day)
For Furnace No. 2: P = ~~193~~ **210** (tons/day)

The individual Malfunction limits are:

1,429 lbs/day for Furnace 1
~~1,379~~ **1,500** lbs/day for Furnace 2

The individual limit applies if one of the furnaces is not operating.

(f) For any Operating Day where Maintenance activities on the Scrubber System (Scrubber No. 1) or ESP (ESP No. 1) are performed, the Permittee may elect to exclude the Maintenance Day from the SO_2 Removal Efficiency 30-day Rolling Average and Scrubber SO_2 Outlet 30-day Rolling Average emission rates. For any Day which is excluded from the SO_2 30-day Rolling Average, the SO_2 emissions (as a 24-hour Block Average) shall be limited as follows:

$SO_{2\ SCRUB\ MAINT}$ = [[MH x (2.5 lb SO_2/ton glass x (P/0.35))] / 24] + [[NH x ((1/3) x 2.5 lb SO_2/ton glass x (P/0.35))] / 24]

Where:

$SO_{2\ SCRUB\ MAINT}$ = SO_2 emission limit for a Furnace with a Semi-Dry Scrubber during a Maintenance Day, in pounds per day.
P = Sum of the Abnormally Low Production Rates (tons glass produced)
For Furnace No. 1: P = 200 tons per day
For Furnace No. 2: P = ~~193~~ **210** tons per day
MH = Hours of Maintenance
NH = Normal Hours = 24 – MH

(g) …

D.1.4 Particulate [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from the two (2) Oxyfuel glass melting furnaces (identified as Furnace No. 1 and 2) using Propane as a back-up fuel, shall not exceed 39.8 and ~~38.8~~ **40.3** pounds per hour when operating at a process weight rate of 59,375 and ~~57,292~~ **62,500** pounds per hour, respectively.

The pounds per hour limitations were calculated with the following equation:

(a) Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$

where

E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

(b) Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.9 Continuous Emissions Monitoring Systems (CEMS) [326 IAC 3-5]

(a) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), upon completion of the cold rebuild of Furnace No. 2, but no later than December 31, 2012, the Permittee shall comply with the following:

....

(b) As required by the Consent Decree entered in United States vs. Saint-Gobain Containers, Inc., Civil Action No. 2:10-cv-00121-TSZ, (W.D. Wash.), after the cold rebuild of Furnace No. 1, but no later than December 31, 2012, the Permittee shall comply with the following:

(1) A continuous emission monitoring system (CEMS) for NOx shall be installed, calibrated, maintained, and operated for measuring Furnace No. 1 NOx emissions at stack No. 1 for the purpose of demonstrating compliance with the NOx limitations of Condition ~~D.0.1 or~~ D.1.1.

The NOx CEMS shall monitor continuously and record the hourly NOx emission concentration (parts per million) during each Operating Day from Furnace No. 1. The CEMS shall calculate and record in units of parts per million of NOx emitted.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(a) One (1) hot end treatment facility, consisting of five (5) individual treatment locations (identified as shops 11, 12, 13, 14, and 15), servicing melting furnace No. 1, and having a maximum throughput capacity of 4.0 pounds per hour and exhausting through building ventilation system.

(b) One (1) hot end treatment facility consisting of three (3) individual treatment locations (identified as shops 21, 22, and 23), servicing melting furnace No. 2, and having a maximum throughput capacity of 4.0 pounds per hour and exhausting through building ventilation system.

(c) One (1) mold swabbing facility consisting of five (5) individual treatment locations (identified as shops 11, 12, 13, 14, and 15), servicing melting furnace No. 1, and having a maximum combined capacity of 4.5 pounds of swabbing material per hour and exhausting through building ventilation system.

(d) One (1) mold swabbing facility consisting of three (3) individual treatment locations (identified as shops 21, 22, and 23), servicing melting furnace No. 2, and having a maximum combined capacity of ~~4.0~~ **4.5** pounds of swabbing material per hour and exhausting through building ventilation system.

(e) One (1) sandblaster, installed in 2007, located in the mold shop, controlled by a dust collector (identified as Empire), and exhausting outside.

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

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(c) One (1) batch handling facility servicing melting furnace No. 1, constructed in 1993, with a maximum capacity of ~~26.04~~ **29.69** tons of raw material per hour, venting inside the building.

(d) One (1) batch handling facility servicing melting furnace No. 2, constructed in 1993, with a maximum capacity of ~~28.65~~ **31.25** tons of raw material per hour, venting inside the building.

(e) One (1) raw material handling process consisting of one (1) raw material storage bin, constructed in 2003, with a maximum throughput rate of ~~560~~ **620** pounds of iron oxide per hour, controlled by one (1) dust collector, and venting inside the silo. The raw material is transferred to the storage bin using a pneumatic conveyance system.

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

D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the two (2) batching handling facilities and one (1) raw storage bin shall not exceed the exceed the particulate emission limit as shown in the table below.

Emission Units	Process Weight (lbs/hour)	Process Weight (tons/hour)	Particulate Emission Limit (lbs/hour)
Batch handling facility servicing furnace No. 1	59,375	~~26.04~~**29.69**	39.8
Batch handling facility servicing furnace No. 2	~~57,292~~ **62,500**	~~28.65~~ **31.25**	~~38.82~~ **40.3**
Raw material handling used in conjunction with raw material storage bin	~~560~~ **620**	~~0.28~~ **0.31**	~~1.75~~ **1.87**

The pounds per hour limitation was calculated with the following equation:

(a) Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$

where

E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

(b) Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ **where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour**

SECTION E.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 1, constructed in 1993, and approved in 2012 for cold rebuild, with a maximum throughput capacity of 570 tons of glass per day and a maximum heat input capacity of ~~80~~ **84** MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and semi-dry scrubber, identified as scrubber No. 1, exhausting through stack No.3. [40 CFR 60, Subpart CC]

(b) One (1) Oxy-fuel glass melting furnace using propane as a backup fuel, identified as Furnace No. 2, constructed in 1998 and approved in 2011 for cold rebuild, with a maximum throughput capacity of ~~550~~ **600** tons of glass per day and a maximum heat input capacity of ~~84.8~~ **150** MMBtu per hour, and exhausting to a common emission control system consisting of an electrostatic precipitator, identified as ESP No. 1, and a semi-dry scrubber, identified as Scrubber No. 1, exhausting through Stack No. 3. [40 CFR 60, Subpart CC]

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

E.2.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [326 IAC 12] [40 CFR Part 60, Subpart IIII]

Pursuant to 40 CFR Part 60, Subpart IIII, the Permittee shall comply with the provisions of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.4200 (a)(2)(i) and (c)
(2) 40 CFR 60.4205(b)
(3) 40 CFR 60.4206
(4) 40 CFR 60.4207(b)
(5) 40 CFR 60.4208
(6) 40 CFR 60.4209(a)
(7) 40 CFR 60.4211 (a), (c), ~~and~~ (e), **and (f)**
(8) 40 CFR 60.4214 (b)
(9) 40 CFR 60.4218
(10) 40 CFR 60.4219
(11) Table 8 to Subpart IIII of Part 60 - Applicability of General Provisions to Subpart IIII

E.3.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [326 IAC 20-82] [40 CFR Part 63, Subpart ZZZZ]

Pursuant to 40 CFR Part 63, Subpart ZZZZ, the Permittee shall comply with the provisions of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 20-82, as specified as follows:

~~(1) 40 CFR 63.6580~~
~~(2) 40 CFR 63.6585 (a), (b), (c), and (d)~~
~~(3) 40 CFR 63.6590 (a)(1)(iii), (a)(1)(iv), (a)(2)(iii), and (c)(1)~~
~~(4) 40 CFR 63.6595 (a)(1), (a)(7), (b), and (c)~~
~~(5) 40 CFR 63.6603(a)~~
~~(6) 40 CFR 63.6605~~
~~(7) 40 CFR 63.6625 (e)(3), (f), (h), and (i)~~
~~(8) 40 CFR 63.6640 (a), (b), (d), (e), (f)(1)~~
~~(9) 40 CFR 63.6645(a)(5)~~
~~(10) 40 CFR 63.6650 (e) and (f)~~
~~(11) 40 CFR 63.6660~~
~~(12) 40 CFR 63.6665~~
~~(13) 40 CFR 63.6670~~
~~(14) 40 CFR 63.6675~~
~~(15) Table 2d to Subpart ZZZZ of Part 63 - Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions~~
~~(16) Table 6 to Subpart ZZZZ of Part 63 - Continuous Compliance with Emission Limitations, Work Practices, and Management Practices~~
~~(17) Table 8 to Subpart ZZZZ of Part 63 - Applicability of General Provisions to Subpart ZZZZ~~

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b), (c), and (d)
(3) 40 CFR 63.6590(a)(1)(iii), (a)(1)(iv), (a)(2)(iii), and (c)(1)
(4) 40 CFR 63.6595(a)(1), (a)(7), (b), and (c)
(5) 40 CFR 63.6603(a)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625(e)(3), (f), (h), and (i)
(8) 40 CFR 63.6640(a), (b), (e), (f)
(9) 40 CFR 63.6645(a)(5)
(10) 40 CFR 63.6650(f)
(11) 40 CFR 63.6655(e)(2), (e)(3), (f)(2)
(12) 40 CFR 63.6660
(13) 40 CFR 63.6665
(14) 40 CFR 63.6670
(15) 40 CFR 63.6675
(16) Table 2d to Subpart ZZZZ of Part 63 - Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

(17) Table 6 to Subpart ZZZZ of Part 63 - Continuous Compliance with Emission Limitations, Work Practices, and Management Practices

(18) Table 8 to Subpart ZZZZ of Part 63 - Applicability of General Provisions to Subpart ZZZZ

Conclusion and Recommendation

This proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 075-32997-00004. The staff recommend to the Commissioner that this Part 70 Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Madhurima Moulik 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) 233-0868 or toll free at 1-800-451-6027 extension 3-0868.

(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

Appendix A: Emission Calculations
Summary Of Emissions Increase

Company Name: Saint-Gobain Containers
Address City IN Zip: 524 East Center Street, Dunkirk, Indiana 47336
Significant Permit Modification No. : 075-32997-00004
Reviewer: Madhurima Moulik
Date: 4/18/2013

1. Summary of Emissions Increase

	PM	PM10	PM2.5	SO2	NOx	H2SO4	VOC	CO	CO2e
PTE (tpy) New Units									
Soda Ash Silo (Limited)	1.73	1.73	1.73	--	--	--	--	--	--
ESP Dust Silo (Limited)	1.73	1.73	1.73	--	--	--	--	--	--
GEN4 & GEN5	0.17	0.17	0.17	0.02	5.29	--	1.07	2.89	247.24
PTE of New Units (tpy)	3.63	3.63	3.63	0.02	5.29	--	1.07	2.89	247.24
Actual to Projected Actual (ATPA) (tpy) #2 Furnace									
Baseline	45.14	43.26	41.76	182.16	134.64	19.80	19.80	19.80	53,554.48
Could Have Accommadated (CHA)	0.54	0.52	0.50	2.19	1.62	0.24	0.24	0.24	644.06
Projected Actuals	49.28	43.80	39.42	65.70	142.35	21.90	21.90	21.90	68,059.01
ATPA (tpy)	3.59	0.02	< 0	< 0	6.09	1.86	1.86	1.86	13,860.46
Actual to Projected Actual (ATPA) (tpy) - Distributor									
Baseline	0.17	0.17	0.17	0.01	2.20	--	0.12	1.85	2,646.61
Could Have Accommadated (CHA)	0.00	0.00	0.00	0.00	0.05	--	0.00	0.04	60.15
Projected Actuals	0.18	0.18	0.18	0.01	2.43	--	0.13	2.04	2,646.61
ATPA (tpy)	0.01	0.01	0.01	0.00	0.18	--	0.01	0.15	< 0
Actual to Projected Actual (ATPA) (tpy) - Forehearths									
Baseline	0.27	0.27	0.27	0.02	3.60	--	0.20	3.02	4,330.82
Could Have Accommadated (CHA)	0.00	0.00	0.00	0.00	0.05	--	0.00	0.04	60.15
Projected Actuals	0.30	0.30	0.30	0.02	3.98	--	0.22	3.34	4,390.97
ATPA (tpy)	0.03	0.03	0.03	0.00	0.33	--	0.02	0.28	< 0
Actual to Projected Actual (ATPA) (tpy) - Lehrs									
Baseline	0.20	0.20	0.20	0.02	2.65	--	0.15	2.23	3,187.96
Could Have Accommadated (CHA)	0.00	0.00	0.00	0.00	0.05	--	0.00	0.04	60.15
Projected Actuals	0.22	0.22	0.22	0.02	2.93	--	0.16	2.46	3,187.96
ATPA (tpy)	0.02	0.02	0.02	0.00	0.23	--	0.01	0.19	< 0
Actual to Projected Actual (ATPA) (tpy) - Mold Swab									
Baseline	11.01	11.01	11.01	0.00	0.00	--	0.00	0.00	
Could Have Accommadated (CHA)	0.13	0.13	0.13	0.00	0.00	--	0.00	0.00	
Projected Actuals	12.17	12.17	12.17	0.00	0.00	--	0.00	0.00	
ATPA (tpy)	1.03	1.03	1.03	0.00	0.00	--	0.00	0.00	0.00
Actual to Projected Actual (ATPA) (tpy) - Hot End Coating									
Baseline	3.11	3.11	3.11	0.00	0.00	--	0.00	0.00	
Could Have Accommadated (CHA)	0.04	0.04	0.04	0.00	0.00	--	0.00	0.00	
Projected Actuals	3.45	3.45	3.45	0.00	0.00	--	0.00	0.00	
ATPA (tpy)	0.29	0.29	0.29	0.00	0.00	--	0.00	0.00	0.00
Actual to Projected Actual (ATPA) (tpy) - Batchhouse									
Baseline	0.42	0.42	0.42	0.00	0.00	--	0.00	0.00	
Could Have Accommadated (CHA)	0.00	0.00	0.00	0.00	0.00	--	0.00	0.00	
Projected Actuals	0.47	0.47	0.47	0.00	0.00	--	0.00	0.00	
ATPA (tpy)	0.04	0.04	0.04	0.00	0.00	--	0.00	0.00	0.00
Hybrid Test (tpy)									
PTE of New Units (tpy)	3.63	3.63	3.63	0.02	5.29	--	1.07	2.89	247.24
Sum of ATPA Increases (tpy)	5.02	1.44	1.43	0.00	6.83	1.86	1.90	2.49	13,860.46
F1 Sum of ATPA Increases (tpy)	2.68	2.68	2.68	0.01	5.22	3.79	3.89	5.38	16,312.97
Hybrid Test Emissions Increase (tpy)	**11.33**	**7.76**	**7.74**	**0.04**	**17.35**	**5.65**	**6.87**	**10.76**	**30,420.67**
Significant Level (tpy)	**25**	**15**	**10**	**40**	**40**	**7**	**40**	**100**	**75000**

Appendix A: Emission Calculations
Summary Of Emissions Increase

Company Name: Saint-Gobain Containers
Address City IN Zip: 524 East Center Street, Dunkirk, Indiana 47336
Significant Permit Modification No. : 075-32997-00004
Reviewer: Madhurima Moulik
Date: 4/18/2013

2. Calculations for Affected Existing Units (PM, PM10, SO2, NOx, VOC, CO)

	Glass (tpy)	PM	PM10	PM2.5	SO2	NOx	H2SO4	VOC	CO
Emission Factors (lb/ton glass)									
AP-42 (Table 11.15-2, 10/86)								0.20	0.20
AP-42 (Table 11.15-3, 10/86)									
Based on Source Testing		0.46	0.44	0.42	1.84	1.36	0.20		
#2 Furnace Baseline PTE (tpy)	198,003	45.14	43.26	41.76	182.16	134.64	19.80	19.80	19.80
#2 Furnace CHA PTE (tpy)	2,382	0.54	0.52	0.50	2.19	1.62	0.24	0.24	0.24
Emission Factors (lb/ton glass)		0.45	0.40	0.36	0.60	1.30	0.20	0.20	0.20
#2 Furnace Projected Actuals (tpy)	219,000	49.28	43.80	39.42	65.70	142.35	21.90	21.90	21.90

Methodology: PTE (tpy) = glass (tpy) x emission factor (lb/ton glass) x 1/2000 (ton/lbs)
Projected Actual Emission Factors for PM/PM10/PM2.5, SO2 & NOx based on Consent Decree.
Projected Actual Emission Factors for H2SO4 VOC & CO from similar facility stack testing data.

	N. Gas (mmscf/yr)	PM	PM10	PM2.5	SO2	NOx	VOC	CO
Emission Factors (lb/mmscf)								
AP-42 (Table 1.4-1 & 2, 7/98)		7.60	7.60	7.60	0.60	100.00	5.50	84.00
Distributor Baseline PTE (tpy)	44	0.17	0.17	0.17	0.01	2.20	0.12	1.85
Forehearths Baseline PTE (tpy)	72	0.27	0.27	0.27	0.02	3.60	0.20	3.02
Lehrs Baseline PTE (tpy)	53	0.20	0.20	0.20	0.02	2.65	0.15	2.23
Distributor CHA PTE (tpy)	1	3.80E-03	3.80E-03	3.80E-03	3.00E-04	5.00E-02	2.75E-03	4.20E-02
Forehearths CHA PTE (tpy)	1	3.80E-03	3.80E-03	3.80E-03	3.00E-04	5.00E-02	2.75E-03	4.20E-02
Lehrs CHA PTE (tpy)	1	3.80E-03	3.80E-03	3.80E-03	3.00E-04	5.00E-02	2.75E-03	4.20E-02
Distributor Projected Actuals (tpy)	49	1.85E-01	1.85E-01	1.85E-01	1.46E-02	2.43E+00	1.34E-01	2.04E+00
Forehearths Projected Actuals (tpy)	80	3.03E-01	3.03E-01	3.03E-01	2.39E-02	3.98E+00	2.19E-01	3.34E+00
Lehrs CHA PTE (tpy)	59	2.23E-01	2.23E-01	2.23E-01	1.76E-02	2.93E+00	1.61E-01	2.46E+00

Methodology: PTE (tpy) = N. Gas (mmscf) x emission factor (lb/mmscf) x 1/2000 (ton/lbs)
Projected Actual N. Gas usage = Baseline N. G. usage x Glass throughput (projected)/Glass throuput (baseline)

	Material (lb/yr)	PM	PM10	PM2.5	SO2	NOx	VOC	CO
Mold Swab Emission Factor (lb/lb material)		0.90	0.90	0.90	0.00	0.00	0.00	0.00
Hot End Emission Factor (lb/lb material)		0.24	0.24	0.24	0.00	0.00	0.00	0.00
Mold Swab Baseline PTE (tpy)	24,458	11.01	11.01	11.01	0.00	0.00	0.00	0.00
Hot End Coating Baseline PTE (tpy)	25,957	3.11	3.11	3.11	0.00	0.00	0.00	0.00
Mold Swab CHA PTE (tpy)	294	0.13	0.13	0.13	0.00	0.00	0.00	0.00
Hot End Coating CHA PTE (tpy)	312	0.04	0.04	0.04	0.00	0.00	0.00	0.00
Mold Swab Projected Actuals (tpy)	27,052	12.17	12.17	12.17	0.00	0.00	0.00	0.00
Hot End Coating Projected Actuals (tpy)	28,710	3.45	3.45	3.45	0.00	0.00	0.00	0.00

Methodology: PTE (tpy) = material (tpy) x emission factor (lb/ton material) x 1/2000 (ton/lbs)
Projected actual material (lb/yr) = Baseline lb/yr x Projected glass throughput/Baseline Glass throughput

	Material (tpy)	PM	PM10	PM2.5	SO2	NOx	VOC	CO
Emission Factors (lb/ton material)		3.60E-03	3.60E-03	3.60E-03	0.00	0.00	0.00	0.00
Batchhouse Baseline PTE (tpy)	235,186	4.23E-01	4.23E-01	4.23E-01	0.00	0.00	0.00	0.00
Batchhouse CHA PTE (tpy)	2,829	5.29E-04	5.29E-04	5.29E-04	0.00	0.00	0.00	0.00
Batchhouse Projected Actuals (tpy)	260,126	0.47	0.47	0.47	0.00	0.00	0.00	0.00

Methodology: PTE (tpy) = material (tpy) x emission factor (lb/ton material) x 1/2000 (ton/lbs)
Batchhouse Material (tpy) Projected = Batchhouse Baseline tpy x Projected actual glass throughput/Baseline glass throughput

Appendix A: Emission Calculations
Summary Of Emissions Increase

Company Name: Saint-Gobain Containers
Address City IN Zip: 524 East Center Street, Dunkirk, Indiana 47336
Significant Permit Modification No. : 075-32997-00004
Reviewer: Madhurima Moulik
Date: 4/18/2013

3. CO2e Calculations for Affected Existing Units

a. Emission factors for N.G. combustion from 40 CFR 98 Subpart C (General Fuel Stationary Combustion Sources).
b. Emission factors for carbonate based raw material usage from 40 CFR 98 Subpart N (Glass Production) & the following calculation:

E.F. (*M* ton/*M* ton material) = summation [Mfi x (Mi x 2000 *M* ton/2205 ton) x EFi x Fi]
Where:

MFi = Annual average mass fraction of carbonate-base mineral i in carbonate-based raw material i (%, expressed as a decimal). Per, 40 CFR 98.143 (c) can use a value of 1.
Mi = Annual amount of carbonate-based raw material i charged to furnace (tons).
EFi = Emission factor for carbonate-based raw material i (metric ton CO2 per metric ton carbonate-based raw material, as shown in Table N–1 to this subpart). EFi (limestone) = 0.44, EFi (soda ash) = 0.415
Fi = Fraction of calcination achieved for carbonate-based raw material i, assumed to be equal to 1.0 (percentage, expressed as a decimal).

Emission Factors:	CO2	CH4	N2O
kg/MMBtu	53.02	0.001	0.0001
M ton/*M* ton limestone	0.44	0	0
M ton/*M* ton soda ash	0.415	0	0
scrubber M ton/*M* ton soda ash	0.415	0	0

Furnace No. 2 - Baseline	Throughput	Units	CO2	CH4	N2O
(1) natural gas usage	569,025	MMBtu/yr	31,014.46	0.58	0.06
(2) limestone usage	21,884	ton/yr	8,733.75	0.00	0.00
(2) soda ash usage	23,370	ton/yr	8,796.87	0.00	0.00
Furnace No. 2 Baseline PTE (*M* ton/yr) =			48,545.08	0.58	0.06
Furnace No. 2 Baseline PTE (tpy) =			**53,520.95**	**0.64**	**0.06**

Furnace No. 2 - Baseline			
Compound		GWP	Resultant
CO2		1	53,520.95
CH4		21	13.54
N2O		310	19.99
(3) **CO2e PTE (tpy)=**			**53,554.48**

Furnace No. 2 - Could Have Accommodated (CHA)	Throughput	Units	CO2	CH4	N2O
(1) natural gas usage	6,845	MMBtu/yr	373.08	0.01	0.00
(2) limestone usage	263	ton/yr	104.96	0.00	0.00
(2) soda ash usage	281	ton/yr	105.77	0.00	0.00
Furnace No. 2 CHA PTE (*M* ton/yr) =			583.82	0.01	0.001
Furnace No. 2 CHA PTE (tpy) =			**643.66**	**0.01**	**0.001**

Furnace No. 2 - (CHA) Could Have Accommodated			
Compound		GWP	Resultant
CO2		1	643.66
CH4		21	0.16
N2O		310	0.24
(3) **CO2e PTE (tpy) =**			**644.06**

Furnace No. 2 - Projected Actuals	Throughput	Units	CO2	CH4	N2O
(1) natural gas usage	742,848	MMBtu/yr	40,488.60	0.76	0.08
(2) limestone usage	24,205	ton/yr	9,659.91	0.00	0.00
(2) soda ash usage	25,848	ton/yr	9,729.72	0.00	0.00
(2) scrubber soda ash usage	4,818	ton/yr	1,813.58	0.00	0.00
Furnace No. 2 Projected Actuals PTE (*M* ton/yr) =			61,691.82	0.76	0.08
Furnace No. 2 Projected Actuals PTE (tpy) =			**68,015.23**	**0.84**	**0.084**

Furnace No. 2 - Projected Actuals			
Compound		GWP	Resultant
CO2		1	68,015.23
CH4		21	17.68
N2O		310	26.10
(3) **CO2e PTE (tpy) =**			**68,059.01**

Distributor - Baseline	Throughput (MMscf/yr)	CO2	CH4	N2O
(4) natural gas usage	44	2,398.20	0.05	0.00
Distributor Baseline PTE (*M* ton/yr) =		2,398.20	4.52E-02	4.52E-03
Distributor Baseline PTE (tpy) =		**2,644.02**	**4.99E-02**	**4.99E-03**

Distributor - Baseline				
Compound	CO2		CH4	N2O
GWP	1		21	310
Resultant	2,644.02		1.05	1.55
(3) **CO2e PTE (tpy) =**	**2,646.61**			

Appendix A: Emission Calculations
Summary Of Emissions Increase

Company Name: Saint-Gobain Containers
Address City IN Zip: 524 East Center Street, Dunkirk, Indiana 47336
Significant Permit Modification No. : 075-32997-00004
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Distributor - Could Have Accommodated (CHA)	Throughput (MMscf/yr)	CO2	CH4	N2O
[4] natural gas usage	1	54.50	1.03E-03	1.03E-04
Distributor CHA PTE (*M* ton/yr) =		54.50	1.03E-03	1.03E-04
Distributor CHA PTE (tpy) =		**60.09**	**1.13E-03**	**1.13E-04**

	Distributor - CHA			
Compound	CO2		CH4	N2O
GWP	1		21	310
Resultant	60.09		2.38E-02	3.51E-02

[3] **CO2e PTE (tpy) = 60.15**

Distributor - Projected Actuals	Throughput (MMscf/yr)	CO2	CH4	N2O
[4] natural gas usage	44	2,398.20	4.52E-02	4.52E-03
Distributor Projected Actuals PTE (*M* ton/yr) =		2,398.20	4.52E-02	4.52E-03
Distributor Projected Actuals PTE (tpy) =		**2,644.02**	**4.99E-02**	**4.99E-03**

	Distributor - Projected Actuals			
Compound	CO2		CH4	N2O
GWP	1		21	310
Resultant	2,644.02		1.05E+00	1.55E+00

[3] **CO2e PTE (tpy) = 2,646.61**

Forehearths - Baseline	Throughput (MMscf/yr)	CO2	CH4	N2O
[4] natural gas usage	72	3,924.33	7.40E-02	7.40E-03
Forehearths Baseline PTE (*M* ton/yr) =		3,924.33	7.40E-02	7.40E-03
Forehearths Baseline PTE (tpy) =		**4,326.57**	**8.16E-02**	**8.16E-03**

	Forehearths - Baseline			
Compound	CO2		CH4	N2O
GWP	1		21	310
Resultant	4,326.57		1.71E+00	2.53E+00

[3] **CO2e PTE (tpy) = 4,330.82**

Forehearths - Could Have Accommodated (CHA)	Throughput (MMscf/yr)	CO2	CH4	N2O
[4] natural gas usage	1	54.50	1.03E-03	1.03E-04
Forehearths CHA PTE (*M* ton/yr) =		54.50	1.03E-03	1.03E-04
Forehearths CHA PTE (tpy) =		**60.09**	**1.13E-03**	**1.13E-04**

	Forehearths - CHA			
Compound	CO2		CH4	N2O
GWP	1		21	310
Resultant	60.09		2.38E-02	3.51E-02

[3] **CO2e PTE (tpy) = 60.15**

Forehearths - Projected Actuals	Throughput (MMscf/yr)	CO2	CH4	N2O
[4] natural gas usage	73	3,978.83	7.50E-02	7.50E-03
Forehearths Projected Actuals PTE (*M* ton/yr) =		3,978.83	7.50E-02	7.50E-03
Forehearths Projected Actuals PTE (tpy) =		**4,386.66**	**8.27E-02**	**8.27E-03**

	Forehearths - Projected Actuals			
Compound	CO2		CH4	N2O
GWP	1		21	310
Resultant	4,386.66		1.74E+00	2.56E+00

[3] **CO2e PTE (tpy) = 4,390.97**

Lehrs - Baseline	Throughput (MMscf/yr)	CO2	CH4	N2O
[4] natural gas usage	53	2,888.74	5.45E-02	5.45E-03
Lehrs Baseline PTE (*M* ton/yr) =		2,888.74	5.45E-02	5.45E-03
Lehrs Baseline PTE (tpy) =		**3,184.84**	**6.01E-02**	**6.01E-03**

	Lehrs - Baseline			
Compound	CO2		CH4	N2O
GWP	1		21	310
Resultant	3,184.84		1.26E+00	1.86E+00

[3] **CO2e PTE (tpy) = 3,187.96**

Lehrs - Could Have Accommodated (CHA)	Throughput (MMscf/yr)	CO2	CH4	N2O
[4] natural gas usage	1	54.50	1.03E-03	1.03E-04
Lehrs CHA PTE (*M* ton/yr) =		54.50	1.03E-03	1.03E-04
Lehrs CHA PTE (tpy) =		**60.09**	**1.13E-03**	**1.13E-04**

	Lehrs - CHA			
Compound	CO2		CH4	N2O
GWP	1		21	310
Resultant	60.09		2.38E-02	3.51E-02

[3] **CO2e PTE (tpy) = 60.15**

Lehrs - Projected Actuals	Throughput (MMscf/yr)	CO2	CH4	N2O
[4] natural gas usage	53	2,888.74	5.45E-02	5.45E-03
Lehrs Projected Actuals PTE (*M* ton/yr) =		2,888.74	5.45E-02	5.45E-03
Lehrs Projected Actuals PTE (tpy) =		**3,184.84**	**6.01E-02**	**6.01E-03**

	Lehrs - Projected Actuals			
Compound	CO2		CH4	N2O
GWP	1		21	310
Resultant	3,184.84		1.26E+00	1.86E+00

[3] **CO2e PTE (tpy) = 3,187.96**

Methodology:
GWP = Global Warming Potential (unitless) (40 CFR 98, Subpart A, Table A–1)
M ton = Metric ton
Emissions factors from 40 CFR 98 Subparts C (General Fuel Stationary Combustion Sources) & N (Glass Production)

[1] PTE (*M* ton/yr) = [N.G. Usage (MMBtu/yr) x 1,000 scf/1 MMBtu x HHv (MMBtu/scf) x E.F. (kg/MMBtu) x 1.0E-3 (*M* ton/kg)]
Where:
HHV (High Heating Value) = 1.028E-03 MMbtu/scf
1,000 scf N.G. = 1.0 MMBtu

[2] PTE (*M* ton/yr) = [Material Throughput (ton/yr) x 2000/2205 (*M* ton/ton) x E.F. (*M* ton Emissions/*M* ton Material)]
PTE (tpy) = PTE *M* ton/yr x 2205 ton/2000 *M* ton

[3] PTE CO2e = Summation of the Resultants [PTE Compound (tpy) x GWP] (Pursuant to 40 CFR 52.21(b)(49)(ii)(a)]

[4] PTE (*M* ton/yr) = [1.0E-3 *M* ton/kg x N.G. Usage (MMscf/yr) x 1,000,000 (scf/MMscf) x HHv (MMBtu/scf) x E.F. (kg/MMBtu)]
Where:
HHV (High Heating Value) = 1.028E-03 MMbtu/scf
1,000 scf N.G. = 1.0 MMBtu

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Summary Of Emissions Increase
Appendix A : Technical Support Document
Company Name: **Saint-Gobain Containers**
Address City IN Zip: **524 East Center Street, Dunkirk, Indiana 47336**
Significant Permit Modification No. : **075-32997-00004**
Reviewer: **Madhurima Moulik**
Date: **4/18/2013**

Furnace 2 Emissions

			Emission Factors (lb/ton, lb/lb, lb/mmcf)								Annual Emissions (TPY)							
	Throughput	Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	HCl	PM	PM10	PM2.5	SO2	NOx	VOC	CO	HCl
Pre-Application PTE																		
Furnace No. 2 (550 tpd)	200,750	tons of glass	0.45	0.44	0.42	0.60	1.30	0.20	0.20	--	45.2	44.2	42.2	60.2	130.5	20.1	20.1	--
Distributor	88	mmcf N/G	7.6	7.6	7.6	0.6	100	5.5	84	--	0.33	0.33	0.33	0.03	4.38	0.24	3.68	--
3 Forehearths	145	mmcf N/G	7.6	7.6	7.6	0.6	100	5.5	84	--	0.55	0.55	0.55	0.04	7.23	0.40	6.07	--
3 Lehrs	105	mmcf N/G	7.6	7.6	7.6	0.6	100	5.5	84	--	0.40	0.40	0.40	0.03	5.26	0.29	4.42	--
Mold Swab (4.0 lb/hr)	35,040	lbs. of material	0.87	0.87	0.87	0	0	0	0	--	15.24	15.24	15.24	0.00	0.00	0.00	0.00	--
Hot End Coating (4.0 lb/hr)	35,040	lbs. of material	0.7	0.7	0.7	0	0	0.98	0	0.21	12.26	12.26	12.26	0.00	0.00	17.17	0.00	3.68
Batchhouse (28.65 tph)	250,974	tons of material	0.038	0.015	0.010	0	0	0	0	--	4.71	1.83	1.20	0.00	0.00	0.00	0.00	--
Pre-Application Total Emissions											**78.66**	**74.79**	**72.15**	**60.33**	**147.35**	**38.17**	**34.24**	**3.68**
Post Application PTE																		
Furnace No. 2 (600 tpd)	219,000	tons of glass	0.45	0.44	0.42	0.60	1.30	0.20	0.20	--	49.28	48.18	45.99	65.70	142.35	21.90	21.90	--
Distributor	88	mmcf N/G	7.6	7.6	7.6	0.6	100	5.5	84	--	0.33	0.33	0.33	0.03	4.38	0.24	3.68	--
3 Forehearths	145	mmcf N/G	7.6	7.6	7.6	0.6	100	5.5	84	--	0.55	0.55	0.55	0.04	7.23	0.40	6.07	--
3 Lehrs	105	mmcf N/G	7.6	7.6	7.6	0.6	100	5.5	84	--	0.40	0.40	0.40	0.03	5.26	0.29	4.42	--
Mold Swab (4.5 lb/hr)	39,420	lbs. of material	0.87	0.87	0.87	0	0	0	0	--	17.15	17.15	17.15	0.00	0.00	0.00	0.00	--
Hot End Coating (4.0 lb/hr)	35,040	lbs. of material	0.7	0.7	0.7	0	0	0.98	0	0.21	12.26	12.26	12.26	0.00	0.00	17.17	0.00	3.68
Batchhouse (31.25 tph)	273,750	tons of material	0.038	0.015	0.010	0	0	0	0	--	5.13	2.00	1.31	0.00	0.00	0.00	0.00	--
Post-Application Total Emissions											**85.10**	**80.87**	**78.00**	**65.80**	**159.22**	**40.00**	**36.07**	**3.68**
Change in PTE (Tons)											**6.44**	**6.09**	**5.85**	**5.48**	**11.86**	**1.83**	**1.83**	**0.00**

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Kimberly Pratt
Saint-Gobain Containers, Inc. (Verallia)
524 East Center Street
PO Box 205
Dunkirk, IN 47336-0205

DATE: July 10, 2013

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

SUBJECT: Final Decision
Significant Permit Modification to a Part 70 Operating Permit
075-32997-00004

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:
Tony Schroeder, Trinity Consultants
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.

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

July 10, 2013

TO: Dunkirk Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: **Saint-Gobain Containers, Inc. (Verallia)**
Permit Number: **075-32997-00004**

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 6/13/2013

Mail Code 61-53

IDEM Staff	VHAUN 7/10/2013 Saint-Gobain Containers, Inc. (Verallia) 075-32997-00004 FINAL		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Kimberly Pratt Saint-Gobain Containers, Inc. (Verallia) 524 E Center St, PO Box 205 Dunkirk IN 47336-0205 (Source CAATS) Confirmed Delivery									
2		Dunkirk City Public Library 127 W Washington St Dunkirk IN 47336-3727 *(Library)*									
3		Jay County Commissioners Jay County Courthouse Portland IN 47371 *(Local Official)*									
4		Jay County Health Department 504 West Arch Street Portland IN 47371 *(Health Department)*									
5		Dunkirk City Council and Mayors Office 131 S. Main St. Dunkirk IN 47336 *(Local Official)*									
6		Tony Schroeder Trinity Consultants 7330 Woodland Drive, Suite 225 Indianapolis IN 46278 *(Consultant)*									
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