

PART 70 OPERATING PERMIT

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 operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17 and the Code of Indianapolis and Marion County, Chapter 511. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T097-6898-00310	
Issued by:	Issuance Date: June 21, 2004
Original signed by:	
Janet G. McCabe, Assistant Commissioner Office of Air Quality	Expiration Date: June 21, 2009
and	
John B. Chavez, Administrator Office of Environmental Services	

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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 the Indianapolis Office of Environmental Services (OES). The information describing the source contained in conditions A.1, A.3 and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a transmission manufacturing and testing plant under a Standard Industrial Classification Code (SIC) of 3568 (establishments primarily engaged in manufacturing mechanical power transmission equipment and parts).

Responsible Official:	General Director of Operations
Source Address:	4700 West 10 th Street, Indianapolis, Indiana 46222
Mailing Address:	4700 West 10 th Street (M-29), Indianapolis, Indiana, 46222
SIC Code:	3568
County Location:	Marion
County Status:	Nonattainment for ozone under the 8-hour standard
Source Status:	Part 70 Permit Program Major Source, under PSD and Emission Offset Rules and Nonattainment NSR; Minor Source, Section 112 of the Clean Air Act

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This transmission manufacturing and testing plant consists of three (3) plants:

- (a) Plant 3 is located at 4700 West 10th Street, Indianapolis, IN 46254;
- (b) Plants 12 and 14 are both located at 901 Grande Avenue, Indianapolis, IN 46254

Since the three (3) plants are located on contiguous or adjacent properties, belong to the same industrial grouping and are under common control of the same entity, they will be considered one (1) source, effective from the date of issuance of this Part 70 permit.

This transmission manufacturing and testing operation consists of a source with an on-site contractor, both listed as follows:

- (a) Plants 3, 12 and 14, the primary operation and considered one (1) source, located at 4700 West 10th Street, Indianapolis, IN 46254 and 901 Grande Avenue, Indianapolis, IN 46254, respectively; and
- (b) Environmental Corporate Remediation Company (ENCORE), the on-site remediation systems contractor supporting operation, located at 4700 West 10th Street, Indianapolis, IN 46254.

IDEM, OAQ and OES have determined that Plant 3, 12 and 14 and the remedial activities operated by ENCORE, the on-site contractor, are each under the common control of the General Motors Corporation, and are, therefore, considered one source. Therefore, the term "source" in the Part 70 documents refers to both the Allison Transmission Division of General Motors and Environmental Corporate Remediation Company, Inc. (herein known as ENCORE) as one source.

One combined Part 70 permit will be issued to Allison Transmission Division of General Motors and Environmental Corporate Remediation Company (ENCORE) for the combined source.

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

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

- (a) One (1) Union Iron Works Boiler, identified as emission unit BLR 1, capable of combusting #4 reclaimed oil or #2 fuel oil, with a maximum capacity of thirty six (36) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3109 and constructed in 1940.
- (b) One (1) Union Iron Works Boiler, identified as emission unit BLR 2, capable of combusting #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of thirty six (36) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3110 and constructed in 1940.
- (c) One (1) Union Iron Works Boiler, identified as emission unit BLR 3, capable of combusting #4 reclaimed oil or #2 fuel oil, with a maximum capacity of forty eight (48) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3112 and constructed in 1942.
- (d) One (1) Union Iron Works Boiler, identified as emission unit BLR 4, capable of combusting #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of seventy two (72) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3107 and constructed in 1953.
- (e) One (1) Union Iron Works Boiler, identified as emission unit BLR 5, capable of combusting #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of ninety six (96) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3108 and constructed in 1969.
- (f) Emission Unit ETC consists of the following twenty five (25) engineering development transmission test cells; 701, 704, 705, 706, 707, 709, 710, 711, 712, 32N, 32S, 38N, 39N, 39S, 40N, 40S, 41N, 41S, 48N, 48S, 49N, 49S, 50, 51N and 51S. The emissions from each test cell 701, 704, 705, 706, 707, 709, 710, 711, 712, 32N, 32S, 38N, 39N, 39S, 40N, 40S, 41N, 41S, 48N, 48S, 49N, 49S, 50, 51N and 51S are exhausted out Stack/Vent PTE 057, PTE 065, PTE 067 PTE 069, PTE 071, PTE 075, PTE 077, PTE 079, PTE 080, PTE 008, PTE 006, PTE 011, PTE 018, PTE 020, PTE 013, PTE 014, PTE 023, PTE 021, PTE 040, PTE 041, PTE 086, PTE 087, PTE 093, PTE 084, and PTE 082, respectively. All test cells were constructed prior to 1977. Test cell 39N was modified during the 1980's. The table below lists the fuel type and engine type that each cell is capable of accommodating based on the physical characteristics of each cell.

Test Cell ID	Fuel Type	Engine Type	Estimated Maximum Engine Size in Horsepower
701	Diesel	Reciprocating or Gas Turbine	4000
704	Diesel	Reciprocating	2400
705	Diesel	Reciprocating or Gas Turbine	2400 for reciprocating; 4000 for gas turbine
706	Diesel	Reciprocating	4000
707	Diesel	Reciprocating	2400
709	Diesel	Reciprocating	2400
710	Diesel	Reciprocating	1500

Test Cell ID	Fuel Type	Engine Type	Estimated Maximum Engine Size in Horsepower
711	Diesel	Reciprocating	2400
712	Diesel	Reciprocating	1500
32N	Diesel	Reciprocating	2400
32S	Diesel	Reciprocating	1500
38N	Diesel	Reciprocating	4000
39N	Diesel	Reciprocating	2400
39S	Diesel	Reciprocating	1500
40N	Diesel	Reciprocating	1500
40S	Diesel	Reciprocating	1500
41N	Diesel	Reciprocating	1200
41S	Diesel	Reciprocating	1200
48N	Diesel	Reciprocating	1200
48S	Diesel	Reciprocating	1200
49N	Diesel	Reciprocating	1500
49S	Diesel	Reciprocating	1500
50	Diesel	Reciprocating	2400
51N	Diesel	Reciprocating	1200
51S	Gasoline or Diesel	Reciprocating	700

- (g) Emission unit DTC consists of the following four (4) transmission reliability test cells, TC-107, TC-109, TC-111 and TC-112. The emissions from test cells TC-107, TC-109, TC-111 and TC-112 are exhausted out stacks PTE045, PTE043, PTE049 and PTE050, respectively. All test cells were constructed in 1985. The following engines can be used in any one of the individual test cells mentioned above:

Test Cell ID	Fuel Type	Engine Type	Estimated Maximum Engine Size in Horsepower
TC-107	Diesel	Reciprocating	1500
TC-109	Diesel	Reciprocating	1500
TC-111	Diesel	Reciprocating	1500
TC-112	Diesel	Reciprocating	1500

- (h) Emission unit PTS12 consists of the following two (2) transmission test stands, identified as test stand C-32 and C-33. Test stands C-32 and C-33 were constructed in 1976 and 1981 respectively. The emissions from test stands C-32 and C-33 are exhausted out stacks 12060 and 12058, respectively. The following engines can be used in any one of the individual test stands mentioned above:

Test Cell ID	Fuel Type	Engine Type	Estimated Maximum Engine Size in Horsepower
C-32	Diesel	Reciprocating	600
C-33	Diesel	Reciprocating	600

- (i) Emission unit PTS14 consists of the following five (5) transmission test stands, identified as test stand O-1, O-2, O-24, O-25 and O-31. Test stands O-1, O-2, O-24, O-25 and O-31 were constructed in 1978, 1979, 1986, 1986, and 1984 respectively. The emissions from test stands O-1, O-2, O-24, O-25 and O-31 are exhausted out stacks 14041, 14038, 14024, 14023, and 14045, respectively. The following engines can be used in any one of the individual test stands mentioned above:

Test Cell ID	Fuel Type	Engine Type	Estimated Maximum Engine Size in Horsepower
O-1	Diesel	Reciprocating	2400
O-2	Diesel	Reciprocating	2400
O-24	Diesel	Reciprocating	600
O-25	Diesel	Reciprocating	600
O-31	Diesel	Reciprocating	2400

- (j) Cold solvent degreasing using mineral spirits identified as emission unit CSD. Emissions are vented inside the building. Each degreasing unit was installed prior to 1977.
- (k) 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. This emission unit can accommodate engines of greater than 600 horsepower. Constructed in 2002.

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour. [326 IAC 6-1-2]
- (b) Emergency diesel generators not exceeding 1600 horsepower.[326 IAC 6-1-2(a)]
- (c) Emergency Stationary fire pumps.[326 IAC 6-1-2(a)]
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-1-2(a)]
- (1) Shot Blast controlled with fabric filters. [326 IAC 6-1-2(a)]
- (e) Heat Treating. [326 IAC 6-1-2(a)]
- (f) Activities or categories of activities with individual HAP emissions not previously identified. Any unit emitting greater than 1 pound per day but less than 5 pounds per day or 1 ton per

year of a single HAP.

- (1) Production welding - manganese [326 IAC 6-1-2(a)]
- (g) One (1) soil and groundwater remediation system, identified as Emission Unit ENCORE, installed in 2003, consisting of [326 IAC 2-4.1]:
 - (1) Soil vapor extraction (SVE) system, including miscellaneous piping and:
 - (A) seventeen (17) soil vapor extraction wells;
 - (B) one (1) 90 gallon knock-out tank, and
 - (C) one (1) 30 -horsepower blower rated at 750 standard cubic feet per minute (scfm), with emissions exhausting to one (1) stack identified as SVE vent.
 - (2) Dense non-aqueous phase liquid (DNAPL)/groundwater recovery system, including miscellaneous piping, pneumatic pumps and:
 - (A) four (4) recovery wells; and
 - (B) one (1) 1000 gallon DNAPL/water storage tank, with emissions exhausting to one (1) stack identified as SVE vent.
- (h) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

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

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

SECTION B

GENERAL CONDITIONS

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

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

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

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 2-7-7]

- (a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the Indianapolis Office of Environmental Services (OES), the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) The Indianapolis Air Pollution Control Board (IAPCB) has adopted by reference state rules listed in Attachment A of this permit. The version adopted by reference includes all amendments, additions and repeals filed with the Secretary of State through August 10, 1997 and published in the Indiana Register September 1, 1997, unless otherwise indicated in the adoption by reference. For the purposes of this permit, all state rules adopted by reference by the IAPCB are enforceable by OES using local enforcement procedures. Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by OES.

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

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

B.5 Severability [326 IAC 2-7-5(5)]

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

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

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

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

- (a) The Permittee shall furnish to IDEM, OAQ 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 "responsible official" as defined by 326 IAC 2-7-1(34). 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, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted 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, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year 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

and

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and OES on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;

- (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ and OES may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

- (a) 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, 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, 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) 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 PMP does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP

requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, 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

- (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.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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

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

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, or OES shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the

information was submitted.

- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, or OES has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, or OES has issued the modification. [326 IAC 2-7-12(b)(8)]

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) deleted
- by this permit.
- (b) All previous registrations and permits are superseded by this permit.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), 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, 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

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 do not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, or 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 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, or 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 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ or OES at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ or OES may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-4]

- (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 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal 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

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
- (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, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ 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 being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ and OES fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

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

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
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 shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

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

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air 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

and

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

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

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes 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 2-7-20(b)(1), (c)(1), and (e)(2).

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

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

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

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

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

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.21 Inspection and Entry [326 IAC 2-7-6] [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, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
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

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ and OES 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, or OES, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

Notwithstanding the Conditions of this Permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or Condition of this Permit.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 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:

- (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.2 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.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.4 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.5 Operation of Equipment [326 IAC 2-7-6(6)]

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 units vented to the control equipment are in operation.

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

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

C.7 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 2-7-6(1)]

C.8 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, 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, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

Unless otherwise specified in the 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, 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

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

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.11 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.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on April 4, 1997.
- (b) 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.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.14 Compliance Response Plan - Preparation, Implementation, Records and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ and OES upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan

is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such an additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the Permittee shall promptly notify IDEM, OAQ and OES of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of the notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable response steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Condition B - Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, 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

that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition does 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.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

This statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling 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

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-1.1-1(1).

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

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. Such records may be maintained in computerized form. If the Commissioner or OES makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or OES 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.18 General Reporting Requirements [326 IAC 2-7-5(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 "responsible official" as defined by 326 IAC 2-7-1(34).

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air 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

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

Stratospheric Ozone Protection

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

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with 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 2-7-5(15)]

- (a) One (1) Union Iron Works Boiler, identified as emission unit BLR 1, capable of combusting #4 reclaimed oil or #2 fuel oil, with a maximum capacity of thirty six (36) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3109 and constructed in 1940.
- (b) One (1) Union Iron Works Boiler, identified as emission unit BLR 2, capable of combusting #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of thirty six (36) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3110 and constructed in 1940.
- (c) One (1) Union Iron Works Boiler, identified as emission unit BLR 3 capable of combusting #4 reclaimed oil or #2 fuel oil, with a maximum capacity of forty eight (48) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3112 and constructed in 1942.
- (d) One (1) Union Iron Works Boiler, identified as emission unit BLR 4, capable of combusting #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of seventy two (72) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3107 and constructed in 1953.
- (e) One (1) Union Iron Works Boiler, identified as emission unit BLR 5, capable of combusting #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of ninety six (96) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3108 and constructed in 1969.

(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 Rules: Marion County [326 IAC 6-1-12(a)][326 IAC 6-1-12(g)]

- (a) Pursuant to 326 IAC 6-1-12(a), particulate (PM) emissions from emission units BLR 1, BLR 2, BLR 3, BLR 4 and BLR 5 shall be limited to:
 - (1) 0.15 pounds per million Btu for each emission unit; and
 - (2) 39.3 tons per year for all emission units combined.
- (b) Pursuant to 326 IAC 6-1-12(g), compliance with the particulate (PM) emissions limit in Condition D.1.1(a) shall be determined at the end of each month based on the sum of the monthly calculated emissions for the most recent twelve (12) consecutive month period. The monthly emissions shall be calculated using AP-42 emissions factors or alternative emission factors approved by the Commissioner.

D.1.2 Sulfur Dioxide Emission Limitations: Marion County [326 IAC 7-4-2]

Pursuant to 326 IAC 7-4-2, Sulfur Dioxide (SO₂) emissions for emission units BLR 1, BLR 2, BLR 3, BLR 4, and BLR 5 are limited as specified below:

Emission Unit	Pounds per million Btu	Pounds per hour
BLR 1	1.88	67.6
BLR 2	1.88	67.6
BLR 3	1.88	90.2
BLR 4	1.88	135.2
BLR 5	1.88	180.3

D.1.3 Non Applicability [40 CFR 60.40c]

40 CFR Part 60.40c (Subpart Dc) does not apply to Boilers BLR 1 through BLR 5 since none of these boilers were constructed after June 9, 1989. The Permittee shall obtain prior approval prior to making any changes to any one of these boilers which would be considered a modification or reconstruction pursuant to 40 CFR Part 60.14 and 60.15.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for emission units BLR 1, BLR 2, BLR 3, BLR 4 and BLR 5.

Compliance Determination Requirements

D.1.5 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3-7-4][326 IAC 7-2-1(c)]

- (a) Compliance shall be determined utilizing one of the following options.
- (1) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content for Distillate Oil and reclaimed #4 fuel oil does not exceed 1.89 and 1.80 percent by weight, respectively, by either:
 - (A) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
 - (B) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (i) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (ii) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
 - (2) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from emission units BLR1, BLR2, BLR3, BLR4 and/or BLR5 in accordance with 326 IAC 3-6, utilizing the procedures in 40 CFR 60, Appendix A, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]
- A determination of noncompliance pursuant to either of the methods specified in (1) or (2) above shall not be refuted by evidence of compliance pursuant to the other method.
- (b) Pursuant to 326 IAC 7-2-1(c) and based on fuel sampling and analysis data obtained in accordance with procedures specified under 326 IAC 3-7-4, the Permittee shall submit to the Commissioner reports of calendar month average sulfur content, heat content, fuel consumption and sulfur dioxide emission rate in pounds per million Btu upon request.

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

D.1.6 Visible Emissions Notations

- (a) Visible emission notations of emission unit BLR 1, BLR 2, BLR 3 BLR 4 and BLR 5 stack exhaust shall be performed once per shift during normal daylight operations when the emission unit is firing distillate fuel oil or reclaimed # 4 fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.

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

D.1.7 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2 and D.1.5, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) below shall be complete and sufficient to establish compliance with the SO₂ emission limit established in Condition D.1.2. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) To certify compliance when burning natural gas only, the Permittee shall maintain records of fuel used.

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

 - (4) Fuel supplier certifications.
 - (5) The name of the fuel supplier; and
 - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (b) Pursuant to Condition D.1.1(b), the Permittee shall maintain monthly fuel usage records for each boiler BLR 1, BLR 2, BLR 3, BLR 4 and BLR 5 that contains sufficient information to estimate emissions, including;

- (1) boiler identification and heat capacity;
 - (2) fuel usage for each type of fuel; and
 - (3) heat content of fuel.
- (c) To document compliance with Condition D.1.5(b), the Permittee shall maintain records of calendar month average sulfur content, heat content, fuel consumption and sulfur dioxide emission rate in pounds per million Btu.
- (d) To document compliance with Condition D.1.6, the Permittee shall maintain records of once per shift visible emission notations of emission units BLR 1, BLR 2, BLR 3, BLR 4 and BLR 5 stack exhausts when combusting distillate fuel oil or reclaimed # 4 fuel oil.
- (e) To document compliance with Condition D.1.4, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.8 Reporting Requirements

- (a) The Permittee shall submit a certification, signed by the responsible official, that certifies all of the fuels combusted during the period. The natural gas fired boiler certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). The natural gas boiler certification shall be submitted to the addresses listed in Section C - General Reporting Requirements of this permit using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the six (6) month period being reported.
- (b) A quarterly summary of the information to document compliance with Condition D.1.1(b) shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the calendar 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).

D.1.9 Used Oil Requirements [329 IAC 13]

The waste oil burned in the emission units BLR 1, BLR 2, BLR 3, BLR 4 and BLR 5 shall comply with the used oil requirements specified in 329 IAC 13 (Used Oil Management). Pursuant to 329 IAC 13-3-2 (Used Oil Specifications), used oil burned for energy recovery that is classified as off-specification used oil fuel shall comply with the provisions of 329 IAC 13-8 (Used Oil Burners Who Burn Off-specification Used Oil For Energy Recovery), including:

- (a) Receipt of an EPA identification number as outlined in 329 IAC 13-8-3 (Notification),
- (b) Compliance with the used oil storage requirements specified in 329 IAC 13-8-5 (Used Oil Storage), and
- (c) Maintaining records pursuant to 329 IAC 13-8-6 (Tracking).

The burning of mixtures of used oil and hazardous waste that is regulated under 329 IAC 3.1 is prohibited at this source.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(f) Emission Unit ETC consists of the following twenty five (25) engineering development transmission test cells; 701, 704, 705, 706, 707, 709, 710, 711, 712, 32N, 32S, 38N, 39N, 39S, 40N, 40S, 41N, 41S, 48N, 48S, 49N, 49S, 50, 51N and 51S. The emissions from each test cell 701, 704, 705, 706, 707, 709, 710, 711, 712, 32N, 32S, 38N, 39N, 39S, 40N, 40S, 41N, 41S, 48N, 48S, 49N, 49S, 50, 51N and 51S are exhausted out Stack/Vent PTE 057, PTE 065, PTE 067 PTE 069, PTE 071, PTE 075, PTE 077, PTE 079, PTE 080, PTE 008, PTE 006, PTE 011, PTE 018, PTE 020, PTE 013, PTE 014, PTE 023, PTE 021, PTE 040, PTE 041, PTE 086, PTE 087, PTE 093, PTE 084, and PTE 082, respectively. All test cells were constructed prior to 1977. Test cell 39N was modified during the 1980's. The table below lists the fuel type and engine type that each cell is capable of accommodating based on the physical characteristics of each cell.

Test Cell ID	Fuel Type	Engine Type	Estimated Maximum Engine Size in Horsepower
701	Diesel	Reciprocating or Gas Turbine	4000
704	Diesel	Reciprocating	2400
705	Diesel	Reciprocating or Gas Turbine	2400 for reciprocating; 4000 for gas turbine
706	Diesel	Reciprocating	4000
707	Diesel	Reciprocating	2400
709	Diesel	Reciprocating	2400
710	Diesel	Reciprocating	1500
711	Diesel	Reciprocating	2400
712	Diesel	Reciprocating	1500
32N	Diesel	Reciprocating	2400
32S	Diesel	Reciprocating	1500
38N	Diesel	Reciprocating	4000
39N	Diesel	Reciprocating	2400
39S	Diesel	Reciprocating	1500
40N	Diesel	Reciprocating	1500
40S	Diesel	Reciprocating	1500
41N	Diesel	Reciprocating	1200
41S	Diesel	Reciprocating	1200
48N	Diesel	Reciprocating	1200
48S	Diesel	Reciprocating	1200
49N	Diesel	Reciprocating	1500

Test Cell ID	Fuel Type	Engine Type	Estimated Maximum Engine Size in Horsepower
49S	Diesel	Reciprocating	1500
50	Diesel	Reciprocating	2400
51N	Diesel	Reciprocating	1200
51S	Gasoline or Diesel	Reciprocating	700

(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.2.1 Particulate Rules [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a) (Particulate Rules), particulate (PM) emissions from each of the twenty five (25) Test Cells covered under Emissions Unit ETC shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

D.2.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1]

Pursuant to 326 IAC 7-1.1-1 (SO₂ Emissions Limitations), Sulfur Dioxide (SO₂) emissions from Test Cells 701, 704, 705, 706, 707, 709, 711, 32N, 38N and 50 shall each not exceed five tenths (0.5) pounds per million Btu heat input.

D.2.3 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Cell 39N:

- (a) NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Cell 39N shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Cell 39N shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Emission Unit ETC.

Compliance Determination Requirements

D.2.5 Sulfur Dioxide Emissions and Sulfur Content

Compliance for Test Cells 701, 704, 705, 706, 707, 709, 711, 32N, 38N and 50 shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or

- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

D.2.6 Emission Factors and Performance Testing

- (a) The Permittee shall use the following NO_x emissions factors in conjunction with the actual throughput of diesel fuel fired in reciprocating engines utilized in Test Cell 39N to determine compliance with emissions limitation in Condition D.2.3:

Reciprocating Engine Size (horsepower)	NO _x emissions factor
600 or less	0.6042 pounds per gallon of diesel fuel combusted
greater than 600	0.4384 pounds per gallon of diesel fuel combusted

- (b) Monthly NO_x emissions shall be determined by the following equation:
$$\text{NO}_x \text{ emissions (tons)} = \frac{(0.6042 \text{ lbs/gal} \times \text{gal throughput for engines 600 hp or less} + 0.4384 \text{ lbs/gal} \times \text{gal throughput for engines greater than 600 hp})}{2000 \text{ lbs NO}_x \text{ per ton NO}_x}$$
- (c) Pursuant to IC 13-15-7-1, IC 13-15-7-2, 326 IC 2-1.1-9(2) and 326 IAC 2-1.1-11 the IDEM, OAQ reserves the authority to require the Permittee to conduct performance tests to verify the emissions factors of this permit.
- (d) After issuance of this permit, if the performance test results indicate a discrepancy between the emission factors and the actual emissions rate observed during the test, the Permittee shall inform IDEM, OAQ, Permits Branch of such variation within 90 days of the submission of performance test report to IDEM.
- (e) Pursuant to IC 13-15-7-1, IC 13-15-7-2 and 326 IC 2-1.1-9(2), the IDEM, OAQ may re-evaluate the permit conditions and emissions factors. IDEM, OAQ may, at its discretion, use the authority under IC 13-15-7-2, IC 13-15-7-2 and/or 326 IAC 2-1.1-9(2) to re-open and revise the permit to more closely reflect the actual performance test results using permit amendment or modification procedures.

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

D.2.7 Visible Emissions Notations

- (a) Visible emission notations of Emission Unit ETC stack exhausts for Test Cell(s) 701 (Stack/Vent PTE 057), 704 (Stack/Vent PTE 065), 705 (Stack/Vent PTE 067), 706 (Stack/Vent PTE 069), 707 (Stack/Vent PTE 071), 709 (Stack/Vent PTE 075), 711 (Stack/Vent PTE 079), 32N (Stack/Vent PTE 008), 38N (Stack/Vent PTE 011), 39N (PTE

018) and 50 (Stack/Vent PTE 093) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.

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

D.2.8 Record Keeping Requirements

- (a) To document compliance with Condition D.2.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator which is not necessarily the responsible official, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

 - (4) Fuel supplier certifications.
 - (5) The name of the fuel supplier; and
 - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (b) To document compliance with Condition D.2.3 and Condition D.2.6, the Permittee shall:
 - (1) Maintain monthly records of the diesel fuel throughput in Test Cell 39N for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput in Test Cell 39N for engines greater than 600 horsepower.
 - (2) Maintain records of NO_x emissions on a monthly basis using the emissions factors in Condition D.2.6 in conjunction with monthly diesel fuel throughput in Test Cell 39N to calculate emissions from Test Cell 39N.
- (c) To document compliance with Condition D.2.7, the Permittee shall maintain records of visible

emission notations of Test Cell(s) 701 (Stack/Vent PTE 057), 704 (Stack/Vent PTE 065), 705 (Stack/Vent PTE 067), 706 (Stack/Vent PTE 069), 707 (Stack/Vent PTE 071), 709 (Stack/Vent PTE 075), 711 (Stack/Vent PTE 079), 32N (Stack/Vent PTE 008), 38N (Stack/Vent PTE 011), 39N (PTE 018) and 50 (Stack/Vent PTE 093) stack exhaust.

- (d) To document compliance with Condition D.2.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.3 and Condition D.2.6 shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the calendar 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).

SECTION D.3 FACILITY OPERATION CONDITIONS

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

- (g) Emission unit DTC consists of the following four (4) transmission reliability test cells, TC-107, TC-109, TC-111 and TC-112. The emissions from test cells TC-107, TC-109, TC-111 and TC-112 are exhausted out stacks PTE045, PTE043, PTE049 and PTE050, respectively. All test cells were constructed in 1985. The following engines can be used in any one of the individual test cells mentioned above:

Test Cell ID	Fuel Type	Engine Type	Estimated Maximum Engine Size in Horsepower
TC-107	Diesel	Reciprocating	1500
TC-109	Diesel	Reciprocating	1500
TC-111	Diesel	Reciprocating	1500
TC-112	Diesel	Reciprocating	1500

(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.3.1 Particulate Rules [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a) (Particulate Rules), particulate (PM) emissions from each of the Test Cells TC-107, TC-109, TC-111 and TC-112 shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

D.3.2 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Cells TC-107, TC-109, TC-111, TC-112:

- (a) Combined NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Cells TC-107, TC-109, TC-111, TC-112 shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The combined input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Cells TC-107, TC-109, TC-111, TC-112 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

Compliance Determination Requirements

D.3.3 Emission Factors and Performance Testing

- (a) The Permittee shall use the following NO_x emissions factors in conjunction with the actual throughput of diesel fuel fired in reciprocating engines utilized in Test Cells TC-107, TC-109, TC-111, TC-112 to determine compliance with emissions limitation in Condition D.3.2:

Reciprocating Engine Size (horsepower)	NO _x emissions factor
600 or less	0.6042 pounds per gallon of diesel fuel combusted
greater than 600	0.4384 pounds per gallon of diesel fuel combusted

(b) Monthly NO_x emissions shall be determined by the following equation:

$$\text{NO}_x \text{ emissions (tons)} = \frac{(0.6042 \text{ lbs/gal} \times \text{gal throughput for engines 600 hp or less} + 0.4384 \text{ lbs/gal} \times \text{gal throughput for engines greater than 600 hp})}{2000 \text{ lbs NO}_x \text{ per ton NO}_x}$$

- (c) Pursuant to IC 13-15-7-1, IC 13-15-7-2, 326 IC 2-1.1-9(2) and 326 IAC 2-1.1-11 the IDEM, OAQ reserves the authority to require the Permittee to conduct performance tests to verify the emissions factors of this permit.
- (d) After issuance of this permit, if the performance test results indicate a discrepancy between the emission factors and the actual emissions rate observed during the test, the Permittee shall inform IDEM, OAQ, Permits Branch of such variation within 90 days of the submission of performance test report to IDEM.
- (e) Pursuant to IC 13-15-7-1, IC 13-15-7-2 and 326 IC 2-1.1-9(2), the IDEM, OAQ may re-evaluate the permit conditions and emissions factors. IDEM, OAQ may, at its discretion, use the authority under IC 13-15-7-2, IC 13-15-7-2 and/or 326 IAC 2-1.1-9(2) to re-open and revise the permit to more closely reflect the actual performance test results using permit amendment or modification procedures.

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

D.3.4 Record Keeping Requirements

- (a) To document compliance with Condition D.3.2 and Condition D.3.3, the Permittee shall:
- (1) Maintain monthly records of the diesel fuel throughput in Test Cells TC-107, TC-109, TC-111, TC-112 for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput in Test Cells TC-107, TC-109, TC-111, TC-112 for engines greater than 600 horsepower.
 - (2) Maintain records of NO_x emissions on a monthly basis using the emissions factors in Condition D.3.3 in conjunction with monthly diesel fuel throughput in Test Cells TC-107, TC-109, TC-111, TC-112 to calculate combined NO_x emissions from Test Cells TC-107, TC-109, TC-111, TC-112. Records necessary to demonstrate compliance shall be available within thirty (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.3.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.2 and Condition D.3.3 shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the calendar 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).

SECTION D.4 FACILITY OPERATION CONDITIONS

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

- (h) Emission unit PTS12 consists of the following two (2) Transmission Test Stands, identified as Test Stand C-32 and C-33. Test Stands C-32 and C-33 were constructed in 1976 and 1981, respectively. The emissions from Test Stands C-32 and C-33 are exhausted out stacks 12060 and 12058, respectively. The following engines can be used in any one of the individual test stands mentioned above:

Test Cell ID	Fuel Type	Engine Type	Estimated Maximum Engine Size in Horsepower
C-32	Diesel	Reciprocating	600
C-33	Diesel	Reciprocating	600

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

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

D.4.1 Particulate Rules [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a)(Particulate Rules), particulate (PM) emissions from Test Stands C-32 and C-33 each shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

D.4.2 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Stand C-33:

- (a) NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Stand C-33 shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Stand C-33 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

Compliance Determination Requirements

D.4.3 Emission Factors and Performance Testing

- (a) The Permittee shall use the following NO_x emissions factors in conjunction with the actual throughput of diesel fuel fired in reciprocating engines utilized in Test Stand C-33 to determine compliance with emissions limitation in Condition D.4.2:

Reciprocating Engine Size (horsepower)	NO _x emissions factor
600 or less	0.6042 pounds per gallon of diesel fuel combusted
greater than 600	0.4384 pounds per gallon of diesel fuel combusted

- (b) Monthly NO_x emissions shall be determined by the following equation:

$$\text{NO}_x \text{ emissions (tons)} = \frac{(0.6042 \text{ lbs/gal} \times \text{gal throughput for engines 600 hp or less} + 0.4384 \text{ lbs/gal} \times \text{gal throughput for engines greater than 600 hp})}{2000 \text{ lbs NO}_x \text{ per ton NO}_x}$$

- (c) Pursuant to IC 13-15-7-1, IC 13-15-7-2, 326 IC 2-1.1-9(2) and 326 IAC 2-1.1-11 the IDEM, OAQ reserves the authority to require the Permittee to conduct performance tests to verify the emissions factors of this permit.
- (d) After issuance of this permit, if the performance test results indicate a discrepancy between the emission factors and the actual emissions rate observed during the test, the Permittee shall inform IDEM, OAQ, Permits Branch of such variation within 90 days of the submission of performance test report to IDEM.
- (e) Pursuant to IC 13-15-7-1, IC 13-15-7-2 and 326 IC 2-1.1-9(2), the IDEM, OAQ may re-evaluate the permit conditions and emissions factors. IDEM, OAQ may, at its discretion, use the authority under IC 13-15-7-2, IC 13-15-7-2 and/or 326 IAC 2-1.1-9(2) to re-open and revise the permit to more closely reflect the actual performance test results using permit amendment or modification procedures.

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

D.4.4 Record Keeping Requirements

- (a) To document compliance with Condition D.4.2 and Condition D.4.3, the Permittee shall:
 - (1) Maintain monthly records of the diesel fuel throughput in Test Stand C-33 for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput in Test Stand C-33 for engines greater than 600 horsepower.
 - (2) Maintain records of the NO_x emissions on a monthly basis using the emissions factors in Condition D.4.3 in conjunction with monthly diesel fuel throughput in Test Stand C-33 to calculate NO_x emissions from Test Stand C-33. Records necessary to demonstrate compliance shall be available within thirty (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.4.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.2 and Condition D.4.3 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 calendar 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).

SECTION D.5 FACILITY OPERATION CONDITIONS

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

- (i) Emission unit PTS14 consists of the following five (5) transmission test stands, identified as test stand O-1, O-2, O-24, O-25 and O-31. Test stands O-1, O-2, O-24, O-25 and O-31 were constructed in 1978, 1979, 1986, 1986, and 1984 respectively. The emissions from test stands O-1, O-2, O-24, O-25 and O-31 are exhausted out stacks 14041, 14038, 14024, 14023, and 14045, respectively. The following engines can be used in any one of the individual test stands mentioned above:

Test Cell ID	Fuel Type	Engine Type	Estimated Maximum Engine Size in Horsepower
O-1	Diesel	Reciprocating	2400
O-2	Diesel	Reciprocating	2400
O-24	Diesel	Reciprocating	600
O-25	Diesel	Reciprocating	600
O-31	Diesel	Reciprocating	2400

(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.5.1 Particulate Rules [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a)(Particulate Rules), particulate (PM) emissions from each of the Test Stands O-1, O-2, O-24, O-25 and O-31 shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

D.5.2 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Stands O-1, O-2, O-24, O-25 and O-31, the following conditions shall apply:

- (a) Combined NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Stands O-1 and O-2 shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The combined input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Stands O-1 and O-2 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.
- (c) Combined NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Stands O-24 and O-25 shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (d) The combined input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Stands O-24 and O-25 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating

engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

- (e) NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Stand O-31 shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (f) The input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Stand O-31 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

Compliance Determination Requirements

D.5.3 Emission Factors and Performance Testing

- (a) The Permittee shall use the following NO_x emissions factors in conjunction with the actual throughput of diesel fuel fired in reciprocating engines utilized in Test Stands O-1, O-2, O-24, O-25 and O-31 to determine compliance with emissions limitation in Condition D.5.2:

Reciprocating Engine Size (horsepower)	NO _x emissions factor
600 or less	0.6042 pounds per gallon of diesel fuel combusted
greater than 600	0.4384 pounds per gallon of diesel fuel combusted

- (b) Monthly NO_x emissions shall be determined by the following equation:

$$\text{NO}_x \text{ emissions (tons)} = \frac{(0.6042 \text{ lbs/gal} \times \text{gal throughput for engines 600 hp or less} + 0.4384 \text{ lbs/gal} \times \text{gal throughput for engines greater than 600 hp})}{2000 \text{ lbs NO}_x \text{ per ton NO}_x}$$
- (c) Pursuant to IC 13-15-7-1, IC 13-15-7-2, 326 IC 2-1.1-9(2) and 326 IAC 2-1.1-11 the IDEM, OAQ reserves the authority to require the Permittee to conduct performance tests to verify the emissions factors of this permit.
- (d) After issuance of this permit, if the performance test results indicate a discrepancy between the emission factors and the actual emissions rate observed during the test, the Permittee shall inform IDEM, OAQ, Permits Branch of such variation within 90 days of the submission of performance test report to IDEM.
- (e) Pursuant to IC 13-15-7-1, IC 13-15-7-2 and 326 IC 2-1.1-9(2), the IDEM, OAQ may re-evaluate the permit conditions and emissions factors. IDEM, OAQ may, at its discretion, use the authority under IC 13-15-7-2, IC 13-15-7-2 and/or 326 IAC 2-1.1-9(2) to re-open and revise the permit to more closely reflect the actual performance test results using permit amendment or modification procedures.

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

D.5.4 Record Keeping Requirements

- (a) To document compliance with Condition D.5.2(b) and Condition D.5.3, for Test Stands O-1 and O-2, maintain monthly records of the diesel fuel throughput for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput for engines greater than 600

horsepower. Maintain records of the combined NO_x emissions on a monthly basis using the emissions factors in Condition D.5.3 in conjunction with combined monthly diesel fuel throughput in Test Stands O-1 and O-2 to calculate NO_x emissions from Test Stand O-1 and O-2. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.

- (b) To document compliance with Condition D.5.2(d), for Test Stands O-24 and O-25, maintain monthly records of the diesel fuel throughput for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput for engines greater than 600 horsepower. Maintain records of the combined NO_x emissions on a monthly basis using the emissions factors in Condition D.5.3 in conjunction with combined monthly diesel fuel throughput in Test Stands O-24 and O-25 to calculate NO_x emissions from Test Stand O-24 and O-25. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
- (c) To document compliance with Condition D.5.2(f), for Test Stand O-31, maintain monthly records of the diesel fuel throughput for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput for engines greater than 600 horsepower. Maintain records of the NO_x emissions on a monthly basis using the emissions factors in Condition D.5.3 in conjunction with monthly diesel fuel throughput in Test Stand O-31 to calculate emissions from Test Stand O-31. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.2 and Condition D.5.3 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 calendar 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).

SECTION D.6 FACILITY OPERATION CONDITIONS

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

- (j) Cold solvent degreasing using mineral spirits identified as emission unit CSD. Emissions are in to the building. Each degreasing unit was installed prior to 1977.

(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.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2][326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-2 (Organic Solvent Degreasing Operations: Cold Cleaner Operation), for cold cleaning operations existing as of January 1, 1980 located in Marion County, the Permittee shall:
- (1) Equip the cleaner with a cover;
 - (2) Equip the cleaner with a facility for draining cleaned parts;
 - (3) Close the degreaser cover whenever parts are not being handled in the cleaner;
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (5) Provide a permanent, conspicuous label summarizing the operation requirements;
 - (6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.
- (b) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs existing as of July 1, 1990, located in Marion County, the Permittee shall ensure that the following requirements are met:
- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent

volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

- (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (c) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the Permittee shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION D.7 FACILITY OPERATION CONDITIONS

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

(k) Transmission Test Cell 702 identified as Emission Unit ID ETC702 consisting of one (1) reciprocating engine firing diesel fuel with a maximum capacity of 8.55 million Btu per hour and exhausting at Stack/ Vent ID PTE062. This emission unit can accommodate engines of greater than 600 horsepower. Constructed in 2002.

(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.7.1 Particulate Rules [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a) (Particulate Rules), particulate (PM) emissions from Emission Unit ID ETC702 shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

D.7.2 PSD Minor Limit [326 IAC 2-2] [Significant Source Modification 097-15550-00310]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Cell 702:

- (a) NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Cell 702 shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) Pursuant to Significant Source Modification 097-15550-00310 issued November 7, 2002, the input of diesel fuel to Test Cell 702 shall be less than 173,516 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

Compliance Determination Requirements

D.7.3 Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11]

During the period between thirty (30) and thirty six (36) months after issuance of this Part 70 Permit, in order to demonstrate compliance with Condition D.7.2, the Permittee shall perform NO_x emissions testing for Test Cell 702 utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

D.7.4 Emission Factors and Performance Testing

- (a) The Permittee shall use the following NO_x emissions factors in conjunction with the actual throughput of diesel fuel fired in reciprocating engines utilized in Test Cell 702 to determine compliance with emissions limitation in Condition D.7.2:

Reciprocating Engine Size (horsepower)	NO _x emissions factor
600 or less	0.6042 pounds per gallon of diesel fuel combusted
greater than 600	0.4384 pounds per gallon of diesel fuel combusted

- (b) Monthly NO_x emissions shall be determined by the following equation:

$$\text{NO}_x \text{ emissions (tons)} = \frac{(0.6042 \text{ lbs/gal} \times \text{gal throughput for engines 600 hp or less} + 0.4384 \text{ lbs/gal} \times \text{gal throughput for engines greater than 600 hp})}{2000 \text{ lbs NO}_x \text{ per ton}}$$

NO_x

- (c) Pursuant to IC 13-15-7-1, IC 13-15-7-2, 326 IC 2-1.1-9(2) and 326 IAC 2-1.1-11 the IDEM, OAQ reserves the authority to require the Permittee to conduct performance tests to verify the emissions factors of this permit.
- (d) After issuance of this permit, if the performance test results indicate a discrepancy between the emission factors and the actual emissions rate observed during the test, the Permittee shall inform IDEM, OAQ, Permits Branch of such variation within 90 days of the submission of performance test report to IDEM.
- (e) Pursuant to IC 13-15-7-1, IC 13-15-7-2 and 326 IC 2-1.1-9(2), the IDEM, OAQ may re-evaluate the permit conditions and emissions factors. IDEM, OAQ may, at its discretion, use the authority under IC 13-15-7-2, IC 13-15-7-2 and/or 326 IAC 2-1.1-9(2) to re-open and revise the permit to more closely reflect the actual performance test results using permit amendment or modification procedures.

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

D.7.5 Record Keeping Requirements

- (a) To document compliance with Condition D.7.2 and Condition D.7.4, the Permittee shall:
 - (1) Maintain monthly records of the diesel fuel throughput in Test Cell 702 for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput in Test Cell 702 for engines greater than 600 horsepower.
 - (2) Maintain records of NO_x emissions on a monthly basis using the emissions factors in Condition D.7.4 in conjunction with monthly diesel fuel throughput in Test Cell 702 to calculate NO_x emissions from Test Cell 702. Records necessary to demonstrate compliance shall be available within thirty (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.7.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.7.2 and D.7.4 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).

SECTION D.8

FACILITY OPERATION CONDITIONS

Insignificant Emitting Activities

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour. [326 IAC 6-1-2]
- (b) Emergency diesel generators not exceeding 1600 horsepower. [326 IAC 6-1-2(a)]
- (c) Emergency Stationary fire pumps. [326 IAC 6-1-2(a)]
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-1-2(a)]
 - (1) Shot Blast controlled with fabric filters. [326 IAC 6-1-2(a)]
- (e) Heat Treating [326 IAC 6-1-2(a)]
- (f) Activities or categories of activities with individual HAP emissions not previously identified. Any unit emitting greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP.
 - (1) Production welding - manganese [326 IAC 6-1-2(a)]

(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.8.1 Particulate Rules [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a) (Particulate Rules), particulate (PM) emissions from the natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, emergency diesel generators, emergency stationary fire pumps, grinding and machining operations, shot blast, heat treating operations and production welding each shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

Compliance Determination Requirements

D.8.2 Particulate Control

In order to comply with D.8.1, the fabric filters for particulate control shall be in operation and control emissions from shot blasting at all times that the shot blasting units are in operation.

SECTION D.9 FACILITY OPERATION CONDITIONS

Insignificant Emitting Activities

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

- (g) One (1) soil and groundwater remediation system, identified as Emission Unit ENCORE, installed in 2003, consisting of [326 IAC 2-4.1]:
 - (1) Soil vapor extraction (SVE) system, including miscellaneous piping and:
 - (A) seventeen (17) soil vapor extraction wells;
 - (B) one (1) 90 gallon knock-out tank, and
 - (C) one (1) 30 -horsepower blower rated at 750 standard cubic feet per minute (scfm), with emissions exhausting to one (1) stack identified as SVE vent.
 - (2) Dense non-aqueous phase liquid (DNAPL)/groundwater recovery system, including miscellaneous piping, pneumatic pumps and:
 - (A) four (4) recovery wells; and
 - (B) one (1) 1000 gallon DNAPL/water storage tank, with emissions exhausting to one (1) stack identified as SVE vent.

(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.9.1 HAP Minor Limit [326 IAC 2-4.1]

HAP emissions from Emission Unit ENCORE shall be less than ten (10) tons per twelve consecutive month period for any single HAP and shall be less than ten (10) tons per twelve consecutive month period of any combination of HAP. Compliance with this limit shall render the requirements of 326 IAC 2-4.1 (New Source Toxics Control) not applicable to Emission Unit ENCORE and shall render Allison Transmission Division a minor source of HAPs.

Compliance Determination Requirements

D.9.2 Testing Requirement

The Permittee shall collect a grab sample of the exhaust stream from the SVE vent to determine HAP emission rates using Tedlar Bag Sampling - SOP 2101, USEPA, 10/21/94, modified to fill tedlar bags directly from the pump rather than to use a vacuum box. Collected samples will be analyzed using Modified Method TO-15. The Permittee shall establish a sample collection and analysis plan that is maintained and available for review by IDEM, OAQ and OES that outlines quality control procedures for sampling and analysis. Samples shall be collected at the following frequency:

- (a) Once per month during steady state operations; and
- (b) Once at any time additional wells are brought on line or the air flow rate from the individual wells is increased.

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

D.9.3 Record Keeping Requirements

To document compliance with Condition D.9.1, the Permittee shall maintain the following records related to HAP emissions from Emission Unit:

- (a) Monthly samples of HAP concentrations;
- (b) Records of HAP concentrations from any additional samples collected;
- (c) Air flow data from the system;
- (d) Hours of operation; and
- (e) Monthly individual HAP and any combination of HAP emission rates based on information collected in (a) through (d) above.

D.9.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.9.1 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 BRANCH
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE**

**PART 70 OPERATING PERMIT
CERTIFICATION**

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
Part 70 Permit No.: 097-6898-00310

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

**PART 70 OPERATING PERMIT
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
Part 70 Permit No.: 097-6898-00310

This form consists of 2 pages

Page 1 of 2

<p>9 This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none">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); andC 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.

**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 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION**

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
Part 70 Permit No.: 097-6898-00310

<input type="checkbox"/> Natural Gas Only
<input type="checkbox"/> Alternate Fuel burned
From: _____ To: _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

**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 OPERATING PERMIT
 QUARTERLY DEVIATION and COMPLIANCE MONITORING 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
 Part 70 Permit No.: 097-6898-00310

Months: _____ to _____ Year: _____

<p>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".</p>	
<input checked="" type="radio"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input checked="" type="radio"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

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 QUALITY MANAGEMENT SECTION
 DATA COMPLIANCE
 Part 70 Usage Report
 (Submit Report Quarterly)**

Source Name: Allison Transmission Division of General Motors
 Source Address: 4700 West 10th Street, Indianapolis Indiana 46222
 Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222
 Part 70 Permit No.: T097-6898-00310
 Facility: BLR 1, BLR 2, BLR 3, BLR 4, and BLR 5
 Parameter: Filterable PM emissions
 Limit: 39.3 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Quarter: _____ **Year:** _____

Month	Type of Fuel	Amount combusted this month	Amount combusted in the pervious 11 months	Filterable PM Emission Factor	Monthly Filterable PM Emissions (tons/month)	Twelve month sum of filterable PM Emissions (tons/12 months)
	#4 Reclaimed					
	Distillate Fuel					
	Natural Gas					
	#4 Reclaimed					
	Distillate Fuel					
	Natural Gas					
	#4 Reclaimed					
	Distillate Fuel					
	Natural Gas					

- ☐ No deviation occurred in this month.
- ☐ Deviation/s occurred in this quarter.

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 QUALITY MANAGEMENT SECTION
 DATA COMPLIANCE
 Part 70 Usage Report
 (Submit Report Quarterly)**

Source Name: Allison Transmission Division of General Motors
 Source Address: 4700 West 10th Street, Indianapolis Indiana 46222
 Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222
 Part 70 Permit No.: T097-6898-00310
 Facility: Emission Unit ETC Test Cell 39N
 Parameter: Diesel fuel usage; limit the potential to emit NO_x in Test Cell 39N to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 Limit: The input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Cell Stand 39N shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

Quarter: _____ Year: _____

	Column 1				Column 2				Column 1 + Column 2			
	This Month				Previous 11 Months				12 Month Total			
	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)
Month												
Month												
Month												

- 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: _____

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 QUALITY MANAGEMENT SECTION
 DATA COMPLIANCE
 Part 70 Usage Report
 (Submit Report Quarterly)**

Source Name: Allison Transmission Division of General Motors
 Source Address: 4700 West 10th Street, Indianapolis Indiana 46222
 Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222
 Part 70 Permit No.: T097-6898-00310
 Facility: Emission Unit DTC (TC-107, TC-109, TC-111 & TC-112)
 Parameter: Combined diesel fuel usage; limit the combined potential to emit NO_x in Test Cells TC-107, TC-109, TC-111 & TC-112 to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 Limit: The combined input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Cells TC-107, TC-109, TC-111 & TC-112 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

Quarter: _____ Year: _____

	Column 1				Column 2				Column 1 + Column 2			
	This Month				Previous 11 Months				12 Month Total			
	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)
Month												
Month												
Month												

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this quarter.

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 QUALITY MANAGEMENT SECTION
 DATA COMPLIANCE
 Part 70 Usage Report
 (Submit Report Quarterly)**

Source Name: Allison Transmission Division of General Motors
 Source Address: 4700 West 10th Street, Indianapolis Indiana 46222
 Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222
 Part 70 Permit No.: T097-6898-00310
 Facility: Emission Unit PTS12 (Test Stand C-33 only)
 Parameter: Diesel fuel usage; limit the potential to emit NO_x in Test Stand C-33 to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 Limit: The input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Stand C-33 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

Quarter: _____ Year: _____

	Column 1				Column 2				Column 1 + Column 2			
	This Month				Previous 11 Months				12 Month Total			
	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)
Month												
Month												
Month												

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this quarter.

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 QUALITY MANAGEMENT SECTION
 DATA COMPLIANCE
 Part 70 Usage Report
 (Submit Report Quarterly)**

Source Name: Allison Transmission Division of General Motors
 Source Address: 4700 West 10th Street, Indianapolis Indiana 46222
 Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222
 Part 70 Permit No.: T097-6898-00310
 Facility: Emission Unit PTS14 (Test Stands O-1 and O-2 only)
 Parameter: Combined diesel fuel usage; limit the combined potential to emit NO_x in Test Stands O-1 and O-2 to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 Limit: The combined input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Stands O-1 and O-2 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

Quarter: _____ Year: _____

	Column 1				Column 2				Column 1 + Column 2			
	This Month				Previous 11 Months				12 Month Total			
	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)
Month												
Month												
Month												

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this quarter.

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 QUALITY MANAGEMENT SECTION
 DATA COMPLIANCE
 Part 70 Usage Report
 (Submit Report Quarterly)**

Source Name: Allison Transmission Division of General Motors
 Source Address: 4700 West 10th Street, Indianapolis Indiana 46222
 Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222
 Part 70 Permit No.: T097-6898-00310
 Facility: Emission Unit PTS14 (Test Stands O-24 and O-25 only)
 Parameter: Combined diesel fuel usage; limit the combined potential to emit NO_x in Test Stands O-24 and O-25 to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 Limit: The combined input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Stands O-24 and O-25 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

Quarter: _____ Year: _____

	Column 1				Column 2				Column 1 + Column 2			
	This Month				Previous 11 Months				12 Month Total			
	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)
Month												
Month												
Month												

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this quarter.

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 QUALITY MANAGEMENT SECTION
 DATA COMPLIANCE
 Part 70 Usage Report
 (Submit Report Quarterly)**

Source Name: Allison Transmission Division of General Motors
 Source Address: 4700 West 10th Street, Indianapolis Indiana 46222
 Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222
 Part 70 Permit No.: T097-6898-00310
 Facility: Emission Unit PTS14 (Test Stand O-31)
 Parameter: Diesel fuel usage; limit the potential to emit NO_x in Test Stand O-31 to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 Limit: The input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Stand O-31 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

Quarter: _____ Year: _____

	Column 1				Column 2				Column 1 + Column 2			
	This Month				Previous 11 Months				12 Month Total			
	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)
Month												
Month												
Month												

- ☐ No deviation occurred in this month.
- ☐ Deviation/s occurred in this quarter.

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 QUALITY MANAGEMENT SECTION
 DATA COMPLIANCE
 Part 70 Usage Report
 (Submit Report Quarterly)**

Source Name: Allison Transmission Division of General Motors
 Source Address: 4700 West 10th Street, Indianapolis Indiana 46222
 Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222
 Part 70 Permit No.: T097-6898-00310
 Facility: Emission Unit ETC702 (Test Cell 702)
 Parameter: Diesel fuel usage; limit the potential to emit NO_x in Test Cell 702 to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 Limit: The input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Cell 702 shall be less than 173,516 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

Quarter: _____ Year: _____

	Column 1				Column 2				Column 1 + Column 2			
	This Month				Previous 11 Months				12 Month Total			
	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)
Month												
Month												
Month												

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this quarter.

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 QUALITY MANAGEMENT SECTION
 DATA COMPLIANCE
 Part 70 Usage Report
 (Submit Report Quarterly)**

Source Name: Allison Transmission Division of General Motors
 Source Address: 4700 West 10th Street, Indianapolis Indiana 46222
 Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222
 Part 70 Permit No.: T097-6898-00310
 Facility: Emission Unit ENCORE
 Parameter: Single HAP and Combined HAP emissions
 Limit: HAP emissions from emission unit ENCORE shall be limited to less than ten (10) tons per twelve consecutive month for any single HAP and shall be limited to less than ten (10) tons per twelve consecutive month period of any combination of HAP.

Quarter: _____ Year: _____

	HAP Emissions this Month		HAP Emissions Previous 11 months		Twelve Consecutive Month Total	
	Single HAP	Combined HAP	Single HAP	Combined HAP	Single HAP	Combined HAP
Month 1						
Month 2						
Month 3						

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____
 Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

Attachment A

The following state rule have been adopted by reference by the Indianapolis Air Pollution Control Board and are enforceable by Indianapolis Office of Environmental Services (OES) using local enforcement procedures.

- (1) 326 IAC 1-1-1 through 1-1-3 and 1-1-5;
- (2) 326 IAC 1-2-1 through 1-2-91 (In addition, the IAPCB has adopted several local definitions);
- (3) 326 IAC 1-3-1 through 1-3-4;
- (4) 326 IAC 1-4-1 (The IAPCB added to the adoption by reference a citation to 61 FR 58482 (November 15, 1996));
- (5) 326 IAC 1-5-1 through 1-5-5;
- (6) 326 IAC 1-6-1 through 1-6-6;
- (7) 326 IAC 1-7-1 through 1-7-5
- (8) 326 IAC 2-3-1 through 2-3-5;
- (9) 326 IAC 2-4-1 through 2-4-6;
- (10) 326 IAC 2-6-1 through 2-6-4;
- (11) 326 IAC 2-7-1 through 2-7-18, 2-7-20 through 2-7-25;
- (12) 326 IAC 2-8-1 through 2-8-15, 2-8-17 through 2-8-10;
- (13) 326 IAC 2-9-1 through 2-9-14;
- (14) 326 IAC 2-10-1 through 2-10-5 (The IAPCB adoption adds the language "state or local" immediately after the word "federal" in 326 IAC 2-10-1);
- (15) 326 IAC 2-11-1, 2-11-3 and 2-11-4 (The IAPCB adoption adds the language "federal, state or local" immediately after the word "by" in 326 IAC 2-11-1);
- (16) 326 IAC 3-1.1-1 through 3-1.1-5;
- (17) 326 IAC 3-2.1-1 through 3-2.1-5;
- (18) 326 IAC 3-3-1 through 3-3-5;
- (19) 326 IAC 4-2-1 through 4-2-2;
- (20) 326 IAC 5-1-1 (a), (b) and c) (5), 5-1-2 (1), (2)(A), (2)c) (4), 5-1-3 through 5-1-5, 5-1-7;
- (21) 326 IAC 7-1.1-1 and 7-1.1-2;
- (22) 326 IAC 7-2-1;
- (23) 326 IAC 7-3-1 and 7-3-2;
- (24) 326 IAC 7-4-2(28) through (31) (Instead of adopting by reference 7-4-2(1) through (27), the IAPCB regulation substitutes the same requirements listed in a format in which the companies are alphabetized and emission points known to no longer exist have been deleted);
- (25) 326 IAC 8-1-0.5 except (b), 8-1-1 through 8-1-2, 8-1-3 except c), (g) and (i), 8-1-5 through 8-1-12;
- (26) 326 IAC 8-2-1 through 8-2-12 (The IAPCB adoption by reference of 8-2- 5 adds additional language specific to Zimmer Paper Products, Incorporated as subpart c);
- (27) 326 IAC 8-3-1 through 8-3-7;
- (28) 326 IAC 8-4-1 through 8-4-5, 8-4-6 (a)(6), (a)(8) and (a)(14) and 8-4-6(b)(1), (b)(3) and 8-4-6c) (In place of 8-4-6(b)(2), which was not adopted, the IAPCB adopted language requiring a pressure relief valve set to release at no less than four and eight-tenths (4.8) Kilo Pascals (seven-tenths (0.7) pounds per square inch)), 8-4-7 except (e), 8-4-8 and 8-4-9;
- (29) 326 IAC 8-5-1 through 8-5-4, 8-5-5 except (a)(3) and (d)(3);
- (30) 326 IAC 8-6-1 and 8-6-2;
- (31) 326 IAC 9-1-1 and 9-1-2;
- (32) 326 IAC 11-1-1 through 11-1-2;
- (33) 326 IAC 11-2-1 through 11-2-3;
- (34) 326 IAC 11-3-1 through 11-3-6;
- (35) 326 IAC 14-1-1 through 14-1-4;

Attachment A continued

- (36) 326 IAC 14-2-1 except 40 CFR 61.145;
- (37) 326 IAC 14-3-1;
- (38) 326 IAC 14-4-1;
- (39) 326 IAC 14-5-1;
- (40) 326 IAC 14-6-1;
- (41) 326 IAC 14-7-1;
- (42) 326 IAC 14-8-1 through 14-8-5;
- (43) 326 IAC 15-1-1, 15-1-2(a)(1), (a)(2) and (a)(8), 15-1-3 and 15-1-4;
- (44) 326 IAC 20-1-1 through 20-1-4 (In 20-1-3(b)(2) the adoption states that "permitting authority" means the commissioner of IDEM or the administrator of OES, whichever is applicable);
- (45) 326 IAC 20-2-1;
- (46) 326 IAC 20-3-1;
- (47) 326 IAC 20-4-1;
- (48) 326 IAC 20-5-1;
- (49) 326 IAC 20-6-1;
- (50) 326 IAC 20-7-1;
- (51) 326 IAC 20-8-1;
- (52) 326 IAC 20-9-1;
- (53) 326 IAC 20-14-1;
- (54) 326 IAC 20-15-1;
- (55) 326 IAC 20-16-1;
- (56) 326 IAC 20-17-1;
- (57) 326 IAC 20-18-1;
- (58) 326 IAC 20-19-1;
- (59) 326 IAC 20-20-1;
- (60) 326 IAC 20-21-1;
- (61) 326 IAC 21-1-1 (The adoption states that "or the administrator of OES" is added in (b));
- (62) 326 IAC 22-1-1 (The adoption states that "or the administrator of OES" is added in (b)).

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

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: Allison Transmission Division of General Motors Corporation
Source Location: 4700 West 10th Street, Indianapolis, Indiana 46222
County: Marion
SIC Code: 3568
Operation Permit No.: T097-6898-00310
Permit Reviewer: M. Caraher

The Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) have reviewed a Part 70 permit application from Allison Transmission Division of General Motors Corporation relating to the operation of a transmission manufacturing and testing plant under a Standard Industrial Classification Code (SIC) of 3568 (establishments primarily engaged in manufacturing mechanical power transmission equipment and parts).

Source Definition

This transmission manufacturing and testing operation consists of three (3) plants:

- (a) Plant 3 is located at 4700 West 10th Street, Indianapolis, IN 46254 and was most recently permitted under Certificate of Operation 0017-01 through 0017-44 issued April 23, 1992; and
- (b) Plants 12 and 14 are both located at 901 Grande Avenue, Indianapolis, IN 46254 and were most recently permitted under Certificate of Operation 0006-05 through 0006-18 issued March 26, 1992.

Since the three (3) plants are located in adjacent and/or contiguous properties, have the same SIC code and have common ownership and/or control, they will be considered one (1) source. The combination results in a new plant identification number of 097-00310 for the purposes of this review and issuance. Plant 3 was previously identified as plant identification number of 097-00017 and Plants 12 and 14 were previously identified as plant identification number 097-00006.

This transmission manufacturing and testing operation consists of a source with an on-site contractor, both listed as follows:

- (a) Plants 3, 12 and 14, the primary operation and considered one (1) source, located at 4700 West 10th Street, Indianapolis, IN 46254 and 901 Grande Avenue, Indianapolis, IN 46254, respectively; and
- (b) Environmental Corporate Remediation Company (herein known as ENCORE), the on-site remediation systems contractor supporting operation, located at 4700 West 10th Street, Indianapolis, IN 46254.

ENCORE is a wholly owned and operated subsidiary of the General Motors Corporation that is independent of Allison Transmission. While not actually manufacturing a product, ENCORE's remedial activities are considered support operations to Allison Transmission since such activities would not exist "but for" Allison's prior tetrachloroethylene (perchloroethylene, PCE) spill on adjacent or contiguous property. As such, IDEM, OAQ and OES have determined that Plant 3, 12 and 14 and the remedial activities operated by ENCORE, the on-site contractor, are each under the common

control of the General Motors Corporation, and are, therefore, considered one source. Therefore, the term "source" in the Part 70 documents refers to both the Allison Transmission Division of General Motors and Environmental Corporate Remediation Company, Inc. as one source.

One combined Part 70 permit will be issued to Allison Transmission Division of General Motors and Environmental Corporate Remediation Company (herein known as ENCORE). The review request response 097-17309-00310 issued by OES on April 1, 2003 will be incorporated in to the combined Part 70 Permit for Allison Transmission as an Insignificant Activity that is not specifically regulated.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) Union Iron Works Boiler, identified as emission unit BLR 1, capable of combusting filtered fuel oil (FFO) generated on site, #4 reclaimed oil, #2 fuel oil, with a maximum capacity of thirty six (36) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3109 and constructed in 1940.
- (b) One (1) Union Iron Works Boiler, identified as emission unit BLR 2, capable of combusting filtered fuel oil (FFO) generated on site, #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of thirty six (36) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3110 and constructed in 1940.
- (c) One (1) Union Iron Works Boiler, identified as emission unit BLR 3, capable of combusting filtered fuel oil (FFO) generated on site, #4 reclaimed oil, #2 fuel oil, with a maximum capacity of forty eight (48) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3112 and constructed in 1942.
- (d) One (1) Union Iron Works Boiler, identified as emission unit BLR 4, capable of combusting filtered fuel oil (FFO) generated on site, #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of seventy two (72) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3107 and constructed in 1953.
- (e) One (1) Union Iron Works Boiler, identified as emission unit BLR 5, capable of combusting filtered fuel oil (FFO) generated on site, #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of ninety six (96) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3108 and constructed in 1969.
- (f) Emission Unit ETC consists of the following twenty five (25) engineering development transmission test cells; 701, 704, 705, 706S, 707, 709, 710, 711, 712, 32N, 32S, 38N, 39N, 39S, 40N, 40S, 41N, 41S, 48N, 48S, 49N, 49S, 50, 51N and 51S. The emissions from each test cell 701, 704, 705, 706S, 707, 709, 710, 711, 712, 32N, 32S, 38N, 39N, 39S, 40N, 40S, 41N, 41S, 48N, 48S, 49N, 49S, 50, 51N and 51S are exhausted out Stack/Vent PTE 057, PTE 065, PTE 067 PTE 069, PTE 071, PTE 075, PTE 077, PTE 079, PTE 080, PTE 008, PTE 006, PTE 011, PTE 018, PTE 020, PTE 013, PTE 014, PTE 023, PTE 021, PTE 040, PTE 041, PTE 086, PTE 087, PTE 093, PTE 084, and PTE 082, respectively. All test cells were constructed prior to 1977. Test cell 39N was modified during the 1980's. The table below lists the fuel type and engine type that each cell is capable of accommodating based on the physical characteristics of each cell.

Test Cell ID	Fuel Type	Engine Type	Estimated Maximum Engine Size in Horsepower
701	Diesel	Reciprocating or Gas Turbine	4000

Test Cell ID	Fuel Type	Engine Type	Estimated Maximum Engine Size in Horsepower
704	Diesel	Reciprocating	2400
705	Diesel	Reciprocating or Gas Turbine	2400 for reciprocating; 4000 for gas turbine
706S	Diesel	Reciprocating	4000
707	Diesel	Reciprocating	2400
709	Diesel	Reciprocating	2400
710	Diesel	Reciprocating	1500
711	Diesel	Reciprocating	2400
712	Diesel	Reciprocating	1500
32N	Diesel	Reciprocating	2400
32S	Diesel	Reciprocating	1500
38N	Diesel	Reciprocating	4000
39N	Diesel	Reciprocating	2400
39S	Diesel	Reciprocating	1500
40N	Diesel	Reciprocating	1500
40S	Diesel	Reciprocating	1500
41N	Diesel	Reciprocating	1200
41S	Diesel	Reciprocating	1200
48N	Diesel	Reciprocating	1200
48S	Diesel	Reciprocating	1200
49N	Diesel	Reciprocating	1500
49S	Diesel	Reciprocating	1500
50	Diesel	Reciprocating	2400
51N	Diesel	Reciprocating	1200
51S	Gasoline or Diesel	Reciprocating	700

- (g) Emission unit DTC consists of the following four (4) transmission reliability test cells, TC-107, TC-109, TC-111 and TC-112. The emissions from test cells TC-107, TC-109, TC-111 and TC-112 are exhausted out stacks PTE045, PTE043, PTE049 and PTE050, respectively. All test cells were constructed in 1985. The following engines can be used in any one of the individual test cells mentioned above:

Engine Type	Type of Fuel	Heat Input (MMBtu/hr)	Model Number
Navistar	Diesel	2.14	DT446C
GM Diesel	Diesel	1.71	6V-53T

Engine Type	Type of Fuel	Heat Input (MMBtu/hr)	Model Number
Navistar	Diesel	2.14	DT466
Cummins	Diesel	2.42	N-14E

- (h) Emission unit PTS12 consists of the following two (2) transmission test stands, identified as test stand C-32 and C-33. Test stands C-32 and C-33 were constructed in 1976 and 1981, respectively. The emissions from test stands C-32 and C-33 are exhausted out stacks 12060 and 12058, respectively. The following engines can be used in any one of the individual test stands mentioned above:

Engine Type	Type of Fuel	Heat Input (MMBtu/hr)	Model Number
GM Diesel	Diesel	2.41	8V-92TA
GM Diesel	Diesel	2.76	8V-92TA

- (i) Emission unit PTS14 consists of the following six (6) transmission test stands, identified as test stand O-16, O-1, O-2, O-24, O-25 and O-31. Test stands O-16, O-1, O-2, O-24, O-25 and O-31 were constructed in 1989, 1978, 1979, 1986, 1986, and 1984 respectively. The emissions from test stands O-16, O-1, O-2, O-24, O-25 and O-31 are exhausted out stacks 3027, 14041, 14038, 14024, 14023, and 14045, respectively. The following engines can be used in any one of the individual test stands mentioned above:

Engine Type	Type of Fuel	Heat Input (MMBtu/hr)	Model Number
GM Diesel	Diesel	4.99	12V71
GM Diesel	Diesel	3.16	16V-149TI
GM Diesel	Diesel	3.16	16V-149TI
GM Diesel	Diesel	2.18	6V53T
GM Diesel	Diesel	2.18	6V53T
GM Diesel	Diesel	3.16	16V-49TI

- (j) Eleven (11) cold solvent degreasing units using mineral spirits identified as emission unit CSD. Emissions are vented inside the building. Each degreasing unit was installed prior to 1977.
- (k) Transmission Test Cell 702 identified as Emission Unit ID ETC702 consisting of one (1) reciprocating engine firing diesel fuel with a maximum capacity of 8.55 million Btu per hour and exhausting at Stack/ Vent ID PTE062. Constructed in 2002.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour. [326 IAC 6-1-2]
- (b) Combustion source flame safety purging on startup.
- (c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (d) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
 - (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (e) Refractory storage not requiring air pollution control equipment.
- (f) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (g) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (h) Cleaners and solvents characterized as follows:
 - (1) having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;
 - (2) having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F);the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (i) Closed loop heating and cooling systems.
- (j) Groundwater oil recovery wells.
- (k) Solvent recycling systems with batch capacity less than or equal to 100 gallons.
- (l) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (m) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (n) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.
- (o) Noncontact cooling tower systems with forced and induced draft cooling tower system not regulated under a NESHAP.
- (p) Quenching operations used with heat treating processes.
- (q) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (r) Heat exchanger cleaning and repair.
- (s) Process vessel degassing and cleaning to prepare for internal repairs.
- (t) Paved and unpaved roads and parking lots with public access [326 IAC 6-4].

- (u) Underground conveyors.
- (v) Asbestos abatement projects regulated by 326 IAC 14-10.
- (w) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (x) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (y) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (z) On-site fire and emergency response training approved by the department.
- (aa) Emergency diesel generators not exceeding 1600 horsepower. [326 IAC 6-1-2(a)]
- (bb) Emergency Stationary fire pumps. [326 IAC 6-1-2(a)]
- (cc) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-1-2(a)]
 - (a) Shot Blast controlled with fabric filters. [326 IAC 6-1-2(a)]
- (dd) Purge double block and bleed valves.
- (ee) Filter or coalescer media changeout.
- (ff) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (gg) Activities or categories of activities with individual HAP emissions not previously identified. Any unit emitting greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP.
 - (1) Production welding - manganese [326 IAC 6-1-2(a)]
- (hh) The following activities or categories not previously identified which have potential emissions less than significance thresholds listed under 326 IAC 2-7-1(21);
 - (1) Heat Treating [326 IAC 6-1-2(a)]
 - (2) The following tanks involved in plating operations;
 - Three copper rod tanks (Dept. 1492 tanks A6, A7, A8)
 - One copper strike tank (Dept. 1492 tank A5)
 - Five pickling (HCL) tanks (Dept. 0384, tank G22; Dept. 1292 tank J3; Dept. 1492 tanks A3, B1, B19)
 - One anodizing (H₂SO₄) tank (Dept. 1492 tank G3)
 - One manganese phosphate tank (Dept. 1492 tank F3)
 - One solution machining (HNO₃) tank (Dept. 1492 tank J6)
 - Two derusting tanks (Dept. 0384 tank G20; Dept. 1492 tank E5)
 - Three copper strip tanks (Dept. 1492 tanks I9, I10, I11)

- (ii) A soil and groundwater remediation system identified as ENCORE and installed in 2003, consisting of:
 - (1) Soil vapor extraction (SVE) system, including miscellaneous piping and:
 - (A) eighteen (18) soil vapor extraction wells;
 - (B) one (1) 40 gallon knock-out tank, and
 - (C) one (1) 10-horsepower blower rated at 600 standard cubic feet per minute (scfm), with emissions exhausting to one (1) stack identified as SVE vent.
 - (2) Dense non-aqueous phase liquid (DNAPL) groundwater recovery system, including miscellaneous piping, pneumatic pumps and:
 - (A) three (3) recovery wells;
 - (B) one (1) DNAPL/water separator, with emissions exhausting to one (1) stack identified as DNAPL/water separator vent; and
 - (C) one (1) 500 gallon DNAPL product storage tank, with emissions exhausting to one (1) stack identified as DNAPL storage vent.

Existing Approvals

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

- (a) Certificate of Operation 0017-01 through 0017-44, issued for Plant 3 on April 23, 1992.
- (b) Certificate of Operation 0006-05 through 0006-18, issued for Plant 12 and 14 on March 26, 1992.
- (c) Installation Permit 88-0006-01, issued on December 14, 1988 for Test Stand O-16 located at Plant 3 and the existing Test Stands O-24, O-25 located at Plant 12/14.
- (d) Exemption letter issued on March 10, 1998 for a paint booth identified as Emission Unit ID Paint98.
- (e) Interim Permit 097-15550i-00310 issued May 16, 2002 for Emission Unit ID ETC702.
- (f) Significant Source Modification 097-15550-00310 issued November 7, 2002 for Emission Unit ID ETC702.
- (g) Validation letter issued March 5, 2003 for operation of Emission Unit ID ETC702 pursuant to the conditions of Significant Source Modification 097-15550-00310 issued by OES on November 7, 2002.
- (h) Response to Review Request letter 097-17309-00310 issued by the City of Indianapolis OES on April 1, 2003 to Environmental Corporate Remediation Company, Inc. (ENCORE), the on-site remediation systems supporting operation. This review determined that installation of the soil and groundwater remediation system did not have any specifically regulated activities and that these operations located on contiguous or adjacent property would be combined in to the Title V Permit for Allison Transmission as an Insignificant Activity that is not specifically regulated.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

- (a) Operating Permit for Plant 3, issued on April 23, 1992;

Allowable Emissions listed under certificate numbers 0017-01 through 0017-07 (Emission Units BLR1 through BLR5, PST3 and ETC) for NO_x, CO and VOC.

Reason not incorporated: Allowable Emissions listed for certificate numbers 0017-01 through 0017-07 (Emission Units BLR1 through BLR5, PST3 and ETC) for NO_x, CO and VOC are not founded on any underlying applicable requirement, but were listed in the permit for billing purposes.

- (b) Operating Permit for Plant 3, issued on April 23, 1992;

Allowable Emissions listed under certificate numbers 0017-06 and 0017-07 (Emission Units PST3 and ETC) for PM and SO₂ and all conditions under 0017-06 as they relate to test stands C-26 and C-29.

Reason not incorporated: Allowable Emissions listed for certificate numbers 0017-06 and 0017-07 (Emission Units PST3 and ETC) for PM and SO₂ are based on Indianapolis Air Pollution Control Board Regulations which are no longer in effect and are not as stringent as 326 IAC regulations.

The PM emission limit of 0.6 pounds per million Btu was based on Indianapolis Air Pollution Control Board Regulation II-1(A)(2) (Particulate Emission From Fuel Combustion Equipment). With the adoption of 326 IAC 6, Regulation II-1 is no longer applicable to Marion County sources. The SO₂ emission limit of 0.6 pounds per million Btu for liquid fired fuel combustion equipment was based on Indianapolis Air Pollution Control Board Regulation IV-4(C)(3) (Sulfur Dioxide Emissions) which is now less stringent than 326 IAC 7-1.1-2 limit of 0.5 pounds per million Btu.

Test stand C-26 was moved off the site and Test Stand C-29 was eliminated as stated in the Allison Transmission follow up inspection letter dated April 10, 2002.

- (c) Operating Permit for Plant 12/14, issued on March 26, 1992;

Allowable Emissions listed under certificate numbers 0006-15 and 0006-16 (Emission Units PST12 and PST14) for NO_x, CO, and VOC.

Reason not incorporated: Allowable Emissions listed for certificate numbers 0006-15 and 0006-16 (Emission Units PST12 and PST14) for NO_x, CO and VOC are not founded on any underlying applicable requirement, but were listed in the permit for billing purposes.

- (d) Operating Permit for Plant 12/14, issued on March 26, 1992;

Allowable Emissions listed under certificate numbers 0006-15 and 0006-16 (Emission Units PST12 and PST14) for PM and SO₂.

Reason not incorporated: Allowable Emissions listed for certificate numbers 0006-15 and 0006-16 (Emission Units PST12 and PST14) for PM and SO₂ are based on Indianapolis Air Pollution Control Board Regulations which are no longer in effect and are not as stringent as 326 IAC regulations.

- (e) Installation Permit for Test Stands O-24, O-25, and O-16, issued on December 14, 1988;

Allowable Emissions listed under certificate number 0006-01 (Emission Units PST12) for PM and SO₂.

Reason not incorporated: Allowable Emissions listed for certificate numbers 0006-01

(Emission Units PST12) for PM and SO₂ are based on Indianapolis Air Pollution Control Board Regulations which are no longer in effect and are not as stringent as 326 IAC regulations.

- (f) Installation Permit for Test Stands O-24, O-25, and O-16, issued on December 14, 1988;

Allowable Emissions listed under certificate numbers 0006-01 (Emission Units PST12) for NO_x, CO and VOC.

Reason not incorporated: Allowable Emissions listed for certificate numbers 0006-01 (Emission Units PST12) for NO_x, CO and VOC are not founded on any underlying applicable requirement, but were listed in the permit for billing purposes.

- (g) Exemption letter issued on March 10, 1998 for a paint booth identified as Emission Unit ID Paint98.

All Conditions.

Reason not incorporated: This paint booth was relocated to a separate location owned and operated by Allison Transmission but not adjacent and or contiguous to this source. This paint booth was incorporated in to the MSOP 097-11931-00374 issued May 24, 2000 and located at 2840 Fortune Circle W., Suite A, Indianapolis, Indiana 46241. Allison Transmission submitted a written letter to OES on April 10, 2002 confirming that Emission Unit ID Paint98 had been removed as verified during OES inspection of March 18, 2002.

- (h) Certificate of Operation numbers 0017-13, 18, 20, 26, 27, 28, 29, 30, 37, 38, 39, 40, 41, 42, 43 and 44 for Plant 3, issued on April 23, 1992; Certificate of Operation numbers 0006-05, 10, 11, 12, 14, 17 and 18 for Plant 12/14, issued on March 26, 1992.

All Conditions.

Reason not incorporated: Allison Transmission notified OAQ and OES in the initial Title V application received October 10, 1996, that most solvent degreasing operations at the source have either been removed or converted to water based cleaners. Allison Transmission has identified these specific degreasing operations as having been removed or converted to water base cleaners. Therefore, these units no longer have the potential to emit regulated pollutants and do not require a permit. In addition, Allison Transmission filed an application with OES (097-14553-00310) on June 18, 2001 to officially identify the total VOC emission reductions achieved at the source since 1996. Allison Transmission stated that they have achieved an actual seventy five (75) ton reduction due to the decreased mineral spirits consumption and the discontinued use of perchloroethylene. Eleven (11) cold solvent degreasing units using mineral spirits identified as emission unit CSD are still in operation.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

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

An administratively complete Part 70 permit application for the purposes of this review was received on October 10, 1996. Additional information was received on November 5, 1998 in a Notice of

Deficiency (NOD1) response. On June 18, 2001, Allison Transmission filed an application with IDEM, OAQ and OES, 097-14553-00310, seeking emission credits with regard to VOC emissions reductions in Emission Unit CSD (Cold solvent degreasing using mineral spirits). The VOC emission reductions arise from discontinuing the use of some solvents, reductions in usage of solvents and from the removal of conveyORIZED degreasing and vapor degreasing equipment. IDEM, OAQ and OES acknowledge that Allison Transmission has identified a seventy five (75) ton decrease in actual VOC emissions and are closing the application tracking number 097-14553-00310 with the approval and issuance of the Part 70 Permit for this source. Allison Transmission submitted written comments to OES on August 2, 1999, August 17, 2000, December 26, 2002 and on January 6, 2003.

Following an OES inspection of March 18, 2002, Allison Transmission submitted a written notification on April 10, 2002, that Test Stands C-26 and C-29, chromium electroplating operations and the paint booth (Emission Unit ID Paint98) had all ceased operation at the source site. Chromium electroplating operations were never included in the Certificate of Operation 0017-01 through 0017-44, issued for Plant 3 on April 23, 1992 or in the Certificate of Operation 0006-05 through 0006-18, issued for Plant 12 and 14 on March 26, 1992. OES received a written notification from Allison Transmission on November 21, 2001 that chromium electroplating operations ceased on July 24, 2001. An inspection on December 11, 2001 verified that chromium electroplating operations had ceased.

A source meeting was held November 14, 2002 to discuss PM emission factors and exhaust air flow rates from the diesel fired reciprocating engines used in the test cells and test stands. Additional information and corrections were submitted by Allison on November 14, 2002.

An Interim Permit application (097-15550i-00310) and a Significant Source Modification application (097-15550-00310) were received on April 18, 2002. The Significant Source Modification to add Emission Unit ID ETC702 was issued November 8, 2002 and is incorporated into the draft Title V Permit.

ENCORE, the on-site remediation systems supporting operation, was issued a Response to Review Request letter (097-17309-00310) by OES on April 1, 2003. This Review Request response 097-17309-00310 is combined into the Title V Permit for Allison Transmission as an Insignificant Activity that is not specifically regulated.

Additional information was received on May 16, 2003 in a Request for Additional Information (RAI) Response No. 1 submitted by Allison Transmission to address PSD rule applicability for the historic and frequent replacement of engines in Emission Unit ID ETC. Specifically, Allison Transmission has identified that engine replacement in Emission Unit ID ETC is the normal method of operation and that engine replacement, as a component of the entire Emission Unit, constitutes routine replacement under 326 IAC 2-2 (Prevention of Significant Deterioration). In constituting routine replacement, Allison Transmission stated engine replacement is not a modification because it is not a physical or operational change. In addition, two (2) source meetings were held with Allison Transmission and IDEM, OAQ and OES on the historic and frequent replacement of engines in Emission Unit ID ETC. These meetings were held on August 14, 2003 and on September 3, 2003. As a result of the August 14th meeting, Allison Transmission submitted a ETC Test Cell Analysis detailing information on the nature and extent of engine replacements as well as support documentation of what Allison Transmission considers a physical change under PSD review rules. In response to the September 3rd meeting and OES's Request for Additional Information letter of September 29, 2003 to Allison Transmission, Allison submitted a letter on October 20, 2003 listing the maximum horsepower rating and fuel type that each individual Test Cell could accommodate as well as maximum potential to emit regulated pollutants from each Test Cell. See TSD *State Rule Applicability - Individual Facilities* under Emission Unit ID ETC for a detailed discussion of 326 IAC 2-2 applicability to engine replacement.

A statement of administrative completeness was contained in a Notice of Deficiency No. 1 mailed to the source on October 16, 1998.

Emission Calculations

See Appendix A of this document pages 1 through 10 of 10 for detailed emissions calculations.

Potential To Emit

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

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	greater than 100
PM-10	greater than 100
SO ₂	greater than 100
VOC	greater than 100
CO	greater than 100
NO _x	greater than 100

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

HAP's	Potential To Emit (tons/year)
Benzene	1.8
Propylene	4.3
Formaldehyde	0.5
Tetrachloroethylene (PCE)	7.7
Hydrogen Chloride	1.0
Manganese Compounds	1.0
TOTAL	17.6

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10, SO₂, VOC, CO and NO_x are each equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions
 Since this type of operation is one of the twenty eight (28) listed source categories under 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), the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2002 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	24.8
PM-10	23.2
SO ₂	132.9
VOC	22.9
CO	284.8

Pollutant	Actual Emissions (tons/year)
NO _x	247.3
HAPs	0.0

Potential to Emit 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 operating permit.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Emission Unit ID BLR 1 Boiler # 1 1940	0.15 lbs/MMBtu each & 39.3 tons per year combined (a)	24.4	1.88 lbs/MMBtu & 67.6 pounds per hour (b); 296.1 tons per year	2.5	38.9	216.2	0.0 / 0.6
Emission Unit ID BLR 2 Boiler # 2 1940			1.88 lbs/MMBtu & 67.6 pounds per hour (b); 296.1 tons per year				
Emission Unit ID BLR 3 Boiler # 3 1942			1.88 lbs/MMBtu & 90.2 pounds per hour (b); 395.1 tons per year				
Emission Unit ID BLR 4 Boiler # 4 1953			1.88 lbs/MMBtu & 135.2 pounds per hour (b); 592.2 tons per year				
Emission Unit ID BLR 5 Boiler # 5 1969			1.88 lbs/MMBtu & 180.3 pounds per hour (b); 789.7 tons per year				
Emission Unit ID ETC 24 engineering development transmission test cells Pre 1977	144.1	136.9	0.5 lbs/MMBtu for 701, 704, 705, 706S, 707, 709, 711, 32N, 38N & 50 (b); 730.1	208.0	2567.3	4660.3	4.3 / 6.7

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Emission Unit ID ETC Engineering development transmission test cell 39N 1980's	2.8	2.8	0.5 lbs/MMBtu (b); 2.6	3.3	8.6	< 40.0 (c)	0.0 / 0.0
Emission Unit ID DTC 4 transmission reliability test cells 1985	2.8	2.8	2.6	3.3	8.6	< 40 (c)	0.0 / 0.1
Emission Unit ID PTS12 transmission test stand C-32 1976	3.3	3.3	3.1	3.8	10.0	46.5	0.0 / 0.1
Emission Unit ID PTS12 transmission test stand C-33 1981	2.8	2.8	2.6	3.3	8.6	< 40.0	0.0 / 0.1
Emission Unit ID PTS14 transmission test stands O-1 & O-2 1978 & 1979, respectively	1.2	0.7	6.3	1.2	10.6	< 40.0 (c)	0.0 / 0.1
Emission Unit ID PTS14 transmission test stand O-31 1984	1.2	0.7	6.3	1.2	10.6	< 40.0 (c)	0.0 / 0.1
Emission Unit ID PTS14 transmission test stands O-24 & O-25 1986	2.8	2.8	2.6	3.3	8.6	< 40.0 (c)	0.0 / 0.1

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Emission Unit ID PTS14 transmission test stand O-16 1989	2.8	2.8	2.6	3.3	8.6	< 40.0 (c)	0.0 / 0.1
Cold solvent degreasing using mineral spirits pre 1977	----	----	----	22.0	----	----	----
Emission Unit ID ETC702 Transmission Test Cell 702 2002	0.8	0.7	6.0	1.1	10.1	< 40 (d)	Negligible
ENCORE On-site remediation systems 2003	---	---	---	7.7	---	---	7 .7 / 7.7
Total Emissions	203.9	180.7	3,134.0	264.0	2,690.5	5,243.0	7.7 / 15.6

- (a) Pursuant to 326 IAC 6-1-12
 - (b) Pursuant to 326 IAC 7-4-2 or 326 IAC 7-1.1-2
 - (c) Pursuant to 326 IAC 2-7-5(1) such that 326 IAC 2-2 does not apply
 - (d) Pursuant to Part 70 Significant Source Modification 097-15550-00310
- All other values represent unrestricted PTE or resultant PTE following an enforceable limitation for a limited pollutant

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	unclassifiable
SO ₂	maintenance attainment
NO ₂	attainment
Ozone	maintenance attainment
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.
- (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.

- (c) Fugitive Emissions
Since this type of operation is one of the twenty eight (28) listed source categories under 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), the fugitive emissions are counted toward determination of PSD applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) Boilers 1 through 5 identified as Emission Unit ID BLR 1 through BLR 5 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60.40 Subpart D Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971, because each unit is less than two hundred and fifty (250) million Btu per hour heat input and each unit commenced construction prior to August 17, 1971.

Boilers 1 through 5 identified as Emission Unit ID BLR 1 through BLR 5 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60.40b Subpart Db Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, because each unit is less than one hundred (100) million Btu per hour heat input and each unit commenced construction prior to June 19, 1984.

Boilers 1 through 5 identified as Emission Unit ID BLR 1 through BLR 5 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60.40c, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units because none of these boilers were constructed after June 9, 1989.

The 500 gallon DNAPL product storage tank associated with on-site remediation systems supporting operation is not subject to 40 CFR 60, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels) because it has a capacity less than the rule applicability threshold capacity of 40 cubic meters (10,560 gallons).

The engineering development transmission test cells 701 and 705 are each not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60.330 Subpart GG Standards of Performance for Stationary Gas Turbines because each test cell was constructed prior to the applicability date of the NSPS of October 3, 1977. Therefore, the requirements of 40 CFR 60.330 Subpart GG do not apply to this source.

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

- (b) This source is no longer subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20, (40 CFR 63.340, Subpart N National Emission Standards for Chromium Emissions from Hard and Decorative Chromium

Electroplating and Chromium Anodizing Tanks) due to Allison Transmission having removed all chrome electroplating operations. This was verified by OES inspection on March 18, 2002 and written notification of the removal was submitted by Allison Transmission in a letter to OES dated April 10, 2002.

This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20, (40 CFR 63.460, Subpart T National Emission Standards for Halogenated Solvent Cleaning) because the source does not utilize any solvent specifically identified in 40 CFR 63.460(a) in a total concentration greater than five percent (5.0%) by weight as a cleaning or drying agent in an individual batch vapor, in-line vapor, in-line cold or batch cold solvent cleaning machine. Wipe cleaning activities, such as using a rag containing halogenated solvent or a spray cleaner using halogenated solvent are not covered under the provisions of this Subpart.

Neither the source nor the five pickling (HCL) tanks identified as (hh) in the *Insignificant Activities* of this TSD are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20, 40 CFR 63.1155, Subpart CCC National Emission Standards for Hazardous Air Pollutants for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants because the source is not a major source of hazardous air pollutants (HAP) nor are the tanks parts of facilities that are major sources of HAP.

This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20, 40 CFR 63.9280, Subpart P P P P P, National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands because the source is not a major source of hazardous air pollutants (HAP) nor are the engine test cells/stands parts of facilities that are major sources of HAP.

This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20, (40 CFR 63, Subpart G G G G G National Emission Standards for Site Remediation) because this source is not a major source of hazardous air pollutants. This rule, promulgated on August 20, 2003, is applicable to site remediation activities occurring at a major source of hazardous air pollutants, as defined at 40 CFR Part 63.2. Allison Transmission does not have the potential to emit single or combined HAPs at major source levels, inclusive of the addition of the ENCORE on-site contractor's remediation systems supporting operation.

This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20, (40 CFR 63, Subpart Y Y Y Y Y, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines) because the source is not a major source of hazardous air pollutants (HAP). This rule, promulgated on August 29, 2003, is applicable to stationary turbines located at a major source of hazardous air pollutants. Allison Transmission does not have the potential to emit single or combined HAPs at major source levels

The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source does not have the potential to emit ten (10) tons per year or greater of a single HAP or twenty five (25) tons per year or greater of any combination of HAP.

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 20 and 40 CFR Part 63) applicable to this source.

- (c) Neither the source or any emission unit at the source is subject to the requirements of 40 CFR Part 64 Compliance Assurance Monitoring because no Pollutant Specific Emissions Unit (PSEU) at the source utilizes a control device to comply with an applicable requirement.

State Rule Applicability - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)

The source has submitted an Emergency Reduction Plan (ERP) on April 4, 1997. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 1-6-3 (Preventive Maintenance Plan)

A Preventive Maintenance Plan (PMP) should have been developed for each facility that was formerly 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 on-site a preventive maintenance plan as described in 326 IAC 1-6-3.

Based on OES's review a PMP is required for Emission Unit ID BLR 1 through BLR 5 and Emission Unit ID ETC.

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

This source is in one of the twenty eight (28) listed source categories under 326 IAC 2-2-1(y)(1)(V) (specifically, Fossil Fuel Boilers (or combinations thereof) Totaling More than Two Hundred and Fifty (250) Million Btu per Hour Heat Input) and has the potential to emit greater than one hundred (100) tons per year of PM-10, SO₂, CO, VOC and NO_x. Therefore, it is a major source pursuant to 326 IAC 2-2-1(y)(1).

This existing major PSD source commenced operation prior to August 8, 1977 and did not have a modification or have new construction that was reviewed and deemed a major modification under the PSD rule at the time of modification or construction. Unless otherwise stated in *State Rule Applicability - Individual Facilities* of this TSD, the installation of each test stand or test cell after August 8, 1977 has been considered by Allison Transmission to be a separate independent project as discussed in the NOD1 response letter of November 5, 1998. As a result of the Request for Additional Information (RAI) responses of May 16, 2003 and October 20, 2003, a detailed discussion of engine replacement and PSD rule applicability for Emission Unit ID ETC is stated in *State Rule Applicability - Individual Facilities* of this TSD.

326 IAC 2-3 (Emission Offset)

Marion County is attainment, maintenance attainment or unclassifiable for all criteria air pollutants. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) do not apply.

326 IAC 2-4.1 (New Source Toxics Control)

This existing source commenced operation prior to July 27, 1997 and does not have the potential to emit hazardous air pollutant (HAP) emissions of greater than ten (10) tons per year for any individual HAP nor does this source have the potential to emit HAP of greater than twenty five (25) tons per year for any combination of HAP. This source did not undergo a construction or a reconstruction of a major HAP source after July 27, 1997. Therefore, this source is not subject to 326 IAC 2-4.1. (See *State Rule Applicability - Individual Facilities - Insignificant Activities* of this TSD for a detailed discussion of the ENCORE on-site remediation systems supporting operation).

326 IAC 2-6 (Emission Reporting)

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

326 IAC 2-7 (Part 70 Permit Program)

This source has the potential to emit each criteria pollutant in excess of one hundred (100) tons per year. This source submitted its initial Part 70 Permit application on October 10, 1996 to the Indiana Department of Environmental Management Office of Air Quality (OAQ) and the City of Indianapolis

Office of Environmental Services (OES). Therefore, this source is subject to the requirements of 326 IAC 2-7 (Part 70 Permit Program).

326 IAC 5-1 (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) (Particulate Rules)

Sources or facilities located in Marion County which have the potential to emit greater than one hundred (100) tons per year of particulate matter or that have actual emissions greater than ten (10) tons per year and are not otherwise limited by 326 IAC 6-1-2(b) through (g) or 326 IAC 6-1-12 shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust air.

State Rule Applicability - Individual Facilities

Union Iron Works Boilers 1 through 5 (Emission Unit ID BLR 1 through BLR 5)

326 IAC 6-1-12 (Particulate Rules: Marion County)

- (a) Pursuant to 326 IAC 6-1-12 particulate (PM) emissions from emission units; BLR 1, BLR 2, BLR 3, BLR 4, and BLR 5 are limited to 0.15 lbs/MMBTU for each boiler and 39.3 tons/yr for all boilers combined.

Based on AP-42 emission factors (Table 1.3-1 (9/98) and Table 1.4-1(2/98)) and the heat capacity for each fuel type, these boilers are in compliance with 0.15 lbs/MMBTU emissions limitation (see below and TSD Appendix A pages 8 and 9 of 10).

Natural Gas:

$$\frac{1.6 \times 10^{-10} \text{ lbs}}{\text{cubic ft.}} \times \frac{10^6 \text{ Btu}}{\text{MMBtu}} = \frac{0.008 \text{ lbs}}{\text{MMBtu}}$$

Distillate Fuel Oil:

$$\frac{0.002 \text{ lbs}}{\text{gal}} \times \frac{10^6 \text{ Btu}}{142,500 \text{ Btu}} = \frac{0.014 \text{ lbs}}{\text{MMBtu}}$$

Reclaimed Fuel Oil:

$$\frac{\frac{0.007 \text{ lbs}}{\text{gal}}}{\frac{143,460 \text{ Btu}}{\text{gal}}} \times \frac{10^6 \text{ Btu}}{\text{MMBtu}} = \frac{0.05 \text{ lbs}}{\text{MMBtu}}$$

Filtered Fuel Oil:

$$\frac{\frac{0.01 \text{ lbs}}{\text{gal}}}{\frac{141,870 \text{ Btu}}{\text{gal}}} \times \frac{10^6 \text{ Btu}}{\text{MMBtu}} = \frac{0.07 \text{ lbs}}{\text{MMBtu}}$$

(b) Pursuant to 326 IAC 6-1-12(g) (Particulate Rules: Marion County), Allison Transmission shall comply with the following:

- (1) Maintain monthly fuel usage records for each boiler identified in subsection 326 IAC 6-1-12(a) that contains sufficient information to estimate emissions, including:
 - (A) Boiler identification and heat capacity;
 - (B) Fuel usage for each type of fuel; and
 - (C) Heat content of fuel.
- (2) Within thirty (30) days of the end of each calendar quarter, a written report shall be submitted to the Indianapolis Office of Environmental Services of the monthly emissions of the boilers identified in subsection 326 IAC 6-1-12(a) and including the information in subdivision 326 IAC 6-1-12(g)(1).
- (3) Compliance with the annual tons per year limitation shall be based on the sum of the monthly emissions for each twelve (12) consecutive month period.
- (4) The fuel usage records shall be maintained at the source for three (3) years and available for an additional two (2) years. The records shall be made available to the Department or its designated representative upon request.

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

Pursuant to 326 IAC 6-2-1(e), if any limitation established by this rule is inconsistent with applicable limitations contained in 326 IAC 6-1, then the limitation(s) contained in 326 IAC 6-1 prevail. Because particulate matter emissions from Emission Unit ID BLR 1 through BLR 5 are each subject to applicable limitations pursuant to 326 IAC 6-1-12 (Particulate Rules: Marion County), 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating) does not apply.

326 IAC 7-4-2 (Sulfur Dioxide Emission Limitations: Marion County)

The following emission units, BLR 1, BLR 2, BLR 3, BLR 4, and BLR 5 have specific emission limits listed under 326 IAC 7-4-2(8). The listing under 326 IAC 7-4-2(8) identifies these units under a previous source operating name of Detroit Diesel Allison - Plant 3. The SO₂ emission rates for these emission units are listed below:

Emission Unit	Pounds per million Btu	Pounds per hour
BLR 1	1.88	67.6
BLR 2	1.88	67.6
BLR 3	1.88	90.2
BLR 4	1.88	135.2

Emission Unit	Pounds per million Btu	Pounds per hour
BLR 5	1.88	180.3

Pursuant to 326 IAC 7-2-1(c)(3), the Permittee shall submit reports of calendar month average sulfur content, heat content, fuel consumption and sulfur dioxide emission rate in pounds per million Btu upon request. Pursuant to 326 IAC 7-2-1(e)(2), compliance shall be determined on a calendar month average sulfur dioxide emission rate in pounds per million Btu. Pursuant to 326 IAC 7-2-1(e), fuel sampling and analysis data shall be collected pursuant to the procedures specified in 326 IAC 3-7-4 (Monitoring Requirements: Fuel oil sampling; analysis methods) for oil combustion. Computation of calculated sulfur dioxide emission rates from fuel sampling and analysis data shall be based on AP-42 emission factors unless other emission factors based on site-specific sulfur dioxide emission measurements are approved by the Commissioner and the USEPA.

Based on AP-42 emission factors and the fuel sulfur content(s) supplied in the application, these emissions units are in compliance with 326 IAC 7-4-2 and as calculated below for Emission Unit ID BLR5 burning reclaimed oil (see TSD Appendix A pages 8 and 9 of 10).

$$150(0.655) \text{ lbs SO}_2 / 1000 \text{ gallons} \times \text{gal} / 143,460 \text{ Btu} \times 10^6 \text{ Btu} / \text{MMBtu} = 0.68 \text{ pounds per million Btu}$$
$$0.68 \text{ pounds per million Btu} \times 96 \text{ million Btu per hour max heat input} = 65.28 \text{ pounds per hour}$$

However, Allison Transmission combusts reclaimed oil and filtered fuel oil in these units as well as natural gas and distillate fuel oil. As a result, fuel sulfur content may vary for the liquid fuel(s) but shall not be allowed to exceed an equivalent fuel sulfur content such that compliance with the short term SIP limitations are not exceeded (see TSD Appendix A page 9 of 10).

Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content for Distillate Oil, Reclaim #4 and Filtered Fuel Oil does not exceed 1.89, 1.80 and 1.70 percent by weight, respectively, by either:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from emission units BLR1, BLR2, BLR3, BLR4 and/or BLR5 in accordance with 326 IAC 3-6, utilizing the procedures in 40 CFR 60, Appendix A, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

329 IAC 13-3-2 (Used Oil Specifications)

Pursuant to 329 IAC 13-3-2 (Used Oil Specifications), used oil burned for energy recovery that is classified as off-specification used oil fuel shall comply with the provisions of 329 IAC 13-8 (Used Oil Burners Who Burn Off-specification Used Oil For Energy Recovery), including:

- (a) Receipt of an EPA identification number as outlined in 329 IAC 13-8-3 (Notification),

- (b) Compliance with the used oil storage requirements specified in 329 IAC 13-8-5 (Used Oil Storage), and
- (c) Maintaining records pursuant to 329 IAC 13-8-6 (Tracking).

The burning of mixtures of used oil and hazardous waste that is regulated under 329 IAC 3.1 is prohibited at this source.

Emission Unit ID ETC (25 engineering development transmission test cells)

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

Emission Unit ID ETC consists of twenty (25) engineering and development transmission test cells that utilize diesel fired and/or gasoline fired engines to test transmissions. These test cells exist solely to conduct research on prototype transmissions, to diagnose problems encountered by transmissions in use in the field and to identify improvements that may be made to address problems encountered in the field. From a physical standpoint, a test cell is essentially a room or a structure equipped with fuel delivery systems and an exhaust stack. Typical test cell components include the fuel fired engine, the transmission, fuel delivery systems, exhaust air handling equipment and support equipment including diagnostic equipment to gauge transmission performance.

All test cells comprising Emission Unit ID ETC were constructed prior to August 8, 1977 and each test cell comprising Emission Unit ID ETC has the potential to emit regulated pollutants in excess of minimum permitting thresholds (see TSD Appendix A pages 4 and 6 of 10). Initial installation permitting of these test cells prior to August 8, 1977 did not list or limit fuel firing capacity. The combined potential to emit NO_x, CO, VOC and SO₂ from the engine installation configuration prior to August 8, 1977 each exceeds one hundred (100) tons per year (see TSD Appendix A pages 4 and 6 of 10). Therefore, the source is an existing major source pursuant to 326 IAC 2-2.

Allison Transmission has had historic and frequent engine replacement(s) in the test cells that comprise Emission Unit ID ETC that were not reviewed and deemed a major modification under the PSD rule at the time of modification or replacement. In the RAI response letters of May 16, 2003 and October 20, 2003, Allison Transmission has identified that the normal operating scenario for these research and development, R & D, test cells is to rotate and/or replace engines and transmissions to test transmissions. Engines are easily moved in and out of the test cells oftentimes being located on wheels to facilitate the ease of engine replacement within a test cell. Thus, the design and intended normal operation of these emission units includes the utilization of whatever engine is appropriate for the transmission to be tested whether that specific engine has been previously specifically identified or not.

Because of the needed flexibility for testing, the test cells are constructed to accommodate a variety of engine/transmission combinations so that when a request from a customer to conduct a specific test is received, Allison Transmission can conduct the testing without the need to alter the physical or operational characteristics of the test cell.

In support of its claim that engine replacement constitutes the normal operation of the source, Allison Transmission submitted information on the frequency of engine replacements in these R&D test cells. Allison Transmission conducts testing on at least 200 engine/transmission combinations during a given year. An individual test cell may use up to 40 different engine/transmission combinations per year. A preliminary recheck of engine replacement data for all test cells by Allison Transmission indicates there have been at least 108 engine replacements for these test cells since 1996 with an average of 15 engine replacements per year. Specifically, for Test Cell 51S, the engine has been replaced at least twelve times in the previous five years.

Each test cell operates by testing a transmission with its associated engine type to evaluate the performance and reliability of the transmission. Because one transmission type may be used with several different engines in customer vehicles, a single transmission may need to be tested with more than one engine. Similarly, one engine may be suitable to test several types of transmissions. For

each test to be conducted, the facility must determine the appropriate engine type for a particular model transmission necessary to obtain the desired test data and locate that transmission and engine combination in an appropriately sized test cell. Utilizing and replacing engines up to the size and fuel type listed for a given test cell is considered part of the normal operation of the test cell.

As part of the October 20, 2003 RAI response, Allison Transmission identified the largest engine size, in terms of rated horsepower and fuel type, that each ETC test cell could accommodate. The largest engine size that each test cell can accommodate is listed in the Emission Unit description for Emission Unit ETC.

Allison Transmission researched past historical data on physical or operational adjustments to each of these test cells. In researching this data, Allison Transmission reviewed all 25 test cells to identify any new installations, any change to the size of the test cell(s), any change to individual fuel type, any change to individual fuel delivery capacity and any change to air handling equipment since 1977. Allison Transmission has identified one cell, Test Cell 39N, where the stack diameter may have been changed from a ten inch diameter stack to a twelve inch diameter stack during the 1980's, thereby potentially increasing the engine size(s) that this cell could potentially accommodate. Complete records on the exact date of the change do not exist. Because detailed information on the physical change to this test cell does not exist, Allison Transmission will accept a fuel use restriction for Test Cell 39N that is equivalent to NO_x emissions of less than forty (40) tons per twelve consecutive month period with compliance determined at the end of each twelve consecutive month period such that compliance with 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) is demonstrated. Based on emission reporting pursuant to 326 IAC 2-6 (Emission Reporting), actual NO_x emissions from Test Cell 39N have not exceeded forty tons per twelve consecutive month period.

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Cell 39N, the following conditions shall apply:

- (a) The input of diesel fuel to Test Cell 39N shall be less than 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month (this usage limit is required to limit the potential to emit of Nitrogen Oxides, at an emission factor of 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted (see TSD Appendix A page 4 of 10; value represents the AP-42 emission factor of 4.41 pounds NO_x/MMBtu converted to pounds per gallon based on 137,000 Btu per gallon), to less than forty (40) tons per twelve (12) consecutive month period).

$$132,400 \text{ gallons/yr} \times 0.6042 \text{ lbs NO}_x/\text{gallon} \times \text{ton}/2000 \text{ lbs} = 39.9 \text{ tons NO}_x/\text{yr}$$

- (b) The NO_x emissions from Test Cell 39N shall not exceed 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted.

Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Cell 39N.

All test cells comprising Emission Unit ID ETC were constructed prior to August 8, 1977 and, with the exception of Test Cell 39N, have not undergone a construction, reconstruction or modification. Therefore, Emission Unit ID ETC is in compliance with the provisions of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements).

326 IAC 6-1-2(a) (Particulate Rules)

Emission Unit ID ETC is not specifically listed in 326 IAC 6-1-12 nor is the emission unit performing a specifically regulated source operation as identified in 326 IAC 6-1-2(b) through (g). 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) does not apply to this emission unit as liquid and gaseous fuels and combustion air will not be considered process weight as defined pursuant to 326 IAC 1-2-59 ("Process Weight; Weight Rate" Defined).

Pursuant to 326 IAC 6-1-2(a) (Particulate Rules), sources or facilities located in Marion County which

have the potential to emit greater than one hundred (100) tons per year of particulate matter or that have actual emissions greater than ten (10) tons per year and are not otherwise limited by 326 IAC 6-1-2(b) through (g) or 326 IAC 6-1-12 shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust air. Therefore, pursuant to 326 IAC 6-1-2(a), each test cell comprising Emission Unit ID ETC shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust air. Based on the calculation below for Test Cell 705, Emission Unit ID ETC is in compliance with 326 IAC 6-1-2(a).

$(4.87 \text{ tons PM/year}) / (8760 \text{ hours/yr} / \text{ton}/2000 \text{ pounds PM}) \times \text{hour}/60 \text{ minutes} \times 7000 \text{ grains/pound} \times \text{minute}/5600 \text{ cf} = 0.02 \text{ grains per standard cubic foot of exhaust air}$

In utilizing the emission factor for diesel fuel combustion, the uncontrolled ton per year emission rate for Test Cell 39N does not exceed the major modification thresholds under 326 IAC 2-2 (Prevention of Significant Deterioration) of twenty five (25) tons of PM or fifteen (15.0) tons of PM10 (see TSD Appendix A page 4 and 6 of 10). Therefore an equivalent mass short term emission rate does not need to be established in order to equate grains per dry standard cubic foot of exhaust air to an hourly mass emission rate such that 326 IAC 2-2 (Prevention of Significant Deterioration) is not applicable.

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

326 IAC 7-1.1-2 applies to facilities with potential to emit greater than 10 pounds per hour or 25 tons per year. Emission Unit ETC Test Cells 701, 704, 705, 706S, 707, 709, 711, 32N, 38N and 50 each have the potential to emit SO₂ of greater than 25 tons per year (see TSD Appendix A page 6 of 10). Therefore, 326 IAC 7-1.1-2 applies to each of these Test Cells. Pursuant to 326 IAC 7-1.1-2, the sulfur dioxide (SO₂) emissions are limited to five tenths (0.5) pounds per million Btu of heat input for distillate oil combustion. Pursuant to 326 IAC 7-2-1(e)(2), compliance shall be determined on a calendar month average sulfur dioxide emission rate in pounds per million Btu.

Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths pounds (0.5) per million Btu heat input by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Based on AP-42 emission factors for diesel engines less than 600 horsepower as well as greater than 600 horsepower (Tables 3.3 and 3.4 (10/96)), each test cell is in compliance with 326 IAC 7-1.1-2 (see TSD Appendix A page 6 of 10).

$$1.01(0.5\%S) \text{ pounds} / \text{million Btu} = 0.5 \text{ pounds} / \text{million Btu}$$

326 IAC 8-1-6 (General Provisions Relating to VOC Rules: General Reduction Requirements for New Facilities)

This rule applies to new facilities (as of January 1, 1980) which have potential emissions of twenty

five (25) tons or more per year of VOC and which are not otherwise regulated by any other provisions of 326 IAC 8 (Volatile Organic Compound Rules). Emission Unit ID ETC was existing as of January 1, 1980 and there are no other provisions of 326 IAC 8-6 (Volatile Organic Compound Rules) applicable to Emission Unit ETC. Test Cell 39N, which was modified during the 1980's, does not have potential emissions of twenty five (25) tons or more per year of VOC (see TSD Appendix A pages 4 and 6 of 10). Therefore, there are no provisions of 326 IAC 8-1-6 (General Provisions Relating to VOC Rules: General Reduction Requirements for New Facilities) applicable to Test Cell 39N or to Emission Unit ETC.

326 IAC 8-6 (Organic Solvent Emission Limitations)

There are no provisions of 326 IAC 8-6 (Volatile Organic Compound Rules) applicable to Emission Unit ETC. Emission Unit ID ETC was existing as of January 1, 1980. Potential to emit exceeds one hundred (100) tons per year (see TSD Appendix A pages 4 and 6 of 10). However, 326 IAC 8-6 (Organic Solvent Emission Limitations) does not apply to Emission Unit ETC because the process involves fuel combustion and not the use of organic solvents utilized as dissolvers, viscosity reducers, carrying agents or cleaning agents. Therefore, 326 IAC 8-6 does not apply to Emission Unit ETC.

Emission Unit ID DTC (4 transmission reliability test cells)

326 IAC 2-2 (Prevention of Significant Deterioration)

Allison Transmission is a major source because this source is in one of the twenty eight (28) listed source categories under 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 has the potential to emit greater than one hundred (100) tons per year of PM-10, SO₂, CO, VOC and NO_x. Therefore, it is a major source pursuant to 326 IAC 2-2-1(y)(1). All modifications and construction of emitting units after August 8, 1977 are reviewed under the PSD regulation. The potential to emit for emission unit ID DTC has been limited (see below) such that the PSD Regulation 326 IAC 2-2 shall not apply.

In 1985 Allison Transmission installed four Test Cells identified as TC-107, TC-109, TC-111, TC-112 to the DTC test cell area. These units were identified in previous installation permitting and in the Certificate of Operation 0017-06 issued April 23, 1992. However, the addition of these units did not have potential to emit NO_x enforceably restricted such that the PSD Regulation 326 IAC 2-2 did not apply nor were there any PM or SO₂ emission limitations contained in installation permitting. Since these four test cells were installed at the same time, IDEM, OAQ and OES have considered the installation of these four cells as one project pursuant to the PSD regulation. Based on OES' review, the combined NO_x emissions from these four test cells exceeds the PSD significance level of forty (40) tons per year for NO_x (see TSD Appendix A page 7 of 10). No other criteria pollutant's combined potential emission rate from the modification exceeds its corresponding PSD significance level emission rate. Based upon actual emissions statements from reporting pursuant to 326 IAC 2-6 (Emission Reporting), criteria pollutant emissions did not exceed major modification thresholds under 326 IAC 2-2 (Prevention of Significant Deterioration).

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Cells TC-107, TC-109, TC-111, TC-112, the following conditions shall apply:

- (a) The combined input of diesel fuel to Test Cells TC-107, TC-109, TC-111, TC-112 shall not exceed 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month (this usage limit is required to limit the potential to emit of Nitrogen Oxides, at an emission factor of 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted (see TSD Appendix A page 7 of 10; value represents the AP-42 emission factor of 4.41 pounds NO_x/MMBtu converted to pounds per gallon based on 137,000 Btu per gallon), to less than forty (40) tons per twelve (12) consecutive month period).

$$132,400 \text{ gallons/yr} \times 0.6042 \text{ lbs NO}_x/\text{gallon} \times \text{ton}/2000 \text{ lbs} = 39.9 \text{ tons NO}_x/\text{yr}$$

- (b) The NO_x emissions from Test Cells TC-107, TC-109, TC-111, TC-112 shall each not exceed 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted.

Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Cells TC-107, TC-109, TC-111, TC-112.

326 IAC 6-1-2(a) (Particulate Rules)

Emission Unit ID DTC is not specifically listed in 326 IAC 6-1-12 nor is the emission unit performing a specifically regulated source operation as identified in 326 IAC 6-1-2(b) through (g). 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) does not apply to this emission unit as liquid and gaseous fuels and combustion air will not be considered process weight as defined pursuant to 326 IAC 1-2-59 ("Process Weight; Weight Rate" Defined).

Pursuant to 326 IAC 6-1-2(a) (Particulate Rules), sources or facilities located in Marion County which have the potential to emit greater than one hundred (100) tons per year of particulate matter or that have actual emissions greater than ten (10) tons per year and are not otherwise limited by 326 IAC 6-1-2(b) through (g) or 326 IAC 6-1-12 shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust air. Therefore, pursuant to 326 IAC 6-1-2(a), each test cell comprising Emission Unit ID DTC shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust air. Based on the calculation below for Transmission Reliability Test Cell TC-112, Emission Unit ID DTC is in compliance with 326 IAC 6-1-2(a) (see TSD Appendix A page 7 of 10).

$$(3.29 \text{ tons PM/year}) / (8760 \text{ hours/yr} / \text{ton}/2000 \text{ pounds PM}) \times \text{hour}/60 \text{ minutes} \times 7000 \text{ grains/pound} \times \text{minute}/7047 \text{ cf} = 0.01 \text{ grains per standard cubic foot of exhaust air}$$

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

326 IAC 7-1.1-2 applies to emission units with potential to emit greater than 10 pounds per hour or 25 tons per year. Emissions Unit DTC does not have the potential to emit SO₂ greater than ten (10) pounds per hour or twenty five (25) tons per year (see TSD Appendix A page 7 of 10). Therefore, 326 IAC 7-1.1-2 does not apply to Emission Unit ID DTC.

326 IAC 8 (Volatile Organic Compound Rules)

There are no provisions of 326 IAC 8 (Volatile Organic Compound Rules) applicable to Emission Unit DTC. Potential to emit does not exceed twenty five (25) tons per year (see TSD Appendix A page 7 of 10). Therefore, neither 326 IAC 8 or 326 IAC 8-1-6 (General Provisions Relating to VOC Rules: General Reduction Requirements for New Facilities) applies to Emission Unit DTC.

Emission Unit ID PTS12 (2 transmission test stands)

326 IAC 2-2 (Prevention of Significant Deterioration)

Allison Transmission is a major source because this source is in one of the twenty eight (28) listed source categories under 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 has the potential to emit greater than one hundred (100) tons per year of PM-10, SO₂, CO, VOC and NO_x. Therefore, it is a major source pursuant to 326 IAC 2-2-1(y)(1). All modifications and construction of emitting units after August 8, 1977 are reviewed under the PSD regulation. Test stand C-32 was constructed in 1976, which is prior to August 8, 1977 and has not had a major modification under the PSD rules. Therefore, 326 IAC 2-2 does not apply to test stand C-32.

In 1981, Allison Transmission installed one test stand identified as C-33 to the PTS12 test stand area. This unit was identified in previous installation permitting and in the Certificate of Operation 0006-16 issued March 26, 1992. However, the addition of this unit did not have potential to emit NO_x enforceably restricted such that the PSD Regulation 326 IAC 2-2 did not apply nor were there any PM or SO₂ emission limitations contained in installation permitting. Based on OES' review, the potential to emit NO_x from this test stand exceeds the PSD significance level of forty (40) tons per year for NO_x (see TSD Appendix A page 2 of 10). No other criteria pollutant's potential emission rate from the modification exceeded its corresponding PSD significance level emission rate. Based upon

actual emissions statements from reporting pursuant to 326 IAC 2-6 (Emission Reporting), criteria pollutant emissions did not exceed major modification thresholds under 326 IAC 2-2 (Prevention of Significant Deterioration).

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Stand C-33, the following conditions shall apply:

- (a) The input of diesel fuel to Test Stand C-33 shall be less than 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month (this usage limit is required to limit the potential to emit of Nitrogen Oxides, at an emission factor of 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted (see TSD Appendix A page 2 of 10; value represents the AP-42 emission factor of 4.41 pounds NO_x/MMBtu converted to pounds per gallon based on 137,000 Btu per gallon), to less than forty (40) tons per twelve (12) consecutive month period).

$$132,400 \text{ gallons/yr} \times 0.6042 \text{ lbs NO}_x/\text{gallon} \times \text{ton}/2000 \text{ lbs} = 39.9 \text{ tons NO}_x/\text{yr}$$

- (b) The NO_x emissions from Test Stand C-33 shall not exceed 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted.

Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Stand C-33.

326 IAC 6-1-2(a) (Particulate Rules)

Emission Unit ID PTS12 is not specifically listed in 326 IAC 6-1-12 nor is the emission unit performing a specifically regulated source operation as identified in 326 IAC 6-1-2(b) through (g). 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) does not apply to this emission unit as liquid and gaseous fuels and combustion air will not be considered process weight as defined pursuant to 326 IAC 1-2-59 ("Process Weight; Weight Rate" Defined).

Pursuant to 326 IAC 6-1-2(a) (Particulate Rules), sources or facilities located in Marion County which have the potential to emit greater than one hundred (100) tons per year of particulate matter or that have actual emissions greater than ten (10) tons per year and are not otherwise limited by 326 IAC 6-1-2(b) through (g) or 326 IAC 6-1-12 shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust air. Therefore, pursuant to 326 IAC 6-1-2(a), each test stand comprising Emission Unit ID PTS12 shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust air. Based on the calculation below for Transmission Test Stand C-33 (see TSD Appendix A page 2 of 10), Emission Unit ID PTS12 is in compliance with 326 IAC 6-1-2(a).

$$(2.8 \text{ tons PM/year}) / (8760 \text{ hours/yr} / \text{ton}/2000 \text{ pounds PM}) \times \text{hour}/60 \text{ minutes} \times 7000 \text{ grains/pound} \times \text{minute}/2900 \text{ cf} = 0.03 \text{ grains per standard cubic foot of exhaust air}$$

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

326 IAC 7-1.1-2 applies to emission units with potential to emit greater than ten (10) pounds per hour or twenty five (25) tons per year. Emissions Unit PTS12 does not have the potential to emit SO₂ greater than ten (10) pounds per hour or twenty (25) tons per year (see TSD Appendix A page 2 of 10). Therefore, 326 IAC 7-1.1-2 does not apply to Emission Unit ID PTS12.

326 IAC 8 (Volatile Organic Compound Rules)

There are no provisions of 326 IAC 8 (Volatile Organic Compound Rules) applicable to Emission Unit PTS12. Potential to emit does not exceed twenty five (25) tons per year (see TSD Appendix A page 2 of 10). Therefore, neither 326 IAC 8 or 326 IAC 8-1-6 (General Provisions Relating to VOC Rules: General Reduction Requirements for New Facilities) applies to Emission Unit PTS12.

Emission Unit ID PTS14 (6 transmission test stands)

326 IAC 2-2 (Prevention of Significant Deterioration)

Allison Transmission is a major source because this source is in one of the twenty eight (28) listed source categories under 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 has the potential to emit greater than one hundred (100) tons per year of PM-10, SO₂, CO, VOC and NO_x. All modifications and construction of emitting units after August 8, 1977 are reviewed under the PSD regulation. Therefore, the potential to emit for emission unit ID PTS14 has been limited such that the PSD Regulation 326 IAC 2-2 shall not apply.

In 1978 and 1979, Allison Transmission installed two transmission test stands identified as O-1 and O-2 to the Emission Unit ID PTS14 test stand area. These units were identified in previous installation permitting and in the Certificate of Operation 0006-15 issued March 26, 1992. However, the addition of these units did not have potential to emit NO_x enforceably restricted such that the PSD Regulation 326 IAC 2-2 did not apply nor were there any PM or SO₂ emission limitations contained in installation permitting. Based on OES' review, the potential to emit NO_x from these test stands exceeds the PSD significance level of forty (40) tons per year for NO_x (see TSD Appendix A page 1 of 10). No other criteria pollutant's potential emission rate from the modification exceeded its corresponding PSD significance level emission rate. Based upon actual emissions statements from reporting pursuant to 326 IAC 2-6 (Emission Reporting), criteria pollutant emissions did not exceed major modification thresholds under 326 IAC 2-2 (Prevention of Significant Deterioration).

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Stands O-1 and O-2, the following conditions shall apply:

- (a) The combined input of diesel fuel to Test Cell Stands O-1 and O-2 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month (this usage limit is required to limit the potential to emit of Nitrogen Oxides (NO_x), at 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted, to less than forty (40) tons per twelve (12) consecutive month period (see TSD Appendix A page 1 of 10; value represents the AP-42 emission factor of 3.2 pounds NO_x/MMBtu converted to pounds per gallon based on 137,000 Btu per gallon), to less than forty (40) tons per twelve (12) consecutive month period).

$$182,481 \text{ gallons/year} \times 0.4384 \text{ lbs NO}_x/\text{gallon} \times \text{ton} / 2000 \text{ lbs} = 39.9 \text{ tons NO}_x \text{ per year}$$

- (b) The NO_x emissions from Test Stands O-1 and O-2 shall each not exceed 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted.

Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Stands O-1 and O-2.

In 1989 Allison Transmission installed one test stand identified as O-16. This unit was identified in Installation Permit 88-0006-01, issued on December 14, 1988 and in the Certificate of Operation 0017-06 issued April 23, 1992. However, the addition of the unit did not have potential to emit NO_x enforceably restricted such that the PSD Regulation 326 IAC 2-2 did not apply nor were there any PM or SO₂ emission limitations contained in installation permitting based upon existing State rules pursuant to 326 IAC 6 or 326 IAC 7. Based on OES' review, the potential to emit NO_x from this test stand exceeds the PSD significance level of forty (40) tons per year for NO_x. No other criteria pollutant's potential emission rate from the modification exceeded its corresponding PSD significance level emission rate. Based upon actual emissions statements from reporting pursuant to 326 IAC 2-6 (Emission Reporting), criteria pollutant emissions did not exceed major modification thresholds under 326 IAC 2-2 (Prevention of Significant Deterioration).

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Stand O-16, the following conditions shall apply:

- (a) The input of diesel fuel to Test Stand O-16 shall be less than 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month (this usage

limit is required to limit the potential to emit of Nitrogen Oxides, at an emission factor of 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted (see TSD Appendix A page 1 of 10; value represents the AP-42 emission factor of 4.41 pounds NO_x/MMBtu converted to pounds per gallon based on 137,000 Btu per gallon), to less than forty (40) tons per twelve (12) consecutive month period).

$$132,400 \text{ gallons/yr} \times 0.6042 \text{ lbs NO}_x/\text{gallon} \times \text{ton}/2000 \text{ lbs} = 39.9 \text{ tons NO}_x/\text{yr}$$

- (b) The NO_x emissions from Test Stand O-16 shall not exceed 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted.

Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Stand O-16.

In 1986 Allison Transmission installed two test stands identified as O-24 and O-25 to the PTS14 test stand area that were unrelated to the O-16 Test Stand project. These units were constructed and operated without a permit and were identified and incorporated in the Installation Permit 88-0006-01, issued on December 14, 1988 and in the Certificate of Operation 0006-15 issued March 26, 1992. However, the addition of these units did not have potential to emit NO_x enforceably restricted such that the PSD Regulation 326 IAC 2-2 did not apply nor were there any PM or SO₂ emission limitations contained in installation permitting based upon existing State rules pursuant to 326 IAC 6 or 326 IAC 7. Based on OES' review, the potential to emit NO_x from these two test stands exceeds the PSD significance level of forty (40) tons per year for NO_x. No other criteria pollutant's potential emission rate from the modification exceeded its corresponding PSD significance level emission rate. Based upon actual emissions statements from reporting pursuant to 326 IAC 2-6 (Emission Reporting), criteria pollutant emissions did not exceed major modification thresholds under 326 IAC 2-2 (Prevention of Significant Deterioration).

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Stands O-24 and O-25, the following conditions shall apply:

- (a) The combined input of diesel fuel to Test Stands O-24 and O-25 shall be less than 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month (this usage limit is required to limit the potential to emit of Nitrogen Oxides, at an emission factor of 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted (see TSD Appendix A page 1 of 10; value represents the AP-42 emission factor of 4.41 pounds NO_x/MMBtu converted to pounds per gallon based on 137,000 Btu per gallon), to less than forty (40) tons per twelve (12) consecutive month period).

$$132,400 \text{ gallons/yr} \times 0.6042 \text{ lbs NO}_x/\text{gallon} \times \text{ton}/2000 \text{ lbs} = 39.9 \text{ tons NO}_x/\text{yr}$$

- (b) The NO_x emissions from Test Stands O-24 and O-25 shall each not exceed 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted.

Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Stands O-24 and O-25.

In 1984 Allison Transmission installed one test stand identified as O-31 to the PTS14 test stand area. This unit was identified in previous installation permitting and in the Certificate of Operation 0006-15 issued March 26, 1992. However, the addition of this unit did not have potential to emit NO_x enforceably restricted such that the PSD Regulation 326 IAC 2-2 did not apply nor were there any PM or SO₂ emission limitations contained in installation permitting. Based on OES' review, the potential to emit NO_x from this test stand exceeds the PSD significance level of forty (40) tons per year for NO_x. No other criteria pollutant's potential emission rate from the modification exceeded its corresponding PSD significance level emission rate. Based upon actual emissions statements from reporting pursuant to 326 IAC 2-6 (Emission Reporting), criteria pollutant emissions did not exceed major modification thresholds under 326 IAC 2-2 (Prevention of Significant Deterioration).

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Stand O-31, the following conditions shall apply:

- (a) The input of diesel fuel to Test Cell Stand O-31 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month (this usage limit is required to limit the potential to emit of Nitrogen Oxides (NO_x), at 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted, to less than forty (40) tons per twelve (12) consecutive month period (see TSD Appendix A page 1 of 10; value represents the AP-42 emission factor of 3.2 pounds NO_x/MMBtu converted to pounds per gallon based on 137,000 Btu per gallon), to less than forty (40) tons per twelve (12) consecutive month period).

$$182,481 \text{ gallons/year} \times 0.4384 \text{ lbs NO}_x/\text{gallon} \times \text{ton} / 2000 \text{ lbs} = 39.9 \text{ tons NO}_x \text{ per year}$$

- (b) The NO_x emissions from Test Stand O-31 shall not exceed 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted.

Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Stand O-31.

326 IAC 6-1-2(a) (Particulate Rules)

Emission Unit ID PTS14 is not specifically listed in 326 IAC 6-1-12 nor is the emission unit performing a specifically regulated source operation as identified in 326 IAC 6-1-2(b) through (g). 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) does not apply to this emission unit as liquid and gaseous fuels and combustion air will not be considered process weight as defined pursuant to 326 IAC 1-2-59 ("Process Weight; Weight Rate" Defined).

Pursuant to 326 IAC 6-1-2(a) (Particulate Rules), sources or facilities located in Marion County which have the potential to emit greater than one hundred (100) tons per year of particulate matter or that have actual emissions greater than ten (10) tons per year and are not otherwise limited by 326 IAC 6-1-2(b) through (g) or 326 IAC 6-1-12 shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust air. Therefore, pursuant to 326 IAC 6-1-2(a), each test stand comprising Emission Unit ID PTS14 shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust air. Based on the calculation below for Transmission Test Stand O-16, Emission Unit ID PTS14 is in compliance with 326 IAC 6-1-2(a) (see TSD Appendix A page 1 of 10).

$$(2.8 \text{ tons PM/year}) / (8760 \text{ hours/yr} / \text{ton}/2000 \text{ pounds PM}) \times \text{hour}/60 \text{ minutes} \times 7000 \text{ grains/pound} \times \text{minute}/3126 \text{ cf} = 0.02 \text{ grains per standard cubic foot of exhaust air}$$

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

326 IAC 7-1.1-2 applies to emission units with potential to emit greater than ten (10) pounds per hour or twenty five (25) tons per year. Emission Unit PTS14 has the combined potential to emit SO₂ of greater than twenty five (25) tons per year. No individual test stand comprising Emission Unit ID PTS14 has the potential to emit SO₂ of greater than twenty five (25) tons per year or ten (10) pounds per hour. Diesel fuel use is limited per twelve (12) consecutive month period (see above discussion under 326 IAC 2-2) such that 326 IAC 2-2 does not apply to individual test stands comprising Emission Unit ID PTS14. In addition, there is no installation permit condition or previous operating permit condition limiting SO₂ emissions pursuant to 326 IAC 2-2 or 326 IAC 7-1.1-2. The fuel use limitation(s) for individual test stands comprising Emission Unit ID PTS14 limits the combined potential to emit SO₂ from Emission Unit ID PTS14 to less than twenty five (25) tons per year (see TSD Appendix A page 1 of 10). Therefore, 326 IAC 7-1.1-2 does not apply to Emission Unit ID PTS14.

326 IAC 8 (Volatile Organic Compound Rules)

There are no provisions of 326 IAC 8 (Volatile Organic Compound Rules) applicable to Emission Unit PTS14. Potential to emit VOC does not exceed twenty five (25) tons per year (see TSD Appendix A page 1 of 10). Therefore, neither 326 IAC 8 or 326 IAC 8-1-6 (General Provisions Relating to VOC

Rules: General Reduction Requirements for New Facilities) applies to Emission Unit PTS14.

Emission Unit CSD (Cold solvent degreasing using mineral spirits)

326 IAC 8-3 (Volatile Organic Compound Rules: Organic Solvent Degreasing Operations)

Pursuant to 326 IAC 8-3-1(a) (Organic Solvent Degreasing Operations: Applicability), 326 IAC 8-3-2 (Organic Solvent Degreasing Operations: Cold Cleaner Operation) is applicable to organic solvent degreasing operations located in Marion County and existing as of January 1, 1980 with potential emissions of one hundred (100) tons or greater per year of VOC. Cold cleaner degreasing operations at Allison Transmission were in existence as of January 1, 1980 and had potential VOC emissions in excess of one hundred (100) tons per year. Therefore, 326 IAC 8-3-2 applies to cold cleaner degreasing operations at Allison Transmission. Pursuant to 326 IAC 8-3-1(b) (Organic Solvent Degreasing Operations: Applicability), 326 IAC 8-3-5 (Organic Solvent Degreasing Operations: Cold Cleaner Degreaser Operation and Control) is applicable to organic solvent degreasing operations located in Marion County and existing as of July 1, 1990. Allison Transmission has existing cold cleaning operations located in Marion County and existing as of July 1, 1990. Therefore, 326 IAC 8-3-5 applies to cold cleaner degreasing operations at Allison Transmission.

(a) Pursuant to 326 IAC 8-3-2 (Organic Solvent Degreasing Operations: Cold Cleaner Operation), for cold cleaning operations existing as of January 1, 1980 located in Marion County and which are located at sources which have potential emissions of one hundred (100) tons or greater per year of VOC, the Permittee shall:

- (1) Equip the cleaner with a cover;
- (2) Equip the cleaner with a facility for draining cleaned parts;
- (3) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (5) Provide a permanent, conspicuous label summarizing the operation requirements;
- (6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

(b) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs existing as of July 1, 1990, located in Marion County, the Permittee shall ensure that the following requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements

outlined in subsection (b).

- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (c) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the Permittee shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Emission Unit ID ETC702 (transmission test cell 702)

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

Allison Transmission is a major source because this source is in one of the twenty eight (28) listed source categories under 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 has the potential to emit greater than one hundred (100) tons per year of PM-10, SO₂, CO, VOC and NO_x. The potential to emit of Emission Unit ID ETC702 exceeds forty (40) tons of NO_x per year. No other criteria pollutant's potential emission rate from the modification exceeded its corresponding PSD significance level emission rate.

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Cell ETC702, the following conditions shall apply:

- (a) Pursuant to Significant Source Modification 097-15550-00310 issued November 7, 2002, the input of diesel fuel to Test Cell ETC702 shall be less than 173,516 gallons per twelve (12) consecutive month period with compliance determined at the end of each month (this usage limit is required to limit the potential to emit of Nitrogen Oxides (NO_x), at 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted, to less than forty (40) tons per twelve (12) consecutive month period (see TSD Appendix A page 10 of 10; value represents the AP-42 emission factor of 3.2 pounds NO_x/MMBtu converted to pounds per gallon based on 137,000 Btu per gallon), to less than forty (40) tons per twelve (12) consecutive month period).

$$173,516 \text{ gallons/year} \times 0.4384 \text{ lbs NO}_x/\text{gallon} \times \text{ton} / 2000 \text{ lbs} = 38.0 \text{ tons NO}_x \text{ per year}$$

- (b) The NO_x emissions from Test Cell ETC702 shall not exceed 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted.

Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Cell ETC702.

326 IAC 6-1-2(a) (Particulate Rules)

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 air. 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 is in compliance with 326 IAC 6-1-2(a).

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

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

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 10 of 10). Therefore, 326 IAC 7 does not apply to this Emission Unit.

326 IAC 8 (Volatile Organic Compound Rules)

There are no provisions of 326 IAC 8 (Volatile Organic Compound Rules) applicable to Emission Unit ETC702. Potential to emit VOC does not exceed twenty five (25) tons per year (see TSD Appendix A page 10 of 10). Therefore, neither 326 IAC 8 or 326 IAC 8-1-6 (General Provisions Relating to VOC Rules: General Reduction Requirements for New Facilities) applies to Emission Unit ETC702.

Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour. [326 IAC 6-1-2]
- (b) Emergency diesel generators not exceeding 1600 horsepower. [326 IAC 6-1-2(a)]
- (c) Emergency Stationary fire pumps. [326 IAC 6-1-2(a)]
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-1-2(a)]
- (1) Shot Blast controlled with fabric filters. [326 IAC 6-1-2(a)]
- (e) Heat Treating [326 IAC 6-1-2(a)]

326 IAC 6-1-2(a) (Particulate Rules)

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 air. 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 each

of the insignificant activities listed above.

The natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour are not indirect heating units or steam generating units. Therefore, neither 326 IAC 6-1-2(b) (Particulate Emission Limitations; Fuel Combustion Steam Generators) or 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating) applies to this Insignificant Activity category.

The baghouses for particulate matter control shall be in operation at all times Shot Blasting is in operation in order to comply with the PM limit. Therefore, this conditions limit PM to less than the applicable emission limit pursuant to 326 IAC 6-1-2(a).

- (f) A soil and groundwater remediation system identified as ENCORE and installed in 2003, consisting of:
 - (1) Soil vapor extraction (SVE) system, including miscellaneous piping and:
 - (A) eighteen (18) soil vapor extraction wells;
 - (B) one (1) 40 gallon knock-out tank, and
 - (C) one (1) 10-horsepower blower rated at 600 standard cubic feet per minute (scfm), with emissions exhausting to one (1) stack identified as SVE vent.
 - (2) Dense non-aqueous phase liquid (DNAPL) groundwater recovery system, including miscellaneous piping, pneumatic pumps and:
 - (A) three (3) recovery wells;
 - (B) one (1) DNAPL/water separator, with emissions exhausting to one (1) stack identified as DNAPL/water separator vent; and
 - (C) one (1) 500 gallon DNAPL product storage tank, with emissions exhausting to one (1) stack identified as DNAPL storage vent.

326 IAC 1-6-3 (Preventive Maintenance Plan)

A Preventive Maintenance Plan (PMP) should have been developed for each facility that was formerly 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 on-site a preventive maintenance plan as described in 326 IAC 1-6-3.

Based on OES's review a PMP is not required for the ENCORE soil and groundwater remediation system.

326 IAC 2 (Permit Review Rules) and 326 IAC 2-7-10.5 (Part 70 Permits: Source Modifications)

The addition of the ENCORE soil and groundwater remediation system identified in the Response to Review Request letter 097-17309-00310 issued by the City of Indianapolis OES on April 1, 2003 does not require a minor or significant Part 70 Source Modification because the addition of the on-site remediation systems supporting operation did not increase potential to emit VOC in excess of ten (10) tons per year for modifications that do not require the use of air pollution control equipment to comply with an applicable provision of 326 IAC 8 (Volatile Organic Compound Rules).

The ENCORE remediation system installation is in response to an 8,000 gallon spill of tetrachloroethylene (synonym, perchloroethylene, PCE) that occurred at the Allison Transmission plant. The spill was reported to IDEM by Allison Transmission during 1988.

The calculations submitted have been verified and found to be accurate and correct. These

calculations are based on mass balance and conservatively assume that the total known quantity (8,000 gallons) of the PCE spill will be emitted to the atmosphere from the remediation systems, as follows:

A spill of 8,000 gallons of tetrachloroethylene (PCE) was reported to IDEM on June 14, 1988 (incident number 1988-06-046).

8,000 gallons x 13.54 pounds per gallon (density PCE) x 1 ton/2000 pounds = 54.16 tons PCE

Based on the design of the remediation systems, the estimated cleanup time is approximated at 7 years:

54.16 tons PCE / 7 years = 7.74 tons per year PCE which is a VOC and a HAP.

This conservative estimate assumes that all PCE spilled is recovered, and the total recovered amount is in the gas phase emitted to the atmosphere from the vapor extraction system. No other regulated pollutant is potentially emitted from this soil and groundwater remediation system.

Pursuant to 326 IAC 2-1.1-3(d)(1)(D) (Exemptions) and 326 IAC 2-7-10.5(d)(4), new sources or modifications to existing sources application requirements do not apply if the potential to emit VOC is less than ten (10) tons per year for sources or modifications that do not require the use of air pollution control equipment to comply with an applicable provision of 326 IAC 8.

Pursuant to 326 IAC 2-7-10.5(d)(5)(C)(iii), modifications for which the potential to emit is less than ten (10) tons per year for any single HAP and is less than twenty five (25) tons per year for any combination of HAP are exempt from the source modification requirements under 326 IAC 2-7-10.5.

The installation of this soil and groundwater remediation system was reviewed and identified in the Response to Review Request letter 097-17309-00310 issued by the City of Indianapolis OES on April 1, 2003 to Environmental Corporate Remediation Company, Inc. (ENCORE), the on-site remediation systems supporting operation. The review determined that installation of the soil and groundwater remediation system did not have any specifically regulated activities and that these operations located on contiguous or adjacent property would be combined in to the Title V Permit for Allison Transmission as an Insignificant Activity that is not specifically regulated.

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), the addition of the ENCORE soil and groundwater remediation system is not considered a major modification because the source is an existing PSD major stationary source and the soil and groundwater remediation system has the potential to emit less than applicable PSD threshold emission levels for any regulated pollutant. Therefore, the PSD rules, 326 IAC 2-2, do not apply to the ENCORE soil and groundwater remediation system.

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE ten (10) tons per year of any HAP or twenty five (25) tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT).

The ENCORE soil and groundwater remediation system has the potential to emit less than ten (10) tons per year of a single HAP and less than twenty five (25) tons per year of a combination of HAPs. In addition, the source wide potential to emit HAP is less than ten (10) tons per year of a any single HAP and is less than twenty five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

The ENCORE soil and groundwater remediation system is not subject to the provisions of 326 IAC

2-6 (Emission Reporting). The potential to emit VOC from the system is not greater than ten (10) tons per year. However, this is a support facility of Allison Transmission which is located in Marion County and currently has potential emissions of NO_x and VOC of greater than 10 tons per year. Therefore, this remediation system shall be included in Allison Transmission's annual emission statement pursuant to 326 IAC 2-6 (Emission Reporting).

326 IAC 6 (Particulate Rules)

The ENCORE soil and groundwater remediation system does not have the potential to emit particulate. Therefore, 326 IAC 6 (Particulate Rules) does not apply.

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

This rule applies to facilities located anywhere in the State that were constructed on or after January 1, 1980, which have potential volatile organic compound (VOC) emissions of twenty five (25) tons per year or more, and which are not otherwise regulated by another provision of 326 IAC 8 (Volatile Organic Compound Rules). The remediation system has a potential to emit of VOC that is less than twenty five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply to this facility. Any change or modification which may increase the potential to emit VOC to twenty-five (25) tons per year or more from the remediation system must be approved by the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) before such change can occur.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties)

The requirements of this rule apply to stationary sources located in Lake, Porter, Clark and Floyd Counties that emit or have the potential to emit VOCs at levels equal to or greater than twenty five (25) tons per year in Lake and Porter Counties; one hundred (100) tons per year in Clark and Floyd Counties; and to any coating facility that emits or has the potential to emit ten (10) tons per year or greater in Lake, Porter, Clark or Floyd County. The source is located in Marion County. Therefore, this rule is not applicable to this soil and groundwater remediation system or this source.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

Pursuant to 326 IAC 8-9-1, on and after October 1, 1995 stationary vessels used to store volatile organic liquids (VOL) must comply with the requirement of the rule if located in Clark, Floyd, Lake or Porter Counties. Stationary vessels with capacities less than 39,000 gallons are only subject to the reporting and record keeping requirements of the rule. This source is located in Marion County. Therefore, this rule is not applicable to this source or this modification.

Testing Requirements

No emission units at Allison Transmission are subject to an NSPS or NESHAP. The source does not rely on control equipment to achieve compliance with an applicable emission limit(s). Emission Unit ID BLR 1 through BLR 5 are each specifically identified in 326 IAC 6-1-12 (Particulate Rules: Marion County). However, each emission unit demonstrates compliance with the applicable PM emission limit by calculation using approved emission factors (see TSD State Rule Applicability - Individual Facilities). In addition, all reciprocating engines are utilizing AP-42 emission factors that do not predict noncompliance with any previously established applicable emission limit. However, IDEM, OAQ and OES are requiring that at least one emission unit, specifically, Emission Unit ID ETC702, be required to perform stack testing for NO_x emissions to verify compliance with the short term AP-42 emission factor of 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted that is being used to limit NO_x emissions, at an input of diesel fuel to Test Cell ETC702 of less than 173,516 gallons per twelve (12) consecutive month period with compliance determined at the end of each month, such that compliance with these limits renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Cell ETC702. During the period between thirty (30) and thirty six (36) months after issuance of this Part 70 Permit, the Permittee shall perform NO_x emissions testing for Test Cell ETC702 utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

In addition, IDEM, OAQ and/or OES may require compliance testing for any emission unit at Allison Transmission when necessary to determine if these emission units are in compliance with an

applicable emission limitation.

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 plans for demonstrating compliance are as follows under Rule 326 IAC 2-7-5(3) which requires all permitted sources to demonstrate that all emitting units are in continuous compliance with all "applicable requirements" as defined by 326 IAC 2-7-1(6). Compliance is demonstrated by taking sufficient measurements of emissions or operating parameters or by gathering other data.

Compliance Monitoring requirements are applicable to Emission Unit ID BLR 1 through BLR 5 as follows:

- (a) Visible emission notations of emission unit BLR 1, BLR 2, BLR 3 BLR 4 and BLR 5 stack exhaust shall be performed once per shift during normal daylight operations when the emission unit is firing distillate fuel oil, reclaim #4 fuel oil or filtered fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.

IDEM, OAQ and OES are requiring compliance monitoring for emission units BLR 1, BLR 2, BLR 3, BLR 4, and BLR 5 in order to ensure compliance with 326 IAC 2-7-5(3) (Part 70 Permit Program: Permit Content), particulate emissions limitations established in 326 IAC 6-1-12 (Particulate Rules: Marion County) and opacity limitations pursuant to 326 IAC 5-1 (Opacity Limitations).

Compliance Monitoring requirements are applicable to Emission Unit ID ETC as follows:

- (a) Visible emission notations of Emission Unit ETC stack exhausts for Test Cell(s) 701 (Stack/Vent PTE 057), 704 (Stack/Vent PTE 065), 705 (Stack/Vent PTE 067), 706S (Stack/Vent PTE 069), 707 (Stack/Vent PTE 071), 709 (Stack/Vent PTE 075), 711 (Stack/Vent PTE 079), 32N (Stack/Vent PTE 008), 38N (Stack/Vent PTE 011), 39N (PTE 018) and 50 (Stack/Vent PTE 093) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.

IDEM, OAQ and OES are requiring compliance monitoring for these specific Emission Unit ID ETC Test Cells in order to ensure compliance with 326 IAC 2-7-5(3) (Part 70 Permit Program: Permit Content), particulate emissions limitations established in 326 IAC 6-1-2(a) (Particulate Rules) and opacity limitations pursuant to 326 IAC 5-1 (Opacity Limitations).

Conclusion

The operation of this transmission manufacturing and testing plant shall be subject to the conditions of the attached proposed Part 70 Permit No. **T097-6898-00310**.

APPENDIX A

**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 Operating Permit**

Source Name: Allison Transmission Division of General Motors Corporation
Source Location: 4700 West 10th Street, Indianapolis, Indiana 46222
County: Marion
SIC Code: 3568
Operation Permit No.: T097-6898-00310
Permit Reviewer: M. Caraher

On December 4, 2003, the Indiana Department of Environmental Management, Office of Air Quality (OAQ) and the City of Indianapolis, Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that Allison Transmission Division of General Motors Corporation had applied for a Part 70 Operating Permit to operate a transmission manufacturing and testing plant under a Standard Industrial Classification Code (SIC) of 3568 (establishments primarily engaged in manufacturing mechanical power transmission equipment and parts). 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.

Allison Transmission Division of General Motors Corporation submitted written comments during the public notice period on December 22, 2003. On January 21, 2004 and March 10, 2004, Allison Transmission Division of General Motors Corporation submitted additional support information for their public notice period comments as a written request to include the existing ENCORE soil and groundwater remediation system, identified as an Insignificant Activity on page 7 of 37 of the public noticed Technical Support Document, in the proposed Part 70 Operating Permit. On February 13, 2004, Allison Transmission Division of General Motors Corporation submitted additional support information for their public notice period comments in regards to engine replacement in Emission Unit ID PTS12, PTS14 and ETC702. On February 20, 2004, Allison Transmission Division of General Motors Corporation submitted additional support information for their public notice period comments in regards to engine replacement in Emission Unit ID TC-107, TC-109, TC-111 and TC-112.

The following changes to the proposed Part 70 Operating Permit will be made. The Technical Support Document (TSD) will remain as it originally appeared when published. OAQ and OES prefer that the TSD reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the permit has been published 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. The Permit Table of Contents has been updated to reflect changes where necessary without being included in the response to comments and formatting changes have been made that do not change the meaning, intent or language of the permit. The summary of the changes made by IDEM and OES, public comments, and responses to comments follows with ~~strikeout~~ showing deleted text and **bold** showing new text.

Comment # 1

In the Emission Unit Description in Section A.3 (a), (b), (c), (d) and (e), General Motors requests that the phrase "filtered fuel oil (FFO) generated on site" be removed from the descriptions of these conditions. Filtered fuel oil is no longer used in these emission units. This change should also be made to the facility

description in Section D.1 (a), (b), (c), (d) and (e) and to the Usage Reporting Forms to eliminate the reference to filtered fuel oil.

Because filtered fuel oil generated on site is no longer used in these emission units, General Motors requests that reference to filtered fuel oil be deleted from Section D.1.5(a), D.1.6(a) and D.1.7(d).

Response to Comment # 1

The Part 70 Permit application received October 10, 1996 contained the reference to filtered fuel oil (FFO) being fired and consumed in these boilers as described in Section A.3 (a), (b), (c), (d) and (e). Previous permitting (Certificate of Operation 0017-01 through 0017-44, issued by OES for Plant 3 on April 23, 1992) also contained reference to "reclaim oil" being consumed in these boilers. As of December 22, 2003, General Motors now states that "filtered fuel oil (FFO) generated on site" is no longer applicable to the five (5) Union Iron Works Boilers, identified as emission unit BLR 1 through BLR 5. As a result the following changes are made to the description of these five (5) boilers in Section A.3 (a), (b), (c), (d) and (e).

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

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

- (a) One (1) Union Iron Works Boiler, identified as emission unit BLR 1, capable of combusting ~~filtered fuel oil (FFO) generated on site~~, #4 reclaimed oil, ~~or~~ #2 fuel oil, with a maximum capacity of thirty six (36) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3109 and constructed in 1940.
- (b) One (1) Union Iron Works Boiler, identified as emission unit BLR 2, capable of combusting ~~filtered fuel oil (FFO) generated on site~~, #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of thirty six (36) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3110 and constructed in 1940.
- (c) One (1) Union Iron Works Boiler, identified as emission unit BLR 3, capable of combusting ~~filtered fuel oil (FFO) generated on site~~, #4 reclaimed oil, ~~or~~ #2 fuel oil, with a maximum capacity of forty eight (48) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3112 and constructed in 1942.
- (d) One (1) Union Iron Works Boiler, identified as emission unit BLR 4, ~~capable of combusting filtered fuel oil (FFO) generated on site~~, #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of seventy two (72) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3107 and constructed in 1953.
- (e) One (1) Union Iron Works Boiler, identified as emission unit BLR 5, capable of combusting ~~filtered fuel oil (FFO) generated on site~~, #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of ninety six (96) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3108 and constructed in 1969.

The descriptions of these five (5) boilers in the Facility Description box of Section D.1 were changed as follows to match the description(s) in Section A.3 (a), (b), (c), (d) and (e):

SECTION D.1

FACILITY OPERATION CONDITIONS

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

- (a) One (1) Union Iron Works Boiler, identified as emission unit BLR 1, capable of combusting ~~filtered fuel oil (FFO) generated on site~~, #4 reclaimed oil, ~~or~~ #2 fuel oil, with a maximum capacity of thirty six (36) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3109 and constructed in 1940.
- (b) One (1) Union Iron Works Boiler, identified as emission unit BLR 2, capable of combusting ~~filtered fuel oil (FFO) generated on site~~, #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of thirty six (36) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3110 and constructed in 1940.
- (c) One (1) Union Iron Works Boiler, identified as emission unit BLR 3, capable of combusting ~~filtered fuel oil (FFO) generated on site~~, #4 reclaimed oil, ~~or~~ #2 fuel oil, with a maximum capacity of forty eight (48) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3112 and constructed in 1942.
- (d) One (1) Union Iron Works Boiler, identified as emission unit BLR 4, ~~capable of combusting filtered fuel oil (FFO) generated on site~~, #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of seventy two (72) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3107 and constructed in 1953.
- (e) One (1) Union Iron Works Boiler, identified as emission unit BLR 5, capable of combusting ~~filtered fuel oil (FFO) generated on site~~, #4 reclaimed oil, #2 fuel oil, and natural gas, with a maximum capacity of ninety six (96) million British thermal units (MMBtu) Btu per hour, exhausting out one stack identified as stack ID# 3108 and constructed in 1969.

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

The Part 70 Usage Report Form for the five (5) Union Iron Works Boilers, identified as Emission Unit BLR 1 through BLR 5, that appeared on page 53 of 63 of the public notice version draft Part 70 Permit is revised as follows to reflect the deletion of filtered fuel oil firing in these units:

Month	Type of Fuel	Amount combusted this month (gallons)	Amount combusted in the pervious 11 months (gallons)	Filterable PM Emission Factor	Monthly Filterable PM Emissions (tons/month)	Twelve month sum of filterable PM Emissions (tons/12 months)
	Filter Fuel Oil					
	#4 Reclaimed					
	Distillate Fuel					
	Natural Gas					
	Filter Fuel Oil					
	#4 Reclaimed					
	Distillate Fuel					
	Natural Gas					
	Filter Fuel Oil					

Month	Type of Fuel	Amount combusted this month (gallons)	Amount combusted in the pervious 11 months (gallons)	Filterable PM Emission Factor	Monthly Filterable PM Emissions (tons/month)	Twelve month sum of filterable PM Emissions (tons/12 months)
	#4 Reclaimed					
	Distillate Fuel					
	Natural Gas					

The reference to filtered fuel oil being consumed in the five (5) Union Iron Works boilers, identified as Emission Unit BLR 1 through BLR 5 has been deleted from Section D.1.5(a), D.1.6(a) and D.1.7(d) as follows:

D.1.5 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3-7-4][326 IAC 7-2-1(c)]

- (a) Compliance shall be determined utilizing one of the following options.
 - (1) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content for Distillate Oil; **and** reclaimed #4 **fuel oil and Filtered Fuel Oil** does not exceed 1.89 **and** 1.80 ~~and 1.70~~ percent by weight, respectively, by either:

D.1.6 Visible Emissions Notations

- (a) Visible emission notations of emission unit BLR 1, BLR 2, BLR 3 BLR 4 and BLR 5 stack exhaust shall be performed once per shift during normal daylight operations when the emission unit is firing distillate fuel oil **or** reclaimed #4 fuel oil ~~or filtered fuel oil~~. A trained employee shall record whether emissions are normal or abnormal.

D.1.7 Record Keeping Requirements

- (d) To document compliance with Condition D.1.6, the Permittee shall maintain records of once per shift visible emission notations of emission units BLR 1, BLR 2, BLR 3, BLR 4 and BLR 5 stack exhausts when combusting distillate fuel oil **or** ~~reclaimed #4 fuel oil or filtered fuel oil~~.

Comment # 2

Because filtered fuel oil generated on site is no longer used in these emission units, General Motors requests that Section D.1.9 be deleted.

Response to Comment # 2

The Section D.1.9 Used Oil Requirements language pertains to the combustion of waste oil or used oil in any of the five (5) Union Iron Works boilers, identified as BLR 1 through BLR 5. The descriptions of these units state that # 4 reclaim oil is burned in some of these units. Therefore, used oil requirements specified in 329 IAC 13 (Used Oil Management) is applicable to used oil fired in any of these units. Therefore, there is no change to Section D.1.9.

Comment # 3

In the Emission Unit Description in Section A.3 (f) and D.2(f), General Motors requests that the test cell designated as 706S be changed to 706. All reference to test cell 706S should be changed to test cell 706.

Response to Comment # 3

All reference to test cell 706S has been changed throughout the Part 70 Permit to test cell 706. As an example, the Emission Unit Description in Section A.3 (f) has been revised as follows:

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

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

- (f) Emission Unit ETC consists of the following twenty five (25) engineering development transmission test cells; 701, 704, 705, ~~706 706S~~, 707, 709, 710, 711, 712, 32N, 32S, 38N, 39N, 39S, 40N, 40S, 41N, 41S, 48N, 48S, 49N, 49S, 50, 51N and 51S. The emissions from each test cell 701, 704, 705, ~~706 706S~~, 707, 709, 710, 711, 712, 32N, 32S, 38N, 39N, 39S, 40N, 40S, 41N, 41S, 48N, 48S, 49N, 49S, 50, 51N and 51S are exhausted out Stack/Vent PTE 057, PTE 065, PTE 067 PTE 069, PTE 071, PTE 075, PTE 077, PTE 079, PTE 080, PTE 008, PTE 006, PTE 011, PTE 018, PTE 020, PTE 013, PTE 014, PTE 023, PTE 021, PTE 040, PTE 041, PTE 086, PTE 087, PTE 093, PTE 084, and PTE 082, respectively. All test cells were constructed prior to 1977. Test cell 39N was modified during the 1980's. The table below lists the fuel type and engine type that each cell is capable of accommodating based on the physical characteristics of each cell.

Comment # 4

In the Emission Unit Description in Section A.3 (g), (h), (i) and (k), General Motors requests that these descriptions be revised to eliminate reference to specific model numbers and heat input of engines to be consistent with the other tables in the Permit. This change should be made to the description boxes in D.3(g), D.4(h), D.5(i) and D.7(k). In addition, test stand O-16 has been eliminated from the A.3(i) description of test stands as the test stand no longer exists.

Response to Comment # 4

On February 13, 2004, Allison Transmission submitted justification that replacing engines in test cells and test stands identified in Section A.3 (g), (h), (i) and (k), is part of the normal operation of the emission unit(s). This justification is based on historical frequent engine replacement records and engine replacement is part of the normal operation of these test stands and test cells (see TSD page 10 of 37).

Therefore, the descriptions in Section A.3 and D.3, D.4, D.5 and D.7 should be consistent throughout the Permit similar to Section D.2 of the Permit. As a result, Section A.3 (g), (h), (i) and (k) have been changed to:

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

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

- (g) Emission unit DTC consists of the following four (4) transmission reliability test cells, TC-107, TC-109, TC-111 and TC-112. The emissions from test cells TC-107, TC-109, TC-111 and TC-112 are exhausted out stacks PTE045, PTE043, PTE049 and PTE050, respectively. All test cells were constructed in 1985. The following engines can be used in any one of the individual test cells mentioned above:

Engine Type Test Cell ID	Type of Fuel Type	Heat Input (MMBtu/hr) Engine Type	Model Number Estimated Maximum Engine Size in Horsepower
Navistar TC-107	Diesel	2.14 Reciprocating	DT446G 1500
GM-Diesel TC-109	Diesel	4.74 Reciprocating	6V-53T 1500
Navistar TC-111	Diesel	2.14 Reciprocating	DT466 1500
Cummins TC-112	Diesel	2.42 Reciprocating	N-14E 1500

- (h) Emission unit PTS12 consists of the following two (2) transmission test stands, identified as test stand C-32 and C-33. Test stands C-32 and C-33 were constructed in 1976 and 1981 respectively. The emissions from test stands C-32 and C-33 are exhausted out stacks 12060 and 12058, respectively. The following engines can be used in any one of the individual test stands mentioned above:

Engine Type Test Cell ID	Type of Fuel Type	Heat Input (MMBtu/hr) Engine Type	Model Number Estimated Maximum Engine Size in Horsepower
GM-Diesel C-32	Diesel	2.41 Reciprocating	8V-92TA 600
GM-Diesel C-33	Diesel	2.76 Reciprocating	8V-92TA 600

- (i) Emission unit PTS14 consists of the following **five (5)** ~~six (6)~~ transmission test stands, identified as test stand ~~O-16~~, O-1, O-2, O-24, O-25 and O-31. Test stands ~~O-16~~, O-1, O-2, O-24, O-25 and O-31 were constructed in ~~1989~~, 1978, 1979, 1986, 1986, and 1984 respectively. The emissions from test stands ~~O-16~~, O-1, O-2, O-24, O-25 and O-31 are exhausted out stacks ~~3027~~, 14041, 14038, 14024, 14023, and 14045, respectively. The following engines can be used in any one of the individual test stands mentioned above:

Engine Type Test Cell ID	Type of Fuel Type	Heat Input (MMBtu/hr) Engine Type	Model Number Estimated Maximum Engine Size in Horsepower
GM-Diesel	Diesel	4.99	42V74
GM-Diesel O-1	Diesel	3.16 Reciprocating	16V-149T 2400
GM-Diesel O-2	Diesel	3.16 Reciprocating	16V-149T 2400
GM-Diesel O-24	Diesel	2.18 Reciprocating	6V53T 600
GM-Diesel O-25	Diesel	2.18 Reciprocating	6V53T 600

Engine Type Test Cell ID	Type of Fuel Type	Heat Input (MMBtu/hr) Engine Type	Model Number Estimated Maximum Engine Size in Horsepower
GM Diesel O-31	Diesel	3.16 Reciprocating	16V-149TH 2400

- (k) 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. **This emission unit can accommodate engines of greater than 600 horsepower.** Constructed in 2002.

Because Test Stand O-16 has been taken out of service, reference to O-16 is deleted from Section D.5 as follows:

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

D.5.1 Particulate Rules [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a)(Particulate Rules), particulate (PM) emissions from each of the Test Stands ~~O-16~~, O-1, O-2, O-24, O-25 and O-31 shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

D.5.2 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Stands ~~O-16~~, O-1, O-2, O-24, O-25 and O-31, the following conditions shall apply:

- ~~(a)~~ The input of diesel fuel to Test Stand O-16 shall be less than 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.
- ~~(b)~~ The NO_x emissions from Test Stand O-16 shall not exceed 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted.
- (a) (e) The combined input of diesel fuel to Test Cell Stands O-1 and O-2 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) (d) The NO_x emissions from Test Stands O-1 and O-2 shall each not exceed 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted.
- (c) (e) The combined input of diesel fuel to Test Stands O-24 and O-25 shall be less than 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (d) (f) The NO_x emissions from Test Stands O-24 and O-25 shall each not exceed 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted.
- (e) (g) The input of diesel fuel to Test Cell Stand O-31 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (f) (h) The NO_x emissions from Test Stand O-31 shall not exceed 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted.

Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Stands ~~O-16~~, O-1, O-2, O-24, O-25 and O-31.

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

D.5.3 Record Keeping Requirements

- ~~(a)~~ To document compliance with Condition D.5.2(a), the Permittee shall maintain records of the monthly gallons of diesel fuel combusted in Test Stand O-16. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
- ~~(a)~~ ~~(b)~~ To document compliance with Condition D.5.2 ~~(e)~~ **(a)**, the Permittee shall maintain records of the monthly gallons of diesel fuel combusted in Test Stands O-1 and O-2 combined. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
- ~~(b)~~ ~~(e)~~ To document compliance with Condition D.5.2 ~~(e)~~ **(c)**, the Permittee shall maintain records of the monthly gallons of diesel fuel combusted in Test Stands O-24 and O-25 combined. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
- ~~(c)~~ ~~(d)~~ To document compliance with Condition D.5.2 ~~(g)~~ **(e)**, the Permittee shall maintain records of the monthly gallons of diesel fuel combusted in Test Stand O-31. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
- ~~(d)~~ ~~(e)~~ All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

The Part 70 Usage Report Form that had appeared on page 59 of 63 for Test Stand O-16 is no longer necessary due to the elimination of Test Stand O-16 from service. Therefore, this report form has been deleted as follows:

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 Usage Report
(Submit Report Quarterly)

Source Name: Allison Transmission Division of General Motors
Source Address: 4700 West 10th Street, Indianapolis Indiana 46222
Mailing Address: 4 700 West 10th Street (M-29), Indianapolis, Indiana, 46222
Part 70 Permit No.: T097-6898-00310
Facility: Emission Unit PTS14 (Test Stand O-16 only)
Parameter: Diesel fuel usage
Limit: The input of diesel fuel to Test Stand O-16 shall be less than 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month

Quarter: _____ Year: _____

Emission Unit	Month	Gallons this month	Gallons per Twelve (12) Consecutive Month period
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Emission Unit ID PTS14 (Test Stand 0-16 only)			

Comment # 5

General Motors requests that the description in Section A.3(j) and in Section D.6 be revised as follows to eliminate the specific number of units, since the actual number of units varies and is not significant to the permit.

- (j) ~~Eleven (11) cold~~ **Cold** solvent degreasing units using mineral spirits identified as emission unit CSD. Emissions are vented inside the building. Each degreasing unit was installed prior to 1977.

Response to Comment # 5

Previously, Certificate of Operation numbers 0017-13, 18, 20, 26, 27, 28, 29, 30, 37, 38, 39, 40, 41, 42, 43 and 44 for Plant 3, issued on April 23, 1992, Certificate of Operation numbers 0006-05, 10, 11, 12, 14, 17 and 18 for Plant 12/14, issued on March 26, 1992, each pertained to degreasing operations at Allison Transmission.

On page 10 of 37 of the public notice TSD, the following was stated, "On June 18, 2001, Allison Transmission filed an application with IDEM, OAQ and OES, 097-14553-00310, seeking emission credits with regard to VOC emissions reductions in Emission Unit CSD (Cold solvent degreasing using mineral spirits). The VOC emission reductions arise from discontinuing the use of some solvents, reductions in usage of solvents and from the removal of conveyerized degreasing and vapor degreasing equipment. IDEM, OAQ and OES acknowledge that Allison Transmission has identified a seventy five (75) ton decrease in actual VOC emissions and are closing the application tracking number 097-14553-00310 with the approval and issuance of the Part 70 Permit for this source." The reductions had occurred over a period of time from 1996 to 1998. The June 18, 2001 letter indicated that there are, approximately, twenty two (22) tons of VOC emissions from remaining cold solvent degreasing operations at Allison Transmission. For the Part 70 Operating Permit, OAQ and OES have grouped all remaining source wide individual cold cleaner solvent degreasing units using mineral spirits under one emission unit and identified these operations as emission unit CSD. Due to servicing of these units, OAQ and OES recognize that the actual number of cold solvent dip tanks on site at any given time could be eleven (11) tanks or less. Therefore, the following changes have been made to the description of emission unit CSD in Section A.3(j) and Section D.6:

- (j) ~~Eleven (11) cold~~ **Cold** solvent degreasing ~~units~~ using mineral spirits identified as emission unit CSD. Emissions are vented inside the building. Each degreasing unit was installed prior to 1977.

Facility Description [326 IAC 2-7-5(15)]
(j) Eleven (11) cold Cold solvent degreasing units using mineral spirits identified as emission unit CSD. Emissions are in to the building. Each degreasing unit was installed prior to 1977.
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Comment # 6

Section B.14 Deviations from Permit Requirements and Conditions item (b) needs to be qualified to state that not all deviations are violations of the permit requirements. General Motors requests that this

distinction be put in this permit.

Response to Comment # 6

A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit. A deviation does not become a violation unless USEPA, IDEM, OAQ or OES decide to pursue enforcement action. Enforcement discretion may be used, but an exemption through the Part 70 Permit cannot be created. Therefore, there is no change to Section B.14 Deviations from Permit Requirements.

Comment # 7

In Section C.16 Emission Statement, this requirement stipulates that General Motors is required to submit an Emission Statement annually for the "twelve (12) consecutive month time period starting December 1 and ending November 30." The Indiana Air Pollution Control Board has recently approved revisions to this rule that would 1) change the reporting period to a calendar year basis, and 2) change the annual reporting requirement to once every three years for certain Title V sources. General Motors requests that this condition be revised to be consistent with the revisions of this rule.

Response to Comment # 7

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6, Emission Reporting. The source also has potential to emit greater than or equal to 2500 tons of Nitrogen Oxides (NO_x) and greater than or equal to 2500 tons of Carbon Monoxide (CO); therefore, an emission statement covering the previous calendar year must be submitted by July 1 annually. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

Based on the rule revisions to 326 IAC 2-6, which became effective March 27, 2004, the following changes are made to Condition C.16 - Emission Statement:

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

- (a) ~~The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6;~~ **Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:** that must be received by annual April 15th of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. ~~The annual emission statement shall meet the following requirements:~~
- (1) ~~Indicate estimated actual emissions of criteria pollutants from the source all pollutants listed in 326 IAC 2-6-4(a); ; in compliance with 326 IAC 2-6 (Emission Reporting);~~
 - (2) ~~Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purpose-s of Part 70 fee assessment.~~
- (b) ~~The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:~~

Indiana Department of Environmental Management
Technical Support and Modeling 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

The emission statement does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

Comment # 8

In Sections D.2.1, D.3.1, D.4.1, D.5.1 and D.7.1, these conditions require that engines used in transmission test cells and transmission test stands meet a particulate emission limit of three hundredths (0.03) grains/dscf of exhaust air based on standards contained in Indiana Rule 326 IAC 6-1-2. This rule applies (pursuant to Indiana Rule 326 IAC 6-1-1(a)(2)) “if the source or facility is not specifically listed in sections 8.1 through 18 of this rule, but has the potential to emit on hundred (100) tons or more, or has actual emissions of ten (10) tons or more of particulate matter per year.” The engines used in the transmission test cells/stands cited should not be identified as being subject to this rule, as 1) they are not listed specifically in sections 8.1 through 18, 2) the particulate matter potential to emit from each unit is less than 100 tons per year, and 3) the actual particulate matter emissions from each unit is less than ten tons per year. This interpretation is consistent with previous permits issued to General Motors for these emission units.

In Section D.8.1, General Motors requests that this condition be clarified by adding the statement that natural gas fired combustion sources are only subject to the 0.03 grains/dscf limit in 326 IAC 6-1-2 if they are not “steam generators.”

Response to Comment # 8

Allison Transmission is correct in stating that this interpretation (the applicability of 326 IAC 6-1-2(a) to transmission test cells and test stands) is not consistent with previous permits issued to General Motors for these emission units.

Allison Transmission has been operating under Certificate of Operation 0017-01 through 0017-44, issued for Plant 3 on April 23, 1992 and Certificate of Operation 0006-05 through 0006-18, issued for Plant 12 and 14 on March 26, 1992. These operating permits contained a particulate (PM) emission limit of six tenths (0.6) pounds per million Btu heat input. The PM emission limit of six tenths (0.6) pounds per million Btu heat input was based on Indianapolis Air Pollution Control Board Regulation II-1(A)(2) (Particulate Emission From Fuel Combustion Equipment) for liquid fuel fired reciprocating engines. With the adoption of 326 IAC 6 (Particulate Rules) by the Indianapolis Air Pollution Control Board on March 9, 2000, the provisions of Regulation II-1 are no longer applicable to Marion County sources. 326 IAC 6 (Particulate Rules) does not specifically state a PM emission limit for liquid fuel fired reciprocating engines as did Indianapolis Air Pollution Control Board Regulation II-1(A)(2) (Particulate Emission From Fuel Combustion Equipment).

Because Indianapolis Air Pollution Control Board Regulation II-1(A)(2) (Particulate Emission From Fuel Combustion Equipment) is no longer applicable to Marion County sources, the former PM emission limit is not an applicable requirement for these units. In the Existing Approvals section on page 8 of 37 of the public notice Technical Support Document, a discussion of why Indianapolis Air Pollution Control Board Regulation

II-1(A)(2) (Particulate Emission From Fuel Combustion Equipment) was no longer applicable was contained. As a result, 326 IAC 6 (Particulate Rules) does apply to PM emissions from the source or facility.

326 IAC 6-1-1 states that this rule is applicable to sources or facilities located in Marion County and specifically listed in 326 IAC 6-1-12 (Particulate Rules: Marion County) or if the source or facility is not specifically listed in 326 IAC 6-1-12 and the source or facility has potential to emit one hundred (100) tons or more or has actual emissions of ten (10) tons or more of particulate matter per year. The five (5) Union Iron Works Boilers, identified as Emission Unit BLR 1 through BLR 5, are facilities at Allison Transmission that are specifically listed in 326 IAC 6-1-12 (see Section D.1 of the proposed Permit). The transmission test cells and test stands are not specifically listed facilities in 326 IAC 6-1-12. However, the source has the potential to emit PM in excess of one hundred tons per year (see TSD Appendix A pages 1 through 10 of 10 and see the Potential to Emit After Issuance table on page 12 of 37 of the TSD).

Pursuant to 326 IAC 6-1-2, particulate matter emissions from facilities not limited by 326 IAC 6-1-2(b), (e), (f), or (g) shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust. Neither the transmission test stands and test cells nor the liquid fuel fired reciprocating engines are limited by 326 IAC 6-1-2(b), (e), (f), or (g). Therefore, the transmission test stands and test cells are subject to the requirements of 326 IAC 6-1-2(a). As a result, all PM emitting facilities, not specifically listed in 326 IAC 6-1-12, at the source are limited to three hundredths (0.03) grains per dry standard cubic foot of exhaust.

In regard to the request to clarify Section D.8.1 by adding the statement that natural gas fired combustion sources are only subject to the three hundredths (0.03) grains/dscf limit if they are not "steam generators," based on the Part 70 Operating Permit application, OAQ and OES stated in the TSD on page 33 of 37 that this category of Insignificant Activity units at Allison Transmission did not consist of any indirect heating units or steam generating units. Pursuant to 326 IAC 6-1-2(b)(3), all gaseous fuel fired steam generators are limited to a particulate matter emission rate of one hundredth (0.01) grains per dry standard cubic foot of exhaust. However, this category of Insignificant Activity units at Allison Transmission does not contain any steam generating units. Pursuant to 326 IAC 6-1-2(a) (Particulate Rules), sources or facilities located in Marion County which have the potential to emit greater than one hundred (100) tons per year of particulate matter or that have actual emissions greater than ten (10) tons per year and are not otherwise limited by 326 IAC 6-1-2(b), (e), (f), or (g) or 326 IAC 6-1-12 shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust air.

Therefore, pursuant to 326 IAC 6-1-2(a) (Particulate Rules), particulate (PM) emissions from the natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, emergency diesel generators, emergency stationary fire pumps, grinding and machining operations, shot blast, heat treating operations and production welding each shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air. As a result, there is no change to Section D.8.1.

Comment # 9

In Sections D.1.6(a) and D.2.6 (a), General Motors requests that this condition be revised to require "visible emission notations and record keeping of the boiler exhaust and/or test cell exhaust only once per day" as in previous versions of this permit. Because of the consistency of the boiler operation and test cell operation, only an upset condition would cause an abnormal visible emission, therefore, no compliance benefit would be obtained by increasing the observation frequency to once per shift. In addition, there has been no history of opacity problems to warrant the increased frequency of observations.

Response to Comment # 9

Compliance monitoring conditions are in the permit, pursuant to 326 IAC 2-7-5(3), in order to "assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements." The previous wording of once per day would not accomplish the purpose of compliance monitoring for a source that operates more than one shift per day. Problems can occur suddenly; therefore monitoring of operational parameters should be more frequently than daily in such cases where a source operates more than one shift per day. The IDEM, OAQ and OES believe that visible emissions notations once per operating shift are a reasonable requirement. Therefore, the requirements to perform visible

emissions notations have been changed from daily to once per shift.

The requirement of performing once per shift visible emission notations during normal daylight operations and when a boiler is burning No. 2 fuel oil is used to indicate that the source is in compliance with 326 IAC 5-1 and 326 IAC 6, and to indicate to the source whether a problem exists in the operation. No changes have been made to the wording of Sections D.1.6 or D.2.6 Visible Emissions Notations or the record keeping requirements related to these Conditions (D.1.7 and D.2.7).

Comment # 10

In regards to Condition D.2.2, General Motors commented on this condition and a duplicate Condition 5.3 in the previous draft of the permit. The previous D.5.3 was removed from this draft of the permit, pursuant to the comment below. General Motors reiterates the comment and requests that this condition be removed consistent with the Department's previous action.

This condition establishes a sulfur dioxide emission rate of 0.5 pounds per MMBtu heat input for transmission test cells and transmission test stands. This limitation derives from a limit contained in 326 IAC 7-1.1-2, which limits sulfur dioxide emissions from "fuel combustion" facilities. While Allison does not have a particular concern with the sulfur dioxide emission limit itself, it does have a concern regarding the characterization of these units as "fuel combustion" facilities. These units are engines used to drive transmissions for testing purposes, and are not regarded as "fuel combustion" units in the same sense as boilers. The rule makings that developed these limitations were based on evaluation of sources that burn fuel for the primary purpose of producing heat or power through indirect heat transfer. This is not the purpose of the test operations at our facilities. Our facilities are instead intended for development and quality assurance testing of the functioning of transmissions and their components – not for the generation of heat or power. Other states have agreed that engine test facilities, such as these, should not be characterized as fuel combustion sources. For example, in a Title V permit issued to General Motors Electro-Motive Division in early May 2000, explicitly determined that engine test facilities were not "fuel combustion units" within the meaning of their regulations. IEPA stated the following in the final permit:

- a. The affected engine test cells are not subject to 35 IAC 216.121, emissions of carbon monoxide from fuel combustion emission units, because the affected engine test cells are not by definition fuel combustion emission units.

State of Illinois Clean Air Act Permit Program (CAAPP) Permit No. 95120282, Section 7.3.4 (May 2, 2000) (emphasis added).

We note that our view that engine test facilities are not appropriately regulated under fuel combustion unit regulations has been endorsed by USEPA in its MACT rule making process. In establishing categories for MACT standards, EPA segregated engine test facilities from traditional combustion categories giving them their own separate category for rule making. During the EPA's Industrial Combustion Coordinated Rule making (ICCR) Federal Advisory Committee process to develop the combustion MACT standards, the EPA excluded the engine test facility category, creating a separate group to address that outside of the ICCR process. Thus the Agency indicated its view that these units should not be considered "fuel combustion sources" as that term is applied for compliance with emissions standards for boilers and furnaces. In addition, in the recent proposed MACT standard for reciprocating internal combustion engines (RICE), EPA clarified that testing of engines is not to be considered operation of a reciprocating internal combustion engine, i.e., it is not an operating combustion source. See proposed 40 CFR 63.6585. This makes sense of course because the control and cost effectiveness analysis for steady state operations of an engine is an entirely different matter from that for a test operation.

As a practical matter, we are concerned that future emissions standards that may be issued by the City or by IDEM applicable to "fuel combustion sources" may not be achievable by our test facilities due to the unique nature of our operations and that they have not previously been considered as such. This could have implications for all pollutants.

While Allison does not believe that these units should be classified as “fuel combustion” units as referenced in 326 IAC 7-1.1-2, it does acknowledge that limits for sulfur dioxide emissions have been established for some of these units through Federally enforceable Installation Permits issued by the City of Indianapolis. For example, three emission units (O-16, O-24, and O-25) contained a limit of 0.6 lb/MMBtu in an Installation Permit, but the rest either have no limit in a Construction Permit, or were installed prior to the date that Construction Permits were required for new equipment. Where appropriate, Allison requests that the Title V permit condition D.2.2 be revised to correspond to historic Installation Permits as its authority for sulfur dioxide emission limits rather than Rule 326 IAC 7-1. In cases where there is no underlying authority for the limit, Allison requests that the limit be eliminated along with any corresponding compliance monitoring provisions.

Finally, we request that the City make a determination that the units are not fuel combustion sources subject to such regulations for purposes of the permit shield.

With regard to Condition D.2.5(a) and in the event that sulfur dioxide limits in Condition D.2.2 are retained in the Title V Permit, this condition should be reworded to clarify that the referenced sulfur dioxide emission limit is only applicable to Test Cells 701, 704, 705, 706, 707, 709, 711, 32N, 38N and 50.

Response to Comment # 10

Allison Transmission has been operating under Certificate of Operation 0017-01 through 0017-44, issued for Plant 3 on April 23, 1992 and Certificate of Operation 0006-05 through 0006-18, issued for Plant 12 and 14 on March 26, 1992. Prior to the issuance of these Operating Permits, the Installation Permit for Test Stands O-24, O-25, and O-16, issued on December 14, 1988 was the only construction permit issued to Allison Transmission that listed a sulfur dioxide emission limit. Each of these permits contained a sulfur dioxide (SO₂) emission limit of six tenths (0.6) pounds per million Btu heat input for all transmission test stands and test cells. The SO₂ emission limit of six tenths (0.6) pounds per million Btu heat input was based on Indianapolis Air Pollution Control Board Regulation IV-4 (Sulfur Dioxide Emissions) for distillate fuel fired combustion equipment. The applicability of Regulation IV-4 was to all existing and new stationary fuel combustion equipment in Marion County which is capable of emitting sulfur dioxide to the atmosphere and which requires a permit pursuant to Indianapolis Air Pollution Control Board Regulation IX-1 (Permits) (has the potential to emit SO₂ of greater than five (5) pounds per hour or twenty five (25) pounds per day of SO₂ emissions).

With the adoption of 326 IAC 7 (Sulfur Dioxide Rules) by the Indianapolis Air Pollution Control Board on September 9, 1999, the provisions of Regulation IV-4 are no longer applicable to Marion County sources. The potential to emit SO₂ for Test Stands O-24, O-25, and O-16, issued on December 14, 1988 was not equal to or greater than forty (40) tons per year (see TSD Appendix A page 1 of 10). Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Rules) did not apply to SO₂ emissions for Test Stands O-24, O-25, and O-16. In addition, the potential to emit SO₂ from Test Stands O-24, O-25, and O-16 was each less than twenty five (25) tons per year. Therefore, 326 IAC 7 was not an applicable requirement for these Test Stands. As a result, the former SO₂ emission limit that was contained in the Installation and Operating Permits for Allison Transmission is no longer an applicable requirement. In the Existing Approvals section on page 8 of 37 of the public notice Technical Support Document, a discussion of why Indianapolis Air Pollution Control Board Regulation IV-4 (Sulfur Dioxide Emissions) was no longer applicable was contained.

The applicability of 326 IAC 7 (Sulfur Dioxide Rules) is to all facilities with a potential to emit twenty five (25) tons per year or ten (10) pounds per hour of SO₂. Although 326 IAC 7-1.1-2 lists specific emission limits for coal, residual oil and distillate oil combustion, the applicability of 326 IAC 7 is dependent on the potential to emit SO₂ and the capability of the unit to burn coal, residual oil or distillate oil, not if the facility is classified as a fuel combustion facility. In the previous draft Part 70 Operating Permits that Allison Transmission has reviewed, the previous Section D.5.3 Sulfur Dioxide (SO₂) contained the 326 IAC 7 emission limitation for distillate fuel combustion of five tenths (0.5) pounds of SO₂ per million Btu of heat input. Because the potential to emit SO₂ from Test Stands O-24, O-25, and O-16 was each less than twenty five (25) tons per year (see TSD Appendix A page 1 of 10), 326 IAC 7 was removed from the public noticed Part 70 Permit as an applicable requirement.

However, the potential to emit SO₂ from Test Cells 701, 704, 705, 706, 707, 709, 711, 32N, 38N and 50 each exceeds twenty five (25) tons per year (see TSD Appendix A page 6 of 10). Because these internal combustion engines in these test cells burn distillate fuel and each of these engines has the potential to emit SO₂ in excess of twenty five (25) tons per year, each test cell is limited to five tenths (0.5) pounds of SO₂ emissions per million Btu of heat input. The applicability of 326 IAC 7 is not dependent on whether a facility is classified as a fuel combustion facility nor does it specifically provide an exemption from applicability for internal combustion engines.

Rule making for the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20, 40 CFR 63.9280, Subpart PPPPP National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands has provided an exemption from applicability based on a facility being a research and development facility. It also appears that the State of Illinois may have specifically provided an exemption from its carbon monoxide rules because the affected engine test cells are not by definition fuel combustion emission units for the purposes of the applicability of that particular rule. However, a determination that the units are not fuel combustion sources subject to any existing regulation cannot be made for the potential applicability or non applicability of any existing Federal, State or local air quality rule. Each rule may have specific provisions intended to apply or to not apply. 326 IAC 7 does not provide an exemption for stationary reciprocating engine sources or facilities.

With regard to Condition D.2.5(a) of the proposed Part 70 Permit, this condition has been reworded to clarify that the referenced sulfur dioxide emission limit is only applicable to Test Cells 701, 704, 705, 706, 707, 709, 711, 32N, 38N and 50. This revision is as follows:

D.2.5 Sulfur Dioxide Emissions and Sulfur Content

Compliance **for Test Cells 701, 704, 705, 706, 707, 709, 711, 32N, 38N and 50** shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Comment # 11

- (a) For Condition D.2.3, D.3.2, D.4.2, D.5.2(c), (d), (e), (f), (g) and (h) and Condition D.7.2, General Motors requests that these conditions be deleted, and replaced with the following sample language for Test Cell 39N:

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Cell 39N, the NO_x emission limit is 39.9 tons per year on a 12 month rolling total.

This new condition specifically limits the emission rate of NO_x from Test Cell 39N to 39.9 tons per year which is the applicable requirement for PSD not to apply. The requirement that applies to the facility is to maintain emissions below the significance level. USEPA allows such a limit to be included if it is coupled with tracking requirements for fuel usage and calculation of emissions using appropriate emission factors. It is neither legally required nor necessary to impose an actual fuel usage and AP-42 emission factor limitation. Instead the permit should require a calculation methodology for determining that emissions from this unit are below 39.9 tons per year on a 12 month rolling basis. Specifically, the permit need only require that the facility track its monthly fuel usage and multiply that by the appropriate applicable emission factor, specifically, 0.6042 pounds of NO_x emissions per gallon of fuel combusted in reciprocating engines 600 horsepower or less and 0.4383 pounds of NO_x emissions per gallon of fuel combusted in reciprocating engines greater than 600 horsepower. Then, report those results as already required by the permit. The difficulty with imposing a fuel and emission factor limitation is that the facility could be in compliance with its emission limitation of 39.9 tons per year and still be in violation of these operational limits. USEPA has repeatedly approved permits that contain tracking systems like we propose here without an absolute limit on fuel usage or emission factor. We request that the same approach be taken in this permit.

- (b) For Condition D.2.7(b), D.3.3(a), D.4.3(a), D.5.3(b), D.5.3(c), D.5.3(d) and D.7.3(a), General Motors requests that these conditions be deleted, and replaced with the following language for that specific test cell, test stand or grouping of test cells or test stands:

To document compliance, the Permittee shall maintain a record of the monthly gallons of diesel fuel combusted. This monthly usage is then multiplied by 0.6042 pounds of NO_x emissions per gallon of fuel combusted in reciprocating engines 600 horsepower or less and 0.4383 pounds of NO_x emissions per gallon of fuel combusted in reciprocating engines greater than 600 horsepower to determine the monthly NO_x emission rate. This rate is then added to the last 11 months of NO_x emission data to determine compliance with the 39.9 tons per year emission limit. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each period.

Response to Comment # 11

Test Cells 39N, TC-107, TC-109, TC-111, TC-112, 702 and Test Stands C-33, O-1 and O-2, O-24 and O-25 and O-31, each commenced construction or were modified after August 8, 1977 (see TSD discussion of 326 IAC 2-2 on pages 21 through 32 of 37). Therefore, the potential to emit NO_x must be enforceably limited in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Cells 39N, TC-107, TC-109, TC-111, TC-112, 702 and Test Stands C-33, O-1 and O-2, O-24 and O-25 and O-31. NO_x emissions shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month. In order for this limit to be enforceable as a practical matter, the source is utilizing the AP-42 emission factor for NO_x of 0.4384 pounds of NO_x per gallon of diesel fuel combusted in reciprocating engines greater than 600 horsepower. Therefore, for the ton per year limit to be enforceable as a practical matter, a fuel cap, based on the emission factor utilized to demonstrate compliance, must be tracked and reported. The fuel cap, based on diesel fuel firing in reciprocating engines greater than 600 horsepower, is calculated as follows:

$$39.9 \text{ tons NO}_x/\text{year} = 0.4384 \text{ lb NO}_x/\text{gallon} \times X \text{ gallon/year} \times \text{ton NO}_x / 2000 \text{ lb NO}_x$$
$$X = 182,481 \text{ gallons/year}$$

Allison Transmission does utilize reciprocating engines that are 600 horsepower or less. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower. This equivalence is generated using the AP-42 emission factor for engines greater than 600 horsepower (0.4384 lb NO_x per gallon) and the AP-42 emission factor

for engines 600 horsepower or less of 0.6042 pounds NO_x per gallon and allows the source to consume as much fuel as possible under the cap, barring any subsequent change in emission factor, and demonstrate that NO_x emissions are less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month. This equivalence is established as follows:

$$0.4384 \text{ lbs NO}_x \text{ per gallon} / 0.6042 \text{ lbs NO}_x \text{ per gallon} = 0.73$$

Therefore, Conditions D.2.3, D.3.2, D.4.2, D.5.2 and D.7.2 have been revised along with the insertion of a new Condition D.2.6, D.3.3, D.4.3, D.5.3 and D.7.4 - Emission Factors and Performance Testing. This new Compliance Determination Condition establishes the emission factors that will be utilized to demonstrate that NO_x emissions are less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month. Revisions to subsequent record keeping and reporting requirements to track and record fuel use as well as a renumbering of conditions to reflect the insertion of the new emission factor condition were made as shown below. The revisions to the record keeping and reporting requirements necessitate revision to each respective Report Form for Sections D.2, D.3, D.4, D.5 and D.7. These revisions are as follows:

D.2.3 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Cell 39N, the following conditions shall apply:

- (a) NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Cell 39N shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (b) The input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Cell 39N shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.**

~~(a) The input of diesel fuel to Test Cell 39N shall be less than 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.~~

~~(b) The NO_x emissions from Test Cell 39N shall not exceed 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted.~~

~~Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Cell 39N.~~

Compliance Determination Requirements

D.2.6 Emission Factors and Performance Testing

- (a) The Permittee shall use the following NO_x emissions factors in conjunction with the actual throughput of diesel fuel fired in reciprocating engines utilized in Test Cell 39N to determine compliance with emissions limitation in Condition D.2.3:**

Reciprocating Engine Size (horsepower)	NO _x emissions factor
600 or less	0.6042 pounds per gallon of diesel fuel combusted
greater than 600	0.4384 pounds per gallon of diesel fuel combusted

(b) Monthly NO_x emissions shall be determined by the following equation:

$$\text{NO}_x \text{ emissions (tons)} = \frac{(0.6042 \text{ lbs/gal} \times \text{gal throughput for engines 600 hp or less} + 0.4384 \text{ lbs/gal} \times \text{gal throughput for engines greater than 600 hp})}{2000 \text{ lbs NO}_x \text{ per ton NO}_x}$$

- (c) Pursuant to IC 13-15-7-1, IC 13-15-7-2, 326 IC 2-1.1-9(2) and 326 IAC 2-1.1-11 the IDEM, OAQ reserves the authority to require the Permittee to conduct performance tests to verify the emissions factors of this permit.**
- (d) After issuance of this permit, if the performance test results indicate a discrepancy between the emission factors and the actual emissions rate observed during the test, the Permittee shall inform IDEM, OAQ, Permits Branch of such variation within 90 days of the submission of performance test report to IDEM.**
- (e) Pursuant to IC 13-15-7-1, IC 13-15-7-2 and 326 IC 2-1.1-9(2), the IDEM, OAQ may re-evaluate the permit conditions and emissions factors. IDEM, OAQ may, at its discretion, use the authority under IC 13-15-7-1, IC 13-15-7-2 and/or 326 IAC 2-1.1-9(2) to re-open and revise the permit to more closely reflect the actual performance test results using permit amendment or modification procedures.**

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

D.2.8 7 Record Keeping Requirements

- (a) To document compliance with Condition D.2.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.**
- (1) Calendar dates covered in the compliance determination period;**
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;**
 - (3) A certification, signed by the owner or operator which is not necessarily the responsible official, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and**
- If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
- (4) Fuel supplier certifications.**
 - (5) The name of the fuel supplier; and**
 - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.**
- (b) To document compliance with Condition D.2.3 and Condition D.2.6, the Permittee shall:**
- (1) Maintain monthly records of the diesel fuel throughput in Test Cell 39N for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput in Test Cell 39N for engines greater than 600 horsepower. ~~maintain records of the monthly gallons of diesel fuel combusted in Test Cell 39N. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.~~**

(2) Maintain records of NO_x emissions on a monthly basis using the emissions factors in Condition D.2.6 in conjunction with monthly diesel fuel throughput in Test Cell 39N to calculate emissions from Test Cell 39N.

- (c) To document compliance with Condition D.2.76, the Permittee shall maintain records of visible emission notations of Test Cell(s) 701 (Stack/Vent PTE 057), 704 (Stack/Vent PTE 065), 705 (Stack/Vent PTE 067), 706 (Stack/Vent PTE 069), 707 (Stack/Vent PTE 071), 709 (Stack/Vent PTE 075), 711 (Stack/Vent PTE 079), 32N (Stack/Vent PTE 008), 38N (Stack/Vent PTE 011), 39N (PTE 018) and 50 (Stack/Vent PTE 093) stack exhaust.
- (d) To document compliance with Condition D.2.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.98 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.3 **and Condition D.2.6** shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the calendar 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).

D.3.2 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Cells TC-107, TC-109, TC-111, TC-112 the following conditions shall apply:

- (a) Combined NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Cells TC-107, TC-109, TC-111, TC-112 shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (b) The combined input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Cells TC-107, TC-109, TC-111, TC-112 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.**

~~(a) The combined input of diesel fuel to Test Cells TC-107, TC-109, TC-111, TC-112 shall be less than 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.~~

~~(b) The NO_x emissions from Test Cells TC-107, TC-109, TC-111, TC-112 shall each not exceed 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted.~~

~~Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Cells TC-107, TC-109, TC-111, TC-112.~~

Compliance Determination Requirements

D.3.3 Emission Factors and Performance Testing

- (a) The Permittee shall use the following NO_x emissions factors in conjunction with the actual throughput of diesel fuel fired in reciprocating engines utilized in Test Cells TC-107, TC-109, TC-111, TC-112 to determine compliance with emissions limitation in Condition D.3.2:

Reciprocating Engine Size (horsepower)	NO _x emissions factor
600 or less	0.6042 pounds per gallon of diesel fuel combusted
greater than 600	0.4384 pounds per gallon of diesel fuel combusted

- (b) Monthly NO_x emissions shall be determined by the following equation:

$$\text{NO}_x \text{ emissions (tons)} = \frac{(0.6042 \text{ lbs/gal} \times \text{gal throughput for engines 600 hp or less} + 0.4384 \text{ lbs/gal} \times \text{gal throughput for engines greater than 600 hp})}{2000 \text{ lbs NO}_x \text{ per ton NO}_x}$$

- (c) Pursuant to IC 13-15-7-1, IC 13-15-7-2, 326 IC 2-1.1-9(2) and 326 IAC 2-1.1-11 the IDEM, OAQ reserves the authority to require the Permittee to conduct performance tests to verify the emissions factors of this permit.
- (d) After issuance of this permit, if the performance test results indicate a discrepancy between the emission factors and the actual emissions rate observed during the test, the Permittee shall inform IDEM, OAQ, Permits Branch of such variation within 90 days of the submission of performance test report to IDEM.
- (e) Pursuant to IC 13-15-7-1, IC 13-15-7-2 and 326 IC 2-1.1-9(2), the IDEM, OAQ may re-evaluate the permit conditions and emissions factors. IDEM, OAQ may, at its discretion, use the authority under IC 13-15-7-2, IC 13-15-7-2 and/or 326 IAC 2-1.1-9(2) to re-open and revise the permit to more closely reflect the actual performance test results using permit amendment or modification procedures.

D.3.43 Record Keeping Requirements

- (a) To document compliance with Condition D.3.2 and Condition D.3.3, the Permittee shall:
- (1) Maintain monthly records of the diesel fuel throughput in Test Cells TC-107, TC-109, TC-111, TC-112 for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput in Test Cells TC-107, TC-109, TC-111, TC-112 for engines greater than 600 horsepower.
 - (2) Maintain records of NO_x emissions on a monthly basis using the emissions factors in Condition D.3.3 in conjunction with monthly diesel fuel throughput in Test Cells TC-107, TC-109, TC-111, TC-112 to calculate combined NO_x emissions from Test Cells TC-107, TC-109, TC-111, TC-112. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.

~~(a) To document compliance with Condition D.3.2, the Permittee shall maintain records of the monthly gallons of diesel fuel combusted in Test Cells TC-107, TC-109, TC-111 and TC-112. Records necessary to demonstrate compliance shall be available within thirty (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.3.54 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.2 and Condition D.3.3 shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the calendar 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).

D.4.2 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Stand C-33 the following conditions shall apply:

- (a) **NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Stand C-33 shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (b) **The input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Cell Stand C-33 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.**

~~(a) The input of diesel fuel to Test Stand C-33 shall be less than 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.~~

~~(b) The NO_x emissions from Test Stand C-33 shall not exceed 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted.~~

~~Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Stand C-33.~~

Compliance Determination Requirements

D.4.3 Emission Factors and Performance Testing

- (a) **The Permittee shall use the following NO_x emissions factors in conjunction with the actual throughput of diesel fuel fired in reciprocating engines utilized in Test Stand C-33 to determine compliance with emissions limitation in Condition D.4.2:**

Reciprocating Engine Size (horsepower)	NO _x emissions factor
600 or less	0.6042 pounds per gallon of diesel fuel combusted
greater than 600	0.4384 pounds per gallon of diesel fuel combusted

- (b) **Monthly NO_x emissions shall be determined by the following equation:**

$$\text{NO}_x \text{ emissions (tons)} = \frac{(0.6042 \text{ lbs/gal} \times \text{gal throughput for engines 600 hp or less} + 0.4384 \text{ lbs/gal} \times \text{gal throughput for engines greater than 600 hp})}{2000 \text{ lbs NO}_x \text{ per ton NO}_x}$$

- (c) **Pursuant to IC 13-15-7-1, IC 13-15-7-2, 326 IC 2-1.1-9(2) and 326 IAC 2-1.1-11 the IDEM,**

OAQ reserves the authority to require the Permittee to conduct performance tests to verify the emissions factors of this permit.

- (d) **After issuance of this permit, if the performance test results indicate a discrepancy between the emission factors and the actual emissions rate observed during the test, the Permittee shall inform IDEM, OAQ, Permits Branch of such variation within 90 days of the submission of performance test report to IDEM.**
- (e) **Pursuant to IC 13-15-7-1, IC 13-15-7-2 and 326 IC 2-1.1-9(2), the IDEM, OAQ may re-evaluate the permit conditions and emissions factors. IDEM, OAQ may, at its discretion, use the authority under IC 13-15-7-2, IC 13-15-7-2 and/or 326 IAC 2-1.1-9(2) to re-open and revise the permit to more closely reflect the actual performance test results using permit amendment or modification procedures.**

D.4.43 Record Keeping Requirements

- (a) **To document compliance with Condition D.4.2 and Condition D.4.3, the Permittee shall:**
 - (1) **Maintain monthly records of the diesel fuel throughput in Test Stand C-33 for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput in Test Stand C-33 for engines greater than 600 horsepower.**
 - (2) **Maintain records of the NO_x emissions on a monthly basis using the emissions factors in Condition D.4.3 in conjunction with monthly diesel fuel throughput in Test Stand C-33 to calculate NO_x emissions from Test Stand C-33. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.**
- ~~(a) To document compliance with Condition D.4.2, the Permittee shall maintain records of the monthly gallons of diesel fuel combusted in Test Stand C-33. Records necessary to demonstrate compliance shall be available within thirty (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.4.54 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.2 **and Condition D.4.3** shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the calendar 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).

D.5.2 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Stands O-1, O-2, O-24, O-25 and O-31, the following conditions shall apply:

- (a) **Combined NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Stands O-1 and O-2 shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (b) **The combined input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Stands O-1 and O-2 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of**

diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

- (c) Combined NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Stands O-24 and O-25 shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (d) The combined input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Stands O-24 and O-25 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.**
- (e) NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Stand O-31 shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (f) The input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Stand O-31 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.**

~~(a) The combined input of diesel fuel to Test Cell Stands O-1 and O-2 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.~~

~~(b) The NO_x emissions from Test Stands O-1 and O-2 shall each not exceed 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted.~~

~~(c) The combined input of diesel fuel to Test Stands O-24 and O-25 shall be less than 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.~~

~~(d) The NO_x emissions from Test Stands O-24 and O-25 shall each not exceed 0.6042 pounds NO_x emissions per gallon of diesel fuel combusted.~~

~~(e) The input of diesel fuel to Test Cell Stand O-31 shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.~~

~~(f) The NO_x emissions from Test Stand O-31 shall not exceed 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted.~~

~~Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Stands O-1, O-2, O-24, O-25 and O-31.~~

Compliance Determination Requirements

D.5.3 Emission Factors and Performance Testing

- (a) The Permittee shall use the following NO_x emissions factors in conjunction with the**

actual throughput of diesel fuel fired in reciprocating engines utilized in Test Stands O-1, O-2, O-24, O-25 and O-31 to determine compliance with emissions limitation in Condition D.5.2:

Reciprocating Engine Size (horsepower)	NO _x emissions factor
600 or less	0.6042 pounds per gallon of diesel fuel combusted
greater than 600	0.4384 pounds per gallon of diesel fuel combusted

(b) Monthly NO_x emissions shall be determined by the following equation:

$$\text{NO}_x \text{ emissions (tons)} = \frac{(0.6042 \text{ lbs/gal} \times \text{gal throughput for engines 600 hp or less} + 0.4384 \text{ lbs/gal} \times \text{gal throughput for engines greater than 600 hp})}{2000 \text{ lbs NO}_x \text{ per ton NO}_x}$$

- (c) Pursuant to IC 13-15-7-1, IC 13-15-7-2, 326 IC 2-1.1-9(2) and 326 IAC 2-1.1-11 the IDEM, OAQ reserves the authority to require the Permittee to conduct performance tests to verify the emissions factors of this permit.**
- (d) After issuance of this permit, if the performance test results indicate a discrepancy between the emission factors and the actual emissions rate observed during the test, the Permittee shall inform IDEM, OAQ, Permits Branch of such variation within 90 days of the submission of performance test report to IDEM.**
- (e) Pursuant to IC 13-15-7-1, IC 13-15-7-2 and 326 IC 2-1.1-9(2), the IDEM, OAQ may re-evaluate the permit conditions and emissions factors. IDEM, OAQ may, at its discretion, use the authority under IC 13-15-7-2, IC 13-15-7-2 and/or 326 IAC 2-1.1-9(2) to re-open and revise the permit to more closely reflect the actual performance test results using permit amendment or modification procedures.**

D.5.43 Record Keeping Requirements

- (a) To document compliance with Condition D.5.2 (b) (a) and Condition D.5.3, the Permittee shall maintain records of the monthly gallons of diesel fuel combusted in Test Stands O-1 and O-2 combined for Test Stands O-1 and O-2, maintain monthly records of the diesel fuel throughput for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput for engines greater than 600 horsepower. Maintain records of combined NO_x emissions on a monthly basis using the emissions factors in Condition D.5.3 in conjunction with combined monthly diesel fuel throughput in Test Stands O-1 and O-2 to calculate NO_x emissions from Test Stand O-1 and O-2. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.**
- (b) To document compliance with Condition D.5.2(d)(e), the Permittee shall maintain records of the monthly gallons of diesel fuel combusted in Test Stands O-24 and O-25 combined for Test Stands O-24 and O-25, maintain monthly records of the diesel fuel throughput for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput for engines greater than 600 horsepower. Maintain records of the combined NO_x emissions on a monthly basis using the emissions factors in Condition D.5.3 in conjunction with combined monthly diesel fuel throughput in Test Stands O-24 and O-25 to calculate NO_x emissions from Test Stand O-24 and O-25. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.**

- (c) To document compliance with Condition D.5.2(f)(e), the Permittee shall maintain records of the monthly gallons of diesel fuel combusted in Test Stand O-31. **for Test Stand O-31, maintain monthly records of the diesel fuel throughput for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput for engines greater than 600 horsepower. Maintain records of NO_x emissions on a monthly basis using the emissions factors in Condition D.5.3 in conjunction with monthly diesel fuel throughput in Test Stand O-31 to calculate NO_x emissions from Test Stand O-31.** Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.55.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.2 **and Condition 5.3** 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 calendar 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).

D.7.2 PSD Minor Limit [326 IAC 2-2] [Significant Source Modification 097-15550-00310]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable to Test Cell 702 the following conditions shall apply:

- (a) **NO_x emissions from diesel fuel fired reciprocating engines utilized in Test Cell 702 shall be limited to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (b) Pursuant to Significant Source Modification 097-15550-00310 issued November 7, 2002, the input of diesel fuel to Test Cell 702 shall be less than 173,516 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower.

~~(b) The NO_x emissions from Test Cell ETC702 shall not exceed 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted.~~

~~Compliance with these limits is necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Cell ETC702.~~

D.7.4 Emission Factors and Performance Testing

- (a) **The Permittee shall use the following NO_x emissions factors in conjunction with the actual throughput of diesel fuel fired in reciprocating engines utilized in Test Cell 702 to determine compliance with emissions limitation in Condition D.7.2:**

Reciprocating Engine Size (horsepower)	NO _x emissions factor
600 or less	0.6042 pounds per gallon of diesel fuel combusted
greater than 600	0.4384 pounds per gallon of diesel fuel combusted

- (b) **Monthly NO_x emissions shall be determined by the following equation:**

NO_x emissions (tons) = (0.6042 lbs/gal x gal throughput for engines 600 hp or less + 0.4384 lbs/gal x gal throughput for engines greater than 600 hp) / 2000 lbs NO_x per ton NO_x

- (c) Pursuant to IC 13-15-7-1, IC 13-15-7-2, 326 IC 2-1.1-9(2) and 326 IAC 2-1.1-11 the IDEM, OAQ reserves the authority to require the Permittee to conduct performance tests to verify the emissions factors of this permit.**
- (d) After issuance of this permit, if the performance test results indicate a discrepancy between the emission factors and the actual emissions rate observed during the test, the Permittee shall inform IDEM, OAQ, Permits Branch of such variation within 90 days of the submission of performance test report to IDEM.**
- (e) Pursuant to IC 13-15-7-1, IC 13-15-7-2 and 326 IC 2-1.1-9(2), the IDEM, OAQ may re-evaluate the permit conditions and emissions factors. IDEM, OAQ may, at its discretion, use the authority under IC 13-15-7-2, IC 13-15-7-2 and/or 326 IAC 2-1.1-9(2) to re-open and revise the permit to more closely reflect the actual performance test results using permit amendment or modification procedures.**

D.7.54 Record Keeping Requirements

- (a) To document compliance with Condition D.7.2 and Condition D.7.4, the Permittee shall:**
 - (1) Maintain monthly records of the diesel fuel throughput in Test Cell 702 for engines 600 horsepower or less and maintain monthly records of diesel fuel throughput in Test Cell 702 for engines greater than 600 horsepower.**
 - (2) Maintain records of NO_x emissions on a monthly basis using the emissions factors in Condition D.7.4 in conjunction with monthly diesel fuel throughput in Test Cell 702 to calculate NO_x emissions from Test Cell 702. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.**

~~(a) To document compliance with Condition D.7.2, the Permittee shall maintain records of the monthly gallons of diesel fuel combusted in Emission Unit ID-ETC702. Records necessary to demonstrate compliance shall be available within thirty (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.7.65 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.7.2 and Condition 7.4 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).

Part 70 Usage Report Forms for diesel fuel use in Emission Unit ETC (Test Cell 39N), Emission Unit DTC (Test Cells TC-107, TC-109, TC-111, TC-112), Emission Unit PTS12 (Test Stand C-33), Emission Unit PTS14 (Test Stands O-1 & O-2), Emission Unit PTS14 (Test Stands O-24 & O-25), Emission Unit PTS14 (Test Stand O-31) and Emission Unit ETC702 have all been revised to show the monthly and twelve consecutive month sum NO_x emissions as follows with the revision to Test Cell 39N shown below:

Source Name: Allison Transmission Division of General Motors
Source Address: 4700 West 10th Street, Indianapolis Indiana 46222
Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222

Part 70 Permit No.: T097-6898-00310
 Facility: Emission Unit ETC Test Cell 39N
 Parameter: Diesel fuel usage; **limit the potential to emit NO_x in Test Cell 39N to less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
 Limit: **The input of diesel fuel to reciprocating engines greater than 600 horsepower that are utilized in Test Cell Stand 39N shall be less than 182,481 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purposes of determining compliance, each gallon of diesel fuel burned in reciprocating engines that are less than or equal to 600 horsepower shall be equivalent to 0.73 gallons of diesel fuel burned in reciprocating engines that are greater than 600 horsepower. The input of diesel fuel to Test Cell 39N shall be less than 132,400 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.**

Quarter: _____ Year: _____

Emission Unit	Month	Gallons this month	Gallons per Twelve (12) Consecutive Month period
Emission Unit ID Test Cell 39N			

	Column 1				Column 2				Column 1 + Column 2			
	This Month				Previous 11 Months				12 Month Total			
	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)	Diesel fuel usage > 600 hp (gal)	Equivalent gallons (gal x 0.73)	Total Diesel fuel usage (gal)	NO _x emissions (tons)
Month												
Month												
Month												

Comment # 12

General Motors requests that Condition D.7.3 be deleted as shown below. Compliance with the NO_x emission limit is determined by multiplying the fuel usage by the appropriate emission factor for the engine size. Since testing was performed to derive the AP-42 emission factor that appeared in AP-42 Table 3.4-1 (10/96) for this type of engine, no further testing should be required.

Compliance Determination Requirements

~~D.7.3 Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11]~~

~~During the period between thirty (30) and thirty six (36) months after issuance of this Part 70 Permit, in order to demonstrate compliance with Condition D.7.2, the Permittee shall perform NO_x emissions testing for Test Cell ETC702 utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C – Performance Testing.~~

Response to Comment # 12

All engines at Allison Transmission are utilizing AP-42 emission factors that do not predict noncompliance with any previously established applicable emission limit. However, AP-42 emission factors represent an average emission rate from similar units but may not be representative of emissions from any one specific emission unit. Therefore, IDEM, OAQ and OES are requiring that at least one emission unit, specifically, Emission Unit ID ETC702, be required to perform stack testing for NO_x emissions to verify compliance with the short term emission limit of 0.4384 pounds NO_x emissions per gallon of diesel fuel combusted. AP-42 emission factors are being used to limit NO_x emissions such that compliance with these limits renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to Test Cell 702. During the period between thirty (30) and thirty six (36) months after issuance of this Part 70 Permit, the Permittee shall perform NO_x emissions testing for Test Cell 702 utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

In addition, IDEM, OAQ and/or OES may require compliance testing for any emission unit at Allison Transmission when necessary to determine if these emission units are in compliance with an applicable emission limitation.

There is no change to Condition D.7.3.

Comment # 13

During 2003, Environmental Corporate Remediation Company, Inc. (ENCORE) submitted a permit application to the Office of Environmental Services (OES) related to a proposed remediation system at the Allison Transmission Speedway plant. This system was being installed to remove perchloroethylene as a part of a soil and groundwater remediation system. On April 1, 2003, OES provided ENCORE with a letter in which it was indicated that the system was exempt from permitting, since the potential to emit, when averaged over the life of the project, did not exceed ten tons per year of a single hazardous air pollutant (HAP) or twenty five tons per year of any combination of HAPs.

The proposed Title V permit contains no terms or conditions related to the remediation system, although there is mention in the Technical Support Document (TSD) of the April 1, 2003 Exemption letter. Due to the difficulty in defining the potential to emit for a remediation system, GM believes that it would be best to create a permit condition that establishes an enforceable permit emission limit of no more than ten tons per year of a single HAP (or ten tons of a combination of HAPs) to clarify that the Speedway Plant is a minor source of HAPs.

GM suggests that a new Section D.9 be added to the permit that would address the perchloroethylene remediation system. This section should include the following description and conditions:

Section D.9 - Facility Description

"One (1) soil and groundwater remediation system, identified as ENCORE, and installed in 2003, consisting of:

- (a) Soil vapor extraction (SVE) system, including miscellaneous piping and:
 - (1) seventeen (17) soil vapor extraction wells;
 - (2) One (1) 90 gallon knock-out tank, and
 - (3) one (1) 30-horsepower blower rated at 750 standard cubic feet per minute (scfm), with emissions exhausting to one (1) stack identified as SVE vent.

- (b) Dense non-aqueous phase liquid (DNAPL) groundwater recovery system, including miscellaneous piping, pneumatic pumps and:
 - (1) four (4) recovery wells;
 - (2) one (1) 1000 gallon DNAPL/water storage tank, with emissions exhausting to one

(1) stack identified as SVE Vent.

D.9.1 HAP Minor Limit

HAP emissions from emission unit ENCORE shall not exceed 9.0 tons per twelve (12) consecutive month period for any single HAP or 9.0 tons per twelve (12) consecutive month period of a combination of HAPs. As a result of this limitation, the Allison Speedway facility is a minor source for HAPs.

Compliance Determination Requirements

D.9.2 Testing Requirements

The Permittee shall collect a grab sample of the exhaust stream from the SVE vent to determine HAP emission rates using Tedlar Bag Sampling - SOP 2102, USEPA 10/21/94 modified to fill tedlar bags directly from the pump rather than to use a vacuum box. Collected samples will be analyzed using Modified Method TO-15. The Permittee shall establish a sample collection and analysis plan that is maintained and available for review by the Commissioner that outlines quality control procedures for sampling and analysis. Samples shall be collected at the following frequency:

- (a) Once per month during steady state operations; and
- (b) Once at any time additional wells are brought on line or the air flow rate from individual wells is increased.

D.9.3 Record Keeping Requirements

To document compliance with Condition D.9.1, the Permittee shall maintain the following records related to HAP emissions from ENCORE:

- (a) Monthly samples of HAP concentrations;
- (b) Records of HAP concentrations from other samples collected;
- (c) Air flow data from the system;
- (d) Hours of operation;
- (e) Monthly HAP emission rates based on information collected in (a) through (d) above.

D.9.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.9.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the calendar 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).

Response to Comment # 13

The addition of the ENCORE remediation system to source wide operations in 2003 was processed by OES as a Response to Review Request letter 097-17309-00310 and was issued by the City of Indianapolis OES on April 1, 2003. This review determined that installation and operation of the soil and groundwater remediation system did not have regulated air pollutant emissions in excess of minimum permitting thresholds (ten tons per year of VOC or ten tons per year of any single HAP or twenty five tons of any combination of HAP). This review determined that installation and operation of the soil and groundwater remediation system was not subject to 326 IAC 2-4.1 (New Source Toxics Control) (see TSD page 17 of 37). This review determined that installation and operation of the soil and groundwater remediation system did not have any specifically regulated activities and that these operations, located on contiguous or adjacent property, would be combined in to the Title V Permit for Allison Transmission as an Insignificant Activity that is not specifically regulated. Because this operation did not have any specifically regulated activities (see TSD page 34 of 37)

and because this operation did not increase source wide potential to emit hazardous air pollutants (HAPs) above the major source threshold(s) for HAPs (see TSD Potential to Emit table on page 11 of 37), this operation was identified in the public notice Technical Support Document only. Once per month emission sampling and analyses since startup of this operation that has no add on air pollution control equipment indicates that the highest hourly emission rate is 0.7 pounds of tetrachloroethylene per hour which equates to 3.1 tons per year.

Through the use of AP-42 emission factors for internal combustion engines, natural gas and fuel oil fired boilers and the potential to emit from the ENCORE remediation system, Allison Transmission is not a major HAP source (see TSD page 11 of 37 and TSD Appendix A calculation pages 1 through 10 of 10).

In the public notice TSD on pages 16 and 34 of 37, it was stated that because Allison Transmission is not a major HAP source, 40 CFR 63 Subpart GGGGG National Emission Standards for Site Remediation, 326 IAC 2-4.1-1 (New Source Toxics Control) and 326 IAC 20 (Hazardous Air Pollutants) do not apply to this source.

In response to the request to add the ENCORE Remediation system to the Part 70 Operating Permit the following changes are made to Condition A.4 along with a new Section D.9 and Reporting Form for HAP emissions from the Encore System;

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

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

(g) One (1) soil and groundwater remediation system, identified as Emission Unit ENCORE, installed in 2003, consisting of [326 IAC 2-4.1]:

(1) Soil vapor extraction (SVE) system, including miscellaneous piping and:

(A) seventeen (17) soil vapor extraction wells;

(B) one (1) 90 gallon knock-out tank, and

(C) one (1) 30 -horsepower blower rated at 750 standard cubic feet per minute (scfm), with emissions exhausting to one (1) stack identified as SVE vent.

(2) Dense non-aqueous phase liquid (DNAPL)/groundwater recovery system, including miscellaneous piping, pneumatic pumps and:

(A) four (4) recovery wells; and

(B) one (1) 1000 gallon DNAPL/water storage tank, with emissions exhausting to one (1) stack identified as SVE vent.

~~(g)~~ (h) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

SECTION D.9

FACILITY OPERATION CONDITIONS

Insignificant Emitting Activities

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

- (g) One (1) soil and groundwater remediation system, identified as Emission Unit ENCORE, installed in 2003, consisting of [326 IAC 2-4.1]:
- (1) Soil vapor extraction (SVE) system, including miscellaneous piping and:
 - (A) seventeen (17) soil vapor extraction wells;
 - (B) one (1) 90 gallon knock-out tank, and
 - (C) one (1) 30 -horsepower blower rated at 750 standard cubic feet per minute (scfm), with emissions exhausting to one (1) stack identified as SVE vent.
 - (2) Dense non-aqueous phase liquid (DNAPL)/groundwater recovery system, including miscellaneous piping, pneumatic pumps and:
 - (A) four (4) recovery wells; and
 - (B) one (1) 1000 gallon DNAPL/water storage tank, with emissions exhausting to one (1) stack identified as SVE vent.

(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.9.1 HAP Minor Limit [326 IAC 2-4.1]

HAP emissions from Emission Unit ENCORE shall be less than ten (10) tons per twelve consecutive month period for any single HAP and shall be less than ten (10) tons per twelve consecutive month period of any combination of HAP. Compliance with this limit shall render the requirements of 326 IAC 2-4.1 (New Source Toxics Control) not applicable to Emission Unit ENCORE and shall render Allison Transmission Division a minor source of HAPs.

Compliance Determination Requirements

D.9.2 Testing Requirement

The Permittee shall collect a grab sample of the exhaust stream from the SVE vent to determine HAP emission rates using Tedlar Bag Sampling - SOP 2101, USEPA, 10/21/94, modified to fill tedlar bags directly from the pump rather than to use a vacuum box. Collected samples will be analyzed using Modified Method TO-15. The Permittee shall establish a sample collection and analysis plan that is maintained and available for review by IDEM, OAQ and OES that outlines quality control procedures for sampling and analysis. Samples shall be collected at the following frequency:

- (a) Once per month during steady state operations; and
- (b) Once at any time additional wells are brought on line or the air flow rate from the individual wells is increased.

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

D.9.3 Record Keeping Requirements

To document compliance with Condition D.9.1, the Permittee shall maintain the following records related to HAP emissions from Emission Unit ENCORE:

- (a) Monthly samples of HAP concentrations;
- (b) Records of HAP concentrations from any additional samples collected;
- (c) Air flow data from the system;
- (d) Hours of operation; and
- (e) Monthly individual HAP and any combination of HAP emission rates based on information collected in (a) through (d) above.

D.9.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.9.1 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 Usage Report
 (Submit Report Quarterly)**

Source Name: Allison Transmission Division of General Motors
 Source Address: 4700 West 10th Street, Indianapolis Indiana 46222
 Mailing Address: 4700 West 10th Street (M-29), Indianapolis, Indiana, 46222
 Part 70 Permit No.: T097-6898-00310
 Facility: Emission Unit ENCORE
 Parameter: Single HAP and Combined HAP emissions
 Limit: HAP emissions from emission unit ENCORE shall be limited to less than ten (10) tons per twelve consecutive month for any single HAP and shall be limited to less than ten (10) tons per twelve consecutive month period of any combination of HAP.

Quarter: _____ Year: _____

	HAP Emissions this Month		HAP Emissions Previous 11 months		Twelve Consecutive Month Total	
	Single HAP	Combined HAP	Single HAP	Combined HAP	Single HAP	Combined HAP
Month 1						
Month 2						

	HAP Emissions this Month		HAP Emissions Previous 11 months		Twelve Consecutive Month Total	
	Single HAP	Combined HAP	Single HAP	Combined HAP	Single HAP	Combined HAP
Month 3						

Comment # 14

General Motors requests that, pursuant to the comments submitted, appropriate changes be made to the Technical Support Document.

Response to Comment # 14

The Technical Support Document (TSD) will remain as it originally appeared when published. OAQ and OES prefer that the TSD reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the permit has been published 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. The changes to the proposed Part 70 Operating Permit that were made based on public notice comments received were documented by this TSD Addendum with additions listed in **boldface** type and deletions listed in ~~strikeout~~.

Public notice comments received from Allison Transmission Division of General Motors Corporation caused no revision to the Potential to Emit After Issuance Table for the public noticed TSD.

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 permit. The following language will be incorporated into the Permit to address credible evidence:

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

Notwithstanding the Conditions of this Permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or Condition of this Permit.

On April 15, 2004, the United States Environmental Protection Agency (U.S. EPA) named 23 Indiana counties and one partial county nonattainment for the new 8-hour ozone standard. The designations became effective on June 15, 2004. Marion County has been designated as nonattainment for the 8-hour ozone standard. The following has been added to A.1 General Information:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a transmission manufacturing and testing plant under a Standard Industrial Classification Code (SIC) of 3568 (establishments primarily engaged in manufacturing mechanical power transmission equipment and parts).

Responsible Official:	General Director of Operations
Source Address:	4700 West 10 th Street, Indianapolis, Indiana 46222
Mailing Address:	4700 West 10 th Street (M-29), Indianapolis, Indiana, 46222
SIC Code:	3568
County Location:	Marion
County Status:	Nonattainment for ozone under the 8-hour standard Attainment

Source Status: ~~for all criteria pollutants~~
 Part 70 Permit Program
 Major Source, under PSD and Emission Offset Rules and
Nonattainment NSR;
 Minor Source, Section 112 of the Clean Air Act

Although the Technical Support Document (TSD) will not be revised as it is a historical document and the TSD was correct at the time of public notice, the following is being provided to show how the county attainment status has been affected as a result of the 8-hour ozone standard designations. The county attainment status regarding other pollutants remain unchanged; therefore will not be shown below other than in the table County Attainment Status.

The source is located in Marion County.

Pollutant	Status
PM-10	unclassifiable
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) 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.~~

(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 nonattainment new source review.

When Condition B.14(a) - Deviations from Permit Requirements was updated in December 2001, the third sentence of the on the Quarterly Deviation and Compliance Monitoring Report Form should have been revised to be consistent with the Condition. Therefore, it is not clear on the Report Form that the deviations that are not required to be reported on that Form are those that are deviations required to be reported pursuant to an applicable requirement that exists independent of the Permit. Therefore, the statement in the Quarterly Deviation and Compliance Monitoring Report Form is revised to state:

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.** 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. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

APPENDIX A - EMISSIONS CALCULATION ALLISON TRANSMISSION

Company Name: Allison Transmission
Address City IN Zip: 4700 West 10th Street, Indpls., IN 46222
Title V Plt ID: 097-6898-00310
Reviewer: MBC
Date: 01/06/03

Emission Unit: PTS14
 Plant: 14
 Heat Content: 137000 Btu/gal
 Sulfur Content: 0.5

EMISSION UNIT DESCRIPTION							
Cell ID Number	Model Number	Output (HP)	Capacity (gal/hr)	Maximum Capacity (MMBtu/hr)	Type of Fuel	Stack I.D. #	Date Installed
O-1	16V149TI	1500	22.2	3.16	Diesel	14041	1978
O-2	16V149TI	1500	22.2	3.16	Diesel	14038	1979
O-24	6V53T	300	15.3	2.18	Diesel	14024	1986
O-25	6V53T	300	15.3	2.18	Diesel	14023	1986
O-16	12V71	460	35	4.99	Deisel	14025	1989
O-31	16V149TI	1500	22.2	3.16	Diesel	14045	1984
POTENTIAL EMISSIONS							
Emission Factors for Diesel Engines with less than 600 HP, (AP-42 Section 3.3 (10/96))							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC	Combined HAP
Factor	4.41	0.95	0.29	0.31	0.31	0.36	6.45E-03
Units	lbs/MMBtu (604.2 #/kgal)	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu
Cell No.	NOx	CO	SOx	PM	PM-10	TOC	HAP
O-24	42.11	9.07	2.77	2.96	2.96	3.44	0.06
O-25	42.11	9.07	2.77	2.96	2.96	3.44	0.06
O-16	96.34	20.75	6.34	6.77	6.77	7.86	0.14
Emission Factors for Diesel Engines with greater than 600 HP, (AP-42 Section 3.4 (10/96))							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC (NM)	Combined HAP
Factor	3.2	0.85	0.505	0.1	0.0573	0.1	4.36E-03
Units	lbs/MMBtu (438.4 #/kgal)	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu
Cell No.	NOx	CO	SOx	PM	PM-10	TOC	HAP
O-1	44.34	11.78	7.00	1.39	0.79	1.39	0.06
O-2	44.34	11.78	7.00	1.39	0.79	1.39	0.06
O-31	44.34	11.78	7.00	1.39	0.79	1.39	0.06
Total Potential Emissions							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC (NM)	Combined HAP
Total	313.58	74.23	32.87	16.85	15.07	18.90	0.45
APPLICABLE EMISSIONS LIMITATIONS							
Pollutant	Test Cell	Regulation	Limit	Diesel Fuel usage limitation	Horsepower hour limitation		
PM	All Cells	326 IAC 6-1-2(a)	0.03 gr/dscf	Not Applicable	Not Applicable		
NOx	O-24,25	326 IAC 2-2	< 40 tons/yr	132,400.00	2,580,645		
NOx	O-16	326 IAC 2-2	< 40 tons/yr	132,400.00	2,580,645		
NOx	O-31	326 IAC 2-2	< 40 tons/yr	182,481.75	3,333,333		
NOx	O-1,O-2	326 IAC 2-2	< 40 tons/yr	182,481.75	3,333,333		
SO2	All Cells	none because SO2 PTE < 25 tpy					
Test cells O-24, and O-25 combined							
Limitation required to make 326 IAC 2-2 (PSD) not applicable							
(39.9 tons x 2000 lbs/ton)/(4.41 lbs/MMBtu x 137,000 Btu/gal x MMBtu/1,000,000 Btu) = 132,400.00 Gal./12 month							
or							
(39.9 tons x 2000 lbs/ton)/(0.031 lb/Hp-hr) = 2,580,645 Hp-Hr/12 month							
Total O-24 & O-25 Emissions @ limited throughput							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC (NM)	Combined HAP
Total	39.9	8.6	2.6	2.8	2.8	3.3	0.1
Test Cell O-16							
Limitation required to make 326 IAC 2-2 (PSD) not applicable							
(39.9 tons x 2000 lbs/ton)/(4.41 lbs/MMBtu x 137,000 Btu/gal x MMBtu/1,000,000 Btu) = 132,400.00 Gal./12 month							
or							
(39.9 tons x 2000 lbs/ton)/(0.031 lb/Hp-hr) = 2,580,645 Hp-Hr/12 month							
O-16 Emissions @ limited throughput							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC (NM)	Combined HAP
Total	39.9	8.6	2.6	2.8	2.8	3.3	0.1
Test Cell O-31							
Limitation required to make 326 IAC 2-2 (PSD) not applicable							
(39.9 tons x 2000 lbs/ton)/(3.2 lbs/MMBtu x 137,000 Btu/gal x MMBtu/1,000,000 Btu) = 182,481.75 Gal./12 month							
or							
(39.9 tons x 2000 lbs/ton)/(0.024 lb/Hp-hr) = 3,333,333 Hp-Hr/12 month							
O-31 Emissions @ limited throughput							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC (NM)	Combined HAP
Total	39.9	10.6	6.3	1.2	0.7	1.2	0.1
Test Cell O-1 and O-2 combined							
Limitation required to make 326 IAC 2-2 (PSD) not applicable							
(39.9 tons x 2000 lbs/ton)/(3.2 lbs/MMBtu x 137,000 Btu/gal x MMBtu/1,000,000 Btu) = 182,481.75 Gal./12 month							
or							
(39.9 tons x 2000 lbs/ton)/(0.024 lb/Hp-hr) = 3,333,333 Hp-Hr/12 month							
O-1 and O-2 Emissions @ limited throughput							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC (NM)	Combined HAP
Total	39.9	10.6	6.3	1.2	0.7	1.2	0.1
Combined Total	159.6	38.5	17.9	8.1	7.1	9.0	0.2

APPENDIX A - EMISSIONS CALCULATION ALLISON TRANSMISSION

Company Name: Allison Transmission
Address City IN Zip: 4700 West 10th Street, Indpls., IN 46222
Title V Plt ID: 097-6898-00310
Reviewer: MBC
Date: 01/06/03

Emission Unit PTS12
 Plant 14
 Heat Content 137000 Btu/gal
 Sulfur Content 0.5

EMISSION UNIT DESCRIPTION							
Cell ID Number	Model Number	Output (HP)	Maximum Unit Capacity (gal/hr)	Maximum Unit Capacity (MMBtu/hr)	Type of Fuel	Stack I.D. #	Date Installed
C-32	8V92TA	400	16.9	2.41	Diesel	12060	1976
C-33	8V92TA	400	19.4	2.76	Diesel	12058	1981

POTENTIAL EMISSIONS							
Emission Factors for Diesel Engines with less than 600 HP, (AP-42 Section 3.3 (10/96							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC	Combined HAP
Factor	4.41	0.95	0.29	0.31	0.31	0.36	6.45E-03
Units	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu
	(604.2 #/kgal)						Combined
Cell No.	NOx	CO	SOx	PM	PM-10	TOC	HAP
C-32	46.52	10.02	3.06	3.27	3.27	3.80	0.07
C-33	53.40	11.50	3.51	3.75	3.75	4.36	0.08
Total	99.92	21.52	6.57	7.02	7.02	8.16	0.15

APPLICABLE EMISSIONS LIMITATIONS							
	Pollutant	Test Cell	Regulation	Limit	Diesel Fuel usage limitation		
	PM	C-32 & 33	326 IAC 6-1-2(a)	0.03 gr/dscf	Not Applicable		
	NOx	C-33	326 IAC 2-2	< 40 tons/yr	132,400.00		
	SO2	All Cells	none because SO2 PTE < 25 tpy				
Test cell C-33							
Limitation required to make 326 IAC 2-2 (PSD) not applicab							
(39.9 tons x 2000 lbs/ton)/(4.41 lbs/MMBtu x 137,000 Btu/gal x MMBtu/1,000,000						132,400.00	Gal./12 month
or							
(39.9 tons x 2000 lbs/ton) / (0.031 lbs/Hp-Hr) :						2,580,645	Hp-Hr
4.41 lbs/MMBtu x .137 MMBtu/ gal x 1000 gal = 604.2 lbs NOx/1000 ga							
Total C-33 Emissions @ limited throughpu							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC (NM)	Combined HAP
Total	39.9	8.6	2.6	2.8	2.8	3.3	0.1
Test Cell	Air Flow Rate	Equivalent PM		Pound per Hour Emission Rate			
C-32	880	0.2					
C-33	880	0.2					

where equivalent PM pound per hour emission rate
 0.03 gr/dscf x ft³/min x 60 min/hr x pound/7000 grain

APPENDIX A - EMISSIONS CALCULATION ALLISON TRANSMISSIO

Company Name: Allison Transmission
Address City IN Zip: 4700 West 10th Street, Indpls., IN 46222
Title V Plt ID: 097-6898-00310
Reviewer: MBC
Date: 10/27/03
 Emission Unit ETC
 Plant 3
 Heat Content 137000 Btu/gal (diesel)
 Heat Content 130000 Btu/gal (gasoline)
 Sulfur Content 0.5

EMISSION UNIT DESCRIPTION - CONFIGURATION if each cell 600 HP or less

Cell ID Number	Fuel Type	Output (HP)	Maximum Unit Capacity (MMBtu/hr)	Maximum Unit Capacity (gal/hr)	S/V I.D.
701	Diesel	600	4.2	30.7	PTE057
704	Diesel	600	4.2	30.7	PTE065
705	Diesel	600	4.2	30.7	PTE067
706S	Diesel	600	4.2	30.7	PTE069
707	Diesel	600	4.2	30.7	PTE071
709	Diesel	600	4.2	30.7	PTE075
710	Diesel	600	4.2	30.7	PTE077
711	Diesel	600	4.2	30.7	PTE079
712	Diesel	600	4.2	30.7	PTE080
32N	Diesel	600	4.2	30.7	PTE008
32S	Diesel	600	4.2	30.7	PTE006
38N	Diesel	600	4.2	30.7	PTE011
39N	Diesel	600	4.2	30.7	PTE018
39S	Diesel	600	4.2	30.7	PTE020
40N	Diesel	600	4.2	30.7	PTE013
40S	Diesel	600	4.2	30.7	PTE014
41N	Diesel	600	4.2	30.7	PTE023
41S	Diesel	600	4.2	30.7	PTE021
48N	Diesel	600	4.2	30.7	PTE040
48S	Diesel	600	4.2	30.7	PTE041
49N	Diesel	600	4.2	30.7	PTE086
49S	Diesel	600	4.2	30.7	PTE087
50	Diesel	600	4.2	30.7	PTE093
51N	Diesel	600	4.2	30.7	PTE084
51S	Gasoline or Diesel	600	4.2	30.7	PTE082
Totals			105.0	766.42	

APPENDIX A - EMISSIONS CALCULATION ALLISON TRANSMISSIO

Company Name: Allison Transmission
 Address City IN Zip: 4700 West 10th Street, Indpls., IN 46222
 Title V Plt ID: 097-6898-00310
 Reviewer: MBC
 Date: 10/27/03

Emissions worksheet for ETC continued

POTENTIAL EMISSIONS - CONFIGURATION at 600HP or less							
Emission Factors for Diesel Engines with less than 600 HP, (AP-42 Section 3.3 (10/96))							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC	Combined HAP
Factor (Diesel)	4.41	0.95	0.29	0.31	0.31	0.36	6.45E-03
Factor (Gasoline)	1.63	62.7	0.084	0.1	0.1	3.03	Not Avialable
Units	lbs/MMBtu (604.2 #/kgal)	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu
Cell No.	NOx	CO	SOx	PM	PM-10	TOC	HAP
701	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
704	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
705	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
706S	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
707	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
709	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
710	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
711	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
712	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
32N	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
32S	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
38N	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
39N	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
39S	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
40N	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
40S	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
41N	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
41S	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
48N	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
48S	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
49N	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
49S	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
50	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
51N	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
51S	81.1	17.5	5.3	5.7	5.7	6.6	1.2E-01
51S (gasoline)	30.0	1153.4	1.5	1.8	1.8	55.7	0.0
Total Potential Emissions							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC (NM)	Combined HAP
Total	2028.2	1572.9	133.4	142.6	142.6	214.7	3.0
PTE w/ 39N limite	1987.0	1564.0	130.7	139.7	139.7	211.3	2.9
highest individual Propylene at 2.58E-003 #/MMBtu =							1.2
other single HAP- Formaldehyde at 1.18E-003 #/MMBtu =							0.5
other single HAP Benzene at 9.33E-004 =							0.4

APPLICABLE EMISSIONS LIMITATIONS							
Pollutant	Test Cell	Regulation	Limit				
PM	All Cells	326 IAC 6-1-2(a)	0.03 gr/dscf				
SO2	None	326 IAC 7-1.1-2	0.5 lbs/MMBtu or 0.5% Sulfur				
NOx	39N	326 IAC 2-2	Fuel use limit such that 2-2 does not apply				
Test cell 39N							
Limitation required to make 326 IAC 2-2 (PSD) not applicable:							
(39.9 tons x 2000 lbs/ton)/(4.41 lbs/MMBtu x 137,000 Btu/gal x MMBtu/10^6 Btu) =						132,400.00	Gal./12 month
or							
(39.9 tons x 2000 lbs/ton) / (0.031 lbs/Hp-Hr) =						2,580,645	Hp-Hr
4.41 lbs/MMBtu x .137 MMBtu/ gal x 1000 gal = 604.2 lbs NOx/1000 gal							
Total Emissions @ limited throughput							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC (NM)	Combined HAP
Total	39.90	8.62	2.63	2.81	2.81	3.26	0.06

APPENDIX A - EMISSIONS CALCULATION ALLISON TRANSMISSIO

Company Name: Allison Transmission
Address City IN Zip: 4700 West 10th Street, Indpls., IN 46222
Title V Plt ID: 097-6898-00310
Reviewer: MBC
Date: 10/27/03

Emission Unit ETC
 Plant 3
 Heat Content 137000 Btu/gal (diesel)
 Heat Content 130000 Btu/gal (gasoline)
 Sulfur Content 0.5

EMISSION UNIT DESCRIPTION - MAXIMUM ENGINE SIZE per TEST CEL

Cell ID Number	Fuel Type	Output (HP)	maximum Unit Capacity (MMBtu/hr)	Maximum Unit Capacity (gal/hr)	S/V I.D.
701	Diesel	4000	28.0	204.4	PTE057
704	Diesel	2400	16.8	122.6	PTE065
705	Diesel	2400	16.8	122.6	PTE067
706S	Diesel	4000	28.0	204.4	PTE069
707	Diesel	2400	16.8	122.6	PTE071
709	Diesel	2400	16.8	122.6	PTE075
710	Diesel	1500	10.5	76.6	PTE077
711	Diesel	2400	16.8	122.6	PTE079
712	Diesel	1500	10.5	76.6	PTE080
32N	Diesel	2400	16.8	122.6	PTE008
32S	Diesel	1500	10.5	76.6	PTE006
38N	Diesel	4000	28.0	204.4	PTE011
39N	Diesel	2400	16.8	122.6	PTE018
39S	Diesel	1500	10.5	76.6	PTE020
40N	Diesel	1500	10.5	76.6	PTE013
40S	Diesel	1500	10.5	76.6	PTE014
41N	Diesel	1200	8.4	61.3	PTE023
41S	Diesel	1200	8.4	61.3	PTE021
48N	Diesel	1200	8.4	61.3	PTE040
48S	Diesel	1200	8.4	61.3	PTE041
49N	Diesel	1500	10.5	76.6	PTE086
49S	Diesel	1500	10.5	76.6	PTE087
50	Diesel	2400	16.8	122.6	PTE093
51N	Diesel	1200	8.4	61.3	PTE084
51S	Gasoline or Diesel	700	4.9	35.8	PTE082
Totals			349.3	2549.64	

APPENDIX A - EMISSIONS CALCULATION ALLISON TRANSMISSIO

Company Name: Allison Transmission
 Address City IN Zip: 4700 West 10th Street, Indpls., IN 46222
 Title V Pit ID: 097-6898-00310
 Reviewer: MBC
 Date: 10/27/03

Emissions worksheet for ETC continued

POTENTIAL EMISSIONS - MAX HP CONFIGURATION							
Emission Factors for Diesel Engines greater than 600 HP, (AP-42 Section 3.4 (10/96))							Combined
Pollutant	NOx	CO	SOx	PM	PM-10	TOC	HAP
Factor (Diesel)	3.2	0.85	0.505	0.1	0.0573	0.1	4.36E-03
Factor (Gasolin	1.63	62.7	0.084	0.1	0.1	3.03	Not Available
Factor (Diesel 1	0.88	0.0033	0.505	0.0043	0.0072	0.00041	1.29E-03
Units	lbs/MMBtu (438.4 #/kgal)	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu
Cell No.	NOx	CO	SOx	PM	PM-10	TOC	HAP
701	392.4	104.2	61.9	12.3	7.0	12.3	5.3E-01
704	235.5	62.5	37.2	7.4	4.2	7.4	3.2E-01
705	235.5	62.5	37.2	7.4	4.2	7.4	3.2E-01
706S	392.4	104.2	61.9	12.3	7.0	12.3	5.3E-01
707	235.5	62.5	37.2	7.4	4.2	7.4	3.2E-01
709	235.5	62.5	37.2	7.4	4.2	7.4	3.2E-01
710	147.2	39.1	23.2	4.6	2.6	4.6	2.0E-01
711	235.5	62.5	37.2	7.4	4.2	7.4	3.2E-01
712	147.2	39.1	23.2	4.6	2.6	4.6	2.0E-01
32N	235.5	62.5	37.2	7.4	4.2	7.4	3.2E-01
32S	147.2	39.1	23.2	4.6	2.6	4.6	2.0E-01
38N	392.4	104.2	61.9	12.3	7.0	12.3	5.3E-01
39N	235.5	62.5	37.2	7.4	4.2	7.4	3.2E-01
39S	147.2	39.1	23.2	4.6	2.6	4.6	2.0E-01
40N	147.2	39.1	23.2	4.6	2.6	4.6	2.0E-01
40S	147.2	39.1	23.2	4.6	2.6	4.6	2.0E-01
41N	117.7	31.3	18.6	3.7	2.1	3.7	1.6E-01
41S	117.7	31.3	18.6	3.7	2.1	3.7	1.6E-01
48N	117.7	31.3	18.6	3.7	2.1	3.7	1.6E-01
48S	117.7	31.3	18.6	3.7	2.1	3.7	1.6E-01
49N	147.2	39.1	23.2	4.6	2.6	4.6	2.0E-01
49S	147.2	39.1	23.2	4.6	2.6	4.6	2.0E-01
50	235.5	62.5	37.2	7.4	4.2	7.4	3.2E-01
51N	117.7	31.3	18.6	3.7	2.1	3.7	1.6E-01
51S	68.7	18.2	10.8	2.1	1.2	2.1	9.4E-02
51S (gasoline)	35.0	1345.7	1.8	2.1	2.1	65.0	0.0
& 705 (turbine: 4000 HP each)	107.9	0.4	61.9	0.5	0.9	0.1	0.2
Total Potential Emissions							Combined
Pollutant	NOx	CO	SOx	PM	PM-10	TOC (NM)	HAP
Total	4895.8	2627.9	772.6	153.0	88.6	215.9	6.7E+00
PTE w/39N limi	4700.3	2575.9	732.7	146.9	85.1	209.8	6.3E+00
highest individu	Propylene at 2.79E-003 #/MMBtu =						4.3
other single HA	Formaldehyde at 7.89E-005 =						0.1
other single HA	Benzene at 7.76E-004 #/MMBtu =						1.2

APPLICABLE EMISSIONS LIMITATIONS			
Pollutant	Test Cell	Regulation	Limit
PM	All Cells	326 IAC 6-1-2(a)	0.03 gr/dscf
SO2	All Cells in Italics	326 IAC 7-1.1-2	0.5 lbs/MMBtu or 0.5% Sulfur (Test Cell 39N fuel use limits restrict SO2 < 25tpy)
NOx	39N	326 IAC 2-2	<40 tpy such that 326 IAC 2-2 will not apply

APPENDIX A - EMISSIONS CALCULATION ALLISON TRANSMISSION

Company Name: Allison Transmission
 Address City IN Zip: 4700 West 10th Street, Indpls., IN 4622
 Title V Plt ID: 097-6898-00310
 Reviewer: MBC
 Date: 01/06/03

TSD Appendix A Page 7 of 10

Emission Unit DTC
 Plant 3
 Heat Content 137000 Btu/gal
 Sulfur Conten 0.5

EMISSION UNIT DESCRIPTION							
Cell ID Number	Model Number	Output (HP)	maximum Unit Capacity (gal/hr)	maximum Unit Capacity (MMBtu/hr)	Type of Fuel	S/N I.D.	Date Installed
TC-107	DT446C	250	15	2.14	Diesel	PTE045	1985
TC-109	6V-53T	250	12	1.71	Diesel	PTE043	1985
TC-111	DT466	270	15	2.14	Diesel	PTE049	1985
TC-112	N-14E	260	24	2.42	Diesel	PTE050	1985

POTENTIAL EMISSIONS							
Emission Factors for Diesel Engines with less than 600 HP, (AP-42 Section 3.3 (10/96							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC	Combined HAP
Factor (Diesel)	4.41	0.95	0.29	0.31	0.31	0.36	6.45E-03
Units	lbs/MMBtu (604.2 #/kgal)	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu	lbs/MMBtu
Cell No.	NOx	CO	SOx	PM	PM-10	TOC	Combined HAP
TC-107	41.29	8.89	2.72	2.90	2.90	3.37	0.06
TC-109	33.03	7.12	2.17	2.32	2.32	2.70	0.05
TC-111	41.29	8.89	2.72	2.90	2.90	3.37	0.06
TC-112	46.74	10.07	3.07	3.29	3.29	3.82	0.07
Total Potential Emissions							Combined HAP
Pollutant	NOx	CO	SOx	PM	PM-10	TOC (NM)	HAP
Total	162.35	34.97	10.68	11.41	11.41	13.25	0.24

APPLICABLE EMISSIONS LIMITATIONS							
Pollutant	Test Cell	Regulation	Limit				
PM	All Cells	326 IAC 6-1	0.03 gr/dscf				
SO2	All Cells	none because SO2 PTE < 25 tpy					
NOx	All Cells	326 IAC 2-2	< 40 tons/yr				
Test cells TC-107,109,111, and 112							
Limitation required to make 326 IAC 2-2 (PSD) not applicable							
		(39.9 tons x 2000 lbs/ton)/(4.41 lbs/MMBtu x 137,000 Btu/gal x MMBtu/1,000,000 E	132,400.00 Gal/12 month				
		or					
		(39.9 tons x 2000 lbs/ton) / (0.031 lbs/Hp-Hr) :	2,580,645 Hp-Hr				
		4.41 lbs/MMBtu x .137 MMBtu/ gal x 1000 gal = 604.2 lbs NOx/1000 ga					
Total Emissions @ limited throughpu							
Pollutant	NOx	CO	SOx	PM	PM-10	TOC (NM)	Combined HAP
Total	39.90	8.62	2.63	2.81	2.81	3.26	0.06

Test Cell	Air Flow Rate	Equivalent PM Pound per Hour Emission Rate
TC-107	1193	0.3
TC-109	4543	1.2
TC-111	4360	1.1
TC-112	7047	1.8

where equivalent PM pound per hour emission rate
 0.03 gr/dscf x ft³/min x 60 min/hr x pound/7000 grain

0310calc.xls