



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

April 22, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Oxford Automotive / 133-18630-00022

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

Notice of Decision: Approval - Registration

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 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires 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
FN-REGIS.dot 9/16/03

April 22, 2004

Mr. David Stonehouse
Oxford Automotive
P. O. Box 508
Greencastle, Indiana 46135

Re: Registered Construction and Operation Status,
133-18630-00022

Dear Mr. Stonehouse:

The application from Oxford Automotive received on March 5, 2004 has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following automobile steel parts production plant, located at 370 Manhattan Road, Greencastle, Indiana, will remain a registered source:

New Emission Units and Pollution Control Equipment

- (a) Ten (10) Metal Inert Gas (MIG) welding and machining stations, designated as PN 131 Welder, with a maximum wire consumption rate of 118.4 pounds per hour (lbs/hr).

Permitted Emission Units and Pollution Control Equipment

- (a) One (1) MIG welding station designated as the GMT 357 Twist Axle, with a maximum wire consumption rate of 208.6 pounds per hour and exhausts inside the building;
- (b) Hand held welder with a maximum wire consumption rate of 1.0 pounds per hour;
- (c) One (1) table-top sandblaster with a maximum consumption of 3.33 pounds of sand per hour or 560.64 pounds of sand per year, with dust collector used to recycle the media;
- (d) One (1) stamp cutting and pressing forming production area, with a maximum steel throughput of 14,500 pounds per hour and exhausts to the atmosphere;
- (e) Welding Operations consisting of the following:
 - (1) Four (4) MIG welding and machining stations designated as the Radius Arm Welder, with a permitted maximum wire consumption rate of 14.0 pounds per hour per station exhaust to a stack designated as WE2. The maximum wire consumption will be increase to 120.8 pounds per hour;
 - (2) Two (2) MIG welding and machining stations designated as the GMX Welder, with a permitted maximum wire consumption rate of 92.3 pounds per hour per station exhaust internally. The new maximum consumption rate is 35.6 pounds per hour;
 - (3) Four (4) MIG welding and machining stations designated as the GMT 360 Welder, with a maximum wire consumption rate of 57.46 pounds per hour per station exhaust internally. The maximum wire consumption will be increase to 522

pounds per hour;

- (4) One (1) MIG welding and machining station designated as the Motor Mounts Welder, with a permitted maximum wire consumption rate of 10.6 pounds per hour and exhausts to a stack designated as WE3. The maximum wire consumption will be increase to 16.8 pounds per hour;
 - (5) One (1) Maintenance Welding Station which exhausts to the atmosphere;
 - (6) One (1) Resistance (barrier) Welding Station which exhausts to one (1) stack designated as WE4;
- (f) A Degreasing and Autophoretic Coating Systems (ACS) consisting of the following:
- (1) Stage 1 through 4 consist of cleaning and rinsing and the moist air exhausts to stacks designated as EX1 through EX4. Stage 1 contains one (1) natural gas-fired boiler designated as B1, with a maximum heat input capacity of 7.6 mmBtu/hr and exhausts to a stack designated as B1. Stage 2 contains one (1) natural gas-fired boiler designated as B2, with a maximum heat input capacity of 6.28 mmBtu/hr and exhausts to a stack designated as B2;
 - (2) Two (2) non-VOC tanks designated as Tank 1 and Tank 2, storing used solvents (T1 contains used cleaner 2599 and Tank 2 contains used coating bath and rinse solution) and exhaust to stacks designated as T1 and T2;
 - (3) One (1) aqueous alkaline rust inhibitor tank designated as the lobster cooker, indirectly heated by one (1) natural gas-fired boiler designated as B3 with a maximum het input capacity of 0.2 mmBtu/hr and exhaust to a stack designated as B3;
 - (4) Stage 5 of the ACS consist of one (1) emersion coating bath and exhausts to the atmosphere;
 - (5) Stages 6 and 7 of the ACS consist of water reaction rinsing and exhausts to the atmosphere;
 - (6) One (1) natural gas-fired drying oven, with a maximum heat input capacity of 3.5 mmBtu/hr and exhausts ton one (1) stack designated as D1;
 - (7) One (1) tool and die power washer consisting of water and rinses heated by one (1) natural gas-fired boiler with a maximum heat input capacity of 0.485 mmBtu/hr designated as B6 and exhaust to a stack designated as B6;
- (g) One (1) water evaporator system consisting of the following:
- (1) Two (2) feed tanks containing various solvents such as spill cleanups and used lobster cooker solution, with a maximum storage capacity of 1500 gallons per tank;

- (2) Two (2) water evaporators designated as North and South exhausting to stacks designated as B4 and B5;
- (3) One (1) natural gas-fired boiler designated as B5, with a maximum heat input capacity of 0.195 mmBtu/hr and exhausts to a stack designated as B5;
- (4) One (1) natural gas-fired boiler designated as B4, with a maximum heat input capacity of 0.395 mmBtu/hr and exhausts to a stack designated as B4;
- (5) One (1) skimmed oil storage tank with a maximum storage capacity of 1500 gallons;
- (6) One (1) residue concentrate storage tank with a maximum storage capacity of 1500 gallons;
- (h) One (1) maintenance oil quench tank for heat treating, with a maximum capacity of 25 gallons and exhausts to the atmosphere;
- (i) One (1) maintenance degreaser, designated as the parts washer, with a maximum capacity of 30 gallons and exhausts to the atmosphere;
- (j) Seven (7) natural gas-fired room heaters with a total maximum heat input capacity of 8.7 mmBtu/hr and exhaust to stacks designated as H1-H7; and
- (k) One (1) natural gas-fired air make-up unit, with a maximum heat input capacity of 4.23 mmBtu/hr and exhausts to the atmosphere.

The following conditions shall be applicable:

1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period 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.
2. Pursuant to 326 IAC 6-3-2 the Particulate emissions from the following operations shall be limited as follows:

OPERATION	PROCESS WEIGHT RATE (tons/hour)	PARTICULATE EMISSION LIMIT (pounds/hour)
MIG Weld Stations, PN 131 Welders	2.6	7.8

MIG Weld Station, GMT 357 Twist Axle	2.46	7.48
Hand Welders	3.75	9.9
Radius Arm Welder	0.49	2.57
GMT 360 Welder	4.23	10.7
GMX Welder	0.34	1.97
Motor Mounts Welder	0.34	1.97

The Particulate emission limits shall be determined using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of Particulate emission in pounds per hour; and}$$

$$P = \text{process weight rate in tons per hour}$$

3. Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the following boilers shall be limited as follows:

Boilers ID	Heat Input Capacity (mmBtu/hr)	PM Limit (lb/mmBtu)
B1	7.6	0.5376
B2	6.28	0.5376
B3	0.2	0.5376
B4	0.395	0.5376
B5	0.195	0.5376
B6	0.485	0.5376

The above PM Limits shall be determined using the following equation:

$$P_t = \frac{1.09}{Q^{0.26}}$$

Where:

- Pt = pounds of particulate matter emitted per million Btu (lb/mmBtu heat input).
Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

4. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator of the cold cleaner degreaser (Maintenance Degreaser) shall:
 - (a) Equip the cleaner with a cover;
 - (b) Equip the cleaner with a emissions unit for draining cleaned parts;
 - (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
 - (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (e) Provide a permanent, conspicuous label summarizing the operation requirements;
 - (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a matter that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

5. Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control)
 - (a) the owner or operator of the cold cleaner degreaser (Maintenance Degreaser) shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a emissions unit for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage emissions unit must be internal such that articles are enclosed under the cover while draining. The drainage emissions unit may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaning emissions unit (Maintenance Degreaser) shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.
6. Any change or modification which may increase the potential to emit (PTE) to 25 tons per year or more from the equipment covered in this registration must be approved by the Office of Air Quality (OAQ) before such change may occur.

This registration is a revised registration, involving new construction issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3)). The annual notice shall be submitted to:

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

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

APD

cc: File - Putnam County
Putnam County Health Department
Air Compliance - Jim Thorpe
Permit Tracking
Compliance Data Section

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	Oxford Automotive
Address:	370 Manhattan Road
City:	Greencastle
Authorized individual:	David Stonehouse
Phone #:	(765) 659-2400
Registration #:	133-18630-00022

I hereby certify that **Oxford Automotive** is still in operation and is in compliance with the requirements of Registration **133-18630-00022**.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: Oxford Automotive
Source Location: 370 Manhattan Road, Greencastle, IN 46135
County: Putnam
SIC Code: 3465
Registration No.: 133-18630-00022
Permit Reviewer: Aida De Guzman

The Office of Air Quality (OAQ) has reviewed an application from Oxford Automotive relating to the construction and operation of new emission units and the removal of the torsion bar welder used in the automobile steel parts production.

New Emission Units and Pollution Control Equipment

- (a) Ten (10) Metal Inert Gas (MIG) welding and machining stations, designated as PN 131 Welder, with a maximum wire consumption rate of 118.4 pounds per hour (lbs/hr).

Permitted Emission Units and Pollution Control Equipment

- (a) One (1) MIG welding station designated as the GMT 357 Twist Axle, with a maximum wire consumption rate of 208.6 pounds per hour and exhausts inside the building;
- (b) Hand held welder with a maximum wire consumption rate of 1.0 pounds per hour;
- (c) One (1) table-top sandblaster with a maximum consumption of 3.33 pounds of sand per hour or 560.64 pounds of sand per year, with dust collector used to recycle the media;
- (d) One (1) stamp cutting and pressing forming production area, with a maximum steel throughput of 14,500 pounds per hour and exhausts to the atmosphere;
- (e) Welding Operations consisting of the following:
 - (1) Four (4) MIG welding and machining stations designated as the Radius Arm Welder, with a permitted maximum wire consumption rate of 14.0 pounds per hour per station exhaust to a stack designated as WE2. The maximum wire consumption will be increase to 120.8 pounds per hour;
 - (2) Two (2) MIG welding and machining stations designated as the GMX Welder, with a permitted maximum wire consumption rate of 92.3 pounds per hour per station exhaust internally. The new maximum consumption rate is 35.6 pounds per hour;
 - (3) Four (4) MIG welding and machining stations designated as the GMT 360 Welder, with a maximum wire consumption rate of 57.46 pounds per hour per station exhaust internally. The maximum wire consumption will be increase to 522

pounds per hour;

- (4) One (1) MIG welding and machining station designated as the Motor Mounts Welder, with a permitted maximum wire consumption rate of 10.6 pounds per hour and exhausts to a stack designated as WE3. The maximum wire consumption will be increase to 16.8 pounds per hour;
 - (5) One (1) Maintenance Welding Station which exhausts to the atmosphere;
 - (6) One (1) Resistance (barrier) Welding Station which exhausts to one (1) stack designated as WE4.
- (f) A Degreasing and Autophoretic Coating Systems (ACS) consisting of the following:
- (1) Stage 1 through 4 consist of cleaning and rinsing and the moist air exhausts to stacks designated as EX1 through EX4. Stage 1 contains one (1) natural gas-fired boiler designated as B1, with a maximum heat input capacity of 7.6 mmBtu/hr and exhausts to a stack designated as B1. Stage 2 contains one (1) natural gas-fired boiler designated as B2, with a maximum heat input capacity of 6.28 mmBtu/hr and exhausts to a stack designated as B2;
 - (2) Two (2) non-VOC tanks designated as Tank 1 and Tank 2, storing used solvents (T1 contains used cleaner 2599 and Tank 2 contains used coating bath and rinse solution) and exhaust to stacks designated as T1 and T2;
 - (3) One (1) aqueous alkaline rust inhibitor tank designated as the lobster cooker, indirectly heated by one (1) natural gas-fired boiler designated as B3 with a maximum heat input capacity of 0.2 mmBtu/hr and exhaust to a stack designated as B3;
 - (4) Stage 5 of the ACS consist of one (1) emersion coating bath and exhausts to the atmosphere;
 - (5) Stages 6 and 7 of the ACS consist of water reaction rinsing and exhausts to the atmosphere;
 - (6) One (1) natural gas-fired drying oven, with a maximum heat input capacity of 3.5 mmBtu/hr and exhausts to one (1) stack designated as D1;
 - (7) One (1) tool and die power washer consisting of water and rinses heated by one (1) natural gas-fired boiler with a maximum heat input capacity of 0.485 mmBtu/hr designated as B6 and exhaust to a stack designated as B6;
- (g) One (1) water evaporator system consisting of the following:
- (1) Two (2) feed tanks containing various solvents such as spill cleanups and used lobster cooker solution, with a maximum storage capacity of 1500 gallons per tank;
 - (2) Two (2) water evaporators designated as North and South exhausting to stacks designated as B4 and B5;
 - (3) One (1) natural gas-fired boiler designated as B5, with a maximum heat input capacity of 0.195 mmBtu/hr and exhausts to a stack designated as B5;
 - (4) One (1) natural gas-fired boiler designated as B4, with a maximum heat input capacity of 0.395 mmBtu/hr and exhausts to a stack designated as B4;
 - (5) One (1) skimmed oil storage tank with a maximum storage capacity of 1500 gallons;

- (6) One (1) residue concentrate storage tank with a maximum storage capacity of 1500 gallons;
- (h) One (1) maintenance oil quench tank for heat treating, with a maximum capacity of 25 gallons and exhausts to the atmosphere;
- (i) One (1) maintenance degreaser, designated as the parts washer, with a maximum capacity of 30 gallons and exhausts to the atmosphere;
- (j) Seven (7) natural gas-fired room heaters with a total maximum heat input capacity of 8.7 mmBtu/hr and exhaust to stacks designated as H1-H7; and
- (k) One (1) natural gas-fired air make-up unit, with a maximum heat input capacity of 4.23 mmBtu/hr and exhausts to the atmosphere.

Recommendation

The staff recommends to the Commissioner that the construction and operation 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 March 5, 2004.

Emission Calculations

- (a) Natural Gas Fired Boilers and Heaters: See Pages 1 and 2 of 3 TSD Appendix A for detailed calculations.
- (b) Metal Fabrication / Welding: See Pages 3 of 3 TSD Appendix A for detailed calculations.
- (c) Sand Blasting Operation:

Actual Throughput	-	3.333 pounds/yr at 52 hours/year actual operation
Maximum Throughput	-	3.333 lbs/yr * 8760 hrs/yr / 52 hrs/yr
	-	561.5 lbs/yr

Using STAPPA/ALAPCO Emission Factor:

PM	-	0.041 lb PM/lb abrasive
PM10	-	0.70 lb PM10/lb PM

PM Emissions	=	561.5 lbs/yr * 0.041 lb/lb * ton/2000 lb
	=	0.01 tons/yr (uncontrolled)
	=	0.01 tons/yr (1-0.98)
	=	0.0 ton/yr (controlled)

PM10 Emissions	=	0.01 tons PM/yr * 2000 lb/ton * 0.70 lb PM10/lb PM
	=	* ton/2000 lb
	=	0.0 tons/yr (uncontrolled)
	=	0.0 (1-0.98)
	=	0.0 ton/yr (controlled)

(d) Miscellaneous Emission Units with Negligible or no Emissions as determined in previous Registration 133-12314–00022, issued on August 4, 2000.

- (1) Stamp cutting and pressing forming production area (no emissions);
- (2) Lobster cooker (no emissions);
- (3) Tanks designated as Tank 1 and Tank 2 (no emissions);
- (4) Stages 5-7 of the ACS (no emissions);
- (5) Tool and die power washer (no emissions);
- (6) Two (2) feed tanks, one (1) skimmed oil tank and one (1) residue concentrate (negligible); and
- (7) Oil quench tank (no emissions).

(e) Parts Washer/Degreaser:

$$\begin{aligned}
 \text{VOC Emissions} &= 0.048 \text{ gal/day} * 6.5 \text{ lb/gal} * 100\% \text{ VOC} \\
 &= 0.312 \text{ lb/day} \\
 &= 0.312 \text{ lb/day} * 365 \text{ day/yr} * \text{ton}/2000 \text{ lb} \\
 &= 0.06 \text{ ton/yr}
 \end{aligned}$$

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit 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, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	24.58
PM-10	24.57
SO ₂	0.08
VOC	0.79
CO	2.91
NO _x	13.82

HAP's	Potential To Emit (tons/year)
Manganese	1.44
TOTAL	1.44

Justification on the Approval Level

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM and PM 10 are each greater than 5 tons per year, but less than 25 tons per year. Therefore, the source will remain a Registered source, pursuant to 326 IAC 2-5.5; or
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of nitrogen oxides (NOx) is each greater than 10 tons per year, but less than 25 tons per year. Therefore, the source will remain a Registered source, pursuant to 326 IAC 2-5.5.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Putnam County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	not determined

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Putnam County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Putnam 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.
- (c) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing re-permitted source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	24.58
PM ₁₀	24.57
SO ₂	0.08
VOC	0.79
CO	2.91
NO _x	13.82
Manganese	1.44

- (a) This source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Part 70 Permit Determination

- (a) 326 IAC 2-7 (Part 70 Permit Program)
This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:
- (1) each criteria pollutant is less than 100 tons per year,
 - (2) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
 - (3) any combination of HAPs is less than 25 tons/year.

This permit involves re-permitting and new construction.

Federal Rule Applicability

- (a) New Source Performance Standards (NSPS), 40 CFR Part 60 and 326 IAC 12:
- (1) 40 CFR Part 60, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels) - This rule applies to each storage vessel with a capacity greater than or equal to 40 cubic meters (m³) that is used to store volatile organic liquids (VOL's for which construction, reconstruction or modification is commenced after July 23, 1984.

This rule does not apply to tanks designated as T1 and T2, the two (2) feeder tanks, one (1) skimmed oil tank, residue concentrate tank and oil quench tank, because the capacity of each tank is less than 40 m³.
 - (2) 40 CFR Part 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) - This rule applies to each steam generating unit for which construction, modification or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 100 million Btu per hour or less, but greater than 10 mmBtu/hr.

This rule does not apply to boilers designated as B1-B6 because the maximum heat input capacity of each unit is less than 10 mmBtu/hr.
 - (3) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters. Boilers designated as B1-B6 are not subject to this NESHAP as they are located in a source that is not a major source for HAPs.
- (c) National Emissions Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 63 and 326 IAC 14
- (1) 40 CFR Part 63, Subpart T (Halogenated Solvent Cleaning) - This rule applies to each individual batch vapor, in-line vapor, in-line cold and batch cold solvent cleaning machine that uses any or combination of the halogenated solvent listed in this rule.

This rule does not apply to the maintenance degreaser because the unit does not use any solvents that contain the compounds listed in 40 CFR Part 63.460.
 - (2) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

- (a) 326 IAC 2-6 (Emission Reporting)
This source is located in Putnam County and the potential to emit of NO_x, CO, SO₂, PM₁₀ and VOC is less than 100 tons per year, therefore it is not subject to 326 IAC 2-6.
- (b) 326 IAC 5-1 (Visible Emissions 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:
 - (1) 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.
 - (2) 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.

State Rule Applicability - Table-Top Sandblaster

- (a) 326 IAC 6-3-2 (Process Operations):
The sandblaster is exempted from the requirements of this rule, since its PM emission of 0.01 ton/yr is not greater than 0.551 pound per hour (2.4 tons/year)

State Rule Applicability - Welding Operations

- (a) 326 IAC 2-4.1-1 (New Source Toxics Rule) does not apply to each welding unit because the potential to emit of a single HAP is less than 10 tons per year per unit and the combination HAPs is less than 25 tons per year per unit.
- (b) 326 IAC 6-3-2 (Process Operations):
 - (1) This rule mandates PM emission limit for the following operations using below equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour
 - (A) MIG welding station, designated as GMT 357 Twist Axle:
 $E = 4.10 (4910.5 \text{ pounds/hr} / 2000 \text{ lb/ton})^{0.67}$
 $= 7.48 \text{ lb/hr}$, it is in compliance as the PTE (1.06 lb/hr) is less than the limit.
 - (B) Radius Arm Welder:
 $E = 4.10 (999.6 \text{ pounds/hr} / 2000 \text{ lb/ton})^{0.67}$
 $= 2.57 \text{ lb/hr}$, it is in compliance as the PTE (0.62 lb/hr) is less than the limit.
 - (C) GMT 360 Welder:
 $E = 4.10 (8464.7 \text{ pounds/hr} / 2000 \text{ lb/ton})^{0.67}$

= 10.7 lb/hr, it is in compliance as the PTE (2.7 lb/hr) is less than the limit.

- (D) Hand Welder:
E = 4.10 (7498 pounds/hr / 2000 lb/ton)^{0.67}
= 9.9 lb/hr, it is in compliance as the PTE (0.004 lb/hr) is less than the limit.
- (E) GMX Welder:
E = 4.10 (670.9 pounds/hr / 2000 lb/ton)^{0.67}
= 1.97 lb/hr, it is in compliance as the PTE (0.18 lb/hr) is less than the limit.
- (F) Motor Mounts Welder:
E = 4.10 (670.8 pounds/hr / 2000 lb/ton)^{0.67}
= 1.97 lb/hr, it is in compliance as the PTE (0.09 lb/hr) is less than the limit.
- (G) Ten (10) Metal Inert Gas (MIG) Weld Stations, PN 131 Welder:
E = 4.10 (5,218.4 pounds/hr / 2000 lb/ton)^{0.67}
= 7.8 lb/hr, it is in compliance as the PTE (0.62 lb/hr) is less than the limit.

State Rule Applicability - Autophoretic Coating System

- (a) 326 IAC 6-3 (Process Operations)
The Autophoretic Coating System is not subject to this rule, as it is a dip coating process that is exempt from 326 IAC 6-3.
- (b) 326 IAC 8-1-6 (New facilities; General Reduction Requirements)
This rule does not apply to the Autophoretic Coating System because no VOC is emitted from this system.
- (c) 326 IAC 8-3 (Organic Solvent Degreasing operations)
This rule does not apply to the cleaning units because no organic solvent is used in the cleaning.

State Rule Applicability - Natural Gas-Fired Boilers (B1-B6)

- (a) 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Indirect Heating Sources):
This rule mandates particulate matter (PM) emissions limit from boilers, identified as B1 through B6 constructed after September 21, 1983 using the following equation:

$$P_t = \frac{1.09}{Q^{0.26}}$$

Where:

- Pt = pounds of particulate matter emitted per million Btu (lb/mmBtu heat input).
Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.
= 15.155 mmBtu/hr for the entire source

$$\begin{aligned} \text{Pt} &= 1.09/(15.155)^{0.26} \\ &= 0.5376 \text{ lb/mmBtu for each boiler.} \end{aligned}$$

Compliance Demonstration with 326 IAC 6-2:

Boiler, B1:	=	0.40 ton PM/yr * yr/8760 hrs * 2000 lb/ton * hr/7.6 mmBtu
	=	0.012 lb/mmBtu < 0.5376 lb/mmBtu, it is in compliance
Boiler, B2	=	0.33 ton PM/yr * yr/8760 hrs * 2000 lb/ton * hr/6.28 mmBtu
	=	0.0119 lb/mmBtu < 0.5376 lb/mmBtu, it is in compliance
Boiler, B3	=	0.01 ton PM/yr * yr/8760 hrs * 2000 lb/ton * hr/0.2 mmBtu
	=	0.0114 lb/mmBtu < 0.5376 lb/mmBtu, it is in compliance
Boiler, B4	=	0.02 ton PM/yr * yr/8760 hrs * 2000 lb/ton * hr/0.395 mmBtu
	=	0.0116 lb/mmBtu < 0.5376 lb/mmBtu, it is in compliance
Boiler, B5	=	0.01 ton PM/yr * yr/8760 hrs * 2000 lb/ton * hr/0.195 mmBtu
	=	0.0117 lb/mmBtu < 0.5376 lb/mmBtu, it is in compliance
Boiler, B6	=	0.03 ton PM/yr * yr/8760 hrs * 2000 lb/ton * hr/0.485 mmBtu
	=	0.014 lb/mmBtu < 0.5376 lb/mmBtu, it is in compliance

- (b) 326 IAC 7-1.1 (Sulfur Dioxide Emissions)
This rule applies to facilities with a potential to emit twenty-five (25) tons per year or ten (10) pounds per hour of sulfur dioxide.

This rule does not apply to boilers, identified as B1 through B6 because the potential to emit of SO₂ is less than 25 tons per year per unit.

State Rule Applicability - Water Evaporator System

- (a) 326 IAC 6-3 (Process operations) does not apply to the water evaporator system because there are no PM emissions from the system.
- (b) 326 IAC 8-1-6 (New facilities; General Reduction Requirements) does not apply to the water evaporator system because its VOC potential to emit is less than 25 tons per year.
- (c) No other 326 IAC 8 rules apply to the water evaporator system.

State Rule Applicability - Maintenance Degreaser

- (a) 326 IAC 2-4.1-1 (New Source Toxics Rule)
This rule does not apply to the degreaser because the potential to emit of a single HAP is less than 10 tons per year and the combination HAPs is less than 25 tons per year.
- (b) 326 8-3-2 (Cold Cleaner Operation):
This rule applies to new facilities after January 1, 1980, performing organic solvent degreasing operations located anywhere in the state. The Degreaser is subject to 326

IAC 8-3-2, pursuant to this rule, the owner or operator of a cold cleaning facility shall:

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

(c) 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control):

The Degreaser is subject to this rule construction commenced after July 1, 1990, and since it is a cold cleaner degreaser without remote solvent reservoirs. Pursuant this rule,

- (1) the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:
 - (a) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) the solvent is agitated; or
 - (C) the solvent is heated.
 - (b) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (c) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (2).
 - (d) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (e) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a

temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):

- (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (b) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (2) the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
- (a) Close the cover whenever articles are not being handled in the degreaser.
 - (b) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (c) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.
- (d) No other 326 IAC 8 rules apply to the degreaser.

State Rule Applicability - Storage Tanks

- (a) 326 IAC 8-4-3 (Petroleum liquid storage vessels)
This rule does not apply to the skimmed oil and quench oil tanks because the capacity of each is less than 39,000 gallons.
- (b) No other 326 IAC 8 rules apply to the storage tanks listed in this permit.

State Rule Applicability - Heaters, oven and air make-up unit

- (a) 326 IAC 6-3-2 (Process Operations) does not apply to the heater, oven and air make-up unit because these are combustion units and are exempt from this rule.
- (b) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect) does not apply to the heaters, oven and air make-up unit because these units are not source of indirect heating.

Conclusion

The construction and operation of this automobile steel parts production operation shall be subject to the conditions of the attached **Registration 133-18630-00022**.

Natural Gas Combustion Only

Company Name: Oxford Automotive
Address City IN Zip: 370 Manhattan Road, Greencastle, IN 46135
Registration: 133-18630
Plt ID: 133-00022
Reviewer: Aida De Guzman
Date Application Received: Mar. 5, 2004

1 natural gas-fired boiler, B1 @ 7.6 mmBtu/hr
 1 natural gas-fired boiler, B2 @ 6.28 mmBtu/hr
 1 natural gas-fired boiler, B3 @ 0.2 mmBtu/hr
 1 natural gas-fired boiler, B4 @ 0.395 mmBtu/hr
 1 natural gas-fired boiler, B5 @ 0.195 mmBtu/hr
 1 natural gas-fired boiler, B6 @ 0.485 mmBtu/hr

Heat Input Capacity
MMBtu/hr

7.6
6.28
0.2
0.395
0.195
0.485

Potential Throughput
MMCF/yr

66.6
55.0
1.8
3.5
1.7
4.2

Pollutant

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	11.9	11.9	0.6	100.0	5.3	21.0
Heat Input (mmBtu/hr)	Emissions (tons/yr)					
7.6 mmBtu/hr	0.4	0.4	0.02	3.33	0.18	0.7
6.28 mmBtu/hr	0.33	0.33	0.02	2.75	0.15	0.58
0.2 mmBtu/hr	0.01	0.01	0	0.09	0	0.02
0.395 mmBtu/hr	0.02	0.02	0	0.17	0.01	0.04
0.195 mmBtu/hr	0.01	0.01	0	0.09	0	0.02
0.485 mmBtu/hr	0.03	0.03	0.00	0.21	0.01	0.04
TOTAL Emissions	0.80	0.80	0.04	6.64	0.35	1.40

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36

Emission Factors for CO: uncontrolled = 21, Low NOx Burner = 27, Flue gas recirculation = ND

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

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

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

**Appendix A: Emission Calculations
Natural Gas Combustion Only**

Company Name: Oxford Automotive
Address City IN Zip: 370 Manhattan Road, Greencastle, IN 46135
Registration: 133-18630
Plt ID: 133-00022
Reviewer: Aida De Guzman
Date Application Received: Mar. 5, 2004

7 natural gas-fired heaters total @ 8.7 mmBtu/hr
 1 nat. gas-fired oven @ 3.5 mmbtu/hr
 1 air make up heater @ 4.2 mmBtu/hr

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

16.4

143.7

Pollutant

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	11.9	11.9	0.6	100.0	5.3	21.0
Potential Emission in tons/yr	0.85	0.85	0.04	7.18	0.38	1.51

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36

Emission Factors for CO: uncontrolled = 21, Low NOx Burner = 27, Flue gas recirculation = ND

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

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

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

Appendix A: Emissions Calculations

Company Name: Oxford Automotive
Address City IN Zip: 370 Manhattan Road, Greencastle, IN 46135
Registration 133-18630
Plt ID: 133-00022
Reviewer: Aida De Guzman
Date Application Received: Mar. 5, 2004

Welding Stations	Total Maximum Wire Consumed (lbs/yr)	Total Maximum Wire Consumed (lbs/hr)	Electrode Type	PM-10/PM 5.2 lb/1000 lb (tons/yr)	HAP		
					Cr -- (tons/yr)	Mn 0.0003 (tons/yr)	Ni -- (tons/yr)
Welding Emission Units:							
Welding Process (MIG - PN 131 Welder)							
10	1037184	118.4	ER70S-3	2.70	0.00	0.00	0.00
Welding Emission Units:							
Welding Process(MIG) - Hand Welder							
4	8760	1	ER70S-3	0.02	0.00	0.00	0.00
Welding Process (MIG) - New GMT 357 Twist Axle Welder							
6	1827336	208.6	ER70S-3	4.75	0.00	0.27	0.00
Welding Process (MIG) - Radius Arm Welder							
4	1058208	120.8	ER70S-3	2.75	0.00	0.16	0.00
Welding Process (MIG) - GMX Welder							
2	311856	35.6	ER70S-3	0.81	0.00	0.05	0.00
Welding Process (MIG) - GMT 360 Welder							
4	4572720	522	ER70S-3	11.89	0.00	0.69	0.00
Welding Process (MIG) - Motor Mounts Welder							
1	147168	16.8	ER70S-3	0.38	0.00	0.22	0.00
TOTAL				22.92	0.00	1.44	0.00

METHODOLOGY

Emission factors are from the SARA Reporting Guide where emission factors are in lb pollutant / lb electrode.

Throughput (lbs/yr) = Maximum Wire consumed (lbs/hr) * 8760 (hrs/yr)

Pollutant Emission (tons/yr) = Throughput (lbs/yr) * Emission factor (lbs/ lb)/2000 (lbs/ton)