

November 8, 2002

Mr. Charles Knuckles
Allison Transmission Division of GMC
M-29
4700 West 10th Street
Indianapolis, Indiana 46222

Re: Significant Source Modification No:
097-15550-00310

Dear Mr. Knuckles:

Allison Transmission Division of General Motors Corporation applied for a Part 70 operating permit on October 11, 1996. An application to modify the source was received on April 18, 2002. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) Transmission Test Cell 702 identified as Emission Unit ID ETC702 consisting of one (1) reciprocating engine firing diesel fuel at 8.55 million Btu per hour and exhausting at Stack/Vent ID PTE062.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM, OAQ and OES receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction, the source can not operate until an Operation Permit Validation Letter is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please call Mr. Mark Caraher of my staff (317) 327-2272.

Sincerely,

Original John B. Chavez
John B. Chavez
Administrator
Office of Environmental Services

Attachments Significant Source Modification
Technical Support Document

MBC

cc: Mindy Hahn, IDEM, OAQ
Matt Mosier, OES, Compliance
files

PART 70 SIGNIFICANT SOURCE MODIFICATION

INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY and CITY of INDIANAPOLIS OFFICE of ENVIRONMENTAL SERVICES

**Allison Transmission Division
of General Motors Corporation
4700 West 10th Street
Indianapolis, Indiana 46222**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

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

Source Modification No.: 097-15550-00310	
John B. Chavez Issued by: John B. Chavez, Administrator Office of Environmental Services	Issuance Date: November 8, 2002

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES). The information describing the emission units contained in conditions A.1 through A.2 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 approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary transmission manufacturing and testing source.

Responsible Official: General Manager of Operations
Source Address: 4700 W. 10th Street, Indianapolis, Indiana 46222
Mailing Address: 4700 W. 10th Street (M-29), Indianapolis, Indiana 46222
SIC Code: 3568
County Location: Marion
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Major Source, under PSD Rule;
Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) Transmission Test Cell 702 identified as Emission Unit ID ETC702 consisting of one (1) reciprocating engine firing diesel fuel at 8.55 million Btu per hour and exhausting at Stack/Vent ID PTE062.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

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

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

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

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

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Administrator may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section and the City of Indianapolis Office of Environmental Services (OES) verifying that the emission unit was constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM. OAQ and OES if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and/or OES and attach it to this document.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
 - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
 - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
 - (3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

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

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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

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

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

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

and

Office of Environmental Services
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

The PMP extension notification does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation 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/or OES. IDEM, OAQ, and/or OES may require the Permittee to revise its PMPs whenever lack of

proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept 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 Administrator makes a request for records to the Permittee, the Permittee shall furnish the records to the Administrator within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.
- (b) Any application requesting an amendment or modification of this approval shall be submitted to:

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

and

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

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

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

C.4 Opacity [326 IAC 5-1]

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

- (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.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval 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.

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

C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, 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 approval, shall be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section, Data 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 "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ 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.7 Compliance Requirements [326 IAC 2-1.1-11]

The Administrator may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.11-1. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

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

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.9 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing 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 2-7-5] [326 IAC 2-7-6]

C.10 Emergency Provisions [326 IAC 2-7-16]

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

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

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

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

OES's phone and facsimile numbers:

Telephone Number: 317-327-2234

Facsimile Number: 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, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Office of Environmental Services
Air Quality Management Section, Data 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 2-7-5(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) 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.

C.11 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ and OES within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAQ and/or OES shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ and OES within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ and/or OES reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ and OES that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ and/or OES may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

C.12 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

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

C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Administrator makes a request for records to the Permittee, the Permittee shall furnish the records to the 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.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

- (b) 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.
- (c) 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 "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) Transmission Test Cell 702 identified as Emission Unit ID ETC702 consisting of one (1) reciprocating engine firing diesel fuel at 8.55 million Btu per hour and exhausting at Stack/ Vent ID PTE062.

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

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

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Limitations), Particulate Matter (PM) emissions from Emission Unit ID ETC702 shall be limited to 0.03 grains per dry standard cubic foot of exhaust air.

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The input of diesel fuel to the Emission Unit ID ETC702 shall be less than 173,516 gallons per twelve (12) consecutive month period. Compliance with the fuel use limitation specified above is required to limit the potential to emit Nitrogen Oxides, at 438.4 pounds NO_x emissions per 1000 gallons of diesel fuel combusted, to less than 40 tons per twelve (12) consecutive month period and shall make the provisions of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test emission unit ETC702 by this permit. However, IDEM, OAQ and/or OES may require compliance testing when necessary to determine if emission unit ETC702 is in compliance with the PM limit specified in Condition D.2.1. If testing is required by IDEM, OAQ and/or OES, compliance shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.4 Fuel Usage Limitation

Compliance with fuel usage limit in Condition D.1.2 shall be demonstrated at the end of each month based on the total amount of diesel fuel combusted in Emission Unit ID ETC702 for the most recent twelve (12) consecutive month period.

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

D.1.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 shall be submitted to the address(es) 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 "responsible official" as defined by 326 IAC 2-7-1(34).

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

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: Allison Transmission Division GMC
Source Address: 4700 West 10th Street, Indianapolis, Indiana 46222
Mailing Address: 4700 West 10th Street, (M-29) Indianapolis, Indiana 46222
Source Modification No.: 097-15550-00310

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

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Other (specify) _____

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

Signature:

Printed Name:

Title/Position:

Date:

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

**Part 70 Source Modification Usage Report
(Submit Report Quarterly)**

Source Name: Allison Transmission Division GMC
Source Address: 4700 West 10th Street, Indianapolis, Indiana 46222
Mailing Address: 4700 West 10th Street, (M-29) Indianapolis, Indiana 46222
Source Modification No.: 097-15550-00310
Facility: Emission Unit ID ETC702
Parameter: diesel fuel usage
Limit: 173,516 gallons, at 438.4 lbs NO_x per 1000 gallons, per twelve (12) consecutive month period

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967
and
INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE
2700 South Belmont Ave.
Indianapolis Indiana 46221
Phone: 317-327-2234
Fax: 317-327-2274**

**PART 70 SIGNIFICANT SOURCE MODIFICATION
EMERGENCY OCCURRENCE REPORT**

Source Name: Allison Transmission Division of General Motors Corporation
Source Address: 4700 West 10th Street, Indianapolis, Indiana, 46254
Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222
Source Modification No.:097-15550-00310

This form consists of 2 pages

Page 1 of 2

9	This is an emergency as defined in 326 IAC 2-7-1(12)
C	The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
C	The Permittee must submit notice or within two (2) working days (Facsimile Number: 317-233-5967), 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.

Mail to: Air Quality Management Section
Office of Environmental Services
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097

Allison Transmission Division GMC.
4700 West 10th Street
Indianapolis, Indiana 46222

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:

(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)
4. I hereby certify that, Allison Transmission Division GMC has constructed the following: *Transmission Test Cell 702 identified as Emission Unit ID ETC702 consisting of one (1) reciprocating engine firing diesel fuel at 8.55 million Btu per hour and exhausting at Stack/ Vent ID PTE062* in conformity with the requirements and intent of the construction permit application received by the Office of Environmental Services on April 18, 2002 and as permitted pursuant to **Significant Source Modification 097-15550-00310, Plant ID No. 097-6898-00310** issued on _____.
5. Additional operations/facilities were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit. (Delete this statement if it does not apply.)
6. I hereby certify that Allison Transmission GMC is subject to the Title V program and has submitted their Title V operating permit application, which includes *Emission Unit ID ETC702*.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana
on this _____ day of _____, 20 _____.

My Commission expires: _____

Signature

Name (typed or printed)

**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
Part 70 Significant Source Modification**

Source Name:	Allison Transmission Division of GMC
Source Location:	4700 West 10th Street, Indianapolis, IN 46222
County:	Marion
SIC Code:	3568
Operation Permit No.:	T097-6898-00310
Operation Permit Issuance Date:	Pending
Significant Source Modification No.:	097-15550-00310
Permit Reviewer:	M. Caraher

On October 5, 2002, the Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services had a notice published in the Indianapolis Star Newspaper, Indianapolis, Indiana, stating that Allison Transmission Division of GMC had applied for a Part 70 Significant Source Modification relating to the construction and operation of the following emission unit:

- (a) Transmission Test Cell 702 identified as Emission Unit ID ETC702 consisting of one (1) reciprocating engine firing diesel fuel at 8.55 million Btu per hour and exhausting at Stack/Vent ID PTE062.

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.

There were no comments received during the thirty (30) day comment period. However, the Emergency Occurrence Report Form referenced in Condition C.10(b)(5) was inadvertently omitted from the public notice version permit. In addition, IDEM, OAQ and OES updated the Part 70 Permit model on October 28, 2002. Upon further review, IDEM, OAQ and OES have decided to make the following revisions to the permit. The Table Of Contents has been modified to reflect these changes.

1. Condition C.10(b)(5) Emergency Provisions, requires that for each emergency lasting one (1) hour or more, that a written report be filed within two (2) working days of the time when emission limitations were exceeded due to the emergency. An emergency is defined in 326 IAC 2-7-1(12). IDEM, OAQ and OES have provided an Emergency Occurrence Report Form in permits that is intended to partially provide the guidance and the information needed for the Permittee in their submittal should an emergency arise. The Emergency Occurrence Report Form was inadvertently omitted from the public notice version and is now included as pages 15 and 16 of 17 total permit pages. The Emergency Occurrence Report Form is a two (2) page form document and is shown below. The Affidavit of Construction that was on page 15 of 15 of the public notice version permit is now moved to page 17 of 17 total permit pages.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967
and
INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE
2700 South Belmont Ave.
Indianapolis Indiana 46221
Phone: 317-327-2234
Fax: 317-327-2274

PART 70 SIGNIFICANT SOURCE MODIFICATION
EMERGENCY OCCURRENCE REPORT

Source Name: Allison Transmission Division of General Motors Corporation
Source Address: 4700 West 10th Street, Indianapolis, Indiana, 46222
Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222
Source Modification No.:097-15550-00310

This form consists of 2 pages

Page 1 of 2

9	This is an emergency as defined in 326 IAC 2-7-1(12)
C	The Permittee must notify the Office of Air QUALITY (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
C	The Permittee must submit notice or within two (2) working days (Facsimile Number: 317-233-5967), 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.

2. During the thirty (30) day public notice period, IDEM, OAQ and OES updated the Part 70 Permit model on October 28, 2002. Some of the model revisions effect Part 70 Significant Source Modification conditions. These revisions are stated below (deletions in ~~strikeout~~ and additions are in **boldface** type).

Condition C.7 Compliance Requirements was further clarified with additional language to state what OAQ and/or OES does when stack testing, monitoring or reporting is required to assure compliance with applicable requirements.

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The Administrator 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.

In Condition C.10 Emergency Provisions, (e) has been revised to state the correct rule cite.

C.10 Emergency Provisions [326 IAC 2-7-16]

(e) IDEM, OAQ, and OES may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)~~(10)~~**(9)** be revised in response to an emergency.

Condition D.1.1 had an "s" added to the word grain and "of exhaust air" was added for clarity.

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Limitations), Particulate Matter (PM) emissions from Emission Unit ID ETC702 shall be limited to 0.03 grains per dry standard cubic foot **of exhaust air**.

There was some confusion as to when the Monthly or Quarterly Report(s) needed to be submitted. The name of the report was changed to **Usage Report** and instructions to the Permittee have been added to submit it quarterly. This model change affected the Quarterly Report Form that appears on page 14 of the Significant Source Modification for reporting monthly diesel fuel usage in Emission Unit ID ETC702.

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

Part 70 Source Modification ~~Quarterly~~ **Usage Report**
(Submit Report Quarterly)

Source Name: Allison Transmission Division GMC
Source Address: 4700 West 10th Street, Indianapolis, Indiana 46222
Mailing Address: 4700 West 10th Street,(M-29) Indianapolis, Indiana 46222
Source Modification No.: 097-15550-00310
Facility: Emission Unit ID ETC702
Parameter: diesel fuel usage
Limit: 173,516 gallons, at 438.4 lbs NO_x per 1000 gallons, per twelve (12) consecutive month period

QUARTER: _____ YEAR: _____

3. In the Technical Support Document on page 3 of 7 under the Section entitled **County Attainment Status**, there is a discussion in item (c) regarding fugitive emissions. Upon further review, the source is in one of the twenty eight (28) listed source categories under 326 IAC 2-2-1(y)(1). Specifically, this source is identified in the category listed in 326 IAC 2-2-1(y)(1)(V) (Fossil Fuel Boilers (or combinations thereof) Totaling More than Two Hundred and Fifty (250) Million Btu per Hour Heat Input) because the source has 5 boilers burning fossil fuels and totaling 288 million Btu heat input (36 MMBtu/hr + 36 MMBtu/hr + 48 MMBtu/hr + 72 MMBtu/hr + 96 MMBtu/hr = 288 MMBtu/hr). At any one time, these boilers can burn combinations of natural gas, # 2 fuel oil, reclaimed oil and filtered fuel oil generated on site. Natural gas and # 2 fuel oil are identified as "fossil fuels" in the definitions found in 40 CFR 60.41 Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971). Specifically, fossil fuel means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat. This change does not effect any existing or additional rule applicability or any other regulatory concern as the source was already an existing major source pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) and this Significant Source Modification is adding a diesel fired reciprocating engine for which there is no fugitive emissions.

As a result, the previous statement of not being on the list of twenty eight (28) source categories is incorrect and is changed in this TSD Addendum only (deletions in strikeout and additions are in boldface type). The public notice version of the TSD cannot be changed and, therefore, remains unchanged.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	unclassifiable
SO ₂	maintenance
NO _x	attainment
Ozone	maintenance
CO	attainment
Lead	unclassifiable

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Marion County has been classified as attainment or unclassifiable for PM-10, 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 and 40 CFR 52.21.
- (c) Fugitive Emissions
Since this type of operation is ~~not~~ one of the 28 listed source categories under ~~326 IAC 2-2~~ **326 IAC 2-2-1(y)(1)(V) (Fossil Fuel Boilers (or combinations thereof) Totaling More than Two Hundred and Fifty (250) Million Btu per Hour Heat Input)** and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are ~~not~~ counted toward determination of PSD and Emission Offset applicability.

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

**Technical Support Document (TSD) for a Part 70 Significant Source
Modification**

Source Background and Description

Source Name:	Allison Transmission Division of GMC
Source Location:	4700 West 10th Street, Indianapolis, IN 46222
County:	Marion
SIC Code:	3568
Operation Permit No.:	T097-6898-00310
Operation Permit Issuance Date:	Pending
Significant Source Modification No.:	097-15550-00310
Permit Reviewer:	M. Caraher

The Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) have reviewed a modification application from Allison Transmission Division of GMC relating to the construction of the following emission unit:

- (a) Transmission Test Cell 702 identified as Emission Unit ID ETC702 consisting of one (1) reciprocating engine firing diesel fuel at 8.55 million Btu per hour and exhausting at Stack/Vent ID PTE062.

History

On October 11, 1996, Allison Transmission submitted its initial Part 70 Permit Program application (T097-6898-00310). On July 1, 1999 the proposed Title V permit was public noticed and issuance is pending.

On April 18, 2002, Allison Transmission submitted an Interim Permit application (097-15550i-00310) and a Significant Source Modification application (097-15550-00310) to modify its operations by installing Transmission Test Cell 702. Emission Unit ID ETC702 was initially proposed to be configured as one (1) gas turbine at 15.05 million Btu per hour or one (1) diesel fuel-fired reciprocating engine at 8.55 million Btu per hour. Allison Transmission sought the flexibility to be able to switch out the turbine or engine in Transmission Test Cell 702. The Interim Significant Source Modification (097-15550i-00310) was public noticed in the Indianapolis Star Newspaper on April 20, 2002. No comments were received and the Interim permit was final issued on May 16, 2002.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (lbs/hr)	Temperature (°F)
PTE062	ETC702 - Reciprocating Engine	46.0	1.0	14,000	300

Recommendation

The staff recommends to the Administrator that the Part 70 Significant Source Modification 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 April 18, 2002. A first Notice of Deficiency, NOD1, was sent to the source on May 31, 2002 requesting clarification on gas turbine NSPS applicability and the selection of gas turbine emission factors. An NOD1 response was received on July 18, 2002 stating that 40 CFR 60.330 Subpart GG did apply to the gas turbine configuration of the initial application. Additional information was received from the source on September 5, 2002 withdrawing the gas turbine configuration and seeking to obtain permitting of the diesel fired reciprocating engine configuration of Emission Unit ID ETC702 only.

Emission Calculations

See Appendix A Pages 1 through 2 of 2 of this document for detailed emissions calculations.

Potential To Emit of Modification

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	2.6
PM-10	2.1
SO ₂	18.9
VOC	3.4
CO	31.8
NO _x	119.8

HAP's	Potential To Emit (tons/year)
Benzene	2.9E-002
Toluene	1.0E-002
Formaldehyde	1.5E-003
Propylene	1.0E-001
Total	1.6E-001

Justification for Modification

This Part 70 source submitted its initial Part 70 Permit application on October 11, 1996. This source has not yet received its initial Part 70 Operating Permit. This Part 70 source is to be modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4), (g) & (h) because the potential to emit NO_x exceeds twenty five (25) tons per year. The source has accepted diesel fuel usage limitations serving to limit NO_x emissions to less than forty (40) tons per year such that 326 IAC 2-2 does not apply. The equipment being reviewed under this application shall be incorporated in to the Title V Permit application.

County Attainment Status

The source is located in Marion County.

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

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Marion County has been classified as attainment or unclassifiable for PM-10, 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 and 40 CFR 52.21.
- (c) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	less than 250
PM-10	less than 250
SO ₂	greater than 250
VOC	less than 100
CO	greater than 250
NOx	greater than 250

- (a) This existing source is a major stationary source because an attainment regulated pollutant

is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

- (b) These emissions are based upon information from the initial Part 70 Operating Permit application received October 11, 1996.

Potential to Emit of Modification 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 Part 70 source modification.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Emission Unit ID ETC702 Reciprocating Engine	0.8	0.1	6.0	1.1	10.1	38.0 *	3.5E-02 / 5.4E-02
PSD or Emission Offset Significance Level	25	15	40	40	100	40	NA
Total Emissions	0.8	0.1	6.0	1.1	10.1	38.0	3.5E-02 / 5.4E-02

* This modification to an existing major stationary source is not major because the emissions increase is limited to less than the PSD major modification significance levels. By limiting diesel fuel consumption to less than 173,516 gallons per twelve (12) consecutive month period and at an emission factor of 438.4 pounds of NO_x per thousand (1000) gallons, NO_x emissions are less than forty (40) tons per twelve (12) consecutive month period. By limiting diesel fuel consumption to less than 173,516 gallons per twelve (12) consecutive month period, all other criteria pollutants potential to emit is limited as indicated above. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) The source withdrew its request to construct and operate a gas turbine on September 5, 2002 that would have been subject to 40 CFR 60.330 Subpart GG. There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Individual Facilities

Emission Unit ID ETC702

326 IAC 1-6-3 (Malfunctions: Preventive Maintenance Plans) & 326 IAC 2-7-5(13)

A Preventive Maintenance Plan (PMP) should be developed for each facility that is permitted as a registration level or higher. A Part 70 application requirement 326 IAC 2-7-4(c)(10) is a confirmation

that the source maintains an on-site a preventive maintenance plan as described in 326 IAC 1-6-3. Since, 326 IAC 1-6-1 is applicable to any facility that emit above minimum permitting thresholds, IDEM, OAQ and OES have developed a guidance for determining applicability of a PMP for each facility permitted under the Part 70 program.

Preventative Maintenance Plans (PMP) are required for all emitting units which emit PM, SO₂ or VOC with existing applicable requirements and:

- 1) a NSPS or NESHAP applies; or
- 2) the unit has a control device and allowable emissions exceed 10 pounds per hour; or
- 3) the unit does not have a control and actual emissions exceed 25 tons per year; or
- 4) the unit would have been subject to an applicable requirement if there was not a condition limiting the PTE.

Based on IDEM, OAQ and OES's review a PMP is not required for Emission Unit ID ETC702.

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

The source wide potential to emit NO_x, SO₂ and CO exceed 250 tons per year. The potential to emit of this modification exceeds forty (40) tons of NO_x per year. The source has requested and accepted a diesel fuel usage limitation of 173, 516 gallons per rolling twelve (12) consecutive month period such that NO_x emissions are less than forty (40) tons per year (see TSD Appendix A page 1 of 2 for detailed calculations).

$$438.4 \text{ lbs NO}_x/1000 \text{ gal} \times 173, 516 \text{ gals/yr} \times \text{ton NO}_x/2000 \text{ lbs NO}_x = 38.0 \text{ tons NO}_x \text{ per year}$$

Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52 do not apply.

326 IAC 2-4.1(New Source Toxics Control)

This source is not a major HAP source and the addition of Emission Unit ID ETC702 does not increase the potential to emit any single HAP in excess of ten (10) tons per year of any combination of HAP in excess of twenty five (25) tons per year (see TSD Appendix A page 2 of 2). Therefore, 326 IAC 2-4.1 does not apply to this Significant Source Modification.

326 IAC 2-7-10.5(f)(4)(Part 70 Permits; Source Modifications)

This source has not yet received its initial Part 70 Operating Permit. This Part 70 source is to be modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4), (g) & (h) because the potential to emit NO_x exceeds twenty five (25) tons per year. The source has accepted diesel fuel use limitations serving to limit NO_x emissions to less than forty (40) tons per year such that 326 IAC 2-2 does not apply.

326 IAC 2-13 (Interim Approvals)

On April 18, Allison Transmission submitted an Interim Permit application (097-15550i-00310) and a Significant Source Modification application (097-15550-00310) to modify its operations by installing Transmission Test Cell 702. Emission Unit ID ETC702 was to be initially configured as one (1) gas turbine at 15.05 million Btu per hour or one (1) diesel fuel-fired reciprocating engine at 8.55 million Btu per hour. Allison Transmission sought the flexibility to be able to switch out the turbine or engine in Transmission Test Cell 702 in the Significant Source Modification to be issued. The Interim Significant Source Modification (097-15550i-00310) was public noticed in the Indianapolis Star Newspaper on April 20, 2002. No comments were received and the Interim permit, 097-15550i-00310, was final issued on May 16, 2002. On September 5, 2002, Allison Transmission withdrew its request to install the gas turbine.

326 IAC 5 (Opacity Limitations)

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%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

326 IAC 6-1-2(a) (Nonattainment Area Limitations)

Pursuant to 326 IAC 6-1-2(a), sources or facilities located in Marion County with potential PM emissions of one hundred (100) tons or more per year or with actual PM emissions of greater than ten (10) tons per year shall be limited to 0.03 grains per dry standard cubic foot of exhaust. This existing source has potential emissions in excess of one hundred (100) tons of PM per year and has actual emissions greater than ten (10) tons per year. Therefore, 326 IAC 6-1-2(a) applies to Emission Unit ID ETC702.

At an air density of 0.0766 lbs of air per cubic foot of air, 14,000 lbs of exhaust air per hour and utilizing the AP-42 emission factor of 0.07 pounds of PM per million Btu of heat input, the calculated emission rate is estimated to be 0.023 grains per dry standard cubic foot of exhaust. Therefore, the emission unit appears to be in compliance with 326 IAC 6-1-2(a).

$$0.0766 \text{ lbs air/ft}^3 \text{ air} \times \text{hr}/14,000 \text{ lbs air} \times 8.55 \text{ MMBtu/hr} \times 0.07 \text{ lbs PM/MMBtu} \times 7000 \text{ gr/lb} = 0.023 \text{ gr/dscf}$$

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

326 IAC 6-2 does not apply to the diesel fuel fired reciprocating engine because, pursuant to 326 IAC 1-2-19, the combustion of fuel in the engine is not used to produce usable heat that is transferred through a heat conducting materials barrier or to a heat storage medium to a material to be heated. The reciprocating engine is utilized to test transmissions produced by the source.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

326 IAC 6-3-2 does not apply to the diesel fuel fired reciprocating engine because it is not a manufacturing process as defined in 326 IAC 6-3-1.5(2). In addition, the process weight rate, pursuant to 326 IAC 1-2-59, shall not include liquid fuels, gaseous fuels and combustion air.

326 IAC 7 (Sulfur Dioxide Rules)

The potential to emit SO₂ from the 8.55 million Btu per hour diesel fuel fired reciprocating engine identified as Emission Unit ID ETC702 does not exceed twenty (25) tons per year (see TSD Appendix A page 1 of 2). Therefore, 326 IAC 7 does not apply to this Emission Unit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ and OES in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

Compliance Monitoring is required for all emitting units which emit PM, SO₂ or VOC with existing applicable requirements and:

- 1) a NSPS or NESHAP applies; or
- 2) the unit has a control device and allowable emissions exceed 10 pounds per hour; or
- 3) The unit does not have a control and actual emissions exceed 25 tons per year; or
- 4) the unit would have been subject to an applicable requirement if there was not a condition limiting the PTE.

Based on IDEM, OAQ and OES's review Compliance Monitoring is not required for Emission Unit ID ETC702.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 097-15550-00310.

Emission Unit ID ETC 702
Diesel Fired Reciprocating Engine

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Reciprocating Engine (>600 HP)

Company Name: Allison Transmission
Address City IN Zip: 4700 West 10th Street, Indpls., IN 46222
CP#: 097-15550-00310
Plt ID:
Reviewer: MBC
Date: 05/29/2002

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity MMBtu/hr S= 0.5 = WEIGHT % SULFUR

8.55

Emission Factor in lb/MMBtu	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	0.07	0.0573	0.5 (1.01S)	3.2 **see below	0.1	0.85
Potential Emission in tons/yr	2.6	2.1	18.9	119.8	3.4	31.8

**NOx emissions: uncontrolled = 3.2 lb/MMBtu, controlled with ignition timing retard = 1.9 lb/MMBtu
Emfacs from AP-42 Tables 3.4-1 & 3.4-2 (10/96)

B. Emissions calculated based on conversion of AP-42 emfac to lbs/1000 gal

Heat Input (Btu/gal) 137000 Potential Throughput gallons/year S= 0.5 = WEIGHT % SULFUR
Heat Input Capacity (MMBtu/hr) 8.55 546700.7

Emission Factor in lb/1000 gal	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	9.6	7.9	69.2	438.4	12.3	116.5
Potential Emission in tons/yr	2.6	2.1	18.9	119.8	3.4	31.8

C. Emissions calculated based on limiting fuel throughput

Limited fuel throughput gallons/year
173516.0

Emission Factor in lb/1000 gal	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	9.6	7.9	69.2	438.4	12.3	116.5
Limited Emissions in tons/yr	0.8	0.7	6.0	38.0	1.1	10.1

Methodology

Potential Throughput: (Heat input capacity (MMBtu/hr) / heat input content (Btu/gal)) x 8760
Emission Factors are from AP 42 (Supplement B 10/96)Table 3.4-1 and Table 3.4-2
Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

Emission Unit ID ETC 702
 Reciprocating
 Engine Configuration

**Appendix A: Emission Calculations
 HAPs Emissions**

Company Name: Allison Transmission
Address City IN Zip: 4700 West 10th Street, Indpls., IN 46222
CP#: 097-15550-00310
Plt ID:
Reviewer: MBC
Date: 05/29/2002

Diesel Engine Configuration HAP	Max rate (gal/hr)	Emfac (lbs/MMBtu)	Emfac (lbs/kgal)	Emissions (lbs/hr)	Max Emissions (tons/yr)	Max limited Emissions *
Benzene	60	7.76E-04	1.11E-01	6.63E-03	2.90E-02	9.63E-03
Toluene	60	2.81E-04	4.00E-02	2.40E-03	1.05E-02	3.47E-03
Xylene	60	1.93E-04	2.75E-02	1.65E-03	7.23E-03	2.39E-03
Propylene	60	2.79E-03	3.98E-01	2.39E-02	1.05E-01	3.45E-02
Formaldehyde	60	7.89E-05	1.12E-02	3.37E-04	1.48E-03	9.72E-04
Acetaldehyde	60	2.52E-05	3.59E-03	2.15E-04	9.42E-04	3.11E-04
Acrolein	60	7.88E-06	1.12E-03	6.74E-05	2.95E-04	9.72E-05
PAH	60	2.12E-04	3.02E-02	1.81E-03	7.93E-03	2.62E-03
Combined HAPs:					1.62E-01	5.40E-02

Fuel Use Limitation:

173516 gallons/12 month period

* if limited to 173, 516 gallons per rolling 12 month period
 Emfacs from AP-42 Tables 3.4-3 & 3.4-4 (10/96)