



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
UNION COUNTY**

CERTIFIED MAIL

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:
Lazarus Gov.
Center

Application No: 01-08305

DATE: 1/25/2001

Honda R&D Americas
Sue Borawski
21001 St Rt 739
Raymond, OH 43067

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

CDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install

Issue Date: 1/25/2001

FINAL PERMIT TO INSTALL 01-08305

Application Number: 01-08305
APS Premise Number: 0180000156
Permit Fee: **\$400**
Name of Facility: Honda R&D Americas
Person to Contact: Sue Borawski
Address: 21001 St Rt 739
Raymond, OH 43067

Location of proposed air contaminant source(s) [emissions unit(s)]:
21001 St Rt 739
Raymond, Ohio

Description of proposed emissions unit(s):
150kw dynamometer.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous

calendar quarters. See B.11 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition

declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

B. State Only Enforceable Permit To Install General Terms and Conditions**1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

5. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

6. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

7. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

8. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

9. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

10. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	2.60
OC	7.86
CO	9.20
NOx	1.64
SO ₂	0.23

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Honda R&D Americas

PTI Application: **01-08305**

Issued: 1/25/2001

Facility ID: **0180000156**

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B023 - Emissions dynamometer in building 5	OAC rule 3745-17-07(A)	None, see A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	None, see A.I.2.a below.
	OAC rule 3745-21-08(B)	None, see A.I.2.c below.
	OAC rule 3745-23-06(B)	None, see A.I.2.c below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).
	OAC rule 3745-31-05(A)(3)	Hourly emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:
		0.04 lb of particulate emissions/hr 0.05 lb of sulfur dioxide/hr 0.25 lbs of nitrogen oxides/hr 0.13 lbs of organic compounds/hr 2.00 lbs of carbon monoxide/hr
		Annual emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:
		0.18 ton particulate emissions/yr 0.23 ton of sulfur dioxide/yr 1.11 tons of nitrogen oxides/yr 0.57 tons of organic compounds/yr 8.76 tons of carbon monoxide/yr

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

2. Additional Terms and Conditions

- 2.a** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 (Control of carbon monoxide emissions from stationary sources) and 3745-23-06 (Control of nitrogen oxides emissions from stationary sources), respectively by committing to comply with the best available technology requirements.
- 2.d** The hourly and annual emission limitations specified in Section A.I.1 reflect the emissions unit's potential to emit for these pollutants; therefore, there are no additional monitoring, record keeping or reporting requirements associated with these emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform weekly checks, when the weather conditions allow, for any visible particulate emissions from all the stacks serving the uncontrolled dynamometers which are in operation at the time of the weekly checks. At a minimum, the visible particulate emissions from each uncontrolled dynamometer stack shall be checked on a quarterly basis unless the dynamometer does not operate during the calendar quarter. The facility shall maintain records showing the operation time(s) of each dynamometer during each calendar quarter. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

The visible emissions check is not required to be performed by individuals certified to conduct U.S. EPA Reference Method 9 observations.

No earlier than 6 months from issuance of this permit, the permittee may, upon receipt of written approval from the Ohio EPA Central District Office, modify the frequencies of the visible particulate emissions checks if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible particulate emissions check frequencies would not be considered a significant modification that would be subject to permit modification requirements.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from any of the stacks serving the uncontrolled dynamometers and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual reports which specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This

Emissions Unit ID: B023

reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:

1. Emission Limitations:

Carbon monoxide emissions shall not exceed 2.0 lbs/hr and 8.76 tons/yr.

Applicable Compliance Method:

The maximum uncontrolled hourly carbon monoxide emissions were established using an emission factor of 0.2 pound of carbon monoxide per gallon of gasoline and a maximum gasoline usage of 10 gallons per hour (this emission factor was derived from the highest dynamometer testing results, from testing conducted on 8/20/97 on an uncontrolled V6 engine at maximum operating conditions on dynamometer B018). The annual carbon monoxide emission limitation was established by multiplying the worst case hourly emission rate (2.0 lbs/hr) by 8760 hours per year.

If required, the permittee shall demonstrate compliance with the hourly carbon monoxide emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 10.

2. Emission Limitations:

Organic compound emissions shall not exceed 0.13 lbs/hr and 0.57 tons/yr.

Nitrogen oxides emissions shall not exceed 0.25 lbs/hr and 1.11 tons/yr.

Particulate emissions shall not exceed 0.04 lb/hr and 0.18 ton/yr.

Sulfur dioxide emissions shall not exceed 0.05 lb/hr and 0.23 ton/yr.

Applicable Compliance Method:

Compliance with the organic compound, nitrogen oxides, particulates, and sulfur dioxide emission limitations for this emissions unit shall be determined by multiplying the maximum hourly gasoline usage rate for this emissions unit, 10 gallons per hour and 87,600 gallons per year, by the following emission factors:

SO_x emission factor (in pounds/gallon) is from U.S. EPA's Factor Information Retrieval Data System (FIRE 6.23) for criteria air pollutants, using (SCC) number 20400401 for reciprocation gasoline engines.

PM, VOC, and NO_x emission factors (in grams/mile) are from Table A96-2 in 40 CFR 86.096-8

The emission factors for particulates, sulfur dioxide, nitrogen oxides, and organic compounds are specified below.

0.20 lbs of carbon monoxide/gallon of gasoline burned

0.10 grams of particulate emissions/mile

5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned

0.60 grams of nitrogen oxides/mile

0.31 grams of organic compounds/mile

If required, the permittee shall demonstrate compliance with these emission limitations in accordance with the appropriate approved method(s) found in 40 CFR Part 60, Appendix A.

3. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observation performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

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PTI Application: **01 00305**
Issued

Facility ID: **0180000156**

Emissions Unit ID: B023

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B023 - Emissions dynamometer in building 5		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K004 - Test paint spray booth, coating metal and plastic	OAC rule 3745-21-07(G)(2)	On any day when employing photochemically reactive materials to non-metal parts, emissions shall not exceed 8 lbs/hr and 40 lbs/day organic compounds for the coatings and photochemically reactive cleanup materials used for the non-metal parts.
	OAC rule 3745-21-09(U)(2)(e)(iii)	On any day when coating metal parts, coating usage shall not exceed 10 gallons/day for the coatings used for the metal parts.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from overspray shall not exceed 0.551 pounds per hour.
	OAC rule 3745-31-05(A)(3)	Organic Compound emissions from coatings and cleanup materials shall not exceed 7.26 tons/yr.

Particulate emissions from overspray shall not exceed 2.41 tons per year.

Emissions from natural gas usage in the drying ovens from this emissions unit shall not exceed:

0.12 lb NO_x/hr;
0.53 ton NO_x/yr;
0.10 lb CO/hr;
0.44 ton CO/yr;
0.002 lb PM/hr;
0.01 ton PM/yr;
0.007 lb VOC/hr; and
0.03 ton VOC/yr

The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-21-07(G)(9), 3745-17-07(A)(1), and 3745-17-11(B)(1).

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. On any day when coating metal parts, the permittee shall collect and record the following information each day for this emissions unit for the coatings used for the metal parts:
 - a. the name and identification number of each coating employed;

- b. the volume, in gallons, of each coating employed; and
 - c. the total volume, in gallons, of all coatings employed.
2. On any day when coating non-metal parts, the permittee shall collect and record the following information each day for this emissions unit for the coatings used for the non-metal parts:
 - a. the company identification for each coating and cleanup material employed;
 - b. the number of gallons of each coating and cleanup material employed;
 - c. the organic compound content of each coating and cleanup material employed in the emissions unit, in pounds per gallon;
 - d. the total organic compound emission from all material(s) applied in the emissions unit, in pounds per day, i.e., (b) x (c), for each coating and cleanup material respectively;
 - e. the total number of hours that material(s) were employed in the emissions unit; and
 - f. the average hourly OC emission rate from the material(s) applied in the emissions unit, i.e., (d)/(f), in pounds per hour (average).
3. The permittee shall collect and record the following information each month for the coating operation, for the purpose of recording the annual organic compound emissions:
 - a. the name and identification of all coatings, reducing solvents, and cleanup/purge materials employed;
 - b. the OC content of all coatings, reducing solvents, and cleanup/purge materials employed, in pounds per gallon;
 - c. the total number of gallons of each coating, reducing solvent, and cleanup material/purge employed; and
 - d. the calculated total organic compound emissions from all coatings, reducing solvents, and cleanup/purge materials employed, in pounds or tons per month.
4. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
5. The permittee shall maintain daily records of each coating and material's usage, the solids content of each, and the hours of each coating/material's application (as per Testing Section V.5), in order to demonstrate compliance with the hourly particulate emission limit from coating overspray. This daily recordkeeping requirement may be substituted with the documentation of compliance,

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through the calculation of "worst-case" emissions of particulate matter from each coating or other material applied, individually. Once the formula of the "worst-case" particulate emissions is documented to meet the hourly limit for any coating or other material applied, daily recordkeeping of the hourly emissions shall not be required for these materials.

6. For the purpose of quantifying organic compound emissions from powder coatings, it shall be assumed that the OC content is equal to 5% by weight of the coatings, unless otherwise approved by the Ohio EPA.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. for any day when coating non-metal parts, an identification of each day during which the average hourly organic compound emissions, from all the materials used for the non-metal parts, exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. for any day when coating non-metal parts, an identification of each day during which the organic compound emissions, from all the materials used for the non-metal parts, exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These quarterly deviation (excursion) reports shall be submitted in accordance with section A.1.c. of the General Terms and Conditions.

2. For any day when coating metal parts, the permittee shall notify the Ohio EPA Central District Office in writing of any daily record showing that this emissions unit employed more than the applicable maximum daily coating usage restriction of 10 gallons per day for metal parts. The notification shall include a copy of such record and shall be sent to the Ohio EPA Central District Office within 45 days after the exceedance occurs.
3. The permittee shall submit deviation (excursion) reports which identify any exceedance of the annual OC or particulate emission limits, calculated at the end of each year. Any annual deviation report shall be submitted as required in the General Terms and Conditions, Part 1, Section A.1.c.

4. The permittee shall notify the Ohio EPA Central District Office in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Central District Office within 30 days after the event occurs.
5. The permittee shall submit quarterly deviation (excursion) reports of any calculated exceedance of the hourly particulate emission limit from coating overspray. These quarterly deviation (excursion) reports shall be submitted in accordance with section A.1.c. of the General Terms and Conditions.

V. Testing Requirements

1. Hourly and Daily Emission Limitation

8 pounds per hour and 40 lbs OC/day when using photochemically reactive materials on non-metal parts

Applicable Compliance Method

Compliance with the hourly and daily OC limits, when using photochemically reactive materials, shall be based on the record keeping requirements specified in Section A.III.2. Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the materials.

2. Usage Limitation

10 gallons of coating per day for coating metal parts

Applicable Compliance Method

Compliance with this daily coating usage limit shall be determined through the daily recordkeeping of coating usage when coating metal parts.

3. Emission Limitation

Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

4. Emission Limitation

7.26 tons OC/year from coatings and cleanup materials

Applicable Compliance Method

Compliance with the annual OC limit shall be determined through monthly recordkeeping of coating, reducing solvent, purge, and cleanup material usage, the organic compound content of each material, and recordkeeping of the total calculated OC emissions. Formulation data from the manufacturers or USEPA Method 24 shall be used to determine the organic compound content of the materials used, to be used in the calculation of emissions.

5. Emission Limitation for Particulate Matter

0.551 lbs PM/hr
2.41 tons PM/yr

Applicable Compliance Method

Compliance with the hourly PM limit shall be determined through daily recordkeeping of coating usage, the solids content of each coating and material applied, and operating hours per day of the coating application. Formulation data from the manufacturer's MSDS shall be used to determine the solids content of the coatings/materials. Hourly emissions shall be calculated by multiplying

the maximum solids content of each coating or material applied in this emissions unit times the maximum coating usage in any hour (gallons/hour). If the emissions unit has run at the same rate all day, the maximum use in any hour may be calculated by dividing the total use at the end of that day by the hours the emissions unit was employed in the coating application operations. In lieu of these requirements of daily recordkeeping, the permittee may document the worst-case particulate emissions of individual coatings/materials at their potential usage of 2 gallons per hour, as per Section III.5. Calculations shall be documented as follows:

PM emissions/hr = (maximum coating usage, in gal/hr) x (maximum solids content, % by weight) x (maximum coating density) x (1-TE) x (1-CE), or

PM emissions/hr = (coating usage, in gal/day) x (maximum solids content, % by weight) (maximum coating density) / (hours of operation) x (1-TE) x (1-CE), and

PM emissions/yr = (maximum coating usage/yr) x (maximum solids content, % by weight) x (maximum coating density) x (1-TE) x (1-CE) / (2000 lbs/ton), where:

TE = transfer efficiency, and

CE = capture efficiency (95%).

6. Emission Limitation

Emissions from natural gas usage in the drying ovens from this emissions unit shall not exceed:

0.12 lb NO_x/hr;
 0.53 ton NO_x/yr;
 0.10 lb CO/hr;
 0.44 ton CO/yr;
 0.002 lb PM/hr;
 0.01 ton PM/yr;
 0.007 lb VOC/hr; and
 0.03 ton VOC/yr

Applicable Compliance Method

These limits represent the maximum capacity of the drying oven. These emission limitations were determined by multiplying the maximum natural gas usage from two drying ovens (1,200 ft³/hr) by the emission factors for each pollutant (lbs of pollutant/MM ft³) found in "Compilation of Air Pollutant Emission Factors", the 7/98 edition of AP-42, Tables 1.4-1, and 1.4-2. These amounts

Honda R&D Americas
PTI Application: 01 00205
Issued

Facility ID: 0180000156

Emissions Unit ID: K004

were multiplied by 8760 hours per year and divided by 2000 pounds per ton, to obtain the potential emissions of the burners. Since these limits reflect the potential emissions of the burners, no additional compliance determination is required.

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K004 - Test paint spray booth, coating metal and plastic	Ohio Air Toxic Policy	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials applied and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst-case" pollutants:

Pollutant: Xylene

TLV: 434 mg/m³

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Emissions Unit ID: K004

Maximum Hourly Emission Rate: 11.06 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 2142 ug/m³

MAGIC: 10333 ug/m³

Pollutant: Styrene

TLV: 85 mg/m³

Maximum Hourly Emission Rate: 5.30 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 1027 ug/m³

MAGIC: 2024 ug/m³

Pollutant: Formaldehyde

TLV: 0.368 mg/m³

Maximum Hourly Emission Rate: 0.026 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 4.92 ug/m³

MAGIC: 8.76 ug/m³

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 01-08305 Facility ID: 0180000156

FACILITY NAME Honda R&D Americas

FACILITY DESCRIPTION 150kw dynamometer. CITY/TWP Raymond

SIC CODE 3711 SCC CODE 2-04-004-01 EMISSIONS UNIT ID B023

EMISSIONS UNIT DESCRIPTION Emissions dynamometer in building 5

DATE INSTALLED 4/01

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.04	0.18	0.04	0.18
PM ₁₀					
Sulfur Dioxide	Attainment	0.05	0.23	0.05	0.23
Organic Compounds	Attainment	0.13	0.57	0.13	0.57
Nitrogen Oxides	Attainment	0.25	1.11	0.25	1.11
Carbon Monoxide	Attainment	2.00	8.76	2.00	8.76
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 01-08305 Facility ID: 0180000156

FACILITY NAME Honda R&D Americas

FACILITY DESCRIPTION 150kw dvnammometer.

CITY/TWP Ravmond

Emissions Unit ID: K004

SIC CODE 3711 SCC CODE 4-02-016-21 EMISSIONS UNIT ID K004

EMISSIONS UNIT DESCRIPTION Test paint spray booth, coating metal and plastic

DATE INSTALLED 4/01

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter		0.442	0.23	0.553	2.42
PM ₁₀					
Sulfur Dioxide					
Organic Compounds		8.007 or 14.007	7.29	8.007 or 14.007-NA	7.29
Nitrogen Oxides		0.12	0.53	0.12	0.53
Carbon Monoxide		0.10	0.44	0.10	0.44
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES NO

IDENTIFY THE AIR CONTAMINANTS: many, worst case model: Formaldehyde, Styrene, Xylene

34 NEW SOURCE REVIEW FORM B

PTI Number: 01-08305

Facility ID: 0180000156

FACILITY NAME Honda R&D Americas

FACILITY DESCRIPTION 150kw dynamometer.

CITY/TWP Ravmond

Emissions Unit ID: K004

Ohio EPA Permit to Install Information Form Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to airpti@epa.state.oh.us

Please fill out the following. If the checkbox does not work, replace it with an 'X'

	<u>Electronic</u>	<u>Additional information File Name Convention (your PTI # plus this letter)</u>	<u>Hard Copy</u>	<u>None</u>
<u>Calculations (required)</u>	<input type="checkbox"/>	0000000c.wpd	<input checked="" type="checkbox"/>	
<u>Modeling form/results</u>	<input type="checkbox"/>	0000000s.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>PTI Application (complete or partial)*</u>	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input type="checkbox"/>
<u>BAT Study</u>	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input type="checkbox"/>
<u>Other/misc.</u>	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input type="checkbox"/>

* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

Applicable or Non-applicable Rules:

Honda R&D is a Title V facility, at this time

PSD: NA

NSPS: NA

MACT: Engine Test Facilities, 10 year standard, not yet

B023: this emission unit is replacing B017 with the same CO limit; and with a change in the source of the emission factors for other pollutants, which represents a decrease from the previously permitted amount for old B017, for all pollutants except SO2 and CO.

3745-17-07(A): exempt per 3745-17-07(A)(3)(h), emission unit not subject to 3734-17-11

3745-17-11(B)(1): this rule does not apply to the dynamometer (dyno) because per the definition of process weight in 3745-17-01(B)(14), Table I does not apply; and the dyno emits less than 10 pounds of PM per hour, therefore per 3745-17-11(A)(2)(a)(ii) Figure II also does not apply.

3745-21-08(B) and 3745-23-06(B): compliance is demonstrated through BAT

3745-18-06: exempt per 3745-18-06(B)

3745-31-05(A)(3): limits established at the potential worst case conditions for gasoline combustion in a

NEW SOURCE REVIEW FORM B

PTI Number: 01-08305

Facility ID: 0180000156

FACILITY NAME Honda R&D Americas

FACILITY DESCRIPTION 150kw dvnammometer.

CITY/TWP Ravmond

Emissions Unit ID: K004

reciprocating engine, using US EPA and AP42 emission factors

K004:

3745-21-07(G)(2): 8 & 40 limit when coating plastics

3745-21-09(U)(2)(e)(iii): 10 gallons per hour limit on coating usage when coating metal

3745-17-07(A)(1): visible emissions, Method 9 if required

3745-17-11(B)(1): Table I limit, daily or worst-case calculations

3745-31-05(A)(3): drying oven emission permitted at potential natural gas usage and TPY limit on PM from overspray from Table I, and coating OC emissions at worst-case usage.

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

Synthetic Minor Determination and/or Netting Determination
Permit To Install ENTER PTI NUMBER HERE

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

P.S.: could someone capitalize my K004 emission unit in the heading, I cannot fix it through PTI 2000?

Please complete:

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	2.60
OC	7.86
CO	9.20
NOx	1.64
SO ₂	0.23