INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: January 21, 2005

RE: Cummins Industrial Center / 071-19569-00015

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 1/10/05

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January 21, 2005

Mr. Andy Cesarski
Cummins Industrial Center
800 East Third Street
Seymour, Indiana 47274

Re: 071-19569-00015
Significant Source Modification to:
Part 70 Operating Permit No.: T 071-7679-00015

Dear Mr. Cesarski:

Cummins Industrial Center was issued Part 70 Operating Permit T 071-7679-00015 on January 9, 2001 for a stationary manufacturing, testing and painting of internal combustion engines source. An application to modify the source was received on August 31, 2004. Pursuant to 326 IAC 2-7-10.5 the following emission unit is approved for construction at the source:

One (1) diesel powered engineering engine test cell, known as EU-02C, exhausted through Stacks TC-11.1 and TC-11.2, with a maximum output of 3,500 horsepower and heat input rate of 21.37 million British thermal units per hour, capacity: 164.47 gallons of diesel fuel per hour.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This significant source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 Operating Permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter contact Edward A. Longenberger, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395, ext. 20 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original Signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
EAL/MES
cc: File - Jackson County
Jackson County Health Department
Air Compliance Section Inspector - Vaughn Ison
Compliance Branch
Administrative and Development Section
Technical Support and Modeling - Michele Boner

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SIGNIFICANT SOURCE MODIFICATION
PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Cummins Industrial Center
800 East Third Street
Seymour, Indiana 47274

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 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.

Second Significant Source Modification SSM 071-19569-00015	Sections Affected: A.2, B.24, D.1, D.2, D.3 Quarterly Reports
Issued by: Original Signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 21, 2005

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

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

The Permittee owns and operates a stationary manufacturing, testing and painting internal combustion engines source.

Responsible Official:	Plant Manager
Source Address:	800 East Third Street, Seymour, Indiana 47274
Mailing Address:	800 East Third Street, Seymour, Indiana 47274
SIC Code:	3519
County Location:	Jackson
Source Location Status:	Nonattainment for 8-hour ozone Attainment for all remaining criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under Nonattainment NSR rules; Minor Source, under PSD; Major Source, Section 112 of the Clean Air Act

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

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

(a) One (1) paint spray line, known as EU-01, consisting of the following equipment:

(1) One (1) primer spray booth, known as EU-01A, installed in 1986, equipped with dry filters for overspray control, exhausted through Stacks S1 and S2, capacity: three (3) engines per hour.

(2) One (1) touch-up spray booth, known as EU-01C, installed in 1986, equipped with dry filters for overspray control, exhausted through Stacks S5 and S6, capacity: three (3) engines per hour.

(3) One (1) offline spray booth, known as EU-01D, installed in 1986, equipped with dry filters for overspray control, exhausted through Stack S7, capacity: 0.67 engines per hour.

(4) One (1) small parts spray booth, known as EU-01F, installed in 1986, equipped with dry filters for overspray control, exhausted through Stacks S8, capacity: three (3) engines per hour.

(b) Six (6) production engine test cells, known as EU-02A, installed in 1978, capacity: 142.14 gallons of diesel fuel per hour, total, consisting of the following equipment:

(1) Three (3) diesel-powered production engine test cells, known as 801, 802, and 803, exhausted through Stacks 801, 802, and 803, respectively, maximum output 765

horsepower and heat input of 3.08 million British thermal units per hour, each; capacity: 23.69 gallons of diesel fuel per hour, each.

(2) Two (2) diesel-powered production engine test cells, known as 804 and 805, exhausted through Stacks 804 and 805, respectively, maximum output 1,500 horsepower and heat input of 3.08 million British thermal units per hour, each; capacity: 23.69 gallons of diesel fuel per hour, each.

(3) One (1) diesel-powered or natural gas-fired production engine test cell, known as 808, exhausted through Stack 808, maximum output 1,500 horsepower on diesel oil or natural gas and heat input of 3.08 million British thermal units per hour on diesel oil or 2.68 million British thermal units per hour on natural gas, capacity: 23.69 gallons of diesel fuel per hour.

(c) Eight (8) engineering engine test cells, known as EU-02B, installed in 1978, capacity: 314.4 gallons of diesel fuel per hour, total, consisting of the following equipment:

(1) Two (2) diesel-powered engineering engine test cells, known as 806 and 807, exhausted through Stacks 806 and 807, respectively, maximum output 1,350 horsepower and heat input of 5.11 million British thermal units per hour, each; capacity: 39.3 gallons of diesel fuel per hour, each.

(2) Two (2) diesel-powered engineering engine test cells, known as HHP1 and HHP2, exhausted through Stacks HHP1 and HHP2, respectively, maximum output 3,600 horsepower and heat input of 5.11 million British thermal units per hour, each; capacity: 39.3 gallons of diesel fuel per hour, each.

(3) One (1) diesel-powered engineering engine test cell, known as HHP3, exhausted through Stack HHP3, maximum output 3,150 horsepower and heat input of 5.11 million British thermal units per hour; capacity: 39.3 gallons of diesel fuel per hour.

(4) One (1) diesel-powered engineering test cell, identified as HHP5, exhausting through Stack HHP5, maximum output 1,350 horsepower and heat input of 5.11 million British thermal units per hour, capacity: 39.3 gallons of diesel fuel per hour.

(5) One (1) diesel-powered or natural gas-fired outside engine test pad, known as PI, exhausted through Stacks PD1 and PD2, maximum output 6,700 horsepower on diesel oil or natural gas and heat input of 5.11 million British thermal units per hour on diesel oil or 4.44 million British thermal units per hour on natural gas, capacity: 39.3 gallons of diesel fuel per hour.

(6) One (1) diesel-powered or natural gas-fired engineering engine test cell, known as HHP4, exhausted through Stack HHP4, maximum output 1,350 horsepower on diesel oil or natural gas and heat input of 5.11 million British thermal units per hour on diesel oil or 4.44 million British thermal units per hour on natural gas, capacity: 39.3 gallons of diesel fuel per hour.

(d) One (1) diesel powered engineering engine test cell, known as EU-02C, exhausted through Stacks TC-11.1 and TC-11.2, with a maximum output of 3,500 horsepower and heat input capacity of 21.37 million British thermal units per hour, capacity: 164.47 gallons of diesel fuel per hour.

(e) Two (2) natural gas-fired boilers with No. 2 fuel oil backup, known as EU-03A and EU-03B,

installed in 1978, exhausted through Stacks B1 and B2, respectively, rated at 20.9 million British thermal units per hour, each.

(f) One (1) top coat spray booth, known as EU-01B, installed in 1995, equipped with dry filters for overspray control, exhausted through Stacks S3 and S4, capacity: three (3) engines per hour.

SECTION B GENERAL CONDITIONS

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) 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.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) paint spray line, known as EU-01, consisting of the following equipment:

(1) One (1) primer spray booth, known as EU-01A, installed in 1986, equipped with dry filters for overspray control, exhausted through Stacks S1 and S2, capacity: three (3) engines per hour.

(2) One (1) touch-up spray booth, known as EU-01C, installed in 1986, equipped with dry filters for overspray control, exhausted through Stacks S5 and S6, capacity: three (3) engines per hour.

(3) One (1) offline spray booth, known as EU-01D, installed in 1986, equipped with dry filters for overspray control, exhausted through Stack S7, capacity: 0.67 engines per hour.

(4) One (1) small parts spray booth, known as EU-01F, installed in 1986, equipped with dry filters for overspray control, exhausted through Stacks S8, capacity: three (3) engines per hour.

(f) One (1) top coat spray booth, known as EU-01B, installed in 1995, equipped with dry filters for overspray control, exhausted through Stacks S3 and S4, capacity: three (3) engines per hour.

(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 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating excluding water for extreme performance coatings, delivered to spray applicators in EU-01A, EU-01B, EU-01C, EU-01D and EU-01F, computed on a daily volume weighted average basis. The daily volume weighted average of VOC content shall be calculated using the following formula, where n is the number of coatings (c):

$$\frac{\sum_{c=1}^{c=n} \text{coating c (gal)} \times \text{VOC content of c (lbs/gal, less water)}}{\sum_{c=1}^{c=n} \text{coating c (gal)}}$$

(b) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM from EU-01A, EU-01B, EU-01C, EU-01D and EU-01F shall not

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(b) Six (6) production engine test cells, known as EU-02A, installed in 1978, capacity: 142.14 gallons of diesel fuel per hour, total, consisting of the following equipment:

(1) Three (3) diesel-powered production engine test cells, known as 801, 802, and 803, exhausted through Stacks 801, 802, and 803, respectively, maximum output 765 horsepower and heat input of 3.08 million British thermal units per hour, each; capacity: 23.69 gallons of diesel fuel per hour, each.

(2) Two (2) diesel-powered production engine test cells, known as 804 and 805, exhausted through Stacks 804 and 805, respectively, maximum output 1,500 horsepower and heat input of 3.08 million British thermal units per hour, each; capacity: 23.69 gallons of diesel fuel per hour, each.

(3) One (1) diesel-powered or natural gas-fired production engine test cell, known as 808, exhausted through Stack 808, maximum output 1,500 horsepower on diesel oil or natural gas and heat input of 3.08 million British thermal units per hour on diesel oil or 2.68 million British thermal units per hour on natural gas, capacity: 23.69 gallons of diesel fuel per hour.

(c) Eight (8) engineering engine test cells, known as EU-02B, installed in 1978, capacity: 314.4 gallons of diesel fuel per hour, total, consisting of the following equipment:

(1) Two (2) diesel-powered engineering engine test cells, known as 806 and 807, exhausted through Stacks 806 and 807, respectively, maximum output 1,350 horsepower and heat input of 5.11 million British thermal units per hour, each; capacity: 39.3 gallons of diesel fuel per hour, each.

(2) Two (2) diesel-powered engineering engine test cells, known as HHP1 and HHP2, exhausted through Stacks HHP1 and HHP2, respectively, maximum output 3,600 horsepower and heat input of 5.11 million British thermal units per hour, each; capacity: 39.3 gallons of diesel fuel per hour, each.

(3) One (1) diesel-powered engineering engine test cell, known as HHP3, exhausted through Stack HHP3, maximum output 3,150 horsepower and heat input of 5.11 million British thermal units per hour; capacity: 39.3 gallons of diesel fuel per hour.

(4) One (1) diesel-powered engineering test cell, identified as HHP5, exhausting through Stack HHP5, maximum output 1,350 horsepower and heat input of 5.11 million British thermal units per hour, capacity: 39.3 gallons of diesel fuel per hour.

(5) One (1) diesel-powered or natural gas-fired outside engine test pad, known as PI, exhausted through Stacks PD1 and PD2, maximum output 6,700 horsepower on diesel oil or natural gas and heat input of 5.11 million British thermal units per hour on diesel oil or 4.44 million British thermal units per hour on natural gas, capacity: 39.3 gallons of diesel fuel per hour.

(6) One (1) diesel-powered or natural gas-fired engineering engine test cell, known as HHP4, exhausted through Stack HHP4, maximum output 1,350 horsepower on diesel oil or natural gas and heat input of 5.11 million British thermal units per hour on diesel oil or 4.44 million British thermal units per hour on natural gas, capacity: 39.3 gallons of diesel fuel per hour.

(d) One (1) diesel powered engineering engine test cell, known as EU-02C, exhausted through Stacks TC-11.1 and TC-11.2, with a maximum output of 3,500 horsepower and heat input capacity of 21.37 million British thermal units per hour, capacity: 164.47 gallons of diesel fuel per hour.

(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 PSD Minor Limit [326 IAC 2-2]

(a) The total diesel fuel oil delivered to the fifteen (15) engine test cells, known as EU-02A, EU-02B and EU-02C, shall not exceed the amount calculated by the following equation, equivalent to NO_X emissions of 217.9 tons per twelve (12) consecutive month period.

NO_X emissions = (Diesel fuel oil burned by engines in EU-02A) * (0.427 pounds of NO_X/gallon of diesel fuel oil)/(2000 pounds/ton)+ (Diesel fuel oil burned by engines in EU-02B and EU-02C) * (0.155 pounds of NO_X/gallon of diesel fuel oil)/(2000 pounds/ ton)+(Natural gas burned by engines in test cells 808, HHP4 and PI) * (0.00416 pounds of NO_X/cubic foot of natural gas / (2000 pounds/ton) at a natural gas heat content of 1,020 British thermal units per cubic foot

(b) The NO_X emissions shall not exceed:

(1) 0.427 pounds of NO_X per gallon of diesel fuel oil for EU-02A, and

(2) 0.155 pounds of NO_X per gallon of diesel fuel oil for EU-02B and EU-02C.

(3) 0.00416 pounds of NO_X per cubic foot of natural gas for test cells 808, HHP4 and PI.

(c) Compliance with the limits in (a) and (b) will insure that the NO_X emissions from the entire source, including insignificant activities, will not exceed two hundred and fifty (250) tons per year and makes the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.2.2 Nonattainment New Source Review Minor Limit [326 IAC 2-1.1-5]

The total amount of diesel fuel oil delivered to one (1) engineering engine test cell, known as EU-02C, shall not exceed 514,838 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. NO_X emissions from EU-02C shall not exceed 0.155 pounds of NO_X per gallon of diesel fuel burned. Compliance with these limitations will limit NO_X emissions from EU-02C to less than 40.0 tons per twelve (12) consecutive month period, and thus renders the requirements of nonattainment area new source review not applicable.

D.2.3 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 EU-02A, EU-02B, EU-02C and their control devices.

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

D.2.4 Visible Emissions Notations

(a) Visible emission notations of the test cell stack exhausts (801 through 808, HHP1 through HHP5, and TC-11.1 and TC-11.2) as well as test pad stack exhausts (PD1 and PD2) shall be performed once per shift during normal daylight operations when burning diesel 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 this unit 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 Monitoring Plan - Failure to Take Response Steps, 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.2.5 Record Keeping Requirements

(a) To document compliance with Conditions D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (3) below:

(1) Calendar dates covered in the compliance determination period; and

(2) Actual diesel fuel oil usage in EU-02A, EU-02B, and EU-02C since last compliance determination period and equivalent NO_X emissions.

(3) Actual natural gas usage in EU-02A and EU-02B since last compliance determination period and equivalent NO_X emissions.

(b) To document compliance with Condition D.2.4, the Permittee shall maintain records of visible emission notations of the test cell stack exhausts 801 through 808, HHP1 through HHP5, and TC-11.1 and TC-11.2, as well as test pad stack exhausts PD1 and PD2 once per shift when burning diesel oil.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.6 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.2.1 and D.2.2 shall be submitted to the address 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.3 FACILITY OPERATION CONDITIONS

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

(e) Two (2) natural gas-fired boilers with No. 2 fuel oil backup, known as EU-03A and EU-03B, installed in 1978, exhausted through Stacks B1 and B2, respectively, rated at 20.9 million British thermal units per hour, each.

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

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

D.3.1 Particulate Matter (PM) Limitation [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3(e), the PM emissions from boilers, EU-03A and EU-03B, shall each be limited to 0.6 pounds per million British thermal units heat input.

D.3.2 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO_2 Emissions Limitations) the SO_2 emissions from each of the two (2) boilers, EU-03A and EU-03B shall not exceed five tenths (0.5) pounds per million British thermal units heat input while combusting fuel oil. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) day rolling weighted average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.

D.3.3 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 these facilities and their control devices.

Compliance Determination Requirements

D.3.4 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options for two (2) boilers, EU-03A and EU-03B.

(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 British thermal units heat input by:

(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor 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.

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
Part 70 Quarterly Report

Source Name: Cummins Industrial Center
Source Address: 800 East Third Street, Seymour, Indiana 47274
Mailing Address: 800 East Third Street, Seymour, Indiana 47274
Part 70 Permit No.: T 071-7679-00015
Facilities: Fifteen (15) engine test cells, known as EU-02A, EU-02B and EU-02C
Parameters: Diesel oil and natural gas fuels
Limit: Fuel usage per twelve (12) consecutive month period total, equivalent to 217.9 tons of NO_X per year calculated by the following equation:

NO_X emissions =(Diesel fuel oil burned by engines in EU-02A) * (0.427 pounds of NO_X/gallon of diesel fuel oil)/(2000 pounds/ton)+ (Diesel fuel oil burned by engines in EU-02B and EU-02C) * (0.155 pounds of NO_X/gallon of diesel fuel oil)/(2000 pounds/ ton)+(Natural gas burned by engines in test cells 808, HHP4 and PI) * (0.00416 pounds of NO_X/cubic foot of natural gas / (2000 pounds/ton) at a natural gas heat content of 1,020 British thermal units per cubic foot

YEAR: _____

Month	**This Month**			**Previous 11 Months**			**12 Month Total**		
	Diesel Fuel (gallons) EU-02A	Diesel Fuel (gallons) EU-02B and EU-02C	Equivalent NO_X (tons) EU-02A + (EU-02B and EU-02C)	Diesel Fuel (gallons) EU-02A	Diesel Fuel (gallons) EU-02B and EU-02C	Equivalent NO_X (tons) EU-02A + (EU-02B and EU-02C)	Diesel Fuel (gallons) EU-02A	Diesel Fuel (gallons) EU-02B and EU-02C	Equivalent NO_X (tons) EU-02A + (EU-02B and EU-02C)
Month	Natural Gas (cubic ft) EU-02A	Natural Gas (cubic ft) EU-02B	Equivalent NO_X (tons) EU-02A + EU-02B	Natural Gas (cubic ft) EU-02A	Natural Gas (cubic ft) EU-02B	Equivalent NO_X (tons) EU-02A + EU-02B	Natural Gas (cubic ft) EU-02A	Natural Gas (cubic ft) EU-02B	Equivalent NO_X (tons) EU-02A + EU-02B

Total NO_X Emissions Diesel Oil & Natural Gas	**Month**	**Month**	**Month**
12 Month Total (tons)			

No deviation occurred in this quarter.
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

Part 70 Quarterly Report

Source Name: Cummins Industrial Center
Source Address: 800 East Third Street, Seymour, Indiana 47274
Mailing Address: 800 East Third Street, Seymour, Indiana 47274
Part 70 Permit No.: T 071-7679-00015
Source Modification: SSM 071-19569-00015
Facility: EU-02C
Parameter: Amount of diesel fuel delivered to EU-02C
Limit: Less than 514,838 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. NO_X emissions less than 0.155 pounds per gallon of diesel fuel burned.

YEAR: _____

Month	Diesel fuel (gallons)	Diesel fuel (gallons)	Diesel fuel (gallons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	**Cummins Industrial Center**
Source Location:	**800 East Third Street, Seymour, Indiana 47274**
County:	**Jackson**
SIC Code:	**3519**
Operation Permit No.:	**T 071-7679-00015**
Operation Permit Issuance Date:	**January 9, 2001**
Significant Source Modification No.:	**SSM 071-19569-00015**
Significant Permit Modification No.:	**SPM 071-20060-00015**
Permit Reviewer:	**Edward A. Longenberger**

The Office of Air Quality (OAQ) has reviewed a modification application from Cummins Industrial Center relating to the construction and operation of the following emission unit:

> One (1) diesel powered engineering engine test cell, known as EU-02C, exhausted through Stacks TC-11.1 and TC-11.2, with a maximum output of 3,500 horsepower and heat input rate of 21.37 million British thermal units per hour, capacity: 164.47 gallons of diesel fuel per hour.

History

Cummins Industrial Center was issued a Part 70 operating permit on January 9, 2001. On August 31, 2004, Cummins Industrial Center submitted an application to the OAQ requesting to add an additional diesel engine test cell to their existing plant. The new engineering engine test cell will use the site specific NO_X emission factor of 0.155 pounds per gallon of diesel fuel burned for engineering engine test cells. This emission factor is based on stack tests conducted at this source in April of 2001. This NO_X emission factor has been used for all engineering engine test cells at this source since it was incorporated into the Part 70 permit through Significant Permit Modification 071-14467-00015, issued on November 7, 2001.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
TC-11.1	EU-02C	14.5	3.0	TBD	1,300
TC-11.2	EU-02C	14.5	3.0	TBD	1,300

Recommendation

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

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

An application for the purposes of this review was received on August 31, 2004.

Emission Calculations

See page 1 of Appendix A of this document for detailed emissions calculations. The HAPs emission calculations provided by the applicant have been verified and found to be accurate.

Potential to Emit of Modification

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

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

Pollutant	**Potential To Emit** (tons/year)
PM	30.6
PM_{10}	30.6
SO_2	28.6
VOC	35.5
CO	93.7
NO_X	112

HAPs	**Potential To Emit** (tons/year)
Benzene	0.03
Toluene	0.01
Xylene	0.01
1,3 Butadiene	0.001
Formaldehyde	0.04
Acetaldehyde	0.03
Acrolien	0.003
PAH	0.01

HAPs	Potential To Emit (tons/year)
TOTAL	0.134

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 2-7-10.5(f)(4), since the potential to emit of PM_{10}, SO_2, VOC and NO_X are each greater than twenty-five (25) tons per year.

The proposed operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification (SPM 071-20060-00015) in accordance with 326 IAC 2-7-12(d)(1). The Significant Permit Modification will give the source approval to operate the proposed emission unit.

County Attainment Status

The source is located in Jackson County.

Pollutant	Status
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
1-Hour Ozone	attainment
8-Hour Ozone	basic nonattainment
CO	attainment
Lead	attainment

(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. Jackson 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.

(b) Jackson County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Source Status

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

Pollutant	Emissions (tons/year)
PM	28.6

Pollutant	Emissions (tons/year)
PM_{10}	28.5
SO_2	107
VOC	95.3
CO	83.4
NO_X	Limited to less than 250

(a) This existing source is a major stationary source under nonattainment area NSR rules because a nonattainment regulated pollutant (NO_X) is emitted at a rate of one hundred (100) tons per year or more.

(b) This existing source is not a major stationary source under 326 IAC 2-2 (PSD) because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories. Note that Jackson County is still designated as attainment for the 1-hour ozone standard.

(c) These emissions are based upon the Technical Support Document for SSM 071-15326-00015.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Pollutant	PM (tons/yr)	PM_{10} (tons/yr)	SO_2 (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO_X (tons/yr)
Proposed Modification	11.0	11.0	10.3	12.7	33.6	39.9
Contemporaneous Increases	-	-	-	-	-	-
Contemporaneous Decreases	-	-	-	-	-	-
Net Emissions	11.0	11.0	10.3	12.7	33.6	39.9
Nonattainment Area Significant Level	25	15	40	40	100	40

This modification to an existing major stationary source is not major because the emissions increase is less than the nonattainment area new source review significant levels.

NO_X emissions are limited to less than 40 tons per year, therefore, the nonattainment area new source review requirements do not apply. This emission limit is achieved by limiting the amount of diesel fuel burned to less than 514,838 gallons per year, and by limiting the maximum NO_X emissions to 0.155 pounds of NO_X per gallon of diesel fuel burned.

This diesel fuel limitation also limits PM and PM_{10} to less than 25 and 15 tons per year, respectively. VOC emissions are also limited to less than twenty-five (25) tons per year, therefore, the requirements of 326 IAC 8-1-6 do not apply.

Federal Rule Applicability

(a) This significant permit modification does involve a pollutant-specific emissions unit as defined in 40 CFR 64.1 that has the potential to emit before controls equal to or greater than the major source threshold for NO_X, and is subject to an emission limitation or standard for that pollutant. However, the emission unit does not use a control device as defined in 40 CFR Part 64.1 to comply with that emission limitation or standard. Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this modification.

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

(c) The one (1) diesel powered engineering engine test cell, known as EU-02C, is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). Pursuant to 40 CFR 63.6585, the requirements of Subpart ZZZZ do not apply since the internal combustion engine is being tested at a stationary engine test cell.

(d) Cummins Industrial Center is not subject to the National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands, (40 CFR 63.9280, Subpart PPPPP), because Cummins Industrial Center is an existing affected source, and the addition of the one (1) diesel powered engineering engine test cell, known as EU-02C, is not a reconstruction as defined in 40 CFR 63.2. Pursuant to 40 CFR 63.9290(b), existing affected sources do not have to meet the requirements of 40 CFR 63 Subpart A or 40 CFR 63 Subpart PPPPP.

State Rule Applicability - Individual Facilities

326 IAC 2-1.1-5 (Air quality requirements)

This source is an existing major source under nonattainment area NSR rules because Jackson County has been designated as basic nonattainment for the 8-hour ozone standard, and potential NO_X emissions are greater than one hundred (100) tons per year. Thus, NO_X emissions from this modification have been limited to less than 40 tons per year, in order to make this modification a minor modification under the nonattainment area new source review requirements. This emission limit is achieved by limiting the amount of diesel fuel burned to less than 514,838 gallons per year, and by limiting the maximum NO_X emissions to 0.155 pounds of NO_X per gallon of diesel fuel burned.

This diesel fuel limitation also limits PM and PM_{10} emissions to less than 25 and 15 tons per year, respectively. VOC emissions are also limited to less than twenty-five (25) tons per year, therefore, the requirements of 326 IAC 8-1-6 do not apply.

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

This source was an existing minor source under PSD since Jackson county is attainment for all criteria pollutants, except the 8-hour ozone standard, and sourcewide NO_X emissions were limited to less than two hundred fifty (250) tons per year. Addition the proposed test cell (EU-02C) will result in sourcewide NO_X emissions greater than two hundred fifty (250) tons per year. Therefore, this source will become a major source under 326 IAC 2-2.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The one (1) diesel-powered engineering engine test cell (EU-02C) is not subject to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limits) because the unrestricted potential to emit of SO_2 from the one (1) engineering engine test cell is less than ten (10) pounds per hour, and the limited potential to emit of SO_2 is less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 7-1.1 do not

apply to this facility.

326 IAC 8-1-6 (New facilities; general reduction requirements)

The diesel fuel limit to the one (1) test cell (EU-02C) of less than 514,838 gallons per year will limit VOC emissions to less than 12.7 tons per year. Therefore, the requirements of 326 IAC 8-1-6 will not apply.

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, 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.

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

The one (1) diesel engineering engine test cell (EU-02C) has applicable compliance monitoring conditions as specified below:

> Visible emissions notations of the test cell stack exhausts (Stacks TC-11.1 and TC-11.2) shall be performed once per shift during normal daylight operations when burning diesel oil. A trained employee will record whether emissions are normal or abnormal. 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. 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. 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. The Compliance Response Plan for this unit 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 Monitoring Plan - Failure to Take Response Steps, shall be considered a deviation from this permit.

These monitoring conditions are necessary because the test cell (EU-02C) must operate properly to ensure compliance with 326 IAC 2-7 (Part 70).

Testing Requirements

No testing is required for the one (1) engineering engine test cell (EU-02C) because all emission factors (except NO_X) are based on standard emission factors found in FIRE 6.24 for SCC 2-04-004-02. The NO_X emission factor is a source specific emission factor for engineering test cells which was derived from stack tests performed at Cummins Industrial Center in April of 2001. The emission factor of 0.155 pounds of NO_X per gallon of diesel fuel for engineering test cells was approved by the

OAQ Compliance Branch and was incorporated into the Part 70 permit through SPM 071-14467-00015, issued on November 7, 2001.

Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in bold):

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 stationary manufacturing, testing and painting internal combustion engines source.

Responsible Official:	Plant Manager
Source Address:	800 East Third Street, Seymour, Indiana 47274
Mailing Address:	800 East Third Street, Seymour, Indiana 47274
SIC Code:	3519
County Location:	Jackson
Source Location Status:	**Nonattainment for 8-hour ozone**
	Attainment for all **remaining** criteria pollutants
Source Status:	Part 70 Permit Program
	Major Source, under Nonattainment NSR rules;
	~~Minor~~ **Major** Source, under PSD;
	Major Source, Section 112 of the Clean Air Act

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

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

(d) One (1) diesel powered engineering engine test cell, known as EU-02C, exhausted through Stacks TC-11.1 and TC-11.2, with a maximum output of 3,500 horsepower and heat input capacity of 21.37 million British thermal units per hour, capacity: 164.47 gallons of diesel fuel per hour.

(**e** ~~d~~) Two (2) natural gas-fired boilers with No. 2 fuel oil backup, known as EU-03A and EU-03B, installed in 1978, exhausted through Stacks B1 and B2, respectively, rated at 20.9 million British thermal units per hour, each.

(**f** ~~e~~) One (1) top coat spray booth, known as EU-01B, installed in 1995, equipped with dry filters for overspray control, exhausted through Stacks S3 and S4, capacity: three (3) engines per hour.

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) 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** ~~0425~~ (ask for OAQ, **Billing, Licensing and Training** ~~Technical Support and Modeling~~ Section), to determine the appropriate permit fee.

The only change to Section D.1 is a re-numbering of the equipment list due to the addition of EU-02C:

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) paint spray line, known as EU-01, consisting of the following equipment:

(1) One (1) primer spray booth, known as EU-01A, installed in 1986, equipped with dry filters for overspray control, exhausted through Stacks S1 and S2, capacity: three (3) engines per hour.

(2) One (1) touch-up spray booth, known as EU-01C, installed in 1986, equipped with dry filters for overspray control, exhausted through Stacks S5 and S6, capacity: three (3) engines per hour.

(3) One (1) offline spray booth, known as EU-01D, installed in 1986, equipped with dry filters for overspray control, exhausted through Stack S7, capacity: 0.67 engines per hour.

(4) One (1) small parts spray booth, known as EU-01F, installed in 1986, equipped with dry filters for overspray control, exhausted through Stacks S8, capacity: three (3) engines per hour.

(**f** ~~e~~) One (1) top coat spray booth, known as EU-01B, installed in 1995, equipped with dry filters for overspray control, exhausted through Stacks S3 and S4, capacity: three (3) engines per hour.

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

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(b) Six (6) production engine test cells, known as EU-02A, installed in 1978, capacity: 142.14 gallons of diesel fuel per hour, total, consisting of the following equipment:

(1) Three (3) diesel-powered production engine test cells, known as 801, 802, and 803, exhausted through Stacks 801, 802, and 803, respectively, maximum output 765 horsepower and heat input of 3.08 million British thermal units per hour, each; capacity: 23.69 gallons of diesel fuel per hour, each.

(2) Two (2) diesel-powered production engine test cells, known as 804 and 805, exhausted through Stacks 804 and 805, respectively, maximum output 1,500 horsepower and heat input of 3.08 million British thermal units per hour, each; capacity: 23.69 gallons of diesel fuel per hour, each.

(3) One (1) diesel-powered or natural gas-fired production engine test cell, known as 808, exhausted through Stack 808, maximum output 1,500 horsepower on diesel oil or natural gas and heat input of 3.08 million British thermal units per hour on diesel oil or 2.68 million British thermal units per hour on natural gas, capacity: 23.69 gallons of diesel fuel per hour.

(c) Eight (8) engineering engine test cells, known as EU-02B, installed in 1978, capacity: 314.4 gallons of diesel fuel per hour, total, consisting of the following equipment:

(1) Two (2) diesel-powered engineering engine test cells, known as 806 and 807, exhausted through Stacks 806 and 807, respectively, maximum output 1,350 horsepower and heat input of 5.11 million British thermal units per hour, each; capacity: 39.3 gallons of diesel fuel per hour, each.

(2) Two (2) diesel-powered engineering engine test cells, known as HHP1 and HHP2, exhausted through Stacks HHP1 and HHP2, respectively, maximum output 3,600 horsepower and heat input of 5.11 million British thermal units per hour, each; capacity: 39.3 gallons of diesel fuel per hour, each.

(3) One (1) diesel-powered engineering engine test cell, known as HHP3, exhausted through Stack HHP3, maximum output 3,150 horsepower and heat input of 5.11 million British thermal units per hour; capacity: 39.3 gallons of diesel fuel per hour.

(4) One (1) diesel-powered engineering test cell, identified as HHP5, exhausting through Stack HHP5, maximum output 1,350 horsepower and heat input of 5.11 million British thermal units per hour, capacity: 39.3 gallons of diesel fuel per hour.

(5) One (1) diesel-powered or natural gas-fired outside engine test pad, known as PI, exhausted through Stacks PD1 and PD2, maximum output 6,700 horsepower on diesel oil or natural gas and heat input of 5.11 million British thermal units per hour on diesel oil or 4.44 million British thermal units per hour on natural gas, capacity: 39.3 gallons of diesel fuel per hour.

(6) One (1) diesel-powered or natural gas-fired engineering engine test cell, known as HHP4, exhausted through Stack HHP4, maximum output 1,350 horsepower on diesel oil or natural gas and heat input of 5.11 million British thermal units per hour on diesel oil or 4.44 million British thermal units per hour on natural gas, capacity: 39.3 gallons of diesel fuel per hour.

(d) One (1) diesel powered engineering engine test cell, known as EU-02C, exhausted through Stacks TC-11.1 and TC-11.2, with a maximum output of 3,500 horsepower and heat input capacity of 21.37 million British thermal units per hour, capacity: 164.47 gallons of diesel fuel per hour.

(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 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

(a) The total diesel fuel oil delivered to the fourteen (14) engine test cells, known as EU-02A and EU-02B, shall not exceed the amount calculated by the following equation, equivalent to NO_X emissions of 217.9 tons per twelve (12) consecutive month period.

NO_X emissions = (Diesel fuel oil burned by engines in EU-02A) * (0.427 pounds of NO_X/gallon of diesel fuel oil)/(2000 pounds/ton)+ (Diesel fuel oil burned by engines in EU-02B) * (0.155 pounds of NO_X/gallon of diesel fuel oil)/(2000 pounds/ ton)+(Natural gas burned by engines in test cells 808, HHP4 and PI) * (0.00416 pounds of NO_X/cubic foot of natural gas / (2000 pounds/ton) at a natural gas heat content of 1,020 British thermal units per cubic foot

(b) The NO_X emission factors shall not exceed:

(1) 0.427 pounds of NO_X per gallon of diesel fuel oil for EU-02A, and

(2) 0.155 pounds of NO_X per gallon of diesel fuel oil for EU-02B.

(3) 0.00416 pounds of NO_X per cubic foot of natural gas for test cells 808, HHP4 and PI.

(c) Compliance with the limits in (a) and (b) will insure that the NO_X emissions from the entire source, including insignificant activities**, but excluding EU-02C,** will not exceed two hundred and fifty (250) tons per year and makes the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.2.2 Nonattainment New Source Review Minor Limit [326 IAC 2-1.1-5]

The total amount of diesel fuel oil delivered to one (1) engineering engine test cell, known as EU-02C, shall not exceed 514,838 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. NO_X emissions from EU-02C shall not exceed 0.155 pounds of NO_X per gallon of diesel fuel burned. Compliance with these

limitations will limit NO_X emissions from EU-02C to less than 40.0 tons per twelve (12) consecutive month period, and thus renders the requirements of nonattainment area new source review not applicable.

D.2.~~3~~**2** 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 EU-02A**,** ~~and~~ EU-02B**, EU-02C** and their control devices.

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

D.2.~~4~~**3** Visible Emissions Notations

(a) Visible emission notations of the test cell stack exhausts (801 through 808, HHP1 through HHP5**, and TC-11.1 and TC-11.2**) as well as test pad stack exhausts (PD1 and PD2) shall be performed once per shift during normal daylight operations when burning diesel 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 this unit 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 Monitoring Plan - Failure to Take Response Steps, shall be considered a **deviation from** ~~violation of~~ this permit.

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

D.2.~~5~~**4** Record Keeping Requirements

(a) To document compliance with Condition**s** D.2.1 **and D.2.2**, the Permittee shall maintain records in accordance with (1) through (3) below:

(1) Calendar dates covered in the compliance determination period; and

(2) Actual diesel fuel oil usage in EU-02A**,** ~~and~~ EU-02B**, and EU-02C** since last compliance determination period and equivalent NO_X emissions.

(3) Actual natural gas usage in EU-02A and EU-02B since last compliance determination period and equivalent NO_X emissions.

(b) To document compliance with Condition D.2.~~4~~**3**, the Permittee shall maintain records of visible emission notations of the test cell stack exhausts 801 through 808, HHP1 through HHP5, **and TC-11.1 and TC-11.2,** as well as test pad stack exhausts PD1 and PD2 once per shift when burning diesel oil.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.**6**~~5~~ Reporting Requirements

A quarterly summary of the information to document compliance with Condition**s** D.2.1 **and D.2.2** shall be submitted to the address 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.3 FACILITY OPERATION CONDITIONS

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

(**e** ~~d~~) Two (2) natural gas-fired boilers with No. 2 fuel oil backup, known as EU-03A and EU-03B, installed in 1978, exhausted through Stacks B1 and B2, respectively, rated at 20.9 million British thermal units per hour, each.

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

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

Part 70 Quarterly Report

Source Name: **Cummins Industrial Center**
Source Address: **800 East Third Street, Seymour, Indiana 47274**
Mailing Address: **800 East Third Street, Seymour, Indiana 47274**
Part 70 Permit No.: **T 071-7679-00015**
Source Modification: **SSM 071-19569-00015**
Facility: **EU-02C**
Parameter: **Amount of diesel fuel delivered to EU-02C**
Limit: **Less than 514,838 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. NO_X emissions less than 0.155 pounds per gallon of diesel fuel burned.**

YEAR: _____

Month	Diesel fuel (gallons)	Diesel fuel (gallons)	Diesel fuel (gallons)
	This Month	Previous 11 Months	12 Month Total

☐ **No deviation occurred in this month.**

☐ **Deviation/s occurred in this month.**
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Conclusion

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 071-19569-00015 and Significant Permit Modification No. 071-20060-00015.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Significant Source Modification and Significant Permit Modification

Source Name:	**Cummins Industrial Center**
Source Location:	**800 East Third Street, Seymour, Indiana 47274**
County:	**Jackson**
SIC Code:	**3519**
Operation Permit No.:	**T 071-7679-00015**
Operation Permit Issuance Date:	**January 9, 2001**
Significant Source Modification No.:	**SSM 071-19569-00015**
Significant Permit Modification No.:	**SPM 071-20060-00015**
Permit Reviewer:	**Edward A. Longenberger**

On November 30, 2004, the Office of Air Quality (OAQ) had a notice published in The Tribune, Seymour, Indiana, stating that Cummins Industrial Center had applied for a Part 70 Significant Source Modification to construct a diesel engine test cell. The notice also stated that OAQ proposed to issue a Part 70 Significant Permit Modification for this operation and provided information on how the public could review the proposed Part 70 Modifications 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 the Part 70 Modifications should be issued as proposed.

On December 16, 2004, Robert Waugaman on behalf of Cummins Industrial Center submitted comments on the proposed Part 70 Modifications. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded.**

Comment 1:

Upon further review, Cummins Industrial Center wishes to remain a minor source under PSD. Please include the emission limits for this modification in with the current limit of 217.9 tons per twelve (12) consecutive month period.

Response 1:

In order for Cummins Industrial Center to remain a minor source under 326 IAC 2-2 (PSD), the following changes have been made. In addition, the OAQ has corrected some rule citations in Condition D.2.1:

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 stationary manufacturing, testing and painting internal combustion engines source.

Responsible Official:	Plant Manager
Source Address:	800 East Third Street, Seymour, Indiana 47274
Mailing Address:	800 East Third Street, Seymour, Indiana 47274
SIC Code:	3519
County Location:	Jackson
Source Location Status:	Nonattainment for 8-hour ozone Attainment for all remaining criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under Nonattainment NSR rules; **Minor** ~~Major~~ Source, under PSD; Major Source, Section 112 of the Clean Air Act

D.2.1 PSD Minor Limit [326 IAC 2-2] ~~[40 CFR 52.21]~~

(a) The total diesel fuel oil delivered to the **fifteen (15)** ~~fourteen (14)~~ engine test cells, known as EU-02A**,** ~~and~~ EU-02B **and EU-02C**, shall not exceed the amount calculated by the following equation, equivalent to NO_X emissions of 217.9 tons per twelve (12) consecutive month period.

NO_X emissions = (Diesel fuel oil burned by engines in EU-02A) * (0.427 pounds of NO_X/gallon of diesel fuel oil)/(2000 pounds/ton)+ (Diesel fuel oil burned by engines in EU-02B **and EU-02C**) * (0.155 pounds of NO_X/gallon of diesel fuel oil)/(2000 pounds/ ton)+(Natural gas burned by engines in test cells 808, HHP4 and PI) * (0.00416 pounds of NO_X/cubic foot of natural gas / (2000 pounds/ton) at a natural gas heat content of 1,020 British thermal units per cubic foot

(b) The NO_X emission**s** ~~factors~~ shall not exceed:

(1) 0.427 pounds of NO_X per gallon of diesel fuel oil for EU-02A, and

(2) 0.155 pounds of NO_X per gallon of diesel fuel oil for EU-02B **and EU-02C**.

(3) 0.00416 pounds of NO_X per cubic foot of natural gas for test cells 808, HHP4 and PI.

(c) Compliance with the limits in (a) and (b) will insure that the NO_X emissions from the entire source, including insignificant activities, ~~but excluding EU-02C,~~ will not exceed two hundred and fifty (250) tons per year and makes the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) ~~and 40 CFR 52.21~~ not applicable.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
Part 70 Quarterly Report

Source Name: Cummins Industrial Center
Source Address: 800 East Third Street, Seymour, Indiana 47274
Mailing Address: 800 East Third Street, Seymour, Indiana 47274
Part 70 Permit No.: T 071-7679-00015
Facilities: **Fifteen (15)** ~~Fourteen (14)~~ engine test cells, known as EU-02A**,** ~~and~~ EU-02B **and EU-02C**
Parameters: Diesel oil and natural gas fuels
Limit: Fuel usage per twelve (12) consecutive month period total, equivalent to 217.9 tons of NO_X per year calculated by the following equation:

NO_X emissions =(Diesel fuel oil burned by engines in EU-02A) * (0.427 pounds of NO_X/gallon of diesel fuel oil)/(2000 pounds/ton)+ (Diesel fuel oil burned by engines in EU-02B **and EU-02C**) * (0.155 pounds of NO_X/gallon of diesel fuel oil)/(2000 pounds/ ton)+(Natural gas burned by engines in test cells 808, HHP4 and PI) * (0.00416 pounds of NO_X/cubic foot of natural gas / (2000 pounds/ton) at a natural gas heat content of 1,020 British thermal units per cubic foot

YEAR: _____

Month	**This Month**			**Previous 11 Months**			**12 Month Total**		
	Diesel Fuel (gallons) EU-02A	Diesel Fuel (gallons) EU-02B **and EU-02C**	Equivalent NO_X (tons) EU-02A + **(**EU-02B **and EU-02C)**	Diesel Fuel (gallons) EU-02A	Diesel Fuel (gallons) EU-02B **and EU-02C**	Equivalent NO_X (tons) EU-02A + **(**EU-02B **and EU-02C)**	Diesel Fuel (gallons) EU-02A	Diesel Fuel (gallons) EU-02B **and EU-02C**	Equivalent NO_X (tons) EU-02A + **(**EU-02B **and EU-02C)**
Month	Natural Gas (cubic ft) EU-02A	Natural Gas (cubic ft) EU-02B	Equivalent NO_X (tons) EU-02A + EU-02B	Natural Gas (cubic ft) EU-02A	Natural Gas (cubic ft) EU-02B	Equivalent NO_X (tons) EU-02A + EU-02B	Natural Gas (cubic ft) EU-02A	Natural Gas (cubic ft) EU-02B	Equivalent NO_X (tons) EU-02A + EU-02B

Total NO_X Emissions Diesel Oil & Natural Gas	**Month**	**Month**	**Month**
12 Month Total (tons)			

- No deviation occurred in this quarter.
- 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.

Appendix A: Emission Calculations
Internal Combustion Engine Testing
Engineering Engine Test Cell EU-02C - Diesel Fuel

Company Name: Cummins Industrial Center
Address City IN Zip: 800 East Third Street, Seymour, Indiana 47274
SSM: 071-19569
Plt ID: 071-00015
Reviewer: Edward A. Longenberger
Date: August 31, 2004

A. Potential to Emit:

Heat Input Capacity MM Btu/hr	Potential Throughput gal/yr	S=	= WEIGHT % SULFUR
21.37	1,441,118	0.5	

	Pollutant					
	PM	PM10	SO2	NOx*	VOC	CO
Emission Factor in lb/gal	0.0425	0.0425	0.0397	0.155	0.0493	0.130
Potential Emission in tons/yr	30.62	30.62	28.61	111.69	35.52	93.67

B. Diesel fuel limit:

39.9 tons NOx / year * 2,000 lbs / ton / 0.155 lbs NOx / gal

= **514,838** gal Diesel fuel / year

C. Limited Potential to Emit:

Heat Input Capacity MM Btu/hr	Limited Throughput gal/yr	S=	= WEIGHT % SULFUR
21.37	514,838	0.5	

	Pollutant					
	PM	PM10	SO2	NOx*	VOC	CO
Emission Factor in lb/gal	0.0425	0.0425	0.0397	0.155	0.0493	0.130
Limited Potential Emission in tons/yr	10.94	10.94	10.22	39.90	12.69	33.46

Methodology

Emission Factors (except NOx) are from FIRE 6.24 (SCC 2-04-004-02)

* NOx emission factor based stack tests performed at Cummins Industrial Center in April 2001. The emission factor of 0.155 pounds of NOx per gallon of diesel fuel for engineering test cells was approved by the OAQ Compliance Branch and was incorporated into the Part 70 permit through SPM 071-14467-00015, issued on November 7, 2001.

Potential Thoughput (gal/yr) = Heat input capacity (MMBtu/hr) / (0.1299 MMBtu/gal) / * (8,760 hrs/yr)

Emissions (tons/yr) = [Thoughput (gal/yr) x Emission Factor (lb/gal)] / (2,000 lb/ton)