FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

OFFICE OF AIR MANAGEMENT and INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION

Roche Diagnostics Corporation 9115 Hague Road Indianapolis, Indiana 46250-0457

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

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

Operation Permit No.: F097-11275-00338	
Issued by:	Issuance Date:
Robert F. Holm, PhD, Administrator Environmental Resources Management Division	

SECTION A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-8-3(b)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
- A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]
- A.4 FESOP Applicability [326 IAC 2-8-2]
- A.5 Prior Permit Conditions

SECTION B GENERAL CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions [326 IAC 2-8-1]
- B.3 Permit Term [326 IAC 2-8-4(2)]
- B.4 Enforceability [326 IAC 2-8-6]
- B.5 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3 (h)]
- B.6 Severability [326 IAC 2-8-4(4)]
- B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
- B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]
- B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]
- B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]
- B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)]
- B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
- B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]
- B.14 Emergency Provisions [326 IAC 2-8-12]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
- B.17 Permit Renewal [326 IAC 2-8-3(h)]
- B.18 Permit Amendment or Modification [326 IAC 2-8-10][326 IAC 2-8-11.1]
- B.19 Operational Flexibility [326 IAC 2-8-15]
- B.20 Construction Permit Requirement [326 IAC 2]
- B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)]
- B.22 Transfer of Ownership or Operation [326 IAC 2-8-10]
- B.23 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

SECTION C SOURCE OPERATION CONDITIONS

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

- C.1 Overall Source Limit [326 IAC 2-8]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1][IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]
- C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

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

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

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

- C.9 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
- C.10 Monitoring Methods [326 IAC 3]

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

Page 3 of 33 OP No. F097-11275-00338

- C.11 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]
- C.12 Compliance Monitoring Plan Failure to Take Response Steps [326 IAC 2-8-4]
- C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

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

- C.14 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]
- C.15 Monitoring Data Availability
- C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
- C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY OPERATION CONDITIONS Four (4) Standby Generators; G1, G2, G3 & G4

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

- D.1.1 PSD Minor Limit [326 IAC 2-8-4(1)][326 IAC 2-2] [40 CFR 52.21]
- D.1.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.1.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]
- D.1.4 Fuel Use Limitation

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

- D.1.5 Record Keeping Requirements
- D.1.6 Reporting Requirements

Certification Form

Emergency/Deviation Form (Two Pages) Quarterly Report Form (Standby Generators G1, G2, G3 & G4) Quarterly Compliance Monitoring Report Form

SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary source, relating to the operation of standby and emergency generators under a Standard Industrial Classification Code (SIC) of 2835 In Vitro and In Vivo Diagnostic Substances.

Authorized individual: Source Address: Mailing Address:	Steve Oldham 9115 Hague Road, Indianapolis, Indiana 46250-0457 P.O. Box 50457, Indianapolis, Indiana 46250-0457
Phone Number:	Mr. Steve Hunter (317) 845-2351
SIC Code:	2835
County Location:	Marion
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD;

- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)] This stationary source consists of the following emission units and pollution control devices:
 - (a) One (1) Kato reciprocating internal combustion engine model number 3516 identified as Emission Unit ID G1. Emission Unit ID G1 is a standby generator and burns diesel fuel at a maximum rated heat input of 18.16 million Btu per hour. Includes an alternative operating scenario of dual firing diesel fuel and natural gas firing up to a maximum natural gas heat input of 11.2 million Btu per hour. Emission Unit ID G1 exhausts at Stack/Vent ID G1. Installation date of 1993.
 - (b) One (1) Kato reciprocating internal combustion engine model number 3516 identified as Emission Unit ID G2. Emission Unit ID G2 is a standby generator and burns diesel fuel at a maximum rated heat input of 18.16 million Btu per hour. Includes an alternative operating scenario of dual firing diesel fuel and natural gas firing up to a maximum natural gas heat input of 11.2 million Btu per hour. Emission Unit ID G2 exhausts at Stack/Vent ID G2. Installation date of 1993.
 - (c) One (1) Kato reciprocating internal combustion engine model number 3516 identified as Emission Unit ID G3. Emission Unit ID G3 is a standby generator and burns diesel fuel at a maximum rated heat input of 18.16 million Btu per hour. Includes an alternative operating scenario of dual firing diesel fuel and natural gas firing up to a maximum natural gas heat input of 11.2 million Btu per hour. Emission Unit ID G3 exhausts at Stack/Vent ID G3. Installation date of 1993.
 - (d) One (1) Kato reciprocating internal combustion engine model number 3516 identified as

Emission Unit ID G4. Emission Unit ID G4 is a standby generator and burns diesel fuel at a maximum rated heat input of 18.16 million Btu per hour. Includes an alternative operating scenario of dual firing diesel fuel and natural gas firing up to a maximum natural gas heat input of 11.2 million Btu per hour. Emission Unit ID G4 exhausts at Stack/Vent ID G2. Installation date of 1993.

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

- This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):
 - (a) Space heaters with fuel oil fired heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight;
 - 1) Six (6) portable space heaters identified as Emission Unit ID 6PSH. Each diesel fired portable space heater is rated at 100,000 Btu max heat input.
 - (b) Combustion source flame safety purging on startup.
 - (c) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
 - (d) Cleaners and solvents characterized as follows:
 - having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;
 - B) having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F);

the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

- (e) Closed loop heating and cooling systems.
- (f) Paved and unpaved roads and parking lots with public access.
- (g) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (h) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (i) Stationary fire pumps.
- (j) Other emergency equipment as follows;

Gasoline generators not exceeding 110 horsepower.

- 1) One (1) gasoline fired portable generator identified as Emission Unit ID K1. Emission Unit ID K1 is a reciprocating internal combustion engine rated at 12.5 kilowatts.
- One (1) gasoline fired portable generator identified as Emission Unit ID K2. Emission Unit ID K2 is a reciprocating internal combustion engine rated at 5.0 kilowatts.

Diesel generators not exceeding 1600 horsepower:

- One (1) diesel fired emergency generator identified as Emission Unit ID L-18. Emission Unit ID L-18 is a Caterpillar Model 3406 reciprocating internal combustion engine rated at 3.1 million Btu maximum heat input and 402 horsepower output. Emission Unit ID L-18 exhausts at Stack/Vent ID L-18. Installation date of September 1999.
- Natural gas reciprocating engines not exceeding 16,000 horsepower:
- 1) One (1) natural gas fired emergency generator identified as Emission Unit ID A-P Tunnel. Emission Unit ID A-P Tunnel is a reciprocating internal combustion engine rated at 15 kilowatts.

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

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

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, and ERMD shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

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

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

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

- B.3
 Permit Term [326 IAC 2-8-4(2)]

 This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.
- B.4 Enforceability [326 IAC 2-8-6]
 - (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM and ERMD.
 - (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.
 - (c) All terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by ERMD.
- B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]
 The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.
- B.6
 Severability [326 IAC 2-8-4(4)]

 The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.
- B.7Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]This permit does not convey any property rights of any sort, or any exclusive privilege.
- B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]
 - (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Permits 2700 South Belmont Avenue Indianapolis, Indiana 46221

- (b) The Permittee shall furnish to IDEM, OAM, and ERMD, within a reasonable time, any information that IDEM, OAM, and ERMD may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, and ERMD copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, and ERMD along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.
- B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]
 IDEM, OAM and ERMD may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.
- B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]
 - (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) 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 conditions of this permit.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted under this permit shall contain certification by a authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).
- B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
 - (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management

Compliance Data Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Compliance Data 2700 South Belmont Avenue Indianapolis, Indiana 46221

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

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

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Compliance Data 2700 South Belmont Avenue Indianapolis, Indiana 46221

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM and ERMD upon request and shall be subject to review and approval by IDEM, OAM, and ERMD. IDEM, OAM and ERMD may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.
- B.14 Emergency Provisions [326 IAC 2-8-12]
 - (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
 - (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM and ERMD, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Management, Compliance Section) or, Telephone No.: 317-233-5674 (ask for Compliance Section) Facsimile No.: 317-233-5967

and

ERMD Telephone No.: 317-327-2234 Facsimile No.: 317-327-2274

Failure to notify IDEM, OAM and ERMD by telephone or facsimile within four (4)

daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Compliance Data 2700 South Belmont Avenue Indianapolis, Indiana 46221

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

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

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

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM and ERMD may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM and ERMD by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the

emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
 - (a) Deviations from any permit requirements (for emergencies see Section B.14 Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Compliance Data 2700 South Belmont Avenue Indianapolis, Indiana 46221

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence

Reporting Form or its substantial equivalent. The notification does not need to be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]
 - (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)]
 - (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM and ERMD determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
 - (c) Proceedings by IDEM, OAM and ERMD to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
 - (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM and ERMD at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM and ERMD may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]
- B.17 Permit Renewal [326 IAC 2-8-3(h)]
 - (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM and ERMD and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Permits 2700 South Belmont Avenue Indianapolis, Indiana 46221

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and ERMD on or before the date it is due.
 - (2) If IDEM, OAM and ERMD upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9] If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAM and ERMD takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM and ERMD any additional information identified as needed to process the application.
- B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11.1]
 - (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
 - (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Permits 2700 South Belmont Avenue Indianapolis, Indiana 46221

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1) only if a certification is required by the terms of the applicable rule.

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]
- B.19 Operational Flexibility [326 IAC 2-8-15]
 - (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-1.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Permits 2700 South Belmont Avenue Indianapolis, Indiana 46221

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

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

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

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

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification

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

- (c) Emission Trades [326 IAC 2-8-15(c)] The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)] The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAM or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.
- B.20
 Construction Permit Requirement [326 IAC 2]

 A modification, construction, or reconstruction shall be approved if required by and in accordance with the applicable provisions of 326 IAC 2.
- B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)]

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

- Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
 [326 IAC 2-8-5(a)(4)]

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management

Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Permits 2700 South Belmont Avenue Indianapolis, Indiana 46221

The application which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]
- B.23 Annual Fee Payment [326 IAC 2-8-4(6)][326 IAC 2-8-16]
 - (a) The Permittee shall pay annual fees to IDEM, OAM, and ERMD within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
 - (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
 - (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Overall Source Limit [326 IAC 2-8]

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

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

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
 - The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)] The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. The provisions of 326 IAC 9-1-2 are not federally enforceable.
- C.5 Fugitive Dust Emissions [326 IAC 6-4]

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

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)] Except as otherwise provided in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment is (are) in operation.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Asbestos 2700 South Belmont Avenue Indianapolis, Indiana 46221

The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

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

- C.8 Performance Testing [326 IAC 3-6]
 - (b) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Compliance Data 2700 South Belmont Avenue Indianapolis, Indiana 46221

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM and ERMD within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, and ERMD, if the source submits to IDEM, OAM, and ERMD a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.9 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Compliance with applicable requirements shall be documented as required by this permit. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90)

days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Compliance Data 2700 South Belmont Avenue Indianapolis, Indiana 46221

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

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

C.10 Monitoring Methods [326 IAC 3] Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

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

C.11 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
 - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
 - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
 - (3) A verification to IDEM, OAM, and ERMD that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, and ERMD that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- C.12 Compliance Monitoring Plan Failure to Take Response Steps [326 IAC 2-8-4][326 IAC 2-8-5] [326 IAC 1-6]
 - (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable

requirements. This compliance monitoring plan is comprised of:

- (1) This condition;
- (2) The Compliance Determination Requirements in Section D of this permit;
- (3) The Compliance Monitoring Requirements in Section D of this permit;
- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM and ERMD upon request and shall be subject to review and approval by IDEM, OAM, and ERMD. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

- C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]
 - (a) When the results of a stack test performed in conformance with Section C.8 Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
 - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

- C.14 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]
 - (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6. This annual statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year). The annual statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Compliance Data 2700 South Belmont Avenue Indianapolis, Indiana 46221

- (b) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and ERMD on or before the date it is due.
- C.15 Monitoring Data Availability
 - (a) With the exception of performance tests conducted in accordance with Section C.8-Performance Testing all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM and ERMD may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements in (a) above.

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, and ERMD representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner and/or Administrator makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or ERMD within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyzes were performed;
 - (3) The company or entity performing the analyzes;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyzes; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure

to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C.12 - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division Air Quality Management Section, Compliance Data 2700 South Belmont Avenue Indianapolis, Indiana 46221

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and ERMD on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report(s) does(do) not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations as described in Section B.15 Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit

and ending on the last day of the reporting period.

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1	FACILITY OPERATION CONDITIONS
Emission Unit ID G1 Standby Generator G1	Facility Description [326 IAC 2-8-4(10)]: One (1) Kato reciprocating internal combustion engine model number 3516 identified as Emission Unit ID G1. Emission Unit ID G1 is a standby generator and burns diesel fuel at a maximum rated heat input of 18.16 million Btu per hour. Includes an alternative operating scenario of dual firing diesel fuel and natural gas firing up to a maximum natural gas heat input of 11.2 million Btu per hour. Emission Unit ID G1 exhausts at Stack/Vent ID G1. Installation date of 1993. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)
Emission Unit ID G2 Standby Generator G2	Facility Description [326 IAC 2-8-4(10)]: One (1) Kato reciprocating internal combustion engine model number 3516 identified as Emission Unit ID G2. Emission Unit ID G2 is a standby generator and burns diesel fuel at a maximum rated heat input of 18.16 million Btu per hour. Includes an alternative operating scenario of dual firing diesel fuel and natural gas firing up to a maximum natural gas heat input of 11.2 million Btu per hour. Emission Unit ID G2 exhausts at Stack/Vent ID G2. Installation date of 1993. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)
Emission Unit ID G3 Standby Generator G3	Facility Description [326 IAC 2-8-4(10)]: One (1) Kato reciprocating internal combustion engine model number 3516 identified as Emission Unit ID G3. Emission Unit ID G3 is a standby generator and burns diesel fuel at a maximum rated heat input of 18.16 million Btu per hour. Includes an alternative operating scenario of dual firing diesel fuel and natural gas firing up to a maximum natural gas heat input of 11.2 million Btu per hour. Emission Unit ID G3 exhausts at Stack/Vent ID G3. Installation date of 1993. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)
Emission Unit ID G4 Standby Generator G4	Facility Description [326 IAC 2-8-4(10)]: One (1) Kato reciprocating internal combustion engine model number 3516 identified as Emission Unit ID G4. Emission Unit ID G4 is a standby generator and burns diesel fuel at a maximum rated heat input of 18.16 million Btu per hour. Includes an alternative operating scenario of dual firing diesel fuel and natural gas firing up to a maximum natural gas heat input of 11.2 million Btu per hour. Emission Unit ID G4 exhausts at Stack/Vent ID G2. Installation date of 1993. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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

- D.1.1 PSD Minor Limit [326 IAC 2-8-4(1)]][326 IAC 2-2][40 CFR 52.21] Pursuant to 326 IAC 2-8-4(1) (FESOP: Permit Content):
 - a) The combined total sum of diesel fuel input to Emission Unit ID G1, G2, G3 and G4 shall not exceed 293,435 gallons per twelve (12) consecutive month period. This usage limit is equivalent to 95.5 tons NO_x emissions per twelve (12) consecutive month period.
 - b) The fuel allotment in subpart a) of this condition shall be adjusted when combusting more than one (1) fuel by the following: Every one (1) thousand gallon reduction in diesel fuel consumption can be substituted for 0.08 million cubic feet of natural gas consumption provided natural gas consumption does not exceed 24.0 million cubic feet per rolling twelve

(12) consecutive month period.

Compliance with a) and b) makes 326 IAC 2-7 (Part 70 Permit Program) not applicable and satisfies the requirement to limit NO_x and CO emissions to below the major source level such that 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 do not apply.

D.1.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B.13 - Preventive Maintenance Plan, of this permit, is required for Emission Unit ID G1, G2, G3 and G4.

Compliance Determination Requirements

- D.1.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11] The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM and ERMD, compliance with the NO_x limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C.8 - Performance Testing.
- D.1.4 Fuel Use Limitation

Compliance with the fuel usage limitation in Condition D.1.1 shall be demonstrated within thirty (30) days of the end of each month based on the combined total amount and type of fuel combusted in Emission Unit ID G1, G2, G3 and G4 per rolling twelve (12) consecutive month period.

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

D.1.5 Record Keeping Requirements

To document compliance with Condition D.1.4, the Permittee shall maintain records in accordance with (a) and (b) below.

- (a) To document compliance with condition D.1.1, the Permittee shall maintain records of the monthly amount of each type of fuel combusted in Emission Unit ID G1, G2, G3 and G4.
- (b) All records shall be maintained in accordance with Section C.16 General Record Keeping Requirements, of this permit.

D.1.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address(es) listed in Section C.17 - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

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

and

INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION AIR QUALITY MANAGEMENT SECTION, COMPLIANCE DATA

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name:Roche Diagnostics CorporationSource Address:9115 Hague Road, Indianapolis, Indiana 46250Mailing Address:P.O. Box 50457, Indianapolis, Indiana 46250-0457FESOP No.:F097-11275-00338

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

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify)
- 9 Report (specify)
- 9 Notification (specify)
- 9 Other (specify)

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

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT **COMPLIANCE DATA SECTION** P.O. Box 6015 **100 North Senate Avenue** Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967 and INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION AIR QUALITY MANAGEMENT SECTION. COMPLIANCE DATA 2700 S. Belmont Ave. Indianapolis Indiana 46221 Phone: 317-327-2234

Fax: 317-327-2274

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

Source Name:	Roche Diagnostics Corporation
Source Address:	9115 Hague Road, Indianapolis, Indiana 46250
Mailing Address:	P.O. Box 50457, Indianapolis, Indiana 46250-0457
FESOP No.:	F097-11275-00338

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2

9_{1.} This is an emergency as defined in 326 IAC 2-7-1(12) CThe Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

9 2. This is a deviation, reportable per 326 IAC 2-8-4(3)(C) CThe Permittee must submit notice in writing within ten (10) calendar days

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency/Deviation started:	
Date/Time Emergency/Deviation was corrected:	
Was the facility being properly operated at the time of the emergency/deviation? Describe:	Y N
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency/deviation:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are new imminent injury to persons, severe damage to equipment, substantial loss of capita loss of product or raw materials of substantial economic value:	

Form Completed by:	_
Title / Position:	_
Date:	_
Phone:	

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

and

INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION AIR QUALITY MANAGEMENT SECTION, COMPLIANCE DATA

FESOP Quarterly Report

Source Name:	Roche Diagnostics Corporation
Source Address:	9115 Hague Road, Indianapolis, Indiana 46250
Mailing Address:	P.O. Box 50457, Indianapolis, Indiana 46250-50457
FESOP No.:	F097-11275-00338
Facility:	Four (4) Standby Generators: G1, G2, G3 & G4
Parameter:	Combined diesel fuel throughput and combined natural gas throughput.
Limit:	Less than 293,439 gallons per twelve (12) consecutive month period. Every 1000
	gallon decrease in consumption can be substituted with 0.08 MMCF of natural gas
	consumption up to 24.0 MMCF per rolling twelve (12) consecutive month period.

QUARTER ______ YEAR: _____

Marth		Column 1	Column 2	Column 1 + Column 2
Month Fuel Type	This Month	Previous 11 Months	12 Month Total	
Month	diesel (gal)			
	natural gas (MMCF)			
Month	diesel (gal)			
	natural gas (MMCF)			
Month	diesel (gal)			
	natural gas (MMCF)			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Signature:	
Date:	
Phone:	

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

and

INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION AIR QUALITY MANAGEMENT SECTION, COMPLIANCE DATA

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

Source Name:	Roche Diagnostics Corporation
Source Address:	9115 Hague Road, Indianapolis, Indiana 46250
Mailing Address:	P.O. Box 50457, Indianapolis, Indiana 46250-50457
FESOP No.:	F097-11275-00338

Months: ______ to _____ Year: _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (eg. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By:	
Title/Position:	
Date:	
Phone:	

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Management

and

Indianapolis Environmental Resources Management Division

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

Source Background and Description

Source Name:	Roche Diagnostics Corporation
Source Location:	9115 Hague Road, Indianapolis, Indiana 46250
County:	Marion
SIC Code:	2835
Operation Permit No.:	F097-11275-00338
Permit Reviewer:	M. Caraher

The Office of Air Management (OAM) and the City of Indianapolis Environmental Resources Management Division (ERMD) have reviewed a FESOP application from Roche Diagnostics Corporation relating to the operation of standby and emergency generators under a Standard Industrial Classification Code (SIC) of 2835 In Vitro and In Vivo Diagnostic Substances.

Permitted Emission Units and Pollution Control Equipment

There are no previously permitted facilities at this source.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

- (a) One (1) Kato reciprocating internal combustion engine model number 3516 identified as Emission Unit ID G1. Emission Unit ID G1 is a standby generator and burns diesel fuel at a maximum rated heat input of 18.16 million Btu per hour. Includes an alternative operating scenario of dual firing diesel fuel and natural gas firing up to a maximum natural gas heat input of 11.2 million Btu per hour. Emission Unit ID G1 exhausts at Stack/Vent ID G1. Installation date of 1993.
- (b) One (1) Kato reciprocating internal combustion engine model number 3516 identified as Emission Unit ID G2. Emission Unit ID G2 is a standby generator and burns diesel fuel at a maximum rated heat input of 18.16 million Btu per hour. Includes an alternative operating scenario of dual firing diesel fuel and natural gas firing up to a maximum natural gas heat input of 11.2 million Btu per hour. Emission Unit ID G2 exhausts at Stack/Vent ID G2. Installation date of 1993.
- (c) One (1) Kato reciprocating internal combustion engine model number 3516 identified as Emission Unit ID G3. Emission Unit ID G3 is a standby generator and burns diesel fuel at a maximum rated heat input of 18.16 million Btu per hour. Includes an alternative operating scenario of dual firing diesel fuel and natural gas firing up to a maximum natural gas heat input of 11.2 million Btu per hour. Emission Unit ID G3 exhausts at Stack/Vent ID G3. Installation date of 1993.
- (d) One (1) Kato reciprocating internal combustion engine model number 3516 identified as

Emission Unit ID G4. Emission Unit ID G4 is a standby generator and burns diesel fuel at a maximum rated heat input of 18.16 million Btu per hour. Includes an alternative operating scenario of dual firing diesel fuel and natural gas firing up to a maximum natural gas heat input of 11.2 million Btu per hour. Emission Unit ID G4 exhausts at Stack/Vent ID G2. Installation date of 1993.

Insignificant Activities

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

- (a) Space heaters with fuel oil fired heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight;
 - 1) Six (6) portable space heaters identified as Emission Unit ID 6PSH. Each diesel fired portable space heater is rated at 100,000 Btu max heat input.
- (b) Combustion source flame safety purging on startup.
- (c) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (d) Cleaners and solvents characterized as follows:
 - having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;
 - b) having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F);

the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

- (e) Closed loop heating and cooling systems.
- (f) Paved and unpaved roads and parking lots with public access.
- (g) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (h) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (i) Stationary fire pumps.
- (j) Other emergency equipment as follows;

Gasoline generators not exceeding 110 horsepower.

- 1) One (1) gasoline fired portable generator identified as Emission Unit ID K1. Emission Unit ID K1 is a reciprocating internal combustion engine rated at 12.5 kilowatts.
- One (1) gasoline fired portable generator identified as Emission Unit ID K2. Emission Unit ID K2 is a reciprocating internal combustion engine rated at 5.0 kilowatts.

Diesel generators not exceeding 1600 horsepower:

 One (1) diesel fired emergency generator identified as Emission Unit ID L-18. Emission Unit ID L-18 is a Caterpillar Model 3406 reciprocating internal combustion engine rated at 3.1 million Btu maximum heat input and 402 horsepower output. Emission Unit ID L-18 exhausts at Stack/Vent ID L-18. Installation date of September 1999.

Natural gas reciprocating engines not exceeding 16,000 horsepower:

 One (1) natural gas fired emergency generator identified as Emission Unit ID A-P Tunnel. Emission Unit ID A-P Tunnel is a reciprocating internal combustion engine rated at 15 kilowatts.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) CP945179-01 issued May 1994 for VOC emissions from Granulator Process; Includes Production and Pilot Operation.

(b) Modified CP945179-01 for modification to the Construction Permit for Granulator Process; Includes Production and Pilot Operation and reissued as CP965179-01 in September 1996.

The source notified ERMD in writing on October 27, 1998 that the Granulator Process; includes Production and Pilot Operation ceased operation June 19,1998 and has been dismantled and removed from the source as of August 8, 1998. Therefore, permitting of this facility was no longer needed.

(c) Exemption letter of September 2, 1999 issued for One (1) diesel fired emergency generator identified as Emission Unit ID L-18. Emission Unit ID L-18 is a Caterpillar Model 3406 reciprocating internal combustion engine rated at 3.1 million Btu maximum heat input and 402 horsepower output. Emission Unit ID L-18 exhausts at Stack/Vent ID L-18. Installation date of September 1999.

All conditions from previous approvals were incorporated into this FESOP except the following:

(a) CP965179-01, issued September 1996;

All Conditions:

Reason not incorporated:

The Granulator Process has been discontinued and dismantled as of August 1998 and the facility was not included by the source as an Insignificant or Significant Activity in their Title V (FESOP) application received by ERMD January 29, 1999.

Enforcement Issue

- (a) IDEM and ERMD are aware that equipment has been constructed and/or operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled Unpermitted Emission Units and Pollution Control Equipment.
- (b) IDEM and ERMD are reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on January 29, 1999. Additional information was received on July 6, 1999, August 26, 1999 and September 10, 1999. An amendment to the FESOP application of January 29, 1999 was received from Roche Diagnostics Corporation on September 27, 1999 in regards to the conversion of Emission Unit ID G1 through G4 from diesel fuel firing only to diesel fuel or the dual fuel firing of natural gas and diesel fuel firing as an alternative operating scenario. An amended Form GSD-07 Source Pollutant Emissions Summary was received November 22, 1999 listing the highest actual emission rate for any criteria pollutant as 8.6 tons per year of NO_x emissions source wide for calendar year 1998.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (TSD Appendix A, pages 1
through 5).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	22.4
PM-10	18.4
SO ₂	128.9
VOC	49.1
СО	331.9
NO _x	1515.1

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Benzene	0.2
Toluene	0.1
Xylene	0.1
Propylene	0.9
Total PAH	0.1
TOTAL	1.4

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of SO_2 , NO_x and CO are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

No previous emission data has been received from the source. The source amended the January 29, 1999 application Form GSD-07 Source Pollutant Emissions Summary with the November 22, 1999 submittal of Form GSD -07 listing 8.6 tons of NO_x emissions for calendar year 1998 (which represents the highest emission rate of any criteria pollutant at the source). The previous submittal had incorrectly assumed 500 actual annual operating hours, whereas, actual emissions were reexamined and determined to be representative of operation at less than 100 hours per year for each significant emissions unit.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

		Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	СО	NO _x	HAPs	
Emission Unit ID G1, G2, G3, G4 Four (4) Standby Generators	1.4	1.2	8.1	3.1	20.8	95.5		
Insignificant Activities	0.2	0.2	0.4	0.3	3.0	3.5		
Total Emissions	1.6	1.4	8.5	3.4	23.8	99.0		

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	unclassifiable
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
СО	attainment
Lead	unclassifiable

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Malfunctions: Preventive Maintenance (PM) Plans) and 326 IAC 2-8-3 (FESOP: Permit Application)

The source is initially subject to 326 IAC 1-6-3 because it is required to obtain a permit under 326 IAC 2 (Permit Review Rules). However, 326 IAC 1-6-3 is superseded by 326 IAC 2-8-3 which requires the source to comply with the provisions of 326 IAC 1-6-3. Any person responsible for operating any facility specified in 326 IAC 1-6 shall prepare and maintain a Preventive Maintenance Plan which includes the following information:

- 1) Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control device(s).
- 2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.

3) Identification and quantification of the replacement parts which will be kept in inventory and made available for quick replacement.

PM Plans shall be submitted to IDEM, OAM and/or ERMD upon request and shall be subject to review and approval by IDEM, OAM and/or ERMD.

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

This source installed four (4) standby generators in 1993 without receiving preconstruction approval and/or addressing New Source Review (NSR) issues. Potential to Emit NO_x and CO has been determined to be in excess of 250 tons per year (see TSD Appendix A page 1 of 5) based on 8760 annual operating hours. However, the standby generators have historically operated at less than 500 hours per year for each unit and have historically had, per the application, actual emissions of less than 100 tons per year of NO_x and CO. The source filed a Construction Permit application on September 17, 1998 for these units to address the NSR review issues when it was deemed at that time that the units were defined as standby generators and not emergency generators and, therefore, PTE should be calculated at 8760 annual operating hours and not be calculated at 500 annual operating hours. The source is seeking an operating permit under 326 IAC 2-8 (Federally Enforceable State Operating Permit Program) to limit source wide PTE under the PSD and major source thresholds for NO_x, CO and SO₂ emissions.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of NO_x in Marion County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 2-7 (Part 70 Permit Program)

This source installed four (4) diesel fired emergency generators in December 1993. No New Source Review determination was made and no application for new construction was received by ERMD. In addition, the operation of these four (4) units was not deemed to be in emergency situations solely at Roche Diagnostics Corporation. The operation of these four (4) units is on a standby basis to deliver emergency power to Indianapolis Power and Light Company and/or Roche Diagnostics Corporation and is not entirely dependent on power outages solely at Roche Diagnostics Corporation.

The operation of four (4) units at 8760 hours per year is in excess of 250 tons per year of NO_x emissions and CO emissions and at 500 hours per year, the combined potential to emit NO_x is in excess of 326 IAC 2-1 (General Provisions) minimum permitting thresholds (see TSD Appendix A page 1 of 5).

As a result, the source has agreed to not pursue a Source Specific Operating Agreement because these units have been deemed to not be emergency units but standby units and wishes to obtain a permit under 326 IAC 2-7 (Part 70 Permit Program) to limit potential to emit below PSD and major source significance levels.

326 IAC 2-8 (Federally Enforceable State Operating Permit Program)

This source, through the Part 70 Permit application process, has stated that actual emissions are less than major source thresholds and wishes to obtain a FESOP in order to limit potential to emit to less than major source significance levels for NO_x , SO_2 and CO.

326 IAC 5-1 (Opacity Regulations)

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

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute

averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6 (Particulate Rules)

The source is not major for PM and consists of standby and emergency reciprocating internal combustion engines combusting either diesel fuel, natural gas and/or gasoline. Therefore, no PM limit for these units is established pursuant to 326 IAC 6-1 (Nonattainment Area Limitations) or 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating). Pursuant to 326 IAC 1-2-59(Definitions), liquid and gaseous fuels and combustion air will not be considered as part of the process weight in determining applicability of 326 IAC 6-3 (Process Operations). Therefore, 326 IAC 6-3 (Process Operations) does not apply to liquid and gaseous fuel fired generators at this source.

326 IAC 7 (Sulfur Dioxide Rules)

Pursuant to 326 IAC 2-8 (Federally Enforceable State Operating Permit Program), potential to emit NO_x , SO_2 and CO are limited to less than major source significance levels. As a result, neither the source nor any individual standby or emergency generator has potential to emit sulfur dioxide in excess of twenty five (25) tons per year. Therefore, 326 IAC 7 (Sulfur Dioxide Rules) does not apply.

State Rule Applicability - Individual Facilities

Emission Unit ID G1, G2, G3 and G4 - Four Standby Generators

326 IAC 2-8 (Federally Enforceable State Operating Permit Program)

This source installed four (4) diesel fired emergency generators in December 1993. No New Source Review determination was made and no application for new construction was received by ERMD. In addition, the operation of these four (4) units was not deemed to be in emergency situations solely at Roche Diagnostics Corporation. The operation of these four (4) units is on a standby basis to deliver emergency power to Indianapolis Power and Light Company and/or Roche Diagnostics Corporation on power outages solely at Roche Diagnostics Corporation.

The operation of four (4) units at 8760 hours per year is in excess of 250 tons per year of NO_x emissions and at 500 hours per year, the individual Emission Unit and combined Emission Unit potential to emit NO_x is in excess of 326 IAC 2-1 (General Provisions) minimum permitting thresholds (see TSD Appendix A page 1 of 5).

As a result, the source has agreed to not pursue a Source Specific Operating Agreement because these units have been deemed to not be emergency units but standby units and wishes to obtain a permit under 326 IAC 2-7 (Part 70 Permit Program) to limit potential to emit NO_x , SO_2 and CO to less than PSD and major source significance levels. The source has requested operation of each unit be limited to 500 annual operating hours pursuant to 326 IAC 2-8 (FESOP Program). At 500 annual operating hours for each unit, the sum of NO_x emissions is, approximately, 86.3 tons per year (see TSD Appendix A page 1 of 5). Insignificant Activity NO_x emissions sum to, approximately, 3.5 tons per year. A FESOP source is allowed up to 99.0 tons of NO_x emissions per year. Instead of creating an emission cap at 86.3 + 3.5, potential to emit will be established at 99.0-3.5 for the significant units.

Pursuant to 326 IAC 2-8 (Federally Enforceable State Operating Permit Program) combined potential to emit NO_x is limited to 293,439 gallons of diesel fuel consumption per rolling twelve (12) consecutive month period (see TSD Appendix A page 1 of 5). This is equivalent to 95.5 tons of NO_x emissions per rolling (12) consecutive month period (and operation of the four (4) units at greater than 500 annual operating hours for each unit).

As an alternative operating scenario, the source wishes to fire a combination of diesel fuel and natural gas with natural gas being fired up to 60% of the total heat input capacity for each unit on an hourly basis. In regards to potential to emit, dual firing natural gas at 60% of the hourly heat input results in higher VOC and CO emissions than the firing of diesel fuel only (see TSD Appendix A page 4 of 5). However, the range of natural gas heat input can vary from greater than 0% but up to 60% of the heat input on an hourly basis. AP-42 emission factors for dual firing natural gas and diesel are estimated assuming natural gas heat input accounts for 95% of the total heat input on an hourly basis. For this reason, fuel equivalency limitations were not set utilizing the NO_x emission factor for straight diesel firing versus firing natural gas at 60% of the total hourly heat input. Fuel equivalency was derived assuming natural gas firing could account for up to 60% of the heat input of the total annual diesel fuel firing limitation (293,439) and, as a worst case, the NO_x emission factor for dual firing is equal to the (higher) NO_x emission factor when firing straight diesel fuel. For every 1000 gallon decrease in diesel fuel consumption, approximately, 0.08 million cubic feet of natural gas can be fired and still limit the source to less than major source threshold for NO_x emissions (see TSD Appendix A page 5 of 5).

Therefore, 326 IAC 2-7 and PSD do not apply.

326 IAC 8-1-6 (New Facilities: General Reduction Requirements)

Emission Unit ID G1 through G4 were installed after 1980 but do not have potential emissions of Volatile Organic Compounds (VOC) of 25.0 tons per year or more (see TSD Appendix A page 1 of 5). Therefore, 326 IAC 8-1-6 does not apply.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

No compliance monitoring requirements are applicable to this source because each of the four (4) standby generators, the only significant emitting emission units at this source, are limited to 293,439 gallons of diesel fuel consumption per rolling twelve (12) consecutive month period, which, thereby limits the potential to emit NO_x (and CO) to less than 100 tons per rolling twelve (12) consecutive month period and the potential to emit of all other criteria pollutant from each standby generator to less than 25 tons per rolling twelve (12) consecutive month period. In addition, no emission unit is equipped with any add on air pollution control devices(s).

Semiannual reporting, at a minimum, is required pursuant to 326 IAC 2-8-4(3)(C) (Permit Content). Because the source is being limited, such that PSD and 326 IAC 2-7 do not apply, the source will be required to submit reporting of fuel use for Emission Unit ID's G1 through G4 quarterly utilizing the FESOP Quarterly Report Form. The Compliance Monitoring Report Form will be submitted quarterly to coincide with the reporting of the required FESOP Quarterly Report Form.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) FESOP Application Form GSD-08.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations (TSD Appendix A pages 1 and 2 of 5).

Conclusion

The operation of standby and emergency generators under a Standard Industrial Classification Code (SIC) of 2835 In Vitro and In Vivo Diagnostic Substances shall be subject to the conditions of the attached proposed **FESOP No.: F097-11275-00338**.

APPENDIX A

Four Standy By Generators Emission Unit IDs		Appendix A: Emissions Calculations Diesel Fuel Fired
G1, G2, G3 & G4		Internal Combustion Engines - Industrial Reciprocating > 600 hp
	Company Name:	Roche Diagnostics Corporation
	Address City IN Zip: CP:	9115 Hague Road, Indianapolis, IN 46250-0457
	Plt ID:	F097-11275-00338
	Reviewer:	M. Caraher
	Date:	08/24/99
E lo I lo ito		

Each	Unit:	

	Max	Max	Max	diesel fuel	Potential
	Output (hp)	Heat Input (MMBtu/hr)	Sulfur Content (% wt)	Btu/gal	Thru (gal/yr)
[2615	18.16	0.4	137,000	1,161,179.6

	PM	PM10	SO2	NOx	VOC	CO	
Emission Factor in lb/MMBtu (AP-42)	0.07	0.06	1.01(S)	3.20	0.08	0.85	emfac used is
Emission Factor in Ib/MMBtu (manufacturer)		0.0308	1.01(S)	4.7511	0.08	0.5358	in bold
Potential Emissions in lbs/hr	1.3	1.0	7.3	86.3	1.5	15.4	
Potential Emissions in tons/yr	5.5	4.6	32.1	377.9	6.5	67.6	
Potential Emissions @ 500 hrs/yr	0.3	0.3	1.8	21.6	0.4	3.9	

Tons sum of 4 units @ 8760 hrs/yr each	22.2	18.2	128.5	1511.6	26.1	270.4
Tons sum of 4 units @ 500 hrs/yr each	1.3	1.0	7.3	86.3	1.5	15.4
Tons sum @ limited thru; see below	1.4	1.2	8.1	95.5	1.6	17.1

Methodology

Emission Factors used are the highest emission rate from either AP-42 Fifth Edition Tables 3.4-1 and 3.4-2 or manufacturer's estimate Sulfur Content & Btu from AP-42 Appendix A

Potential thru (gal/yr) = MMBtu/hr x gal/0.137 MMBtu x 8760 hr/yr

HAPs

	Benzene	Toluene	Xylene	Propylene	Formaldehyde	Total PAH
Emission Factor in Ib/MMBtu	7.76E-04	2.81E-04	1.93E-04	2.79E-03	7.89E-05	2.21E-04
Potential Emissions in Ibs/hr	0.0	0.0	0.0	0.1	0.0	0.0
Potential Emissions in tons/yr	0.1	0.0	0.0	0.2	0.0	0.0
Potential Emissions @ 500 hrs/yr	0.0	0.0	0.0	0.0	0.0	0.0

Tons sum of 4 units @ 8760 hrs/yr each	0.2	0.1	0.1	0.9	0.0	0.1
Tons sum of 4 units @ 500 hrs/yr each	0.0	0.0	0.0	0.1	0.0	0.0
Tons sum at limited thru; see below	0.0	0.0	0.0	0.1	0.0	0.0

Methodology

Emission Factors from AP-42 Fifth Edition Table 3.4-3

Limited total diesel fuel consumption: to limit Significant + Insignificant < major source 99.0 tons NOx - 3.5 tons NOx from Insignificant Activities = 95.5 tons NOx from Significant emission units What combined total diesel fuel use limitation will limit NOx < 95.5 tons/yr? x gal/yr x 137000 Btu/gal x MMBtu/10^6 Btu x 4.7511 #NOx/MMBtu x ton/2000 lbs = 95.5 tons NOx/yr; x = 293,439 gallons/yr

One Emergency Generator Emission Unit ID L-18		Appendix A: Emissions Calculations Diesel Fuel Fired Internal Combustion Engines - Industrial Reciprocating < 600 hp
	Company Name: Address City IN Zip:	Roche Diagnostics Corporation 9115 Hague Road, Indianapolis, IN 46250-0457
	CP: Plt ID: Reviewer:	F097-11275-00338 M. Caraher
Max	Date:	08/27/99

Max	Max	Max	diesel fuel	Potential	
Output (hp)	Heat Input (MMBtu/hr)	Sulfur Content (% wt)	Btu/gal	Thru (gal/yr)	
402	3.1	0.4	137,000	198,219.0	

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in Ib/MMBtu	0.31	0.31	0.29	4.41	0.35	0.95
Potential Emissions in Ibs/hr	1.0	1.0	0.9	13.7	1.1	2.9
Potential Emissions in tons/yr	4.2	4.2	3.9	59.9	4.8	12.9
Potential Emissions @ 500 hrs/yr	0.2	0.2	0.2	3.4	0.3	0.7

Methodology

Emission Factors from AP-42 Fifth Edition Table 3.3-1 Sulfur Content & Btu from AP-42 Appendix A Potential thru (gal/yr) = MMBtu/hr x gal/0.137 MMBtu x 8760 hr/yr

<u>HAPs</u>

	Benzene	Toluene	Xylene	Propylene	Formaldehyde	Total PAH
Emission Factor in Ib/MMBtu	9.33E-04	4.09E-04	2.85E-04	2.58E-03	1.18E-03	1.68E-04
Potential Emissions in Ibs/hr	0.0	0.0	0.0	0.0	0.0	0.0
Potential Emissions in tons/yr	0.0	0.0	0.0	0.0	0.0	0.0
Potential Emissions @ 500 hrs/yr	0.0	0.0	0.0	0.0	0.0	0.0

Methodology

Emission Factors from AP-42 Fifth Edition Table 3.3-2

Limited diesel fuel consumption: operating for 500 hrs/yr annually

max heat input x gal/MMBtu x 500 hrs/yr 1 unit =

11,313.9 gallons/yr

0338calc.wk4

Output five rating 15 Equivalent MMBu rating 0.0512 Equivalent fmmBu rating 0.0512 Equivalent fmmSu rating 0.0512 Emission Factor PM PM10 SOx NOx VOC CO Image: Society of the sector (bs / MMCF) 10.0 10.0 0.8 3400.0 82.9 430.0 Potential Emissions (bs / MMCF) 0.0 0.0 0.0 0.0 0.0 0.0 Instance (g 8760 msyr) 0.0 0.0 0.0 0.0 0.0 0.0 Methodology Equivalent MMBbr rating: Equivalent MMBr rating: Equivalent	A-P Tunnel Generator Emission Unit ID A-P Tunnel Naural Gas Fired		Company Name: Address City IN Zip: CP: Pit ID: Reviewer: Date:	Appendix A: 1 Insignificant J Natural Gas F Internal Comb < 600 hp Roche Diagno 9115 Hague R F097-11275-00 M. Caraher 09/13/99	TSD Appendix A Page 3 of 5			
Emission Factor Ibs / MMCP Ibs Ibs </th <th></th> <th>]</th> <th></th> <th>MMBtu rating</th> <th></th> <th>horsepower</th> <th>MMCF/hr</th> <th>]</th>]		MMBtu rating		horsepower	MMCF/hr]
bs/ MMCF: 10.0 10.0 0.6 3400.0 82.9 430.0 Potential Emissions 0.0 0.0 0.0 0.2 0.0 0.0 boty of 200 ms/m 0.0 0.0 0.0 0.0 0.0 0.0 boty of 200 ms/m 0.0 0.0 0.0 0.0 0.0 0.0 boty of 200 ms/m 0.0 0.0 0.0 0.0 0.0 0.0 Methodology from SCC# 2-03-002-01 Internal Combustion Engines - Commercial/Institutional Natural Gas Fired Reciprocating E 1 Kiowatt hour = 3410 Btu 0.0<		PM	PM10	SOx	NOx	voc	со	1
Ibs/r 0.0 0.0 0.0 0.2 0.0 0.0 Ions/gr 0570 https/r 0.0		10.0	10.0	0.6	3400.0	82.9	430.0	-
Methodology from SCC#2.03.002-01 Internal Combustion Engines - Commercial/Institutional Natural Gas Fired Reciprocating E Pr42 Appendix A Conversion Factor: 1 kilowatt hour = 3410 Btu Pr42 Appendix A Conversion Factor: 1 horspoorer = 2433503 Btu output kir mang:	lbs/hr tons/yr @ 8760 hrs/yr	0.0	0.0	0.0	0.8	0.0	0.1	
K-Bidg Gasoline Portable Generator 1 Emission Unit ID K1	tonslyr @ 500 hrs/yr Methodology Emission Factor (lbs / MMC AP-42 Appendix A Convers AP-42 Appendix A Convers Equivalent MMBtu rating: Equivalent Horsepower:	CF): iion Factor:	from SCC# 2-03-002-0 1 kilowatt hour = 3410 1 horsepower = 2.5435 output kw rating x 3410 million Btu / 2.5435E03	11 Internal Comb Btu iE03 Btu) / 1,000,000] latural Gas Fired Reciprocating Eng
equivalent equivalent resultant	Emission Unit ID K1	Generator 1	_			Consiscont	recultant	1

	PM	PM10	SOx	NOx	VOC	CC
Emission Factor						
lbs / MMBtu	0.1	0.1	0.1	1.6	2.1	154.
Potential Emissions						
lbs/hr	0.0	0.0	0.0	0.1	0.1	6.6
tons/yr @ 8760 hrs/yr	0.0	0.0	0.0	0.3	0.4	28.8
tons/yr @ 500 hrs/yr	0.0	0.0	0.0	0.0	0.0	1.6

K-Bldg Gasoline Portable Generator 2 Emission Unit ID K2

Gasoline Fired

output kw rating 5]		equivalent MMBtu rating 0.0171		equivalent horsepower 7	resultant MMCF/hr 0.00002
Emission Factor	PM	PM10	SOx	NOx	VOC	CO
lbs / MMBtu	0.1	0.1	0.1	1.6	2.1	154.0
Potential Emissions						
lbs/hr	0.0	0.0	0.0	0.0	0.0	2.6
tons/yr @ 8760 hrs/yr	0.0	0.0	0.0	0.1	0.2	11.5
tons/yr @ 500 hrs/yr	0.0	0.0	0.0	0.0	0.0	0.7

Methodology Emission Factor (lbs / MMBtu): from AP-42 Table 3.3-1Gasoline Fired Reciprocating Engines < 600 hp

6 Portable Space Heaters

100,000 Btu/hr each Emission Unit ID 6PSH		6 @ 100.000 ea =	MMBtu/hr rating 0.6	Percent Sulfur 0.35	Btu per Gallon 137000	kgal/hr 0.0044
Emission Factor	PM	PM10	SOx	NOx	VOC	со
lbs / kgal	2.5	1.3	50.3 143.6(S)	18.0	1.0	5.0
Potential Emissions Ibs/hr	0.0	0.0	0.9	0.3	0.0	0.1
tons/yr @ 8760 hrs/yr	0.0	0.1	3.8	1.3	0.1	0.4
tons/yr @ 500 hrs/yr	0.0	0.0	0.2	0.1	0.0	0.0

Methodology Emission Factor (Ibs / MMCF): MMBtu/hr to kgal/hr:

from SCC 1-05-002-05 Commercial/Institutional Space Heaters - Distillate oil MMBtu/hr x 10^6 Btu/MMBtu x gal/137,000 Btu x kgal/1000 gal

Emission Unit ID	PM	PM10	SOx	NOx	VOC	co
A-P Tunnel	0.0	0.0	0.0	0.0	0.0	0.0
K1	0.0	0.0	0.0	0.0	0.0	1.6
K2	0.0	0.0	0.0	0.0	0.0	0.7
6SPSH	0.0	0.0	0.2	0.1	0.0	0.0
L-18	0.2	0.2	0.2	3.4	0.3	0.7
SUM	0.2	0.2	0.4	3.5	0.3	3.0

0338calc.wk4

Four Standy By Generators Emission Unit IDs G1, G2, G3 & G4 Alternative Operating Scenario

TSD Appendix A Page 4 of 5 Appendix A: Emissions Calculations Conversion to 40% Diesel Fuel Fired/60% Natural Gas Firing Internal Combustion Engines - Industrial Reciprocating > 600 hp Roche Diagnostics Corporation 9115 Hague Road, Indianapolis, IN 46250-0457

Company Name:
Address City IN Zip:
CP:
PIt ID:
Reviewer:
Date:

Each Unit on 100% diesel:

Max	Max	1	Max		diesel fuel	Potential	1
Output (hp)	Heat Input (MMBtu/hr)		Sulfur Content (% wt)		Btu/gal	Thru (gal/yr)	
2615	18.16		0.4		137,000	1,161,179.6	
	PM	PM10	SO2	NOx	VOC	CO	
Emission Factor in Ib/MMBtu	0.07	0.06	1.01(S)	4.7511	0.08	0.85	NOx emfac is manufacturer's
			0.40				estimate > AP-42
Potential Emissions in lbs/hr	1.3	1.0	7.3	86.3	1.5	15.4	
Potential Emissions in tons/yr	5.5	4.6	32.1	377.9	6.5	67.6	
Potential Emissions @ 500 hrs/yr	0.3	0.3	1.8	21.6	0.4	3.9	
Tons sum of 4 units @ 8760 brs/vr each	22.2	18.2	128.5	1511.6	26.1	270.4	

Tons sum of 4 units @ 8760 hrs/yr each	22.2	18.2	128.5	1511.6	26.1	270.4
Tons sum of 4 units @ 500 hrs/yr each	1.3	1.0	7.3	86.3	1.5	15.4
Tons sum @ limited thru; see below	1.4	1.2	8.1	95.5	1.6	17.1

F097-11275-00338 M. Caraher 09/29/99

Methodology

Emission Factors from AP-42 Fifth Edition Tables 3.4-1 and 3.4-2 or manufacturers estimate whichever is higher Sulfur Content & Btur from AP-42 Appendix A Potential thru (gal/yr) = MMBtu/hr x gal/0.137 MMBtu x 8760 hr/yr

HAPs

	Benzene	Toluene	Xylene	Propylene	Formaldehyde	Total PAH
Emission Factor in Ib/MMBtu	7.76E-04	2.81E-04	1.93E-04	2.79E-03	7.89E-05	2.21E-04
Potential Emissions in lbs/hr	0.0	0.0	0.0	0.1	0.0	0.0
Potential Emissions in tons/yr	0.1	0.0	0.0	0.2	0.0	0.0
Potential Emissions @ 500 hrs/yr	0.0	0.0	0.0	0.0	0.0	0.0
Tons sum of 4 units @ 8760 hrs/yr each	0.2	0.1	0.1	0.9	0.0	0.1
Tons sum of 4 units @ 500 hrs/yr each	0.0	0.0	0.0	0.1	0.0	0.0
Tons sum at limited thru; see below	0.0	0.0	0.0	0.1	0.0	0.0

Methodology

Emission Factors from AP-42 Fifth Edition Table 3.4-3

Limited total diesel fuel consumption: to limit Significant + Insignificant < major source 99.0 tons NOx - 3.5 tons NOx from Insignificant Activities = 95.5 tons NOx from Significant emission units

What combined total diesel fuel use limitation will limit NOx < 95.5 tons/yr?

x gal/yr x 137000 Btu/gal x MMBtu/10^6 Btu x 4.7511 #NOx/MMBtu x ton/2000 lbs = 95.5 tons NOx/yr; x =

293,439 gallons/yr

Max Output (hp) 2615	(Total) Max Heat Input (MMBtu/hr) 18.74		Dual fuel max heat input (MMBtu/hr) 11.2	Straight Diesel heat input (MMBtur/hr) 6.801		Max Sulfur Content (% wt) 0.4	
	PM	PM10	SO2	NOx	VOC	СО	
Emission Factor in lb/MMBtu (Straight)	0.07	0.06	1.01(S)	4.7511	0.08	0.85	NOx mfgrs
Emission Factor Ib/MMBtu (Dual Fuel)	ND	ND	0.05(S1) + 0.895(S2)	2.70	0.20	1.16	0
· · ·			0.4 and 0.021				
Potential Emissions in Ibs/hr (Straight)	0.5	0.4	2.7	32.3	0.5	5.8	
Potential Emissions in tons/yr (Straight)	2.1	1.7	12.0	141.5	2.4	25.3	
Potential Emissions @ 500 hrs/yr (Straight)	0.1	0.1	0.7	8.1	0.1	1.4	
Potential Emissions in Ibs/hr (Dual)	0.0	0.0	0.2	30.2	2.2	13.0	
Potential Emissions in tons/yr (Dual)	0.0	0.0	1.0	132.5	9.8	56.9	
Potential Emissions @ 500 hrs/yr (Dual)	0.0	0.0	0.1	7.6	0.6	3.2	
SUM tons @ 8760 hrs	2.1	1.7	13.1	274.0	12.2	82.2	
Tons SUM of 4 units @ 8760 hrs/yr each	8.3	6.8	52.3	1095.9	48.8	328.9	VOC & CO

ars estimate is > AP-42

VOC & CO PTE higher when burning dual fuel

Generation of Multiple Fuel Use Limitation for G1, G2, G3 & G4

Appendix A: Emissions Calculations

Straight Diesel max heat input

SO2

1.01(S)

0.05(S1) + 0.895(S2)

3.2

0.2

3.4

per year (MMBtu/yr)

16081 PM10

0.06

ND

0.5

0.0

0.5

Company Name: Roche Diagnostics Corporation Address City IN Zip: 9115 Hague Road, Indianapolis, IN 46250-0457 F097-11275-00338 Reviewer: M. Caraher 11/05/99

When burning diesel only:

Emission Factor in Ib/MMBtu (Straight)

Emission Factor lb/MMBtu (Dual Fuel)

Potential Emissions in tons/yr (Dual)

Sum at limited throughput in tons/yr

Potential Emissions in tons/yr (Straight)

Limited total diesel fuel consumption: to limit Significant + Insignificant < major source 99.0 tons NOx - 3.5 tons NOx from Insignificant Activities = 95.5 tons NOx from Significant emission units What combined total diesel fuel use limitation will limit NOx < 95.5 tons/yr? X gal/yr x 137000 Btu/gal x MMBtu/10^6 Btu x 4.7511 #NOx/MMBtu x ton/2000 lbs = 95.5 tons NOx/yr; x =

CP: PIt ID:

Date:

293,439 gallons/yr

NOx

4.7511

2.70

38.2

32.6

70.8

VOC

0.08

0.20

0.6

2.4

3.1

When burning diesel / natural gas mix up to 60% max heat input from natural gas:

293,439 gal diesel / yr x 137,000 Btu / gal = 40,201 MMBtu / yr required heat input for all units combined on an annual basis 40,201 MMBtu / yr x 60% max heat input from natural gas = 24,120 MMBtu / yr required heat input from natural gas consumption 24,120 MMBtu / yr / 1000 MMBtu / MMCF = 24.0 MMCF maximum natural gas consumption 24.0 MMCF / 293.4 kgal = 0.08 MMCF consumption allowed per kgal decrease in consumption

Dual fuel max heat input

per year (MMBtu/yr)

24120

PM

0.07

ND

0.6

0.0

0.6

93,439 gal/yr					
PM	PM10	SO2	NOx	VOC	CO
0.07	0.06	1.01(S)	4.7511	0.08	0.85
		0.40			
1.4	1.2	8.1	95.5	1.6	17.1
	PM	PM PM10 0.07 0.06 14 12	PM PM10 SO2 0.07 0.06 1.01(S) 0.40 0.40	PM PM10 SO2 NOx 0.07 0.06 1.01(S) 4.7511 0.40 0.40 0.40 0.40	PM PM10 SO2 NOx VOC 0.07 0.06 1.01(S) 4.7511 0.08 0.40 0.40 0.08 0.08 0.08

NOx emfac is manufacturer's estimate > AP-42

NOx mfgrs estimate is > AP-42

VOC & CO Limited PTE higher when burning dual

0338calc.wk4

CO

0.85

1.16

6.8

14.0

20.8

TSD Appendix A Page 5 of 5