

Mr. Ronald Collins
Delphi Energy & Engine Management Systems
2900 S. Scatterfield
Anderson, IN 46013

Re: 095-12180
Third Minor Source Modification to:
Part 70 permit No.: T095-6388-00016

Dear Mr. Collins:

Delphi Energy & Engine Management Systems was issued Part 70 operating permit T095-6388-00016 on August 31, 1999 for an automobile parts manufacturing operation. An application to modify the source was received on April 18, 2000. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (1) One (1) natural gas-fired boiler, with a maximum heat input capacity of 25.1 mmBtu/hr and exhausts to one (1) stack designated as DD10EA24.
- (2) One (1) natural gas-fired boiler, with a maximum heat input capacity of 25.1 mmBtu/hr and exhausts to one (1) stack designated as DD10SA24.

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 Management (OAM).
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.

The proposed operating conditions applicable to these emission units are attached to this Source Modification approval. These proposed operating conditions shall be incorporated into the Part 70 operating permit as an administrative amendment in accordance with 326 IAC 2-7-10.5(l)(1) and 326 IAC 2-7-11.

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 call (800) 451-6027, press 0 and ask for Nysa L. James or extension (3-6875), or dial (317) 233-6875.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments

NLJ

cc: File - Madison County
U.S. EPA, Region V
Madison County Health Department
Anderson Office of Air Management
Air Compliance Section Inspector - Jim Thorpe
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

SECTION D.1 FACILITY OPERATION CONDITIONS

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

Varnish operations consisting of the following:

- (a) One (1) varnish dip tank, EU 11-18, identified as Dip Tank A (North), with a drying oven and cooling area, with maximum capacity of 600 parts per hour, and exhausting to stacks N16EA19, N16NA9 and N18NA19 respectively.
- (b) One (1) varnish dip tank, EU 11-19, identified as Dip Tank B (South), with a drying oven and cooling area, with maximum capacity of 600 parts per hour, and exhausting to stacks N18EA19, N20EA9 and N18EA19 respectively.
- (c) One (1) varnish dip tank, EU 11-100, identified as Dip Tank C (East), with a drying oven and cooling area, with maximum capacity of 600 parts per hour, and exhausting to stacks G18EA25, G20EA7 and G24NA17 respectively.
- (d) One (1) varnish dip tank, EU 11-101, identified as Dip Tank D (West), with a drying oven and cooling area, with maximum capacity of 600 parts per hour, and exhausting to stacks G18SA25, G20SA8 and G20WA17 respectively.

One (1) double drum parts washer, identified as EU11-117, with a maximum capacity of 2,000 pounds per hour, with no controls and exhausting to stack L36EA21.

Two (2) engine dynamometers used for research and development.

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

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8]

Based on the date of construction, pre 1973, there are no Article 8 rules that apply to the varnish operations or double drum parts washer.

D.1.2 Nitrogen Oxide Compounds (NOx)

The input of gasoline to the two (2) dynamometers shall be limited to 7500 gallons per twelve (12) consecutive month period, rolled on a monthly basis.

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

D.1.3 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC emission limits established in Condition D.1.2.
 - (1) The total gasoline usage in gallons for each month;
 - (2) A log of the dates of use;
 - (3) Monthly emissions in tons of NOx.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

Two (2) natural gas-fired boilers, identified as boiler A and boiler B, each boiler has a heat input capacity of 33.5 million Btu per hour (mmBtu/hr). These boilers are currently installed at Plant #17, and proposed to be moved to Plant #11.

One (1) natural gas-fired boiler, with a maximum heat input capacity of 25.1 mmBtu/hr and exhausts to one (1) stack designated as DD10EA24.

One (1) natural gas-fired boiler, with a maximum heat input capacity of 25.1 mmBtu/hr and exhausts to one (1) stack designated as DD10SA24.

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

D.2.1 Oxides of Nitrogen (NO_x) Emissions Limit

The total natural gas usage from the two (2) 33.5 mmBtu/hr boilers, A and B shall be limited to less than 247 million cubic feet (MMCF) per twelve-month period, rolled on a monthly basis. This natural gas usage limitation is equivalent to NO_x emissions limit less than 25 tons per twelve-month period.

During the first twelve (12) months of operation, the natural gas usage shall be limited such that the total natural gas usage divided by accumulated months of operation shall be less than 20.58 MMCF average per month, rolled on a monthly basis. Compliance with this condition will make 326 IAC 2-7-10.5(f), Significant Source Modification not applicable.

D.2.2 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the particulate matter emissions from the four (4) natural gas-fired boilers with a total source maximum operating capacity of 117.2 mmBtu/hr, shall be limited to 0.3159 lb/mmBtu based on the following equation:

$Pt = 1.09/Q^{0.26}$; where Pt = pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input; and

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hour) heat input.

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or Anderson Office of Air Management compliance with the Oxides of Nitrogen (NO_x) limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

D.2.4 Record Keeping Requirements

(a) To document compliance with Condition D.2.1, the Permittee shall maintain meter readings of the natural gas fuel usages monthly. The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the recording/monitoring.

- (b) Pursuant to 40 CFR § 60.48c, the owner or operator shall maintain records of the amounts of fuel combusted during each month for the four (4) boilers.
- (c) Pursuant to 40 CFR § 60.48c, all records shall be maintained by the owner or operator for a period of two (2) years following the date of such record.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of the Part 70 permit.

D.2.5 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.2.1, and the natural gas fired boiler certification shall be submitted to:

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

and

Anderson Office of Air Management
P.O. Box 2100
120 East 8th Street
Anderson, Indiana 460111

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.

- (b) Pursuant to 40 CFR § 60.48c, the owner or operator shall submit notification of the date of construction or reconstruction, anticipated startup and actual startup of the four (4) boilers as provided by 40 CFR § 60.7. The notification shall contain the information required under 40 CFR § 60.48c, including the following:
 - (1) The design heat input capacity of the four (4) boilers and identification of the fuel to be combusted; and
 - (2) The annual capacity factor at which the owner or operator anticipates operating the four (4) boilers, based on all fuels fired and based on each individual fuel fired.

SECTION D.3 FACILITY OPERATION CONDITIONS

One (1) trickle varnish line for stators, which exhausts to one (1) stack designated as L10SA15 and consists of the following three (3) processes:

1. preheating;
2. trickle varnish coating; and
3. curing.

One (1) trickle varnish line for rotors, which exhausts to one (1) stack designated as J12WA15 and consists of the following three (3) processes:

1. preheating;
2. trickle varnish coating; and
3. curing.

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

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of applied coating of the two (2) trickle varnish lines shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air dried coatings.

Compliance Determination Requirements

D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.3.3 Volatile Organic Compounds (VOC)

Compliance with the VOC content contained in Condition D.4.1, shall be determined using the ASTM Method D6053-96, which is an approved USEPA alternative to Method 24.

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

D.3.4 Record Keeping Requirements

- (a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.4.1.
 - (1) The amount and VOC content of each material and solvent used. Records shall include purchase orders, invoices, material safety data sheets (MSDS) and alternative manufacturer information necessary to verify the type and amount used.
 - (2) A log of the dates of use; and
 - (3) The total VOC usages for each month;
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**Indiana Department of Environmental Management
Office of Air Management
and Anderson Office of Air Management**

**Technical Support Document (TSD) for the Third Part 70 Minor Source
Modification**

Source Background and Description

Source Name:	Delphi Energy & Engine Management Systems
Source Location:	2900 South Scatterfield Road, Anderson, IN 46011
County:	Madison
SIC Code:	3714
Operation Permit No.:	T 095-6388-00016
Operation Permit Issuance Date:	August 31, 1999
Third Minor Source Modification No.:	095-12180-00016
Permit Reviewer:	Nysa L. James

The Office of Air Management (OAM) has reviewed a modification application from Delphi Energy & Engine Management Systems relating to the construction of the following emission units and pollution control devices:

- (a) Two (2) natural gas-fired boilers, with a maximum heat input capacity of 25.1 mmBtu/hr each and exhaust to two (2) stacks designated as DD10EA24 and DD10SA24.

The two (2) existing boilers, designated as EU 20-1 and EU 20-2 and rated at 68.9 mmBtu/hr each, will be removed from the existing source located in Plant #20. The two (2) new boilers, rated at 25.1 mmBtu/hr each, will be re-located from Plant #3 to Plant #20. The two (2) boilers rated at 25.1 mmBtu/hr each were previously operated by Delco-Remy America (DRA) when this source leased Plant #3 from Delphi Energy & Engine Management Systems. Delphi Energy & Engine Management Systems now requests to move the boilers rated at 25.1 mmBtu/hr each to Plant #20. The boilers rated at 25.1 mmBtu/hr each were not included in the Title V. Such boilers were previously permitted by the Anderson Office of Air Management, but such permit was based on 600 hp per unit and not the maximum operating capacity of the boilers which is 9872 hp per unit. Therefore, the OAM has determined that the boilers must be re-permitted based on maximum operating capacity.

History

On April 18, 2000, Delphi Energy & Engine Management Systems submitted an application to the OAM requesting to add two (2) natural gas-fired boilers rated at 25.1 mmBtu/hr each and remove the two (2) existing natural gas-fired boilers rated at 68.9 mmBtu/hr each. Delphi Energy & Engine Management Systems was issued a Part 70 permit on August 31, 1999. On November 19, 1999, Delphi Energy & Engine Management Systems was issued their First Minor Source Modification (095-11322) and First Minor Permit Modification (095-11377), for two (2) natural gas-fired boilers. On April 25, 2000, Delphi Energy & Engine Management Systems was issued their Second Minor Source Modification (095-11938) and Second Minor Permit Modification (095-11994), for two (2) trickle varnish lines. The OAM has reviewed the level of emissions from the Second Minor Source Modification (095-11938) and the new application for the two (2) boilers (095-12180) in order to determine the appropriate permit level.

Based on the Second Minor Source Modification and the new application, the potential to emit of all criteria pollutants does not exceed twenty-five (25) tons per year. The level of permitting is the same as previously determined under the Second Minor Source Modification (095-11938), including the new boilers. Also, this additional modification to the source does not trigger PSD review. Therefore, the OAM has determined that this modification can be issued separately as a third minor source modification.

Changes Proposed

The Office of Air Management (OAM) has reviewed an application from Delphi Energy & Engine Management Systems, relating to the second minor source modification to their existing Part Operating Permit. The modification consists of two (2) natural gas-fired boilers rated at 25.1 mmBtu/hr each. The source is proposing the following changes (changes are bolded and stricken out for emphasis):

1. Section D.1, originally containing the two (2) natural gas-fired boilers designated as EU 20-1 and EU 20-2, is revised to contain the facilities listed in Section D.2 since the two (2) boilers are removed from the permit. The revised D.1 Section is as follows (changes are bolded and crossed out for emphasis):

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (1) ~~One (1) natural gas-fired boiler (C), installed in 1973, identified as EU 20-1, rated at 68.9 MMBtu/hr, with no controls, and exhausting to stack CC11EA48.~~
- (2) ~~One (1) natural gas-fired boiler (D), installed in 1973, identified as EU 20-2, rated at 68.9 MMBtu/hr, with no controls, and exhausting to stack CC11NA48.~~

Varnish operations consisting of the following:

- (a) **One (1) varnish dip tank, EU 11-18, identified as Dip Tank A (North), with a drying oven and cooling area, with maximum capacity of 600 parts per hour, and exhausting to stacks N16EA19, N16NA9 and N18NA19 respectively.**
- (b) **One (1) varnish dip tank, EU 11-19, identified as Dip Tank B (South), with a drying oven and cooling area, with maximum capacity of 600 parts per hour, and exhausting to stacks N18EA19, N20EA9 and N18EA19 respectively.**
- (c) **One (1) varnish dip tank, EU 11-100, identified as Dip Tank C (East), with a drying oven and cooling area, with maximum capacity of 600 parts per hour, and exhausting to stacks G18EA25, G20EA7 and G24NA17 respectively.**
- (d) **One (1) varnish dip tank, EU 11-101, identified as Dip Tank D (West), with a drying oven and cooling area, with maximum capacity of 600 parts per hour, and exhausting to stacks G18SA25, G20SA8 and G20WA17 respectively.**

One (1) double drum parts washer, identified as EU11-117, with a maximum capacity of 2,000 pounds per hour, with no controls and exhausting to stack L36EA21.

Two (2) engine dynamometers used for research and development.

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

~~D.1.1 Particulate Matter (PM) [326 IAC 6-2-3]~~

~~Pursuant to 326 IAC 6-2-3 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from each of the two boilers identified as 20-1 and 20-2 boilers, shall be limited to 0.6 pounds per MMBtu heat input.~~

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8]

Based on the date of construction, pre 1973, there are no Article 8 rules that apply to the varnish operations or double drum parts washer.

D.1.2 Nitrogen Oxide Compounds (NOx)

The input of gasoline to the two (2) dynamometers shall be limited to 7500 gallons per twelve (12) consecutive month period, rolled on a monthly basis.

Compliance Determination Requirements

~~D.1.2 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]~~

~~The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.~~

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

~~D.1.3 Natural Gas Fired Boiler Certification~~

~~The natural gas fired boiler certification located at the end of this permit shall be submitted to the address listed in Section C - General Reporting Requirements, within thirty (30) days after the end of the quarter being reported.~~

D.1.3 Record Keeping Requirements

(a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC emission limits established in Condition D.1.2.

(1) The total gasoline usage in gallons for each month;

(2) A log of the dates of use;

(3) Monthly emissions in tons of NOx.

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

3. Section D.2 is revised to contain the facilities listed in Section D.3, since the facilities originally listed in Section D.2 have been moved to Section D.1. Section D.2 is also revised to reflect the addition of the two (2) new natural gas-fired boilers. The revised D.2 Section is as follows (changes are bolded and crossed out for emphasis):

SECTION D.2 FACILITY OPERATION CONDITIONS

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

~~(3) Varnish operations consisting of the following:~~

- ~~(a) One (1) varnish dip tank, EU 11-18, identified as Dip Tank A (North), with a drying oven and cooling area, with maximum capacity of 600 parts per hour, and exhausting to stacks N16EA19, N16NA9 and N18NA19 respectively.~~
- ~~(b) One (1) varnish dip tank, EU 11-19, identified as Dip Tank B (South), with a drying oven and cooling area, with maximum capacity of 600 parts per hour, and exhausting to stacks N18EA19, N20EA9 and N18EA19 respectively.~~
- ~~(c) One (1) varnish dip tank, EU 11-100, identified as Dip Tank C (East), with a drying oven and cooling area, with maximum capacity of 600 parts per hour, and exhausting to stacks G18EA25, G20EA7 and G24NA17 respectively.~~
- ~~(d) One (1) varnish dip tank, EU 11-101, identified as Dip Tank D (West), with a drying oven and cooling area, with maximum capacity of 600 parts per hour, and exhausting to stacks G18SA25, G20SA8 and G20WA17 respectively.~~

~~(4) One (1) double drum parts washer, identified as EU11-117, with a maximum capacity of 2,000 pounds per hour, with no controls and exhausting to stack L36EA21.~~

~~(5) Two (2) engine dynamometers used for research and development.~~

Two (2) natural gas-fired boilers, identified as boiler A and boiler B, each boiler has a heat input capacity of 33.5 million Btu per hour (mmBtu/hr). These boilers are currently installed at Plant #17, and proposed to be moved to Plant #11.

One (1) natural gas-fired boiler, with a maximum heat input capacity of 25.1 mmBtu/hr and exhausts to one (1) stack designated as DD10EA24.

One (1) natural gas-fired boiler, with a maximum heat input capacity of 25.1 mmBtu/hr and exhausts to one (1) stack designated as DD10SA24.

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

~~D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8]~~

~~Based on the date of construction, pre 1973, there are no Article 8 rules that apply to the varnish operations or double drum parts washer.~~

~~D.2.2 Nitrogen Oxide Compounds (NOx)~~

~~The input of gasoline to the two (2) dynamometers shall be limited to 7500 gallons per twelve (12) consecutive month period, rolled on a monthly basis.~~

D.2.1 Oxides of Nitrogen (NOx) Emissions Limit

The total natural gas usage from the two (2) 33.5 mmBtu/hr boilers, A and B shall be limited to less than 247 million cubic feet (MMCF) per twelve-month period, rolled on a monthly basis. This natural gas usage limitation is equivalent to NOx emissions limit less than 25 tons per twelve-month period.

During the first twelve (12) months of operation, the natural gas usage shall be limited such that the total natural gas usage divided by accumulated months of operation shall be less than 20.58 MMCF average per month, rolled on a monthly basis. Compliance with this condition will make 326 IAC 2-7-10.5(f), Significant Source Modification not applicable.

D.2.2 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the particulate matter emissions from the four (4) natural gas-fired boilers with a total source maximum operating capacity of 117.2 mmBtu/hr, shall be limited to 0.3159 lb/mmBtu based on the following equation:

$$P_t = 1.09/Q^{0.26}; \quad \text{where } P_t = \text{pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input; and}$$
$$Q = \text{Total source maximum operating capacity rating in million Btu per hour (mmBtu/hour) heat input.}$$

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or Anderson Office of Air Management compliance with the Oxides of Nitrogen (NOx) limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

D.2.3 Record Keeping Requirements

~~(a) To document compliance with Condition D.2.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC emission limits established in Condition D.2.2.~~

~~(1) The total gasoline usage in gallons for each month;~~

~~(2) A log of the dates of use;~~

~~(3) Monthly emissions in tons of NOx.~~

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

D.2.4 Record Keeping Requirements

(a) To document compliance with Condition D.2.1, the Permittee shall maintain meter readings of the natural gas fuel usages monthly. The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the recording/monitoring.

(b) Pursuant to 40 CFR § 60.48c, the owner or operator shall maintain records of the amounts of fuel combusted during each month for the four (4) boilers.

(c) Pursuant to 40 CFR § 60.48c, all records shall be maintained by the owner or operator for a period of two (2) years following the date of such record.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of the Part 70 permit.

D.2.5 Reporting Requirements

- (a) **A quarterly summary of the information to document compliance with Condition D.2.1, and the natural gas fired boiler certification shall be submitted to:**

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

and

**Anderson Office of Air Management
P.O. Box 2100
120 East 8th Street
Anderson, Indiana 460111**

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.

- (b) **Pursuant to 40 CFR § 60.48c, the owner or operator shall submit notification of the date of construction or reconstruction, anticipated startup and actual startup of the four (4) boilers as provided by 40 CFR § 60.7. The notification shall contain the information required under 40 CFR § 60.48c, including the following:**

- (1) **The design heat input capacity of the four (4) boilers and identification of the fuel to be combusted; and**
- (2) **The annual capacity factor at which the owner or operator anticipates operating the four (4) boilers, based on all fuels fired and based on each individual fuel fired.**

4. Section D.3 is revised to contain the facilities listed in Section D.4, since the facilities originally listed in Section D.3 have been moved to Section D.2. The revised D.3 Section is as follows (changes are bolded and crossed out for emphasis):

SECTION D.3 FACILITY OPERATION CONDITIONS

~~Two (2) natural gas-fired boilers, identified as boiler A and boiler B, each boiler has a heat input capacity of 33.5 million Btu per hour (mmBtu/hr). These boilers are currently installed at Plant #17, and proposed to be moved to Plant #11.~~

One (1) trickle varnish line for stators, which exhausts to one (1) stack designated as L10SA15 and consists of the following three (3) processes:

1. preheating;
2. trickle varnish coating; and
3. curing.

One (1) trickle varnish line for rotors, which exhausts to one (1) stack designated as J12WA15 and consists of the following three (3) processes:

1. preheating;
2. trickle varnish coating; and
3. curing.

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

~~D.3.1 Oxides of Nitrogen (NOx) Emissions Limit~~

~~The total natural gas usage from the two (2) 33.5 mmBtu/hr boilers, A and B shall be limited to less than 247 million cubic feet (MMCF) per twelve-month period, rolled on a monthly basis. This natural gas usage limitation is equivalent to NOx emissions limit less than 25 tons per twelve-month period.~~

~~During the first twelve (12) months of operation, the natural gas usage shall be limited such that the total natural gas usage divided by accumulated months of operation shall be less than 20.58 MMCF average per month, rolled on a monthly basis. Compliance with this condition will make 326 IAC 2-7-10.5(f), Significant Source Modification not applicable.~~

~~D.3.2 Particulate Matter Limitation (PM) [326 IAC 6-2-3]~~

~~Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the particulate matter emissions from each of the 33.5 mmBtu/hr boiler shall be limited to 0.27 pound per million Btu (lb/mmBtu).~~

~~D.3.3 New Source Performance Standards (NSPS) 40 CFR § 60.48, Subpart Dc~~

~~Pursuant to 40 CFR § 60.48c, Subpart Dc, Subsections (a), (g) and (i), the two (2) 33.5 mmBtu/hr boilers shall comply with the following requirements:~~

~~(a) Under Subsection (a) of § 60.48c, the Permittee shall submit notification of the date of construction, or reconstruction, anticipated startup and actual startup of the two (2) boilers as provided by 40 CFR § 60.7. The notification shall include:~~

~~(1) The design heat input capacity of the two (2) boilers and identification of the fuel to be combusted; and~~

~~(2) the annual capacity factor at which the Permittee anticipates operating the two (2) boilers, based on all fuels fired and based on each individual fuel fired.~~

~~(b) Under Subsection (g) of § 60.48c, the Permittee shall maintain records of the amounts of fuel combusted during each month for the two (2) boilers.~~

~~(c) Under Subsection (i) of § 60.48c, all records required by § 60.48c shall be maintained by the Permittee for the two (2) boilers for a period of two (2) years following the date of such record.~~

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of applied coating of the two (2) trickle varnish lines shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air dried coatings.

Compliance Determination Requirements

~~D.3.4 D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]~~

~~The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or Anderson Office of Air Management compliance with the Oxides of Nitrogen (NOx) limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.~~

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.3.3 Volatile Organic Compounds (VOC)

Compliance with the VOC content contained in Condition D.3.1, shall be determined using the ASTM Method D6053-96, which is an approved USEPA alternative to Method 24.

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

~~D.3.5 Record Keeping Requirements~~

- ~~(a) To document compliance with Condition D.3.1, the Permittee shall maintain meter readings of the natural gas fuel usages monthly. The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the recording/monitoring.~~
- ~~(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of the Part 70 permit.~~

~~D.3.6 Reporting Requirements~~

~~A quarterly summary of the information to document compliance with Condition D.3.1, and the natural gas fired boiler certification shall be submitted to:~~

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

~~and~~

~~Anderson Office of Air Management
P.O. Box 2100
120 East 8th Street
Anderson, Indiana 460114~~

~~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.~~

D.3.4 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.3.1.**
 - (1) The amount and VOC content of each material and solvent used. Records shall include purchase orders, invoices, material safety data sheets (MSDS) and alternative manufacturer information necessary to verify the type and amount used.**
 - (2) A log of the dates of use; and**
 - (3) The total VOC usages for each month;**

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

- The total number of pages are renumbered accordingly to reflect the removal of the two (2) existing boilers rates at 68.9 mmBtu/hr each and to incorporate the permit modifications that have been issued (November 18, 1999 and April 25, 2000) since the issuance of the original Title V.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
DD10EA24	natural gas-fired boiler	43.5	2.0	8,500	350
DD10SA24	natural gas-fired boiler	43.5	2.0	8,500	350

Recommendation

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

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

A complete application for the purposes of this review was received on April 18, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (page 1 of 1).

Potential To Emit of Modification

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

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

Pollutant	Potential To Emit (tons/year)
PM	0.4
PM-10	1.7
SO ₂	0.1
VOC	1.2
CO	18.5
NO _x	22.0
Benzene	4.62E-04
Dichlorobenzene	2.64E-04
Formaldehyde	1.65E-02
Hexane	3.96E-01

Toluene	7.48E-04
Lead	1.10E-04
Cadmium	2.41E-04
Chromium	3.08E-04
Manganese	8.35E-05
Nickel	4.62E-04

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d), because the NOx potential to emit is greater than ten (10) tons per year but less than twenty-five (25) tons per year.

County Attainment Status

The source is located in Madison County.

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

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Madison County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Madison County has been classified as attainment or unclassifiable for CO, SO₂ and PM₁₀. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

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	5.03
PM-10	8.14
SO ₂	0.669
VOC	307.1
CO	80.3
NOx	96.0

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

- (b) These emissions are based upon the Part 70 permit issued on August 31, 1999 the source's potential to emit summary from the annual inspection on February 18, 1998 the First Minor Source Modification issued on November 18, 1999 and the Second Minor Source Modification issued April 25, 2000.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the two boilers rated at 25.1 mmBtu/hr each.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	Worst Case HAP *
Two natural gas-fired boilers rated at 25.1 mmBtu/hr each	0.4	1.7	0.1	1.2	18.5	22.0	3.96E-01

* Worst case Hazardous Air Pollutant is based on the highest potential to emit of all of the HAPs emitted by the above boilers. In this case, Hexane has the highest potential to emit at 3.96E-01 tons per year.

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) Pursuant to 40 CFR Part 60, Subpart Dc -Standard of Performance for Small Industrial-Commercial -Institutional Steam Generating Units for which Construction, Reconstruction, or Modification is commenced after June 9, 1989, with a maximum design heat input of 100 mmBtu/hr or less but greater than 10 mmBtu/hr, the two (2) natural gas-fired boilers rated at 25.1 mmBtu/hr each are subject to the following:
- (1) Pursuant to 40 CFR § 60.48c, the owner or operator shall submit notification of the date of construction or reconstruction, anticipated startup and actual startup of the four (4) boilers as provided by 40 CFR § 60.7. The notification shall contain the information required under 40 CFR § 60.48c, including the following:
 - (a) The design heat input capacity of the four (4) boilers and identification of the fuel to be combusted; and
 - (b) The annual capacity factor at which the owner or operator anticipates operating the four (4) boilers, based on all fuels fired and based on each individual fuel fired.
 - (2) Pursuant to 40 CFR § 60.48c, the owner or operator shall maintain records of the amounts of fuel combusted during each month for the four (4) boilers.
 - (3) Pursuant to 40 CFR § 60.48c, all records shall be maintained by the owner or operator for a period of two (2) years following the date of such record.
- (b) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Two (2) Natural Gas-Fired Boilers rated at 25.1 mmBtu/hr each

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 forty percent (40%) 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 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating):

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the particulate matter emissions from the four (4) natural gas-fired boilers with a total source maximum operating capacity of 117.2 mmBtu/hr, shall be limited to 0.3159 lb/mmBtu based on the following equation:

$$Pt = 1.09/Q^{0.26}; \text{ where}$$

Pt = pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input; and

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hour) heat input.

No other 326 IAC 6 rules apply.

326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations) does not apply to the boilers because the SO₂ potential to emit of each boiler is less than 25 tons per year or ten (10) pounds per hour.

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

Pursuant to 326 IAC 8-1-6 (New facilities; general reduction requirements), the requirements of BACT do not apply because the potential to emit of VOC of each boiler is less than 25 tons per year.

326 IAC 9 (Carbon Monoxide Emission Limits):

Pursuant to 326 IAC 9 (Carbon Monoxide Emission Limits), the source is subject to this rule because it is a stationary source which emits CO emissions and commenced operation after March 21, 1972. Under this rule, there is not a specific emission limit because the source is not an operation listed under 326 IAC 9-1-2.

326 IAC 10 (Nitrogen Oxides) does not apply to the source because it is not located in the specified counties (Clark and Floyd) listed under 326 IAC 10-1-1.

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, OAM, 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.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Third Part 70 Minor Source Modification No. 095-12180-00016.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Two (2) natural gas-fired boilers rated at 25.1 mmBtu/hr each

Company Name: Delphi Energy and Engine Management Systems

Address City IN Zip: 2900 S. Scatterfield Road, Anderson, IN 46013

CP: 095-12018

Plt ID: 095-00016

Reviewer: NLJ

Date: 05/08/2000

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

50.2

439.8

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.4	1.7	0.1	22.0	1.2	18.5

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

HAPs - Organics

Emission Factor in lb/MMcf	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	4.617E-04	2.639E-04	1.649E-02	3.958E-01	7.476E-04

HAPs - Metals

Emission Factor in lb/MMcf	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.099E-04	2.419E-04	3.078E-04	8.355E-05	4.617E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.