



TO: Interested Parties / Applicant

RE: Allison Transmission, General Motors Corporation, Eagle Creek Technology Center /
097-22681-00333

FROM: Felicia A. Robinson
Administrator

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within fifteen (15) calendar days of the receipt of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

If you have technical questions regarding the enclosed documents, please contact the Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures



Department of Public Works
Office of Environmental Services

2700 Belmont Avenue
Indianapolis, IN 46221

317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

July 17, 2006



Mr. Charles Knuckles
Allison Transmission, General Motors Corporation
Eagle Creek Technology Center
4700 West 10th Street
462-470-L05
Indianapolis, IN 46222

Certified Mail: 7000 0600 0023 5186 5614

Re: Permit No. 097-22681-00333
First Significant Permit Revision to
FESOP No. 097-15984-00333

Dear Mr. Knuckles:

Allison Transmission, General Motors Corporation, Eagle Creek Technology Center was issued a Federally Enforceable Source Operating Permit (FESOP) July 2, 2003 for stationary diesel, natural gas, and gasoline engine test cells. An application was received on January 27, 2006 requesting to modify the emission factors for the gasoline-fired engines on carbon monoxide (CO) and nitrogen oxide (NOx) to reflect stack tested emission rates. Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

After extensive evaluation and deliberation, IDEM and OES have concluded that certain permit conditions that are routinely appealed in FESOPs could be altered in a manner that would be less burdensome on the Permittee but would still ensure that sources can demonstrate compliance with State and Federal Regulations on a continual basis. Allison Transmission, General Motors Corporation, Eagle Creek Technology Center has requested that such changes be made to their existing permit. These changes, including the relaxation of compliance monitoring frequency, are being made, pursuant to 326 IAC 2-8-11.1(f). Additional changes have been made to the permit as a result of administrative changes and changes to federal and state regulations.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire revised permit has been attached.

Sincerely,

ORIGINAL SIGNED BY:

Felicia A. Robinson
Administrator
Office of Environmental Services

Attachments

FAR/an

cc: File
Marion County Health Department
Air Compliance
IDEM, OAQ



**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

**Allison Transmission, General Motors Corporation
Eagle Creek Technology Center
6040 West 62nd Street
Indianapolis, Indiana 46278**

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

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

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.

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.: F097-15984-00333	
Issued by: Original signed by, John B. Chavez, Administrator Indianapolis Office of Environmental Services	Issuance Date: July 2, 2003 Expiration Date: July 2, 2008
1 st Administrative Amendment No.: F097-19068-00333 2 nd Administrative Amendment No: F097-20241-00333	Issuance Date: September 10, 2004 Issuance Date: March 17, 2005
1 st Significant Permit Revision No: F097-22681-00333	Conditions Affected: A.1; A.2; B.10; B.12; B.13; B.18; B.24; D.1.1; D.1.3; D.1.4; and FESOP Quarterly Report.
Issued by: ORIGINAL SIGNED BY: Felicia A. Robinson Administrator Indianapolis Office of Environmental Services	Issuance Date: July, 17, 2006 Expiration Date: July 2, 2008



Department of Public Works
Office of Environmental Services
2700 Belmont Avenue
Indianapolis, IN 46221
317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and City of Indianapolis Office of Environmental Services (OES). 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 stationary diesel, natural gas, and gasoline engine test cells.

Authorized individual:	General Director of Operations - Indianapolis
Source Address:	6040 West 62 nd Street, Indianapolis, Indiana 46278
Mailing Address:	4700 West 10 th Street, 462-470-L05, Indianapolis, IN 46222
General Source Phone:	317-242-3666
SIC Code:	8731
Source Location Status:	Marion County
	Nonattainment for 8-hour ozone standard and PM-2.5
	Attainment for all other criteria pollutants.
Source Status:	Federally Enforceable State Operating Permit (FESOP)
	Minor Source under PSD and Emission Offset Rules and
	Nonattainment New Source Review
	Minor Source, Section 112 of the Clean Air Act

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:

Five (5) Transmission Test Cells, identified as Emission Units EC130, EC131, EC132, EC133, and EC134, using Diesel Fuel, Gasoline, or Natural Gas Reciprocating Engines. The emissions from each test cell EC130 - EC134 are exhausted out stacks EC130 - EC134 respectively.

The test cells EU EC131, EC132, EC133, and EC134 were constructed in 1992. According to Interim Permit 097-15984i-00333, issued on September 19, 2002, the test cells EU EC131, EC132, EC133, and EC134 were modified in 2002, to allow gasoline engines usage alternatively with diesel engines; and test cell EC130 was constructed in 2002.

Engines of a fuel type and size up to the sizes listed in the table below can be used in any one of the individual test cells mentioned above.

Type of Fuel	Maximum Unit Capacity (HP)	Heat Input (MMBtu/hr)
Gasoline	500	5.32
Diesel	400	2.77
Natural Gas	400	2.47

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) Two (2) natural gas-fired boilers with heat input equal or less than (10) million Btu per hour, identified as Emission Units B-1 and B-2, 2.396 MMBtu/hr each.
- (b) Storage tanks emitting less than one (1) ton per year of a single HAP and less than fifteen (15) pounds per day of VOC:
 - (1) one (1) 2,000 gallon gasoline above ground storage tank, identified as GC-1;
 - (2) one (1) 3,000 gallon diesel oil underground storage tank, identified as DC-1.

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 Quality (OAQ), and Indianapolis Office of Environmental Services (OES) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 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, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-8-6]

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

B.4 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.5 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.6 Property 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.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, and OES within a reasonable time, any information that IDEM, OAQ, and OES, 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. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, and OES copies of records required to be kept by this permit.

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

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

IDEM, OAQ and OES 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.9 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 shall contain certification by an 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, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.10 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 initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services
Air Compliance
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, OAQ and OES on or before the date it is due.
- (a) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ and OES 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.11 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 (PMPs) 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; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement PMPs, including any required record keeping as necessary to ensure that failure to implement a PMP does not cause or contribute to any exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and OES. IDEM, OAQ and OES may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (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, OAQ and OES within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM, OAQ:

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-0178 (ask for Compliance Section)
Facsimile No.: 317-233-6865

OES:

Telephone No.: 317-327-2234 (ask for Air Compliance)
Facsimile No.: 317-327-2274

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services
Air Compliance
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). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations or emissions. However, IDEM, OAQ and OES, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

- (f) Failure to notify IDEM, OAQ and OES, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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

B.14 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 - 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 Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services

Air Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination

[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (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)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if the IDEM, OAQ and OES 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 the IDEM, OAQ and OES 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 IDEM, OAQ and OES, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ and OES may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and OES and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management

Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, IN 46204-2251

and

Indianapolis Office of Environmental Services
Air 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, OAQ and OES on or before the date it is due.

(2) If IDEM, OAQ and OES 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, OAQ and OES 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, OAQ and OES, any additional information identified as needed to process the application.

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

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

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

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services
Air Permits
2700 South Belmont Avenue
Indianapolis, Indiana 46221

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

- (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 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services
Air 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, on a rolling five (5) year basis, which document all such changes and emissions trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, to public review.

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

- (b) Emission Trades [326 IAC 2-8-15(c)]

The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, OES and U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.19 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-30-3-1]

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

- (e) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-22, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-22, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-22, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-22, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

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

Indiana Department of Environmental Management

Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services
Air Permits
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing and Training (BLT) Section), to determine the appropriate permit fee.

B.23 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

- (a) The requirements to obtain a permit revision under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction work is suspended for a continuous period of one (1) year or more.

B.24 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314] [326 IAC 1-16]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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 Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

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

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.

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).

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

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

C.7 Performance Testing [326 IAC 3-6]

- (a) 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, OAQ.

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 Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services
Air Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, 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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services
Air Compliance
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).

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

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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, 40 CFR 60 Appendix B, 40 CFR 63 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 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

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

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management

Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services
Air Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

within ninety (90) days from the date of issuance of this permit.

- (c) If the ERP is disapproved by IDEM, OAQ and OES, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ and OES that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

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

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

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 - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ and OES within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (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, OAQ and OES that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ and OES may extend the retesting deadline.
- (c) IDEM, OAQ and OES reserve the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require 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 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner and OES Administrator makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner and OES Administrator within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.15 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and 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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services
Air Compliance
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, OAQ and OES on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

Stratospheric Ozone Protection

C.16 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

Facility Description [326 IAC 2-8-4(10)]:

- (a) Five (5) Transmission Test Cells, identified as Emission Units EC130, EC131, EC132, EC133, and EC134, using Diesel Fuel, Gasoline, or Natural Gas Reciprocating Engines. The emissions from each test cell EC130 - EC134 are exhausted out stacks EC130 - EC134 respectively.

The test cells EU EC131, EC132, EC133, and EC134 were constructed in 1992. According to Interim Permit 097-15984-00333, issued on September 19, 2002, the test cells EU EC131, EC132, EC133, and EC134 were modified in 2002, to allow gasoline engines usage alternatively with diesel engines; and test cell EC130 was constructed in 2002.

Engines of a fuel type and size up to the sizes listed in the table below can be used in any one of the individual test cells mentioned above.

Type of Fuel	Maximum Unit Capacity (HP)	Heat Input (MMBtu/hr)
Gasoline	500	5.32
Diesel	400	2.77
Natural Gas	400	2.47

(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 Carbon Monoxide (CO) and Nitrogen Oxides (NOx) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, the source wide NOx and CO emissions shall be limited to less than one hundred (100) tons per year such that it does not fall within any of the categories listed in 326 IAC 2-7-2(a) and that assure compliance with all applicable requirements at the time of FESOP issuance (See Emissions Calculations, Appendix A). The following limits shall apply to assure compliance with this rule:

- (a) Carbon Monoxide (CO)
The input of gasoline to the engines used in test cells Emission Units EC130 - EC134 shall be limited to less than 246,753 gallons per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to CO emissions of less than 95.0 tons per year from the transmissions test cells EU EC130 - EC134 and less than 100 tons per year sourcewide. Compliance with the potential to emit limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

These limits are structured such that when including emissions from insignificant activities, the total source CO emissions remain below one hundred (100) tons per twelve (12) consecutive month period. The source wide unrestricted potential to emit of an individual HAP or combination of HAPs does not exceed the thresholds listed in 326 IAC 2-7-1(22), thus the source is not a major source of HAPs. Limiting source wide emissions of CO will further limit the potential to emit of an

individual HAP or combination of HAPs. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

For purposes of determining compliance based on CO emissions:

- (1) Each gallon of diesel fuel shall be equivalent to 0.173 gallons of gasoline;
- (2) Each 1,000 cubic feet of natural gas shall be equivalent to 1.041 gallons of gasoline.

(b) Nitrogen Oxides (NO_x) Emissions Limitations

The input of diesel fuel to the engines used in test cells Emission Units EC130 - EC134 shall be limited to less than 307,562 gallons per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to NO_x emissions of less than 94.9 tons per year from the transmissions test cells EU EC130 - EC134 and less than 100 tons per year sourcewide. Compliance with the potential to emit limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

These limits are structured such that when including emissions from insignificant activities, the total source NO_x emissions remain below one hundred (100) tons per twelve (12) consecutive month period. The source wide unrestricted potential to emit of an individual HAP or combination of HAPs does not exceed the thresholds listed in 326 IAC 2-7-1(22), thus the source is not a major source of HAPs. Limiting source wide emissions of NO_x will further limit the potential to emit of an individual HAP or combination of HAPs. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

The addition of natural gas to the list of permitted fuels does not increase the potential to emit NO_x because diesel fuel is the worst case fuel for this pollutant.

For purposes of determining compliance based on NO_x emissions:

- (1) Each gallon of gasoline shall be equivalent to 0.761 gallons of diesel fuel;
- (2) Each 1,000 cubic feet of natural gas shall be equivalent to 0.519 gallons of diesel fuel.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

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

D.1.3 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records of the amount of diesel fuel and gasoline (in gallons), and natural gas (in cubic feet) used by the reciprocating engines in test cells EC130 - EC134. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the addresses listed in Section C - 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. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) Two (2) natural gas-fired boilers with heat input equal or less than (10) million Btu per hour, identified as Emission Units B-1 and B-2, 2.396 MMBtu/hr each.

(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.2.1 Particulate [326 IAC 6-2]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), PM emissions from existing natural gas boilers Emission Units B-1 and B-2, constructed after September 21, 1983, shall be limited to 0.6 lb/MMBtu.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Allison Transmission, General Motors Corporation, Eagle Creek Technology Center
Source Address: 6040 West 62nd Street, Indianapolis, Indiana 46278
Mailing Address: 4700 West 10th Street, 462-470-L05, Indianapolis, IN 46222
FESOP No.: F097-15984-00333

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

Please check what document is being certified:

- ☐ Annual Compliance Certification Letter
- ☐ Test Result (specify) _____
- ☐ Report (specify) _____
- ☐ Notification (specify) _____
- ☐ Affidavit (specify) _____
- ☐ Other (specify) _____

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

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204
Phone: 317-233-0178
Fax: 317-233-6865**

**and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE
2700 South Belmont Avenue
Indianapolis, Indiana 46221
Phone: 317-327-2234
Fax: 317-327-2274**

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

Source Name: Allison Transmission, General Motors Corporation
Eagle Creek Technology Center
Source Address: 6040 West 62nd Street, Indianapolis, Indiana 46278
Mailing Address: 4700 West 10th Street, 462-470-L05, Indianapolis, IN 46222
FESOP No.: F097-15984-00333

This form consists of 2 pages

Page 1 of 2

9 This is an emergency as defined in 326 IAC 2-7-1(12)
 ☐ The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 ☐ The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

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

Page 2 of 2

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

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

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE
FESOP Quarterly Report
 (Fuel Usage)

Source Name: Allison Transmission, General Motors Corporation
 Eagle Creek Technology Center
 Source Address: 6040 West 62nd Street, Indianapolis, Indiana 46278
 Mailing Address: 4700 West 10th Street, 462-470-L05, Indianapolis, IN 46222
 FESOP No.: F097-15984-00333
 Facility: Transmission test cells EU EC130 - EC134
 Parameter: Diesel fuel, gasoline, and natural gas consumption
 Limit: 246,753 gallons of gasoline (CO emissions); 307,562 gallons of diesel fuel (NOx Emissions)

Month	Fuel	Column 1	Column 2	Column 1 + Column 2
		This Month	Previous 11 Months	12 Month Total
Month 1	Diesel fuel (gal)			
	Gasoline (gal)			
	Natural Gas (1,000 cf)			
	Total equivalent diesel fuel (gal)			
	Total equivalent gasoline (gal)			
Month 2	Diesel fuel, gal			
	Gasoline, gal			
	Natural Gas, 1,000 cf			
	Total equivalent diesel fuel (gal)			
	Total equivalent gasoline (gal)			
Month 3	Diesel fuel, gal			
	Gasoline, gal			
	Natural Gas, 1,000 cf			
	Total equivalent diesel fuel (gal)			
	Total equivalent gasoline (gal)			

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE**

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

Source Name: Allison Transmission, General Motors Corporation
Eagle Creek Technology Center
Source Address: 6040 West 62nd Street, Indianapolis, Indiana 46278
Mailing Address: 4700 West 10th Street, 462-470-L05, Indianapolis, IN 46222
FESOP No.: F097-15984-00333
Facility: Transmission test cells EU EC130 - EC134

Months: _____ to _____ Year: _____

This form consists of 2 pages

Page 1 of 2

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

☒ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☒ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services**

**Addendum to the Technical Support Document
for a Significant Permit Revision to a
Federally Enforceable State Operating Permit**

Source Name:	Allison Transmission, General Motors Corporation, Eagle Creek Technology Center
Source Location:	6040 West 62 nd Street, Indianapolis, Indiana 46278
County:	Marion County
SIC Code:	8731
Operation Permit No.:	097-22681-00333
Permit Reviewer:	Anh-tuan Nguyen

On May 10, 2006, the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that Allison Transmission, General Motors Corporation, Eagle Creek Technology Center had applied for a Significant Permit Revision to a Federally Enforceable State Operating Permit to modify the emission factors for gasoline-fired engines on carbon monoxide (CO) and nitrogen oxide (NO_x) to reflect stack tested emissions. The notice also stated that OAQ and OES proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On June 5, 2006, Allison Transmission, General Motors Corporation, Eagle Creek Technology Center submitted comments on the draft Significant Permit Revision to a Federally Enforceable State Operating Permit. Upon further review, the OAQ and OES have decided to make the following revisions to the Significant Permit Revision to a Federally Enforceable State Operating Permit. The TSD will remain as it originally appeared when published. Changes to the permit or technical support material that occur after the permit has published for public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Bolded language has been added and the language with strikeout has been deleted. The Table of Contents has been modified to reflect these changes.

The comments and responses, including changes to the permit, are as follows:

Comment 1:

Condition A.2: This Condition Describes several emission units, including Test Cells EC135, which is described as "is to be constructed in 2003". General Motors notes that this emission unit was never constructed, and should be removed from the equipment description in this condition. In addition, this description should be removed elsewhere in permit documents, including the equipment description provided for Section D.1 of the permit.

Response 1:

As requested, all references to Test Cell EC135 have been removed throughout the permit. The calculations have all been redone to reflect five (5) engines instead of six (6). Revised calculations are listed in the ATSD Appendix A. This change does not affect the overall limited potential to emit. The emission unit description in Condition A.2 and the facility description D.1 and the record keeping condition D.1.3(a) has been changed as follows:

~~Six (6)~~ **Five (5)** Transmission Test Cells, identified as Emission Units EC130, EC131, EC132, EC133, **and** EC134, ~~and EC135~~, using Diesel Fuel, Gasoline, or Natural Gas Reciprocating Engines. The emissions from each test cell EC130 - ~~EC135~~ **134** are exhausted out stacks EC130 - ~~EC135~~ **134** respectively.

The test cells EU EC131, EC132, EC133, and EC134 were constructed in 1992. According to Interim Permit 097-15984i-00333, issued on September 19, 2002, the test cells EU EC131, EC132, EC133, and EC134 were modified in 2002, to allow gasoline engines usage alternatively with diesel engines; **and** the test cell EC130 was constructed in 2002., ~~and the test cell EC135 is planned to be constructed in 2003.~~

D.1.3 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records of the amount of diesel fuel and gasoline (in gallons), and natural gas (in cubic feet) used by the reciprocating engines in test cells EC130 – ~~EC135~~ **134**. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

Comment 2:

Condition B.10: To the extent any additional changes are made to the permit, Condition B.10 should be removed from the General Conditions and placed on the front page of the permit as it is with Title V permits. Otherwise, the provision could be misinterpreted to require a second deviation to be reported ever deviation from a unit-specific term of the permit. IDEM has clarified this for Title V sources and it should also be clarified for FESOPs.

Response 2:

Condition B.10 has been removed from the General Conditions and moved to the cover page of the permit. The subsequent B conditions have been renumbered.

Comment 3:

Condition B.13 (now Condition B.11): We object to the changes to Section B.13 regarding preventive maintenance plans (PMPs) in that IDEM/OES have deleted the following statement that had been included in B.13(b).

The Permittee shall implement the PMPs , including any required record keeping as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

This provision was deleted without an explanation or justification. We request that it be included in our permit once again as our permit revision application did not request this change to the permit. Although we recognize that IDEM and OES believe the addition of the following statement to the Emergency Provision in Condition B.14(e) addresses our concern, the earlier approach is more clear.

(e) The Permittee seeking to establish the occurrence of an emergency shall make record available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations or emissions. However, IDEM, OAQ and OES, may require that the Preventative Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

The above statement does not address our concern explicitly because it only says that if we want to use the emergency defense we need to show that failure to comply with the PMP was not a reason that the emergency occurred. This may be helpful language for the emergency defense but it does not solve the problem related to compliance certification for PMPs. While B.13 arguably does not require compliance with the PMP in the first place, merely preparation of it, we believe it should be clear in the permit that compliance is not required. Otherwise the implication of removing the former B.13(b) language is unclear. Sources should not be required to certify compliance with a PMP unless there is a basis for believing that failing to implement a PMP was the reason for an emission limit exceedance.

As an alternative, it would be acceptable if IDEM and OES added the following statement to Section D.1.2 which is the only provision imposing a PMP requirement on our emission units.

*D.1.2 Preventative Maintenance Plan [326 IAC 2-8-4(9)]
A Preventative Maintenance Plan, in accordance with Section B – Preventative Maintenance Plan, of this permit is required for these facilities. The Permittee shall implement the PMPs, including any required record keeping as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.*

Response 3:

Condition B.11 has been revised as follows:

B.11 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 (PMPs) 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; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement PMPs, including any required record keeping as necessary to ensure that failure to implement a PMP does not cause or contribute to any exceedance of any limitation on emissions or potential to emit.**
- ~~(b)~~**(c)** A copy of the PMPs shall be submitted to IDEM, OAQ and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and OES. IDEM, OAQ and OES may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

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

Comment 4:

Condition D.1(b)(1): This condition provides an equivalency factor to convert the quantity of gasoline burned to gallons of diesel fuel for the purpose of demonstrating that NOx emissions are below 94.9 tons per year. The conversion factor provided in this condition is based on several values, including the heat content of diesel fuel. OES used a value of 150,000 Btu/gallon for the heat content of diesel fuel, which is consistent with the value provided in ECTC's initial application. We note, however, that the actual heat content of the diesel fuel burned at ECTC is somewhat lower (approximately 138,000 Btu/gallon). The use of a lower heat content for diesel fuel would change the gasoline equivalency factor in this condition from 0.700 gallons to 0.770 gallons. Because we consider 138,000 Btu/gallon to be more typical of the diesel fuel heat content, we suggest that OES change the equivalency factor in this condition to 0.770 gallons.

Response 4:

Based on the fuel analysis provided to the source by the fuel supplier, the heat input of diesel fuel has been changed to 138,000 Btu/gal. The change will affect the diesel fuel throughput and fuel equivalencies. Revised calculations are listed in ATSD Appendix A. Condition D.1.1(a) & (b) and the FESOP Quarterly Report has been revised as follows:

D.1.1 Carbon Monoxide (CO) and Nitrogen Oxides (NOx) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, the source wide NOx and CO emissions shall be limited to less than one hundred (100) tons per year such that it does not fall within any of the categories listed in 326 IAC 2-7-2(a) and that assure compliance with all applicable requirements at the time of FESOP issuance (See Emissions Calculations, Appendix A). The following limits shall apply to assure compliance with this rule:

(a) Carbon Monoxide (CO)

The input of gasoline to the engines used in test cells Emission Units EC130 - EC435 ~~134~~ shall be limited to less than 246,753 gallons per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to CO emissions of less than 95.0 tons per year from the transmissions test cells EU EC130 - EC435 ~~134~~ and less than 100 tons per year sourcewide. Compliance with the potential to emit limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

These limits are structured such that when including emissions from insignificant activities, the total source CO emissions remain below one hundred (100) tons per twelve (12) consecutive month period. The source wide unrestricted potential to emit of an individual HAP or combination of HAPs does not exceed the thresholds listed in 326 IAC 2-7-1(22), thus the source is not a major source of HAPs. Limiting source wide emissions of CO will further limit the potential to emit of an individual HAP or combination of HAPs. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

For purposes of determining compliance based on CO emissions (~~See calculations, Appendix A~~):

- (1) Each gallon of diesel fuel shall be equivalent to ~~0.488~~ **0.173** gallons of gasoline;
- (2) Each 1,000 cubic feet of natural gas shall be equivalent to 1.041 gallons of gasoline.

(b) Nitrogen Oxides (NO_x) Emissions Limitations

The input of diesel fuel to the engines used in test cells Emission Units EC130 - EC135 ~~134~~ shall be limited to less than ~~282,957~~ **307,562** gallons per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to NO_x emissions of less than 94.9 tons per year from the transmissions test cells EU EC130 - EC135 ~~134~~ and less than 100 tons per year sourcewide. Compliance with the potential to emit limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

These limits are structured such that when including emissions from insignificant activities, the total source NO_x emissions remain below one hundred (100) tons per twelve (12) consecutive month period. The source wide unrestricted potential to emit of an individual HAP or combination of HAPs does not exceed the thresholds listed in 326 IAC 2-7-1(22), thus the source is not a major source of HAPs. Limiting source wide emissions of NO_x will further limit the potential to emit of an individual HAP or combination of HAPs. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

The addition of natural gas to the list of permitted fuels does not increase the potential to emit NO_x because diesel fuel is the worst case fuel for this pollutant (~~see calculations, Appendix A~~).

For purposes of determining compliance based on NO_x emissions (~~See calculations, Appendix A~~):

- (1) Each gallon of gasoline shall be equivalent to ~~0.700~~ **0.761** gallons of diesel fuel;
- (2) Each 1,000 cubic feet of natural gas shall be equivalent to ~~0.478~~ **0.519** gallons of diesel fuel.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE
FESOP Quarterly Report
(Fuel Usage)**

Source Name:	Allison Transmission, General Motors Corporation Eagle Creek Technology Center
Source Address:	6040 West 62 nd Street, Indianapolis, Indiana 46278
Mailing Address:	4700 West 10 th Street, 462-470-L05, Indianapolis, IN 46222
FESOP No.:	F097-15984-00333
Facility:	Transmission test cells EU EC130 - EC134
Parameter:	Diesel fuel, gasoline, and natural gas consumption
Limit:	246,753 gallons of gasoline (CO emissions); 282,957 307,562 gallons of diesel fuel (NO _x Emissions)

Change 1:

The telephone and fax number for IDEM, OAQ (Compliance Group) has been updated as follows:

IDEM, OAQ
Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Branch) or,
Telephone No.: 317-233-5674-**0178** (ask for Compliance Branch)
Facsimile No.: 317-233-5967-**6865**

Change 2:

IDEM and OES have decided to include the following updates to further address and clarify the permit terms and the terms of conditions. This includes the relocation of the "Permit No Defense" condition from the Section B to the cover page and moving the "Prior Permit Superseded" condition from section A to Section B. All subsequent A and B conditions have been renumbered.

The following statement has been added to the cover page:

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.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.~~

The following Condition A.5 has been moved and renumbered Condition B.13:

~~A.5~~B.13 Prior Permit Superseded [326 IAC 2-1.1-9.5]

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

**Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Office of Environmental Services**

**Technical Support Document (TSD) for a Significant Permit Revision to a
Federally Enforceable State Operating Permit**

Source Background and Description

Source Name:	Allison Transmission, General Motors Corporation, Eagle Creek Technology Center
Source Location:	6040 West 62nd Street, Indianapolis, Indiana 46268
County:	Marion County
SIC Code:	8731
Operation Permit No.:	097-15984-00333
Operation Permit Issuance Date:	July 2, 2003
Permit Revision No.:	097-22681-00333
Permit Reviewer:	Anh-tuan Nguyen

Permitted Emission Units and Pollution Control Equipment

There are no changes to the existing permitted emission units and pollution control equipment included in this Significant Permit Revision to a FESOP.

Insignificant Activities

There are no changes to the existing insignificant activities included in this Significant Permit Revision to a FESOP.

History

On July 2, 2003, Allison Transmission, General Motors Corporation, Eagle Creek Technology Center was issued a Federally Enforceable State Operating Permit (FESOP) 097-15984-00333. A first administrative amendment, 097-19068-00333, was issued on September 10, 2004. A second administrative amendment, 097-20241-00333, was issued on March 17, 2005. On January 27, 2006, Allison Transmission, General Motors Corporation, Eagle Creek Technology Center submitted an application to OES and IDEM, OAQ, requesting to modify the emission factors for gasoline-fired engines on carbon monoxide (CO) and nitrogen oxide (NOx) to reflect stack tested emission rates. The results of the testing are provided below:

CO = 0.770 lb/gallon combusted
NOx = 0.470 lb/gallon combusted

These values were higher than the figures provided in the original application. To ensure that the CO emissions did not exceed 95 tons per year, the original FESOP had limited the gasoline throughput to 345,440 gallons per twelve consecutive month period, and one gallon of diesel is equivalent to 0.281 gallons of gasoline, and 1,000 cubic feet of natural gas is equivalent to 1.173 gallons of gasoline. Also, to ensure that the NOx emissions did not exceed 95 tons per year, the original FESOP included a statement indicating that one gallon of gasoline is equivalent to 0.331 gallons of diesel fuel and 1,000 cubic feet is equivalent to 0.360 gallons of diesel fuel. Based on the recent stack test results listed above, the annual gasoline throughput would be changed to 246,753 gallons per twelve consecutive month period. The diesel and natural gas conversion factor for CO would be changed to indicate that one gallon of diesel is equivalent to 0.188 gallons of gasoline and 1,000 cubic feet of natural gas is equivalent to 1.041 gallons of gasoline. The gasoline and natural gas conversion factor for NOx would be changed to indicate that one gallon of gasoline is equivalent to 0.700 gallons of diesel fuel and 1,000 cubic feet of natural gas is equivalent to 0.478 gallons of diesel fuel.

Recommendation

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

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

An application for the purposes of this review was received on January 27, 2006.

Justification for Revision

Allison Transmission, General Motors Corporation, Eagle Creek Technology Center was issued a Federally Enforceable State Operating Permit (FESOP) on July 2, 2003 for a stationary diesel, natural gas, and gasoline engine test cells. A letter requesting changes to this permit was received on January 27, 2006. The FESOP is being modified through a Significant Permit Revision. This revision is being performed pursuant to 326 IAC 2-8-11.1(f) and (g)(3) because it involves significant changes to the permit and changes to an existing requirement for the units or processes under the cap.

Emission Calculations

See Appendix A (four pages) of this document for detailed emissions calculations.

Potential to Emit of the Revision

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."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	23.29
PM-10	23.29
SO ₂	21.56
VOC	86.84
CO	877.0
NO _x	327.97
HAPs	less than 10 of single less than 25 of combination

Potential to Emit of Revision After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Six (6) Transmission Test Cells, identified as Emission Units EC130, EC131, EC132, EC133, EC134, and EC135 using Diesel Fuel, Gasoline, or Natural Gas Reciprocating Engines	6.95	6.95	6.47	9.73	95.0	94.9	Negligible
Boilers EU B-1 and B-2	0.16	0.16	0.01	0.12	1.76	2.10	0.00
Total Emissions	7.11	7.11	6.48	9.85	Less than 100	Less than 100	Negligible

- (a) The gasoline fuel usage is limited to 246,753 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, in order to limit CO emissions to less than 100 tons per year from the entire source. For purposes of determining compliance with this CO emission limit one (1) gallon of diesel is equivalent to 0.188 gallon of gasoline fuel. The diesel fuel usage is limited to 282,957 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, in order to limit NO_x emissions to less than 100 tons per year from the entire source. For purposes of determining compliance with this NO_x emission limit one (1) gallon of gallon of gasoline is equivalent to 0.700 gallons of diesel fuel. The potential to emit PM, PM-10, VOC, and HAPs as a result of these limits is also shown in the table.
- (b) This revision to an existing minor stationary source is not major because the emission increase is less than the PSD, Emission Offset, or nonattainment new source review threshold levels. Therefore, pursuant to 326 IAC 2-2, 326 IAC 2-3, and 326 IAC 2-1.1-5, this source is a minor source.
- (c) This revision to an existing minor stationary source will not make the source a major source pursuant to 326 IAC 2-2, 326 IAC 2-3, and 326 IAC 2-1.1-5, because the potential

to emit each attainment criteria pollutant will remain less than 250 tons per year and the potential to emit each nonattainment criteria pollutant will remain less than 100 tons per year.

- (d) This revision to the existing FESOP will not change the status of the stationary source because the emissions from the entire source will still be limited to less than the Part 70 major source thresholds.

County Attainment Status

The source is located in Marion County.

Pollutant	Status Status
PM-10	attainment
PM-2.5	nonattainment
SO ₂	maintenance attainment
NO ₂	attainment
1-hour Ozone	maintenance attainment
8-hour Ozone	basic nonattainment
CO	attainment
Lead	unclassifiable

- (a) Volatile organic compounds (VOC and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Marion County has been classified as nonattainment for PM_{2.5} in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as surrogate for PM_{2.5} emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability.
- (c) Marion County has been classified as attainment or unclassifiable in Indiana for PM₁₀, SO₂, NO_x, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability.
- (e) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 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.

Federal Rule Applicability

There are no changes to federal rules included in this Significant Permit Revision to a FESOP.

State Rule Applicability

The following are changes to state rules included in this Significant Permit Revision to a FESOP.

326 IAC 2-1.1-5 (Non-attainment New Source Review)

This source is not major under nonattainment NSR because it has the potential to emit less than 100 tons of PM₁₀ (as surrogate for PM_{2.5}). Therefore, the Non-attainment New Source Review requirements are not applicable.

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

This source has the potential to emit greater than 250 tons per year of CO and NO_x. Therefore, it is a major source pursuant to 326 IAC 2-2-1(y)(2). However, the NO_x and CO emissions are limited to less than 100 tons per year; therefore, 326 IAC 2-2 shall not apply.

326 IAC 2-3 (Emission Offset)

Marion County has been designated as non-attainment for PM_{2.5} in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled "Implementation of New Source Review Requirements in PM_{2.5} Nonattainment Areas" authored by Steve Page, Director of OAQPS, until EPA promulgates the PM_{2.5} major NSR regulations, states should assume that a major stationary source's PM₁₀ emissions represent PM_{2.5} emissions. IDEM will use the PM₁₀ nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM_{2.5} NAAQS. A major source in a nonattainment area as a source that emits or has the potential to emit 100 ton per year of any regulated pollutant. Allison Transmission, General Motors Corporation, Eagle Creek Technology Center has a potential to emit of PM₁₀ below 100 tons per year. Therefore, assuming that PM₁₀ emissions represent PM_{2.5} emissions, 326 IAC 2-3 does not apply.

Marion County has been designated as basic nonattainment for the 8-hour ozone standard. The potential to emit of NO_x and VOC from this source is less than 100 tons per year for each pollutant. Therefore, the requirements of 326 IAC 2-3 do not apply.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is located in Marion County, it is not required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, and it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year.

326 IAC 2-8-4 (FESOP)

Pursuant to this rule, source wide emissions of NO_x and CO shall be limited to less than one hundred (100) tons per year such that it does not fall within any of the categories listed in 326 IAC 2-7-2(a) and that assure compliance with all applicable requirements at the time of FESOP issuance (See Emissions Calculations, Appendix A). The following limits shall apply to assure compliance with this rule:

(a) Carbon Monoxide (CO)

The input of gasoline to the engines used in test cells Emission Units EC130 - EC135 shall be limited to less than 246,753 gallons per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to CO emissions of less than 95.0 tons per year from the transmissions test cells EU EC130 - EC135 and less than 100 tons per year sourcewide. Compliance with the potential to emit limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

These limits are structured such that when including emissions from insignificant activities, the total source CO emissions remain below one hundred (100) tons

per twelve (12) consecutive month period. The source wide unrestricted potential to emit of an individual HAP or combination of HAPs does not exceed the thresholds listed in 326 IAC 2-7-1(22), thus the source is not a major source of HAPs. Limiting source wide emissions of CO will further limit the potential to emit of an individual HAP or combination of HAPs. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

For purposes of determining compliance based on CO emissions (See calculations, Appendix A):

- (1) Each gallon of diesel fuel shall be equivalent to 0.188 gallons of gasoline;
- (2) Each 1,000 cubic feet of natural gas shall be equivalent to 1.041 gallons of gasoline

(b) Nitrogen Oxides (NO_x) Emissions Limitations

The input of diesel fuel to the engines used in test cells Emission Units EC130 - EC135 shall be limited to less than 282,957 gallons per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to NO_x emissions of less than 94.9 tons per year from the transmissions test cells EU EC130 - EC135 and less than 100 tons per year sourcewide. Compliance with the potential to emit limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

These limits are structured such that when including emissions from insignificant activities, the total source NO_x emissions remain below one hundred (100) tons per twelve (12) consecutive month period. The source wide unrestricted potential to emit of an individual HAP or combination of HAPs does not exceed the thresholds listed in 326 IAC 2-7-1(22), thus the source is not a major source of HAPs. Limiting source wide emissions of NO_x will further limit the potential to emit of an individual HAP or combination of HAPs. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

The addition of natural gas to the list of permitted fuels does not increase the potential to emit NO_x because diesel fuel is the worst case fuel for this pollutant (see calculations, Appendix A).

For purposes of determining compliance based on NO_x emissions (See calculations, Appendix A):

- (1) Each gallon of gasoline shall be equivalent to 0.700 gallons of diesel fuel;
- (2) Each 1,000 cubic feet of natural gas shall be equivalent to 0.478 gallons of diesel fuel.

Changes to the FESOP

The following changes were requested in the application for this Significant Permit Revision. Bolded language has been added, and the language with a line through it has been deleted. The Table of Contents has been modified and conditions have been renumbered to reflect these changes.

1. Condition D.1.1(a) was revised as follows:

(a) Carbon Monoxide (CO)

The input of gasoline to the engines used in test cells Emission Units EC130 - EC135 shall be limited to less than ~~345,440~~ **246,753** gallons per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to CO emissions of less than 95.0 tons per year from the transmissions test cells EU EC130 - EC135 and less than 100 tons per year sourcewide. Compliance with the potential to emit limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

These limits are structured such that when including emissions from insignificant activities, the total source CO emissions remain below one hundred (100) tons per twelve (12) consecutive month period. The source wide unrestricted potential to emit of an individual HAP or combination of HAPs does not exceed the thresholds listed in 326 IAC 2-7-1(22), thus the source is not a major source of HAPs. Limiting source wide emissions of CO will further limit the potential to emit of an individual HAP or combination of HAPs. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

For purposes of determining compliance based on CO emissions (See calculations, Appendix A):

- (1) Each gallon of diesel fuel shall be equivalent to ~~0.281~~ **0.188** gallons of gasoline;
- (2) Each 1,000 cubic feet of natural gas shall be equivalent to ~~1.173~~ **1.041** gallons of gasoline.

2. Condition D.1.1(b) was revised as follows:

(b) Nitrogen Oxides (NO_x) Emissions Limitations

The input of diesel fuel to the engines used in test cells Emission Units EC130 - EC135 shall be limited to less than 282,957 gallons per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to NO_x emissions of less than 94.9 tons per year from the transmissions test cells EU EC130 - EC135 and less than 100 tons per year sourcewide. Compliance with the potential to emit limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

These limits are structured such that when including emissions from insignificant activities, the total source NO_x emissions remain below one hundred (100) tons per twelve (12) consecutive month period. The source wide unrestricted potential to emit of an individual HAP or combination of HAPs does not exceed the thresholds listed in 326 IAC 2-7-1(22), thus the source is not a major source of HAPs. Limiting source wide emissions of NO_x will further limit the potential to emit of an individual HAP or combination of HAPs. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

The addition of natural gas to the list of permitted fuels does not increase the potential to emit NO_x because diesel fuel is the worst case fuel for this pollutant (see calculations, Appendix A).

For purposes of determining compliance based on NO_x emissions (See calculations, Appendix A):

- (1) Each gallon of gasoline shall be equivalent to ~~0.334~~ **0.700** gallons of diesel fuel;
 - (2) Each 1,000 cubic feet of natural gas shall be equivalent to ~~0.360~~ **0.478** gallons of diesel fuel.
3. Condition D.1.3 has been removed. Allison Transmission, General Motors Corporation, Eagle Creek Technology Center satisfied this condition when they conducted stack testing on March 17, 2005 to verify manufacturer emission factors for NOx and CO. The source submitted a request to have the NOx and CO emission factors reflect the stack testing results which changes the annual gasoline throughput limit and the fuel equivalencies.

Compliance Determination Requirements

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

~~Within 720 days after issuance of this FESOP, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform initial CO and NOx testing for a test cell (at least one of Emission Units EC130 - EC135) with Gasoline engines, utilizing methods as approved by the Commissioner and OES Administrator. During the stack test the emission rates based on manufacturer emission factors for NOx and CO are to be verified (no more than 9.5 g/hp-hr for NOx and 22.0 g/hp-hr for CO). Testing shall be conducted in accordance with Section C - Performance Testing.~~

4. Conditions D.1.4 and D.1.5 has been renumbered and revised as follows:

D.1.4 3 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records of the amount of diesel fuel and gasoline (in gallons), and natural gas (in cubic feet) used by the reciprocating engines in test cells EC130 - EC135. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit

D.1.5 4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the addresses listed in Section C - 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. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

5. The Quarterly Report Form has been revised as follows:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE
FESOP Quarterly Report
(Fuel Usage)**

Source Name: Allison Transmission, General Motors Corporation
Eagle Creek Technology Center
Source Address: 6040 West 62nd Street, Indianapolis, Indiana 46278

Mailing Address: 4700 West 10th Street, 462-470-L05, Indianapolis, IN 46222
FESOP No.: F097-15984-00333
Facility: Transmission test cells EU EC130 - EC135
Parameter: Diesel fuel, gasoline, and natural gas consumption
Limit: 345,440 **246,753** gallons of gasoline (CO emissions); 282,957 gallons of diesel fuel (NOx Emissions)

6. Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), and Indianapolis Office of Environmental Services (OES) have determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, IDEM, OAQ, and OES have deleted paragraph (b) of Section B – Preventive Maintenance and have amended the Section B – Emergency Provisions condition as follows:

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

If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) 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; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

~~Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204~~

~~and~~

~~Indianapolis Office of Environmental Services
Air Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221~~

~~The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

- ~~(b) The Permittee shall implement the PMPs, including any required record keeping as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.~~
- ~~(c)~~ **(b)** A copy of the PMPs shall be submitted to IDEM, OAQ, and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and OES. IDEM, OAQ, and OES, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any

limitation on emissions or potential to emit. The PMPs does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

and

Telephone No.: 317-327-2234 (ask for OES Air Compliance Section)

Facsimile No.: 317-327-2274

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services
Air Compliance
2700 South Belmont Avenue
Indianapolis, IN 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 2-7-5(3)(C)(ii) and must contain the following:

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) **The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, and OES, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.**
- (f) Failure to notify IDEM, OAQ, and OES, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

7. IDEM and OES have clarified the Section B Operational Flexibility condition as follows:

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 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the ~~emissions allowable~~ **under limitations provided in this permit** (whether expressed herein as a rate of emissions or in terms of total emissions);

- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services
~~Air Compliance Permits~~
2700 South Belmont Avenue
Indianapolis, IN 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, **on a rolling five (5) year basis**, which document, ~~on a rolling five (5) year basis~~, all such changes and emissions ~~trading trades~~ that are subject to 326 IAC 2-8-15(b) through (d). ~~and makes~~ **The Permittee shall make** such records available, upon reasonable request, for public review.

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

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

8. IDEM, OAQ, and OES have determined that in order to avoid duplication of requirements which may be included in D sections, Condition C.6 shall be removed from the permit as follows:

~~C.6 — Operation of Equipment [326 IAC 2-8-5(a)(4)]~~

~~Except as otherwise provided by statute, rule or 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 vented to the control equipment is in operation.~~

Upon Further Review, IDEM, OAQ, and OES have also decided to make the following changes to the FESOP:

9. IDEM and OES have clarified the Section B Certification condition as follows:

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 shall contain certification by an 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, using the attached Certification Form, with each submittal requiring certification. **One (1) certification may cover multiple forms in one (1) submittal.**
- (a) An authorized individual is defined at 326 IAC 2-1.1-1(1).
10. The third sentence on the Quarterly Deviation and Compliance Monitoring report form has been changed as follows to be consistent with the condition in Section B - Deviations from Permit Requirements and Conditions:

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

11. In accordance with the credible evidence rule (62 Fed. Reg. 8314, Feb. 24, 1997); Section 113(a) of the Clean Air Act, 42 U.S.C. § 7413 (a); and a letter from the United States Environmental Protection Agency (USEPA) to IDEM, OAQ dated May 18, 2004, all permits must address the use of credible evidence; otherwise, USEPA will object to the permits. The following language will be incorporated into the permit to address credible evidence:

B.25 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314] [326 IAC 1-16]

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

12. All references to IDEM, OAQ's mailing address have been revised as follows:

Indiana Department of Environmental Management
Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

13. Condition A.1 of the FESOP has been revised to reflect changes in the attainment status of Marion County as follows:

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

The Permittee owns and operates a stationary diesel, natural gas, and gasoline engine test cells.

Authorized individual:	General Director of Operations - Indianapolis
Source Address:	6040 West 62 nd Street, Indianapolis, Indiana 46278
Mailing Address:	4700 West 10 th Street, 462-470-L05, Indianapolis, IN 46222
General Source Phone:	317-242-3666
SIC Code:	8731
Source Location Status:	Marion County Nonattainment for 8-hour ozone standard and PM-2.5 Attainment for all other criteria pollutants.
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source under PSD and Emission Offset Rules and Nonattainment New Source Review Minor Source, Section 112 of the Clean Air Act

Conclusion

The operation of this stationary diesel, natural gas, and gasoline engine test cells shall be subject to the conditions of this Significant Permit Revision 097-22681-00333.

Appendix A: Emission Calculations

Internal Combustion Engines

Six 400 HP (2.8 MMBtu/hr) Engines

Company Name: Allison Transmission Division GMC Eagle Creek Technology Center

Address, City IN Zip: 6040 W 62nd Street, Indianapolis, IN 46268

Permit: 097-22681-00333

Reviewer: Anh-tuan Nguyen

Diesel Fuel

Emissions calculated based on output rating (hp)

Horsepower (hp), (6 engines, 400 hp each)

2400.0					
Diesel Engines (6)	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	2.20E-03	2.05E-03	3.10E-02	2.51E-03	6.68E-03
Potential Emission in lb/hr	5.28	4.92	74.40	6.03	16.03
Potential Emission in ton/yr	23.13	21.55	325.87	26.43	70.22

	PM10	SO2	NOx	VOC	CO
Boilers Potential Emission, unlimited, ton/yr	0.160	0.013	2.099	0.115	1.763
Total (Diesel Engines+ Boilers), ton/yr	23.29	21.56	327.97	26.54	71.98
6 Diesel Engines, limited, ton/yr, less than:	6.95	6.47	97.90	7.94	21.10
Total Limited, ton/yr, less than:	7.11	6.49	100.00	8.06	22.86

Fuel Limit Calculation (gal/year) - Diesel Fuel

Heat Input Capacity (6 engines, 2.77 MMBtu/hr each) MMBtu/hr		Diesel Fuel Heat Input Value, Btu/gal 150,000	Diesel Fuel Potential Throughput, 970,608		
16.62	PM10	SO2	NOx	VOC	CO
6 Diesel Engines, limited, ton/yr	6.742	6.282	95.00	7.705	20.471
Total PTE (diesel engines & boilers), limited, ton/yr, less than:	6.901	6.295	97.1	7.820	22.234
Diesel Fuel throughput, limited, kgal/yr (less than):	282.957				

Methodology

Emission Factors are from AP42, Tables 3.3-1 and 3.3-2.

Emission (lb/hr) = Engines Output Rating (hp) x Emission Factor (lb/hp-hr)

Emission (tons/yr) = Emission (lb/hr) x 8,760 (hr/yr) x 1 (ton) / 2000 (lbs)

Potential Fuel Throughput (gal/yr) = Heat Input Capacity (MMBtu/hr) x 10 (Btu/MMBtu) x 8,760 (hr/yr) / Heat Input Value (Btu/gal)

Fuel Throughput Limit = Potential Fuel Throughput (gal/yr) x [Limited CO Emissions (ton/yr) / Potential CO Emissions (ton/yr)]

Emission rate (hp-hr/gal) = Engine output Six engines (hp) x 8760 (hr) / Potential fuel throughput (gal/yr)

Diesel Emission rate (lb/hp-hr) = Emission Factor

Diesel Fuel emission factor (lb/gal) = Emission factor (lb/hp-hr) x Emission rate (hp-hr/gal)

Equivalency Factors Calculation

	Emission Factors, lb/gal		Diesel Emission rates	Gasoline Emission rates	Natural Gas Emission rates
	Diesel Fuel	Gasoline	21.66 hp-hr/gal	123,000 Btu/gal	lb/MMcf
NOx	0.671	0.470	0.031 lb NOx/hp-hr	3.821 lb NOx/MMBtu	320.6
CO	0.145	0.770	0.00668 lb CO/hp-hr	6.260 lb CO/MMBtu	801.6

Fuel Conversion Factors:

1 gal of Gasoline = X gal of Diesel fuel

1 gal of Diesel fuel = Y gal of Gasoline

1,000 cf of Nat. Gas = Z_d gal of Diesel fuel

1,000 cf of Nat. Gas = Z_g gal of Gasoline

	X	Y	Z _d	Z _g
For NOx:	0.700	-	0.478	-
For CO:	-	0.188	-	1.041

$$X = 0.470 / 0.671$$

$$Y = 0.145 / 0.771$$

$$Z_d = 320.6 \times 10^{-3} / 0.671$$

$$Z_g = 801.6 \times 10^{-3} / 0.770$$

	NOx	CO
1 gallon Diesel Fuel =	-	0.188 gallons Gasoline
1 gallon Gasoline =	0.700 gallons Diesel Fuel	-
1,000 cf Natural Gas =	-	1.041 gallons Gasoline
	0.478 gallons Diesel Fuel	-

Company Name: Allison Transmission Division GMC Eagle Creek Technology Center
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Permit: 097-22681-00333
Reviewer: Anh-tuan Nguyen

Natural Gas**Emissions calculated based on heat input rating (MMBtu/hr)**

6 Internal Combustion Engines, 400 hp, 2.47 MMBtu/hr each)

One (1) Engine

Pollutant	Maximum Rate (units/hr)	Emission Factors (lb/unit)	Potential Emissions (ton/yr)
PM	2.47 MMBtu/hr	0.00008 lb/MMBtu	0.001
PM10	2.47 MMBtu/hr	0.010 lb/MMBtu	0.108
SO ₂	0.0024 MMcf/hr	0.6 lb/MMcf	0.006
NO _x	400 hp	0.9 grams/hp-hr	3.469
VOC	400 hp	0.9 grams/hp-hr	3.469
CO	400 hp	2.25 grams/hp-hr	8.67
Formaldehyde	2.47 MMBtu/hr	0.0528 lb/MMBtu	0.1304

Six (6) engines combined

Pollutant	Maximum Rate (units/hr)	Emission Factors (lb/unit)	Potential Emissions (ton/yr)
PM	14.82 MMBtu/hr	0.00008 lb/MMBtu	0.005
PM10	14.82 MMBtu/hr	0.010 lb/MMBtu	0.649
SO ₂	0.0144 MMcf/hr	0.6 lb/MMBtu	0.038
NO _x	2,400 hp	0.9 grams/hp-hr	20.814
VOC	2,400 hp	0.9 grams/hp-hr	20.814
CO	2,400 hp	2.25 grams/hp-hr	52.03
Formaldehyde	14.82 MMBtu/hr	0.0528 lb/MMBtu	0.7825

Methodology

Emission Factors for NO_x, VOC, and CO - provided by engines manufacturer.

Emission Factors for SO₂ - from AP-42, Section 1.4; for PM, PM10, and Formaldehyde - from AP-42, Section 3.2 (4-cycle, lean burn).

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

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

NOTE: Assume that the heating value of natural gas is 1,000 Btu/Cubic Foot.

Potential fuel throughput:

$$2.47 \text{ (MMBtu/hr)} / 1,000 \text{ (btu/cf)} =$$

One Engine	Six Engines
0.0025 MMcf/hr	0.0148 MMcf/hr
21.64 MMcf/yr	129.82 MMcf/yr

Emission Rates:

NO _x	320.6	lb/MMcf
CO	801.6	lb/MMcf

Emission rate (lb/MMcf) = Potential emissions Six Engines (ton/yr) x 2000 / Potential fuel throughput Six Engines (MMcf/yr)

**Appendix A: Emission Calculations
Internal Combustion Engines
Six 500 HP (5.32 MMBtu/hr) Engines**

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Company Name: Allison Transmission Division GMC Eagle Creek
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Gasoline

Emissions calculated based on output rating (hp)

Heat Output (6 engines, 500 HP each) Heat Input (6 engines, 5.32 MMBtu/hr each)
Horsepower (hp) MMBtu/hr

3000.0	31.9
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AP-42, Table 3.3-1				March 30, 2005 Stack Test Data	Manufacturer's Data	March 30, 2005 Stack Test Data
Emission Factor, lb/unit	PM/PM10	SO ₂	VOC	NO _x	VOC	CO
	7.21E-04	5.91E-04	0.015	0.470	3.0	0.770
Units	lb/hp-hr	lb/hp-hr	lb/hp-hr	lb/gal	g/hp-hr	lb/gal
Potential Emission in lb/hr	2.163	1.773	45.000	121.97	19.80	199.82
Potential Emission in ton/yr	9.474	7.766	197.100	534.23	86.72	875.23

	AP-42			Manuf. EF		
	PM10	SO ₂	NO _x	VOC	VOC	CO
Boilers Potential Emission, unlimited, ton/yr	0.160	0.013	2.099	0.115	0.115	1.763
Total (Gasoline + Boilers), ton/yr	9.63	7.78	536.33	534.35	86.84	877.0
6 Gasoline Engines, limited, ton/yr, less than:	1.06	0.87	59.96	59.96	9.73	98.24
Total Limited, ton/yr, less than:	1.22	0.88	62.06	60.08	9.85	100.00

Fuel Limit Calculation (kgal/year) - Gasoline		Gasoline Heat Input Value	Gasoline Potential Throughput		
		Btu/gal	gal/year		
		123,000	2,273,327		
	PM10	SO2	NOx	VOC	CO
6 Gasoline Engines, limited, ton/yr	1.028	0.843	57.987	9.413	95.00
Total PTE (Gasoline engines & boilers), limited, ton/yr, less than:	1.188	0.856	60.086	9.529	96.76
Gasoline throughput, limited, kgal/yr (less than):		246.753			

Methodology

Potential Throughput (hp-hr/yr) = hp * 8760 hr/yr

When necessary, an average brake-specific fuel consumpton (BSFC) of 7,000 Btu/hp-hr was used to convert from lb/MMBtu to lb/hp-hr.

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-1 for PM/PM10 and SO₂; Manufacturer specifications - VOC; March 30, 2005 Stack Tes

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

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

Fuel Throughput Limit = [Limited CO Emissions (ton/yr) / Potential CO Emissions (ton/yr)] x [Potential Fuel Throughput (gal/yr)]

Gasoline Emission rates	
123,000	Btu/gal
3.821	lb NO _x /MMBtu
6.260	lb CO/MMBtu

Emission rate (lb/MMBtu) = Potential emissions (ton/yr) x 2000 / [Heat input Six Engines (MMBtu/hr) x 8760]

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Two (2) boilers identified as BG-888-WF-WB-MO-UL, each with a heat input capacity 2.396 MMBtu/hr.

Natural Gas

Heat Input Capacity
Total MMBtu/hr

4.792

Potential Throughput
MMCF/yr

41.98

Pollutant

	PM	PM10	SO ₂ *	NOx	VOC	CO
Emission Factor in lb/MMSCF	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.160	0.160	0.013	2.099	0.115	1.763

Methodology

*Assumes sulfur content is natural gas of 2,000 grains/106 scf. The SO₂ emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO₂ emission factor by the ratio of the site-specific sulfur content (grains/106 scf) to 2,000 grains/106 scf.

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03, Supplement D 3/98

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPs

	Benzene	Butane	Ethane	Formaldehyde	Hexane	Pentane	Propane
Emission Factor in lb/MMSCF	2.10E-03	2.1E+00	3.1E+00	7.5E-02	1.8E+00	2.6E+00	1.6E+00
Potential Emission in tons/yr	0.0000	0.0441	0.0651	0.0016	0.0378	0.0546	0.0336

	Toluene	Barium	Cadmium	Chromium	Molybdenum	Nickel	Vanadium	Zinc
Emission Factor in lb/mmBtu	3.4E-03	4.4E-03	1.1E-03	1.4E-03	1.1E-03	2.1E-03	2.3E-03	2.9E-02
Potential Emission in tons/yr	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0006

HAPs emissions were calculated from HAP emission factors greater than 10E-03

	HAPs - VOC	HAPs - Metals
Total, ton/yr:	0.00165	0.00078