



State of Ohio Environmental Protection Agency

Street Address:

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Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL
MONTGOMERY COUNTY
Application No: 08-04886
Fac ID: 0857040734**

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 2/28/2008

Behr Dayton Thermal Products LLC
Bill Huston
1600 Webster St
Dayton, OH 45404-0000

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

Sincerely,

Michael W. Ahern 

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

RAPCA



Permit To Install
Terms and Conditions

Issue Date: 2/28/2008
Effective Date: 2/28/2008

FINAL PERMIT TO INSTALL 08-04886

Application Number: 08-04886

Facility ID: 0857040734

Permit Fee: **\$200**

Name of Facility: Behr Dayton Thermal Products LLC

Person to Contact: Bill Huston

Address: 1600 Webster St
Dayton, OH 45404-0000

Location of proposed air contaminant source(s) [emissions unit(s)]:

**1600 Webster St
Dayton, Ohio**

Description of proposed emissions unit(s):

Deoiling oven and thermal oxidizer.

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

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. 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

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping 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 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 (i.e., postmarked) quarterly 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. Records Retention Requirements

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.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air

contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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 verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. 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 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. 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 emissions unit(s) that is (are) served by such control system(s).

6. 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.

7. 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.

8. 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.

9. 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 cannot meet the requirements of this permit 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 cannot meet the requirements of this permit or cannot meet applicable standards.

10. 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.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. 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.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. 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.

15. 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.

B. 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>
OC	3.64

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. 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.

Operations, Property, and/or Equipment - (P105) - Deoiling oven w/thermal oxidizer installed Post Aug. 3rd, 2006.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-21-07(G)(9)	See A.2.a.
OAC rule 3745-31-05(A)(3)(b)	See A.2.b.
OAC rule 3745-31-05(C)(state only enforceable)	The organic compound (OC) emissions from this emissions unit shall not exceed 3.64 tons per year.
OAC rule 3745-31-05(C) (synthetic minor to avoid Title V)	The organic compound (OC) emissions rate from emission units P100, P101, P102, P103, P104 and P105 combined shall not exceed 19.15 tons/yr, based upon a rolling, 12-month summation of the monthly OC emissions. See A.2.c.

2. Additional Terms and Conditions

- 2.a This emissions unit currently does not employ photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5). It is, therefore, exempt from all emission limitations and control requirements contained in OAC rule 3745-21-07(G)(2).
- 2.b The Permit to Install 08-04886 for this air contaminant source takes into account the voluntary use of a thermal oxidizer as proposed by the permittee, therefore, the requirements of Best Available Technology (BAT) per OAC rule 3745-31-05(A)(3) do not apply.
- 2.c The annual OC emissions rate of 3.64 tons for this air contaminant source is included in the combined annual OC emissions rate of 19.15 tons for emission units P100, P101, P102, P103, P104, and P105.

- 2.d** The OC emissions from this emissions unit shall be controlled through the application of a permanent total enclosure with a 100% capture efficiency and a thermal oxidizer operating at a minimum 95% destruction efficiency.
- 2.e** In order to ensure that all OC emissions are vented from the deoiling ovens to the thermal incinerator, the permittee will utilize an interlock system which will be associated with the ventilation fan's rotation rate. This approach is being utilized since the oven only has two natural draft openings (the entrance and exit of the oven) and there are no other openings that can be compromised during the operation of the emissions unit. The other openings in the oven that are used for maintenance are closed during operation of the oven and are only opened for maintenance purposes when the oven is shut down. If the ventilation fan's rotation rate drops below the minimum rotation rate established during the initial emissions tests, that demonstrated that the emissions unit was in compliance (or the rotation rate established in subsequent emissions tests that demonstrated that the emissions unit was in compliance), then the mechanism that feeds the oil-coated parts into the oven will be shutdown until the ventilation fan's rotation rate is restored to the appropriate rate.

B. Operational Restrictions

- 1. The maximum organic material usage for emission units P100, P101, P102, P103, P104 and P105 shall not exceed 19.15 tons per year, based upon a rolling, 12-month summation of the monthly organic material usage rate. The annual organic material usage in this term equates to the annual OC emission rate in term A.1. based upon the premise that 100% of all the solvents contained within the material usage is emitted and therefore all the record keeping and reporting requirements of this permit for the OC emissions will be sufficient to verify the annual organic material usage rate of this term.

C. Monitoring and/or Record keeping Requirements

- 1. The ventilation fan's rotation rate shall not be less than the minimum rotation rate established during the initial emissions tests that demonstrated that the emissions unit was in compliance (or the rotation rate established in subsequent emissions tests that demonstrated that the emissions unit was in compliance) when the emissions unit is in operation.(The minimum fan speed shall be 1515 rpm until the actual fan speed is determined through emissions testing).
- 2. The permittee shall install, operate, and maintain a continuous ventilation fan rotation rate monitor and recorder which measures and records the rotation rate of the ventilation fan when the emissions unit is in operation. Units shall be in revolutions per minute. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The ventilation fan rotation rate monitor and

recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. verification that the interlock system's set point (i.e., the minimum ventilation fan rotation rate that corresponds to 100% capture of the organic compound emissions) is correct;
- b. all periods of time when the interlock system was activated, when production through the oven was shut down because the furnace fan rotation rate had dropped below the required level; and
- c. all periods of time when the fan rotation rate dropped below the minimum rotation rate that corresponds to 100% capture of the organic emissions and the interlock system did not shut down operation.

The permittee shall, on a monthly basis, test the interlock system to ensure that the mechanism that feeds the oil-coated parts into the oven does shutdown when the ventilation fan's rotation rate drops below the rotation rate that corresponds to 100% capture of the organic compound emissions.

3. In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit controlled by the thermal oxidizer is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions unit was in compliance. Until compliance testing has been conducted, the thermal oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.
4. The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals. Following compliance testing, the permittee shall collect and record the following information each day the emissions unit is in operation:
 - a. all 3-hour blocks of time, when the emissions unit controlled by the thermal oxidizer was in operation, during which the average combustion temperature

within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions unit was in compliance; and

- b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit.

These records shall be maintained at the facility for a period of five years.

- 5. Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range/limit specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for the controlled

emissions unit(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

6. The permittee shall collect and record the following information each month for emission units P100, P101, P102, P103, P104 and P105:
 - a. The total amount of parts process.
 - b. The weight of the oil per part pounds.
 - c. The total uncontrolled OC emissions from the stamping oil employed, in tons.
 - d. The calculated controlled OC emissions rate from the stamping oil, in tons. The controlled OC emissions rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent test that demonstrated that the emissions unit was in compliance.
 - e. The rolling, 12-month summation of the monthly OC emissions rate in tons.

D. Reporting Requirements

1. Prior to employing any photochemically reactive material in this emissions unit, the permittee shall provide written notification to the Director (the appropriate District Office or local air agency). Such notification shall include information sufficient to determine compliance with the emission limits and/or control requirements specified in OAC rule 3745-21-07(G).
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time when the fan rotation rate dropped below the minimum rotation rate that corresponds to 100% capture of the organic emissions and the interlock system did not shut down operation.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month OC emissions limitation, and the actual rolling, 12-month OC emissions for each such month.
4. The permittee shall submit quarterly reports that identify the following information concerning the operation of the thermal oxidizer during the operation of the emissions unit(s):
 - a. each period of time when the average combustion temperature within the thermal oxidizer was outside of the range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;

- b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in "a" where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s).
5. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the OC emissions were not vented to the thermal oxidizer. Each report shall be submitted within 30 days after the deviation occurs.
 6. These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter. If no deviations occurred during the calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.
 7. The permittee shall submit annual reports that specify the actual total OC emissions for this emissions unit. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emission Report.

E. Testing Requirements

1. Compliance with the emissions limitations of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation-
The OC emissions rate from this emissions unit shall not exceed 3.64 tons/yr.

Applicable Compliance Method-

The annual OC emissions allowable is based on the maximum uncontrolled hourly emissions $[(500 \text{ parts/hr})(15 \text{ grams oil/part})(\text{lb}/454 \text{ grams}) = 16.5 \text{ lbs OC/hr}]$ multiplied by an overall control efficiency of 95% (1 - 0.95) which is then multiplied by the maximum operating schedule of 8760 hrs and divided by 2000 lbs/ton.

b. Emission Limitation-

The OC emissions rates from emission units P100, P101, P102, P103, P104 and P105 combined shall not exceed 19.15 tons/yr, based upon a rolling, 12-month summation of the monthly OC emissions.

Applicable Compliance Method-

Compliance shall be based upon record keeping requirement specified in Section C.6.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months after start-up.

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for OC. The capture is assumed to be 100% if the fan speed is sufficient to maintain 0.007 inches of water, whenever the emissions unit is in operation. A fan speed sufficient to maintain 0.007 inches of water, shall be determined during the initial compliance test.

c. The following test method shall be employed to demonstrate compliance with the allowable the control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

F. Miscellaneous Requirements

None