OhioEPA

State of Ohio Environmental Protection Agency

Street Address: Mailing Address:

TELE: (614) 644-3020 FAX: (614) 644-2329

12/14/97

CERTIFIED MAIL

13-18-08-2830

RE: Final Chapter 3745-35 Permit To Operate

Marathon Oil Company-BRK2830
David E. Siebold
539 S. Main Street
Environmental L&T
Findlay, OH 48540

Dear David E. Siebold:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them 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. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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

If you have any questions, please contact the Cleveland Division of Air Pollution Control at (216) 664-2324.

Very truly yours,

Thomas G. Rigo

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

cc: Cleveland Division of Air Pollution Control
US EPA
Jim Orlemann, DAPC Engineering
Becky Castle, DAPC PMU

OhioEPA

PERMIT TO OPERATE AN EMISSIONS UNIT

Effective Date: 12/14/97

Facility ID: 13-18-08-2830

Expiration Date: 12/14/00

FINAL ISSUE

This document constitutes issuance for:

Marathon Oil Company-BRK2830
10439 Brecksville Road
Brecksville, OH 44141-3395

of a permit to operate for:

J001 (Loading Racks/VRU)
Bottom Loading Racks (4) equipped with VRU

PART I General Terms & Conditions

1 Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. 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 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, quar terly 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 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.)

4. **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 three 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 the permit. Such records may be maintained in computerized form.

5. **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 and federal 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.

6. **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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. **Permit Transfers**

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

8. **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.

9. **Permit Renewal**

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency. It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

The following Ohio EPA District Office or local air agency has jurisdiction in the area in which the facility is located:

Cleveland Division of Air Pollution Control
1925 St. Clair
Cleveland, OH 44114
(216) 664-2324

You will be contacted approximately six months prior to expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate DO or LAA.

10. **The permittee is also subject to the attached special terms and conditions.**

OHIO ENVIRONMENTAL PROTECTION AGENCY

Director

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Loading rack controlled with a carbon adsorption/gasoline absorption vapor recovery unit. The loading rack has 26 bottom loading arms in 4 bays for loading gasoline, interface and distillates (distillate oil products, kerosene, diesel fuel, fuel oil, etc.) into the delivery vessels. Bay #1 has 7 loading arms; Bay #2 has 7 loading arms; Bay #5 has 6 loading arms; and Bay #6 has 6 loading arms.	OAC rule 3745-35-07	Gasoline Loading: 0.083 pound of VOC per 1,000 gallons (10.0 mg/l) of gasoline loaded into the delivery vessel, 21.68 tons of VOC per year. Interface Loading: 0.083 pound of VOC per 1,000 gallons (10.0 mg/l) of interface loaded into the delivery vessel, 0.17 ton of VOC per year. Distillate Loading (diesel fuels, fuel oils, and kerosene): 0.019 pound of VOC per 1,000 gallons of distillates loaded into the delivery vessel, 0.95 ton of VOC per year. Tank Truck Losses: 0.108 pound of VOC per 1,000 gallons of gasoline loaded into the delivery vessel, 28.29 tons of VOC per year. The total annual VOC emissions from this emissions unit shall not exceed 51.09 tons per year (TPY). The total annual HAP emissions from this facility shall not exceed 25 TPY. (See A.2.a below.) The total annual emissions of any individual HAP from this facility shall not exceed 10 TPY. (See A.2.a below.)

2. **Additional Terms and Conditions**

2.a The emissions of hazardous air pollutants (HAPs) from all emissions units at this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 10 TPY for any individual HAP and 25 TPY for any combination of HAPs.

B. Operational Restrictions

1. The annual throughput of gasoline, interface and distillates shall not exceed 520,000,000 gallons, 3,966,000 gallons and 100,000,000 gallons, respectively. In order to ensure federal enforceability during the first 12 calendar months of operation after the issuance of this permit to operate (PTO), this emissions unit shall not exceed the following product throughput limitations, in gallons:

   MAXIMUM ALLOWABLE CUMULATIVE THROUGHPUT FOR:

Month(s)	Gasoline	Interface	Distillates
1	43,333,333	330,500	8,333,333
1-2	86,666,667	661,000	16,666,667
1-3	130,000,000	991,500	25,000,000
1-4	173,333,333	1,322,000	33,333,333
1-5	216,666,667	1,652,500	41,666,667
1-6	260,000,000	1,983,000	50,000,000
1-7	303,333,333	2,313,500	58,333,333
1-8	346,666,667	2,644,000	66,666,667
1-9	390,000,000	2,974,500	75,000,000
1-10	433,333,333	3,305,000	83,333,333
1-11	476,666,667	3,635,500	91,666,667
1-12	520,000,000	3,966,000	100,000,000

   After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual gasoline, interface, and distillates throughput limitations shall be based upon rolling, 12-month summations of the gasoline, interface, and distillates throughput amounts.

2. The loading rack shall be equipped with a vapor collection system whereby during the transfer of product to any gasoline delivery vessel:

   a. all vapors displaced from the gasoline delivery vessel during loading are vented only to the vapor collection system; and

   b. the pressure in the vapor collection system is maintained between minus 6 and plus 18 inches of water gauge pressure.

3. The loading rack shall be equipped with a vapor control system whereby:

   a. all vapors collected by the vapor collection system are vented to the vapor control system; and

   b. any liquid gasoline returned to a stationary storage tank from the vapor control system is free of entrained air to the extent possible with good engineering design.

4. A means shall be provided to prevent drainage of gasoline from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

5. All gasoline loading lines and vapor lines shall be equipped with fittings which are vapor tight.

6. The permittee shall not permit gasoline to be spilled, discarded in sewers, stored in open containers or handled in any other manner that would result in evaporation.

7. The permittee shall repair within 15 days any leak from the vapor collection system and vapor control system which are employed to meet the requirements of paragraph (Q)(1) of OAC rule 3745-21-09 when such leak is equal to or greater than 100% of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10.

B. Operational Restrictions (continued)

8. The following vapor recovery unit parameters have been identified as key operating parameters for which acceptable operating ranges have been established. The permittee shall operate the vapor recovery unit within these acceptable operating ranges:

a. to ensure proper regeneration of the carbon beds, the maximum vacuum pulled during the regeneration cycle shall be greater than or equal to 25 inches of Hg and the air purge solenoid must be open;

b. to ensure proper absorption by the absorption tower, the gasoline supply temperature shall not exceed 98 degrees F;

c. to ensure a proper flow rate from the absorption tower to the carbon bed, a positive absorber pressure shall be maintained (i.e., greater than or equal to 1.0 psi); and

d. to ensure proper adsorption, the carbon bed temperature, at all levels, shall not exceed 200 degrees F.

Operation of the vapor recovery unit outside of these specified operating ranges is not necessarily indicative of an emission violation, but rather serves as a trigger level for maintenance and/or repair activities, or futher investigation to establish correct operation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information:

a. the total throughputs, in gallons, of gasoline, interface and distillates;

b. during the first 12 calendar months of operation following the issuance of this permit, the cumulative total throughputs, in gallons, of gasoline, interface and distillates for each calendar month; and

c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summations of the total gasoline, interface and distillates throughputs, in gallons.

2. The permittee shall implement within 90 days of the issuance of this permit, a preventive maintenance program (PMP) for the vapor recovery unit which has been approved by the Cleveland Air Pollution Control Agency. The PMP shall include an annual inspection of the vapor recovery unit by a qualified individual trained in the operation and inspection of carbon adsorption/absorption systems. The resultant report shall be maintained on site and shall be made available during subsequent inspections by the Cleveland Air Pollution Control Agency.

3. The permittee shall maintain the data required by the vapor recovery unit manufacturers' recommended daily operating guidelines. The permittee shall submit a copy of the daily operating guidelines to the Cleveland Air Pollution Control Agency within 90 days of the issuance of this permit. Any subsequent changes to the guidelines shall be mutually agreeable to the permittee and the Cleveland Air Pollution Control Agency.

4. The permittee shall collect and record the following information for each day for the control equipment:

a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation;

b. during the regeneration cycle, the vacuum pressure in inches of Hg

c. the gasoline supply temperature in degrees F;

d. the absorber pressure in psi; and

e. the carbon bed temperatures in degrees F.

D. Reporting Requirements

1. The permittee shall submit semi-annual deviation (excursion) reports which identify all exceedances of the following:

   a. the rolling, 12-month limitations on the throughput of gasoline, interface and distillates;

   b. for the first 12 calendar months of operation following the issuance of this permit, the maximum allowable cumulative throughput limits; and

   c. any parameter readings that are outside of the acceptable value for each vapor recovery unit key operating parameter established in Section B.8 above.

   The reports shall also include the cause of the exceedance(s) and an explanation of any corrective action(s) taken to prevent a similar exceedance in the future. If no deviations occurred during the 6-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that 6-month period. The reports shall be submitted semi-annually, i.e., by February 15 and August 15 of each year and shall address the data obtained during the previous 6-month calendar period (July to December and January to June, respectively).

2. The permittee shall submit annual reports of the total throughputs, in gallons, for gasoline, interface and distillates and the total VOC emissions during the calendar year for this emissions unit, and the total individual HAP, and combined HAP emissions for all emissions units at this facility. These annual reports shall be submitted by February 15 of each year.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A of these terms and conditions shall be determined in accordance with the following method(s):

2. Emission Limitations:

   0.083 pound of VOC per 1,000 gallons of gasoline loaded

   0.083 pound of VOC per 1,000 gallons of interface loaded

   Applicable Compliance Method: Compliance with these emission limitations shall be demonstrated through emission tests. The emission test methods and procedures are those outlined in OAC rule 3745-21-10(E) and specify a minimum of one 6-hour test during which at least 79,260 gallons (300,000 liters) of gasoline are loaded. (The test should be conducted at the maximum gasoline throughput possible.)

   Within 12 months prior to the expiration of this permit, the permittee shall conduct or have conducted, an emission test(s) for this emissions unit in order to demonstrate continuing compliance with the allowable VOC emission rate. This test shall be conducted between the months of May through September.

   No later than 30 days prior to proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland Air Pollution Control 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, 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 Cleveland Air Pollution Control Agency's refusal to accept the results of the emission test(s).

   Personnel from the Cleveland Air Pollution Control 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.

   A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the test(s) and submitted to the Cleveland Air Pollution Control Agency within 30 days following completion of the the test(s).

E. Testing Requirements (continued)

3. Emission Limitation:

0.019 pound of VOC per 1,000 gallons of distillates loaded

Applicable Compliance Method: Compliance with this emission limitation shall be based upon emission factors from AP-42, 5th Edition, Table 5.2-5 of 0.016 pound of VOC per 1,000 gallons of kerosene and 0.014 pound VOC per 1,000 gallons of diesel.

Emission Limitations:

21.68 tons of VOC per year from gasoline loading

0.17 ton of VOC per year from interface loading

Applicable Compliance Method: The actual annual emissions shall be calculated as the product of the VOC emission rate from the last compliant emission test (in pound of VOC per 1,000 gallons of gasoline and interface loaded) times the gallons of gasoline and interface loaded during the year, divided by 2,000.

Emission Limitation:

0.95 ton of VOC per year from distillates loading

Applicable Compliance Method: The actual annual emissions shall be calculated as the product of 0.019 pound of VOC per 1,000 gallons times the total gallons of kerosene loaded during the year, divided by 2,000, and 0.014 pound VOC per 1,000 gallons times the total gallons of diesel oil loaded during the year, divided by 2,000.

4. In order to calculate the total VOC emission rates for the facility, the permittee shall comply with the following:

a. VOC emissions from the storage tanks shall be determined using USEPA's "Tanks Program 3.0."

b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."

c. The VOC emissions from gasoline tank trucks loading shall be determined using the most recent VOC stack test results and a vapor-tightness loss rate of 13 mg/l from the trucks. The 13 mg/l leakage emission factor is calculated using 1.3% as the average leakage from a truck passing the 3-inch pressure decay test (EPA-453/R-94-002b, "Gasoline Distribution Industry (Stage I) - Background Information for Promulgated Standards", Appendix A, November 1994).

d. The VOC emissions from distillates and interface loading shall be determined using AP-42, 5th Edition, Equation 5.2-1.

5. Emission Limitation:

10 TPY for any individual HAP and 25 TPY for any combination of HAPs

Applicable Compliance Method: For every individual HAP, multiply the following emission factors by the actual annual VOC emission rate for the year (in tons per year) for all gasoline VOC emissions from the facility, including fugitive emissions. These emission factors are from EPA-453/R-94-002a, "Gasoline Distribution Industry (Stage I) - Background Information for Proposed Standards", January 1994, and are based upon the liquid weight percent (weight fraction) of each HAP in the gasoline.

a. benzene - 0.009 pound of benzene emissions per pound of VOC emissions;
b. toluene - 0.013 pound of toluene emissions per pound of VOC emissions;
c. xylene - 0.005 pound of xylene emissions per pound of VOC emissions;
d. ethyl benzene - 0.001 pound of ethyl benzene emissions per pound of VOC emissions;
e. hexane - 0.016 pound hexane emissions per pound of VOC emissions; and
f. 2,2,4 trimethylpentane - 0.008 pound of 2,2,4 trimethylpentane per pound VOC emissions.

The HAP emissions from distillates and interface truck loading and storage and fugitive emissions shall be determined using USEPA's "VOC/PM Speciation Data System", version 1.50, Oct. 1992.

For the combination of HAPs, sum the calculated annual emission rates for the individual HAPs.

6. Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the new emission factors are mutually acceptable to the permittee, the Ohio EPA, and the Cleveland Air Pollution Control Agency.