OhioEPA

State of Ohio Environmental Protection Agency

Street Address:
1800 WaterMark Drive
Columbus, OH 43215-1099

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

Mailing Address:
P.O. Box 1049
Columbus, OH 43216-1049

12/14/97

CERTIFIED MAIL

01-25-04-0772

RE: Final Chapter 3745-35 Permit To Operate

Clark Refining & Marketing, Inc. - Columbus terminal
Johnna S. Van Keuren
4070 South First Street
St. Louis, MO 63118

Dear Johnna S. Van Keuren:

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 Central District Office at (614) 728-3778.

Very truly yours,

Thomas G. Rigo

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

cc: Central District Office
Jim Orlemann, DAPC Engineering

US EPA
Becky Castle, DAPC PMU

OhioEPA

PERMIT TO OPERATE AN EMISSIONS UNIT

Effective Date: 12/14/97

Facility ID: 01-25-04-0772

Expiration Date: 12/14/00

FINAL ISSUE

This document constitutes issuance for:

Clark Refining & Marketing, Inc. - Columbus terminal
4033 Fisher Road
Columbus, OH 43228

of a permit to operate for:

J001 (2 Bay Bottom Loading Rack)
Two bay loading rack used to load gasoline, ethanol, and fuel additive into tank trucks

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:

Central District Office
3232 Alum Creek Drive
PO Box 1049
Columbus, OH 43216-1049
(614) 728-3778

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
2-bay tank truck loading rack for gasoline with a flare vapor control unit (VCU).	OAC rule 3745-35-07	0.29 pound of VOC per 1,000 gallons of gasoline loaded into the delivery vessel. Total VOC emissions from this emissions unit shall not exceed 20.9 tons per year, as a rolling, 12-month summation. Total VOC emissions from all emissions units at this facility shall not exceed 40.7 tons per year, as a rolling, 12-month summation. The individual and combined HAP emissions from all emissions units at this facility shall not exceed 10 tons per year and 25 tons per year, respectively, as rolling, 12-month summations.

2. **Additional Terms and Conditions**

   None

B. Operational Restrictions

1. Compliance with the emission limitations as stated in Section A.1 shall be achieved by restricting the annual throughput of gasoline. The annual throughput of gasoline shall not exceed 143,518,000 gallons per year. In order to ensure federal enforceability during the first 12 calendar months of operation after issuance of this permit to operate (PTO), this emissions unit shall not exceed the following throughput limitations:

MONTH(s)	GASOLINE (gallons)
1	11,959,833
1-2	23,919,667
1-3	35,879,500
1-4	47,839,333
1-5	59,799,167
1-6	71,759,000
1-7	83,718,833
1-8	95,678,667
1-9	107,638,500
1-10	119,598,333
1-11	131,558,167
1-12	143,518,000

The facility does not handle distillates and transmix. The facility currently handles gasoline, ethanol and a small amount of additives (1/1000 gallons of gasoline) which, for purposes of this permit, shall be considered as "gasoline" and included in the gasoline throughput limitation. Any future use of transmix, distillates or other additives shall also be considered as "gasoline" and included in the gasoline throughput limitation until the permittee submits and obtains a modified PTO that specifically addresses the use of distillates, transmix and additives.

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual gasoline throughput limitation shall be based upon a rolling, 12-month summation.

2. The vapor collection and control systems shall be kept in good working order and shall be used at all times during the transfer of gasoline into tank trucks.

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

   a. all vapors displaced from the 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.

4. 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.

5. 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.

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

7. The permittee shall prohibit gasoline to be spilled, discharged in sewers, stored in open containers or handled in any other manner that would result in evaporation.

8. The permittee shall repair within 15 days any leak from the vapor collection system and vapor control system 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.

9. Any tank truck used in conjunction with this emissions unit must comply with the requirements of OAC rule 3745-21-09(V), if applicable.

10. A pilot flame shall be maintained at all times in the flare's pilot light burner during the loading of gasoline.

C. Monitoring and/or Record Keeping Requirements

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

   a. the total throughput, in gallons, of gasoline for each month;

   b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall maintain records of the cumulative total throughput, in gallons, of gasoline for each calendar month;

   c. after the first 12 calendar months of operation following the issuance of this permit, the permittee shall maintain the rolling, 12-month summation of the total gasoline throughput, in gallons;

   d. the total VOC emissions from this emissions unit, in tons; and

   e. the total HAP (individual and combined) and VOC emissions from all emissions units at the facility, in tons.

2. The permittee shall properly install, operate, and maintain a device to continuously monitor the flare's pilot flame when the emissions unit is in operation. The monitoring device shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. This monitoring device shall include an interlock that prevents the loading of gasoline when the flare's pilot flame is not operational.

3. Each business day, the permittee shall verify that the flare's pilot flame and flame sensor are functioning properly when the emissions unit is in operation. The permittee shall record the results of the daily flare pilot flame and flame sensor inspections.

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;

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

   c. the rolling, 12-month emission limitations for VOC; and

   d. all periods during which the flare's pilot flame and flame sensor were not functioning properly when the emissions unit was in operation.

   The reports shall also document the cause of each exceedance and an explanation of any corrective actions which have been taken or will be 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. These reports shall be submitted by May 1 and November 1 of each year and shall address the data obtained during the previous 6-month calendar period (January 1 through June 30 and July 1 through December 31, respectively).

2. The permittee shall submit annual reports of the total gasoline throughput, in gallons, and the total VOC emissions during the calendar year for this emissions unit, and the total individual and combined HAP emissions and the total VOC emissions during the calendar year for all emissions units at the facility. These annual reports shall be submitted by May 1 of each year and shall cover the previous calendar 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 methods(s):

E. Testing Requirements (continued)

2. Emission Limitation: 0.29 pound VOC per 1,000 gallons of gasoline loaded
Applicable Compliance Method: Compliance with this emission limitation shall be demonstrated through emission tests. The emission test methods and procedures are those outlined in OAC rule 3745-21-10(E), i.e., a minimum of one 6-hour test during which at least 98,300 gallons (372,105 liters) of gasoline are loaded. (The test should be conducted at the maximum 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 done 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 Ohio EPA Central District Office. 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 Ohio EPA Central District Office's refusal to accept the results of the emission test(s).

   Personnel from the Ohio EPA Central District Office 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 Ohio EPA Central District Office within 30 days following completion of the the test(s).

3. Emission Limitation: 20.9 tons of VOC per year from gasoline loading, as a rolling, 12-month summation
Applicable Compliance Method: The actual emissions shall be calculated as the product of the VOC emission rate from the last emission test (in pounds of VOC per 1,000 gallons of gasoline loaded) times the gallons of gasoline loaded during the year, divided by 2,000.
(See Section C.1. above.)

4. Emission Limitation: 40.7 tons of VOC per year from all emissions units at the facility, as a rolling, 12-month summation
Applicable Compliance Method: The actual emissions shall be calculated as the sum of the VOC emission rate from E.3. above and the total actual VOC emissions from all other emissions units at the facility. (See Section C.1. above.)

5. To calculate VOC emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following:

   a. VOC emissions from the storage tanks shall be determined using USEPA's "Tanks" program, version 2.0 or newer.

   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 truck loading shall be determined using the most recent VOC stack test results and a vapor-tightness loss rate of 9 mg/l from the trucks. The 9 mg/l leakage emission factor is calculated using 0.5% as the average leakage from a truck passing the 3-inch pressure decay test (USEPA, 1980: Bulk Gasoline Terminals - Background Information for Proposed Standards, Table C-4).

E. Testing Requirements (continued)

6. Emission Limitation: 10 tons per year for any individual HAP and 25 tons per year for any combination of HAPs, as rolling, 12-month summations
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 VOC emissions from the facility, including fugitive emissions.

Benzene - 20.4 lbs per ton of VOC
Cumene - 0.20 lb per ton of VOC
Ethyl benzene - 2 lbs per ton of VOC
Hexane - 33.6 lbs per ton of VOC
Isooctane - 10.4 lbs per ton of VOC
Toluene - 33.2 lbs per ton of VOC
Xylenes - 11.6 lbs per ton of VOC

These emission factors are based on the liquid weight percent (weight fraction) of each HAP in the gasoline. Speciated emissions were estimated based on equations found in AP-42, 5th Edition, Section 7.1.4, Hazardous Air Pollutant Speciation Methodology.

To determine total combined HAP emissions, sum the calculated annual emission rates for each individual HAP.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the new emission factors are mutually agreeable to the Ohio EPA and Clark Refining and Marketing, Inc.

F. Miscellaneous Requirements

1. The following special terms and conditions of this PTO are federally enforceable requirements: A-F.