



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL
ASHTABULA COUNTY
Application No: 02-19131**

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
40 CFR 63, subpart ZZZZ	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 7/8/2004

Iten Industries, Inc., Plant 1
Hans Reich
P.O. Box 2150
Ashtabula, OH 44005

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 7/8/2004
Effective Date: 7/8/2004**

FINAL PERMIT TO INSTALL 02-19131

Application Number: 02-19131

APS Premise Number: 0204010112

Permit Fee: **\$400**

Name of Facility: Iten Industries, Inc., Plant 1

Person to Contact: Hans Reich

Address: P.O. Box 2150
Ashtabula, OH 44005

Location of proposed air contaminant source(s) [emissions unit(s)]:

**4001 Benefit Ave.
Ashtabula, Ohio**

Description of proposed emissions unit(s):

Cogeneration equipment.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. 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 federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is

granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
NOx	76.07
CO	10.25
SOx	0.022
PE	11.75
OC	2.76

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

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

Sec.

WHAT THIS SUBPART COVERS

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63.6585 Am I subject to this subpart?

63.6590 What parts of my plant does this subpart cover?

63.6595 When do I have to comply with this subpart?

EMISSION LIMITATIONS

63.6600 What emission limitations and operating limitations must I meet?

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

TESTING AND INITIAL COMPLIANCE REQUIREMENTS

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TABLES TO SUBPART ZZZZ OF PART 63

Table 1a to Subpart ZZZZ of Part 63. Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE

Table 1b to Subpart ZZZZ of Part 63. Operating Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE

Table 2a to Subpart ZZZZ of Part 63. Emission Limitations for New and Reconstructed Lean Burn and Compression Ignition Stationary RICE

Table 2b to Subpart ZZZZ of Part 63. Operating Limitations for New and Reconstructed Lean Burn and Compression Ignition Stationary RICE

Table 3 to Subpart ZZZZ of Part 63. Subsequent Performance Tests

Table 4 to Subpart ZZZZ of Part 63. Requirements for Performance Tests

Table 5 to Subpart ZZZZ of Part 63. Initial Compliance with Emission Limitations and Operating Limitations

Table 6 to Subpart ZZZZ of Part 63. Continuous Compliance with Emission Limitations and Operating Limitations

Table 7 to Subpart ZZZZ of Part 63. Requirements for Reports

Table 8 to Subpart ZZZZ of Part 63. Applicability of General Provisions to Subpart ZZZZ

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 sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

§63.6585 Am I subject to this subpart?

The permittee are subject to this subpart if the permittee own or operate a stationary RICE at a major 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. §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 with a site-rating of more than 500 brake horsepower located at a major source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) Existing stationary RICE. A stationary RICE is existing if the permittee commenced construction or reconstruction of the stationary RICE before December 19, 2002. 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. A stationary RICE is new if the permittee commenced construction of the stationary RICE on or after December 19, 2002.

(3) Reconstructed stationary RICE. A stationary RICE is reconstructed if the permittee meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(b) Stationary RICE subject to limited requirements.

(1) An affected source which meets either of the criteria in paragraph (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(d).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE; or

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE.

(2) A new or reconstructed stationary RICE 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(d) 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) A stationary RICE which is an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE, an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE, an existing compression ignition (CI) stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

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

(a) Affected sources.

(1) If the permittee have an existing stationary RICE, the permittee must comply with the applicable emission limitations and operating limitations no later than [3 YEARS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

(2) If the permittee start up your new or reconstructed stationary RICE before [60 DAYS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], the permittee must comply with the applicable emission limitations and operating limitations in this subpart no later than [60 DAYS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

(3) If the permittee start up your new or reconstructed stationary RICE after [60 DAYS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], the permittee 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 the permittee 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 the permittee.

(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 this subpart within 3 years after your area source becomes a major source of HAP.

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

EMISSION AND OPERATING LIMITATIONS

§63.6600 What emission limitations and operating limitations must I meet?

(a) If the permittee own or operate an existing, new, or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE located at a major source of HAP emissions, the permittee must comply with the emission limitations in Table 1(a) of this subpart and the operating limitations in Table 1(b) of this subpart which apply to the permittee.

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

(c) If the permittee own or operate: an existing 2SLB stationary RICE, an existing 4SLB stationary RICE, or an existing CI 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, the permittee do not need to comply with the emission limitations in Tables 1(a) and 2(a) of this subpart or operating limitations in Tables 1(b) and 2(b) of this subpart.

GENERAL COMPLIANCE REQUIREMENTS

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

- (a) The permittee must be in compliance with the emission limitations and operating limitations in this subpart that apply to the permittee at all times, except during periods of startup, shutdown, and malfunction.
- (b) If the permittee must comply with emission limitations and operating limitations, the permittee must operate and maintain your stationary RICE, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

TESTING AND INITIAL COMPLIANCE REQUIREMENTS

§63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations?

- (a) The permittee must conduct the initial performance test or other initial compliance demonstrations in Table 4 of this subpart that apply to the permittee 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 the permittee commenced construction or reconstruction between December 19, 2002 and [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], the permittee must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than [240 DAYS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER] or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).
- (c) If the permittee commenced construction or reconstruction between December 19, 2002 and [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], and the permittee chose to comply with the proposed emission limitations when demonstrating initial compliance, the permittee must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by [3 YEARS AND 180 DAYS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER] 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.

§63.6615 When must I conduct subsequent performance tests?

If the permittee must comply with the emission limitations and operating limitations, the permittee 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) The permittee must conduct each performance test in Tables 3 and 4 of this subpart that applies to the permittee.
- (b) Each performance test must be conducted according to the requirements in §63.7(e)(1) and under the specific conditions that this subpart specifies in Table 4. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.
- (c) The permittee may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).
- (d) The permittee must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.
- (e) The permittee must use Equation 1 of this section to determine compliance with the percent reduction requirement:

Where:

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

C_i = concentration of CO
device inlet,

or formaldehyde at the control

C_o = concentration of CO or formaldehyde at the control device outlet, and
R = percent reduction of CO or formaldehyde emissions.

The permittee must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in paragraphs (e)(1) through (3) of this section.

- (1) Calculate the fuel-specific Fo value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

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

Where:

Fo = Fuel factor based on the ratio of oxygen volume to the ultimate CO2 volume produced by the fuel at zero percent excess air.

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

Fd = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm³/J (dscf/106 Btu).

Fc = Ratio of the volume of CO2 produced to the gross calorific value of the fuel from Method 19, dsm³/J (dscf/106 Btu).

(2) Calculate the CO2 correction factor for correcting measurement data to 15 percent oxygen, as follows:

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

Where:

Xco2 = CO2 correction factor, percent.

5.9 = 20.9 percent O2 - 15 percent O2, the defined O2 correction value, percent.

(3) Calculate the NOx and SO2 gas concentrations adjusted to 15 percent O2 using CO2 as follows:

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

Where:

%CO2 = Measured CO2 concentration measured, dry basis, percent.

(f) If the permittee comply with the emission limitation to reduce CO and the permittee are not using an oxidation catalyst, if the permittee comply with the emission limitation to reduce formaldehyde and the permittee are not using NSCR, or if the permittee comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and the permittee are not using an oxidation catalyst or NSCR, the permittee 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. The permittee must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If the permittee 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 the permittee 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 the permittee 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 the permittee will use to measure and the instruments the permittee 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 the permittee will use for monitoring these parameters.

(h) If the permittee 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 the permittee 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 the permittee could use to measure them and the instruments the permittee 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 the permittee 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.

(a) If the permittee elect to install a CEMS as specified in Table 5 of this subpart, the permittee must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO₂ at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

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

(2) The permittee 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. The permittee 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 CO₂ concentration.

(b) If the permittee are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, the permittee must install, operate, and maintain each CPMS according to the requirements in §63.8.

(c) If the permittee 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, the permittee must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, the permittee must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

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

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

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

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

CONTINUOUS COMPLIANCE REQUIREMENTS

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

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

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

(c) The permittee 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. The permittee must, however, use all the valid data collected during

all other periods.

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

- (a) The permittee must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1(a) and 1(b) and Tables 2(a) and 2(b) of this subpart that apply to the permittee according to methods specified in Table 6 of this subpart.
- (b) The permittee must report each instance in which the permittee did not meet each emission limitation or operating limitation in Tables 1(a) and 1(b) and Tables 2(a) and 2(b) of this subpart that apply to the permittee. 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 the permittee change your catalyst, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablish the values of your operating parameters, the permittee must also conduct a performance test to demonstrate that the permittee are meeting the required emission limitation applicable to your stationary RICE.
- (c) During periods of startup, shutdown, and malfunction, the permittee must operate in accordance with your startup, shutdown, and malfunction plan.
- (d) Consistent with §§63.6(e) and 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrate to the Administrator's satisfaction that the permittee were operating in accordance with the startup, shutdown, and malfunction plan. For new and reconstructed 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.
- (e) The permittee must also report each instance in which the permittee did not meet the requirements in Table 8 of this subpart that apply to the permittee. If the permittee own or operate an existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing CI stationary RICE, an existing emergency stationary RICE, an existing limited use emergency 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, the permittee do not need to comply with the requirements in Table 8 of this subpart. If the permittee own or operate 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, the permittee do not need to comply with the requirements in Table 8 of this subpart, except for the initial notification requirements.

NOTIFICATIONS, REPORTS, AND RECORDS

§63.6645 What notifications must I submit and when?

- (a) The permittee 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 the permittee by the dates specified.
- (b) As specified in §63.9(b)(2), if the permittee must comply with the emission and operating limitations, and the permittee start up your stationary RICE before the effective date of this subpart, the permittee must submit an Initial Notification not later than [120 DAYS AFTER DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

(c) If the permittee start up your new or reconstructed stationary RICE on or after the [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], the permittee must submit an Initial Notification not later than 120 days after the permittee become subject to this subpart.

(d) If the permittee 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).

(e) If the permittee are required to conduct a performance test, the permittee 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).

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

(1) For each initial compliance demonstration required in Table 5 of this subpart that does not include a performance test, the permittee 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 of this subpart that includes a performance test conducted according to the requirements in Table 4 to this subpart, the permittee 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).

§63.6650 What reports must I submit and when?

(a) The permittee must submit each report in Table 7 of this subpart that applies to the permittee.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), the permittee must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) 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) 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) 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) 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), the permittee 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 (4) of this section.

(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 the permittee had a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in §63.10(d)(5)(i).
- (5) If there are no deviations from any emission or operating limitations that apply to the permittee, 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 the permittee 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 the permittee are using a CMS to comply with the emission and operating limitations in this subpart, the permittee 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 208 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 the permittee 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, the permittee 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. The permittee 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. The permittee 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.

§63.6655 What records must I keep?

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

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

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(b) For each CEMS or CPMS, the permittee 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 the permittee 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, the permittee must keep the records of your daily fuel usage monitors.

(d) The permittee must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to the permittee.

§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), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) The permittee must keep each record readily accessible in hard copy or electronic form on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). The permittee can keep the records off-site for the remaining 3 years.

OTHER REQUIREMENTS AND INFORMATION

§63.6665 What parts of the General Provisions apply to me?

Table 8 of this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to the permittee. If the permittee own or operate an existing 2SLB, an existing 4SLB stationary RICE, an existing CI stationary RICE, an existing 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 existing emergency stationary RICE, or an existing limited use stationary RICE, the permittee do not need to comply with any of the requirements of the General Provisions. If the permittee own or operate 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, the permittee do not need to comply with the requirements in the General Provisions except for the initial notification requirements.

§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. The permittee should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph

(c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

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

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

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

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

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

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

§63.6675 What definitions apply to this subpart?

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

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

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

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

Compression ignition 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 autoignition, including diesel engines, dual-fuel engines, and engines that are not spark ignition.

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

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

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless of whether or not such failure is permitted by this subpart.
- (4) Fails to conform to any provision of the applicable startup, shutdown, or malfunction plan, or 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.

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 CO₂.

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 RICE that operates in 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 is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. Emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency

stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE may also operate an additional 50 hours per year in nonemergency situations.

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.

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.

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 CO₂.

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.

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.

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

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 this section, 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 this section, 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. 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. 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 CO₂, 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 221 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 C₃H₈.

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 engine means a type of engine in which a compressed air/fuel mixture is ignited by a timed electric spark generated by a spark plug.

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

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

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

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

Subpart means 40 CFR part 63, subpart ZZZZ.

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

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

Tables to Subpart ZZZZ of Part 63

Table 1a to Subpart ZZZZ of Part 63. Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE

As stated in §§63.6600 and 63.6640, the permittee must comply with the following emission limitations for existing, new and reconstructed 4SRB stationary RICE:

For each . . .

The permittee must meet one of the following emission limitations . . .

1. 4SRB stationary RICE

a. reduce formaldehyde emissions by 76 percent or more. If the permittee commenced construction or reconstruction between December 19, 2002 and [THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], the permittee may reduce formaldehyde emissions by 75 percent or more until [3 YEARS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER]. OR

b. limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbv or less at 15 percent O₂.

Table 1b to Subpart ZZZZ of Part 63. Operating Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE

As stated in §§63.6600, 63.6630 and 63.6640, the permittee must comply with the following operating emission limitations for existing, new and reconstructed 4SRB stationary RICE:

For each . . .

The permittee must meet the following operating limitation . . .

1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or 4SRB stationary RICE complying with the requirement to limit the

a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than two inches of water from the pressure drop across the catalyst measured during the initial performance test;

concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O2 and using NSCR

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.

2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent, if applicable), and not using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O2 and not using NSCR

comply with any operating limitations approved by the Administrator.

Table 2a to Subpart ZZZZ of Part 63. Emission Limitations for New and Reconstructed Lean Burn and Compression Ignition Stationary RICE

As stated in §§63.6600 and 63.6640, the permittee must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE:

For each . . .

The permittee must meet the following emission limitation . . .

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 O2. If the permittee commenced construction or reconstruction between December 19, 2002 and [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], the permittee may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O2 until [3 YEARS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

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 O2.

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 O₂.

Table 2b to Subpart ZZZZ of Part 63. Operating Limitations for New and Reconstructed Lean Burn and Compression Ignition Stationary RICE

As stated in §§63.6600, 63.6630, and 63.6640, the permittee must comply with the following operating limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE:

For each . . .	The permittee must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than two 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.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst	comply with any operating limitations approved by the Administrator.

Table 3 to Subpart ZZZZ of Part 63. Subsequent Performance Tests

As stated in §§63.6615 and 63.6620, the permittee must comply with the following subsequent performance test requirements:

For each . . .	Complying with the requirement to . . .	The permittee must . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	reduce CO emissions and not using a CEMS	conduct subsequent performance tests semiannually ^a .

2. 4SRB stationary RICE with a brake horsepower $\geq 5,000$	reduce formaldehyde emissions	conduct subsequent performance tests semiannually ^a .
3. stationary RICE (all stationary RICE subcategories and all brake horsepower ratings)	limit the concentration of formaldehyde in the stationary RICE exhaust	conduct subsequent performance tests semiannually ^a .

^a. After the permittee have demonstrated compliance for two consecutive tests, the permittee 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 the permittee deviate from any of your operating limitations, the permittee must resume semiannual performance tests.

Table 4 to Subpart ZZZZ of Part 63. Requirements for Performance Tests

As stated in §§63.6610, 63.6620, and 63.6640, the permittee must comply with the following requirements for performance tests:

For each . . .	Complying with the requirement to . . .	The permittee must . . .	Using . . .	According to the following requirements . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. reduce CO emissions	i. measure the O2 at the inlet and outlet of the control device	(1) portable CO and O2 analyzer	(a) using ASTM D6522- 00 ^a . Measurements to determine O2 must be made at the same time as the measurements for CO concentration.
		AND		
		ii. measure the CO at the inlet and the outlet of the control device	(1) portable CO and O2 analyzer	(a) using ASTM D6522- 00 ^a . The CO concentration must be at 15 percent O2,dry basis.
2. 4SRB stationary RICE	a. reduce formaldehyde emission	i. select the sampling port location and the number of traverse points	(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.
		AND		
		ii. measure O2 at the inlet and outlet of the control device	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A	(a) measurements to determine O2 concentration must be made at the same time as the measurements for
		AND		

		iii. measure moisture content at the inlet and outlet of the control device	(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	formaldehyde concentration. (a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		AND		
		iv. measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03 ^b , provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique e), 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.
3. stationary RICE	a. limit the concentration of formaldehyde in the stationary RICE 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 §63.7(d)(1)(i)	(a) if using a control device, the sampling site must be located at the outlet of the control device.
		AND		
		ii. determine the O ₂ concentration of the stationary RICE exhaust at the sampling port location	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A	(a) measurements to determine O ₂ concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		AND		
		iii. measure moisture content of the stationary RICE exhaust at the sampling port location	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03	(a) measurements to determine moisture content must be made at the same time and location as the measurements

<p>AND</p> <p>iv. measure formaldehyde at the exhaust of the stationary RICE</p>	<p>(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348- 03^b, 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.</p>	<p>for formaldehyde concentration.</p> <p>(a) Formaldehyde concentration must be at 15 percent O₂, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.</p>
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^a The permittee may also use Methods 3A and 10 as options to ASTM D6522- 00. The permittee may obtain a copy of ASTM-D6522-00 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohochen, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ^b The permittee may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohochen, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

Table 5 to Subpart ZZZZ of Part 63. Initial Compliance with Emission Limitations and Operating Limitations

As stated in §§63.6625 and 63.6630, the permittee must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	The permittee have demonstrated initial compliance if . . .
<p>1. 2SLB and 4SLB stationary RICE and CI stationary RICE</p>	<p>a. reduce CO emissions and using oxidation catalyst, and using a CPMS</p>	<p>i. the average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction;</p> <p>AND</p> <p>ii. the permittee have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b);</p> <p>AND</p> <p>iii. the permittee have recorded the catalyst pressure drop and catalyst</p>

inlet temperature during the initial performance test.

2. 2SLB and 4SLB stationary RICE and CI stationary RICE 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. the permittee 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. the permittee have recorded the approved operating parameters (if any) during the initial performance test.

3. 2SLB and 4SLB stationary RICE and CI stationary RICE a. reduce CO emissions, and using a CEMS

i. the permittee have installed a CEMS to continuously monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a);

AND

ii. the permittee 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. The initial test comprises the first 4-hour 236 period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.

4. 4SRB stationary RICE

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;

AND

ii. the permittee have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b);

AND

iii. the permittee have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

5. 4SRB stationary RICE

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.

AND

ii. the permittee 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. the permittee have recorded the approved operating parameters (if any) during the initial performance test.

6. stationary RICE

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 O₂, dry basis, from the three test runs is less than or equal

to the formaldehyde emission limitation.

AND

ii. the permittee have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b);

AND

iii. the permittee have recorded the catalyst pressure drop and catalyst inlet temperature during the initial238 performance test.

7. stationary RICE

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 O₂, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation.

AND

ii. the permittee 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. the permittee have recorded the approved operating parameters (if any) during the initial performance test.

Table 6 to Subpart ZZZZ of Part 63. Continuous Compliance with Emission Limitations and Operating Limitations

As stated in §63.6640, the permittee must continuously comply with the emissions and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	The permittee must demonstrate continuous compliance by . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	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
		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 established during the initial performance test;
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. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. reduce CO e missions 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. 2SLB and 4SLB stationary RICE and CI stationary RICE

a. reduce formaldehyde emissions and using NSCR

i. collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to §63.6620;

AND

ii. demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4- hour averaging period;

AND

iii. conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

4. 4SRB stationary RICE

a. reduce CO emissions 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 of CO emissions according to §63.6620;

AND

ii. demonstrating that the catalyst achieves the required percent

reduction of CO emissions over the 4- hour averaging period;

AND

iii. conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

i. collecting the catalyst inlet temperature data according to §63.6625(b);

AND

ii. reducing these data to 4-hour rolling averages;

AND

iii. maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature established during the performance test;

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. 4SRB stationary RICE

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. 4SRB stationary RICE with a brake horsepower $\geq 5,000$

reduce formaldehyde emissions

conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved ^a.

7. stationary RICE

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 established during the initial performance test;

AND

v. measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

8. stationary RICE

limit the concentration of

i. conducting semiannual

formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR

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.

^a After the permittee have demonstrated compliance for two consecutive tests, the permittee 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 the permittee deviate from any of your operating limitations, the permittee must resume semiannual performance tests.

Table 7 to Subpart ZZZZ of Part 63. Requirements for Reports

As stated in §63.6650, the permittee must comply with the following requirements for reports:

The permittee must submit a(n)	The report must contain ...	The permittee must submit the report ...
1. compliance report	a. if there are no deviations from any emission limitations or operating limitations that apply to the permittee, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including	i. semiannually according to the requirements in §63.6650(b).

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

i. semiannually according to the requirements in §63.6650(b).

b. if the permittee 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 the permittee had a startup, shutdown or malfunction during the reporting period, the information in §63.10(d)(5)(i).

2. an immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with your startup, shutdown, or malfunction plan during the reporting period

a. actions taken for the event.

i. by fax or telephone within 2 working days after starting actions inconsistent with the plan.

AND

b. the information in §63.10(d)(5)(ii).

i. by letter within 7 working days after the end of the event unless the permittee have made alternative arrangements with the permitting authorities. (§63.10(d)(5)(i i))

3. Report

a. the fuel flow rate of each fuel and the heating values that were used in your calculations, and the permittee 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.

annually, according to the requirements in §63.6650.

AND

b. the operating limits provided in your federally enforceable permit, and any deviations from these limits.

AND

c. any problems or errors suspected with the meters

Table 8 to Subpart ZZZZ of Part 63. Applicability of General Provisions to Subpart ZZZZ

As stated in §63.6665, the permittee 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 area sources that become major sources	Yes	
§63.6(d)	[Reserved]		
§63.6(e)(1)	Operation and maintenance	Yes	

§63.6(e)(2)	[Reserved]		
§63.6(e)(3)	Startup, shutdown, and malfunction plan	Yes	
§63.6(f)(1)	Applicability of standards except during startup shutdown malfunction (SSM)	Yes	
§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.
§63.7(a)(3)	CAA section 114 authority	Yes	
§63.7(b)(1)	Notification of performance test	Yes	
§63.7(b)(2)	Notification of rescheduling	Yes	
§63.7(c)	Quality assurance/test plan	Yes	
§63.7(d)	Testing facilities	Yes	
§63.7(e)(1)	Conditions for conducting performance tests	Yes	
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes	
§63.7(f)	Alternative test method provisions	Yes	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes	
§63.7(h)	Waiver of tests	Yes	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.

§63.8(a)(2)	Performance specifications	Yes	
§63.8(a)(3)	[Reserved]	Yes	
§63.8(a)(4)	Monitoring for control devices	No	
§63.8(b)(1)	Monitoring	Yes	
§63.8(b)(2)- (3)	Multiple effluents and multiple monitoring systems	Yes	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes	
§63.8(c)(1) (i)	Routine and predictable SSM	Yes	
§63.8(c)(1) (ii)	SSM not in Startup Shutdown Malfunction Plan	Yes	
§63.8(c)(1) (iii)	Compliance with operation and maintenance requirements	Yes	
§63.8(c)(2)-(3)	Monitoring system installation	Yes	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)- (8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii) , which applies to COMS.
§63.8(f)(1)- (5)	Alternative monitoring method	Yes	
§63.8(f)(6)	Alternative to relative accuracy test	Yes	
§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.
§63.9(c)	Request for compliance extension	Yes	
§63.9(d)	Notification of special	Yes	

	compliance requirements for new sources		
§63.9(e)	Notification of performance test	Yes	
§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	
§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.
§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.
§63.9(i)	Adjustment of submittal deadlines	Yes	
§63.9(j)	Change in previous information	Yes	
§63.10(a)	Administrative provisions for record keeping/reporting	Yes	
§63.10(b)(1)	Record retention	Yes	
§63.10(b)(2) (i)-(v)	Records related to SSM	Yes	
§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	Yes	

	results		
§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	Yes	
§63.10(e)(1) and (2)(i)	Additional CMS reports	Yes	
§63.10(e)(2) (ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes	
§63.11	Flares	Yes	
§63.12	State authority and delegations	Yes	
§63.13	Addresses	Yes	
§63.14	Incorporation by reference	Yes	
§63.15	Availability of information	Yes	

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P017 - Gen Set SITA (CoGen), 4 stroke rich burn (4SRB) reciprocating internal combustion engine (RICE), equipped with a catalytic converter. This engine combusts natural gas and drives a generator for electricity. Exhaust gases are used to preheat water (heat exchanger) for existing plant boilers.	OAC rule 3745-31-05 (A)(3)	Nitrogen Oxide (NOx) emissions from the stack shall not exceed 0.098 pounds per hour and 0.43 tons per year Carbon Monoxide (CO) emissions from the stack shall not exceed 1.00 pound per hour and 4.38 tons per year Sulfur Dioxide (SO2) emissions from the stack shall not exceed 0.0026 pound per hour and 0.011 tons per year Organic Compound (OC) emissions from the stack shall not exceed 0.13 pound per hour and 0.57 tons per year Particulate emissions (PE) from the stack shall not exceed 0.310 pound per million Btu of actual heat input and 6.00 tons per year
	OAC rule 3745-17-07 (A)(1)	Visible particulate emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-07 (B)(1)	Visible particulate emissions from fugitive dust from the building shall not exceed twenty percent opacity as a three-minute average.

OAC rule 3745-17-11 (B)(5)(a)	The emissions limitations specified by this rule are equivalent to emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-18-06 (F)	Exempt in accordance with OAC 3745-18-06 (B).
40 CFR 63, Subpart ZZZZ	Terms and Conditions will become effective AFTER THE PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER. See Section: A.2.a.

2. Additional Terms and Conditions

- 2.a See Part II - Facility Specific Terms and Conditions: Subpart ZZZZ — National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

Compliance with the emission limitations in the Air Emissions Summary and in the terms and conditions for the emissions unit P017 shall be determined in accordance with the following methods:

1. Emission Limitation
0.098 pounds of nitrogen oxide per hour
1.00 pound of carbon monoxide per hour

0.0026 pound of sulfur dioxide per hour
0.13 pound of organic compounds per hour

Applicable Compliance Method

Compliance shall be demonstrated by applying the emission factors from AP-42, Chapter 3.2, July, '00, Natural Gas-fired Reciprocating Engines (4-Stroke Rich-Burn Engines), found in Table 3.2-3 as follows:

$E = EF \times 4.417 \text{ mmBtu/hr}$ where:

E = emission rate (pounds per hour)

EF = emission factors from AP-42, Chapter 3.2, July, '00, Natural Gas-fired Reciprocating Engines (4-Stroke Rich-Burn Engines), found in Table 3.2-3:

for NO_x : 2.21 lb/mmBtu

for CO : 3.72 lb/mmBtu

for SO₂ : 0.000588 lb/mmBtu

for OC : 0.0296 lb/mmBtu

4.417 mmBtu/hr = Fuel Input (million BTU/hr)

2. Emission Limitation

0.310 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method

The particulate emission limit for this emissions unit has been established using the emission factor of 0.0095 pounds PE/mmBtu, as outlined in AP-42, Chapter 3.2, July, '00, Natural Gas-fired Reciprocating Engines (4-Stroke Rich-Burn Engines), Table 3.2-3; and this limit is also set by rule.

If required by the Ohio EPA, compliance with the allowable particulate emission limit shall be determined in accordance with the following method(s): Methods 1-4, and Method 5 of 40 CFR Part 60, Appendix A.

3. Emission Limitation

0.43 tons of Nitrogen Oxide per year
4.38 tons of Carbon Monoxide per year
0.011 tons of Sulfur Dioxide per year
6.00 tons of Particulate Emissions per year
0.57 tons of Organic Compound per year

Applicable Compliance Method

The annual limits, for all but particulates, compliance may be determined by multiplying the hourly emission rate for each pollutant by the maximum hours of operation per year of 8760, and then dividing by 2000 (pounds per ton). For particulates, compliance may be determined by multiplying together the emissions limit (0.310 pound of particulate emissions per million Btu of actual heat input) by the maximum fuel input (4.417 mmBtu/hr) and by the maximum hours of operation per year of 8760, and then dividing by 2000 (pounds per ton).

4. Emission Limitation

Visible particulate emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method

Visible particulate emissions from the stack shall be determined in accordance with OAC rule 3745-17-03(B)(3), using the methods and procedures specified in USEPA Reference Method 9, found in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

5. Emission Limitation

Visible particulate emissions from fugitive dust shall not exceed twenty percent opacity as a three-minute average.

Applicable Compliance Method

Visible particulate emissions from fugitive dust shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").\

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P017 - Gen Set SITA (CoGen), 4 stroke rich burn (4SRB) reciprocating internal combustion engine (RICE), equipped with a catalytic converter. This engine combusts natural gas and drives a generator for electricity. Exhaust gases are used to preheat water (heat exchanger) for existing plant boilers.	OAC rule 3745-31-05 (A)(3)	

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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Iten Industries, Inc., Plant 1
PTI Application: **02-19131**
Issued: 7/8/2004

Facility ID: **0204010112**
Emissions Unit ID: P018

None

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P018 - Gen Set LE (CO Gen), 4 stroke lean burn (4SLB) reciprocating internal combustion engine. This engine combusts natural gas and drives a generator for electricity.	OAC rule 3745-31-05 (A)(3)	Nitrogen Oxide (NOx) emissions from the stack shall not exceed 17.27 pounds per hour and 75.64 tons per year Carbon Monoxide (CO) emissions from the stack shall not exceed 1.34 pound per hour and 5.87 tons per year Sulfur Dioxide (SO2) emissions from the stack shall not exceed 0.0025 pound per hour and 0.011 tons per year Organic Compound (OC) emissions from the stack shall not exceed 0.50 pound per hour and 2.19 tons per year Particulate emissions (PE) from the stack shall not exceed 0.310 pound per million Btu of actual heat input and 5.75 tons per year
	OAC rule 3745-17-07 (A)(1)	Visible particulate emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-07 (B)(1)	Visible particulate emissions from fugitive dust from the building shall not exceed twenty percent opacity as a three-minute average.

OAC rule 3745-17-11 (B)(5)(a)	The emissions limitations specified by this rule are equivalent to emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-18-06 (F)	Exempt in accordance with OAC 3745-18-06 (B).
40 CFR 63 Subpart ZZZZ	Terms and Conditions will become effective AFTER THE PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER. See Section: A

2. Additional Terms and Conditions

- 2.a** See Part II - Facility Specific Terms and Conditions: Subpart ZZZZ — National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

Compliance with the emission limitations in the Air Emissions Summary and in the terms and conditions for the emissions unit P018 shall be determined in accordance with the following methods:

1. Emission Limitation

17.27 pounds of nitrogen oxide per hour
1.34 pound of carbon monoxide per hour
0.0025 pound of sulfur dioxide per hour
0.50 pound of organic compounds per hour

Applicable Compliance Method

Compliance shall be demonstrated by applying the emission factors from AP-42, Chapter 3.2, July, '00, Natural Gas-fired Reciprocating Engines (4-Stroke Lean-Burn Engines), found in Table 3.2-2 as follows:

$E = EF \times 4.234 \text{ mmBtu/hr}$ where:

E = emission rate (pounds per hour)

EF = emission factors from AP-42, Chapter 3.2, July, '00, Natural Gas-fired Reciprocating Engines (4-Stroke Lean-Burn Engines), found in Table 3.2-2:

for NO_x : 4.08 lb/mmBtu

for CO : 0.317 lb/mmBtu

for SO₂ : 0.000588 lb/mmBtu

for OC : 0.118 lb/mmBtu

4.234 mmBtu/hr = Fuel Input (million BTU/hr)

2. Emission Limitation

0.310 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method

The particulate emission limit for this emissions unit has been established using the emission factor of 0.0000771 pounds PE/mmBtu, as outlined in AP-42, Chapter 3.2, July, '00, Natural Gas-fired Reciprocating Engines (4-Stroke Lean-Burn Engines), Table 3.2-2; and this limit is also set by rule.

If required by the Ohio EPA, compliance with the allowable particulate emission limit shall be determined in accordance with the following method(s): Methods 1-4, and Method 5 of 40 CFR Part 60, Appendix A.

3. Emission Limitation

75.64 tons of Nitrogen Oxide per year
5.87 tons of Carbon Monoxide per year
0.011 tons of Sulfur Dioxide per year

5.75 tons of Particulate Emissions per year

2.19 tons of Organic Compound per year

Applicable Compliance Method

The annual limits, for all but particulates, compliance may be determined by multiplying the hourly emission rate for each pollutant by the maximum hours of operation per year of 8760, and then dividing by 2000 (pounds per ton). For particulates, compliance may be determined by multiplying together the emissions limit (0.310 pound of particulate emissions per million Btu of actual heat input) by the maximum fuel input (4.234 mmBtu/hr) and by the maximum hours of operation per year of 8760, and then dividing by 2000 (pounds per ton).

4. Emission Limitation

Visible particulate emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method

Visible particulate emissions from the stack shall be determined in accordance with OAC rule 3745-17-03(B)(3), using the methods and procedures specified in USEPA Reference Method 9, found in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

5. Emission Limitation

Visible particulate emissions from fugitive dust shall not exceed twenty percent opacity as a three-minute average.

Applicable Compliance Method

Visible particulate emissions from fugitive dust shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P018 - Gen Set LE (CO Gen), 4 stroke lean burn (4SLB) reciprocating internal combustion engine. This engine combusts natural gas and drives a generator for electricity.	OAC rule 3745-31-05	LIMIT(s)

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None