OhioEPA

State of Ohio Environmental Protection Agency

Street Address: Mailing Address:

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

09/03/98

CERTIFIED MAIL

01-25-04-0426

RE: Final Chapter 3745-35 Permit To Operate

Columbus Storage and Distribution Facility
Thomas G Leigh
P.O. Box 391
Ashland, KY 41114

Dear Thomas G Leigh:

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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. 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
Becky Castle, DAPC PMU

OhioEPA

PERMIT TO OPERATE AN EMISSIONS UNIT

Effective Date: 09/03/98

Facility ID: 01-25-04-0426

Expiration Date: 09/03/03

FINAL ISSUE

This document constitutes issuance for:

Columbus storage and distribution facility
3855 Fisher road
Columbus, OH 43228

of a permit to operate for:

J001 (Tank Truck Loading Rack)
Loading of liquid products 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:

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 Central District Office.

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

Donald R Schregardus

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 truck loading rack with 6 loading arms for gasoline/ethanol and distillates loading, controlled by a carbon adsorption/absorption vapor recovery unit (VRU)	40 CFR Part 60, Subpart XX	Limitation applicable to the loading of gasoline (i.e., gasoline, ethanol, and additives) and distillates (kerosene, #2 fuel oil, and jet fuel): 0.29 pound of VOC per 1,000 gallons (35 milligrams of VOC per liter) of gasoline and distillates loaded into the delivery vessel.
	OAC Rule 3745-21-09(Q)	The emission limit established by this rule is less stringent than that established in 40 CFR Part 60, Subpart XX.
	OAC Rule 3745-35-07	The emissions of VOC from J001 shall not exceed 34.26 TPY, as a rolling, 12-month summation. Total VOC emissions from all emissions units at this facility shall not exceed 59.38 tons per year, as a rolling, 12-month summation. The annual, individual and combined hazardous air pollutant emissions from all emissions units at this facility shall not exceed 9.9 tons per year and 24.9 tons per year, respectively, as a rolling, 12-month summation.

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 annual throughputs of gasoline (i.e., gasoline, ethanol, and additives) and distillates (kerosene, #2 fuel oil, and jet fuel). The annual throughputs of gasoline and distillates shall not exceed 386,000,000 gallons per year and 550,000,000 gallons per year, respectively. In order to ensure federal enforceability during the first twelve calendar months of operation after issuance of this permit to operate, this emissions unit shall not exceed the following product throughput limitations:

MONTH(s)	GASOLINE (gallons)	DISTILLATES (gallons)
1-1	32,166,667	45,833,333
1-2	64,333,334	91,666,666
1-3	96,500,001	137,499,999
1-4	128,666,668	183,333,332
1-5	160,833,335	229,166,665
1-6	193,000,002	274,999,998
1-7	225,166,669	320,833,331
1-8	257,333,336	366,666,664
1-9	289,500,003	412,499,997
1-10	321,666,670	458,333,330
1-11	353,833,337	504,166,663
1-12	386,000,000	550,000,000

The loading rack does not handle transmix. Any future use of transmix, or other additives shall also be considered as "gasoline" and included in the gasoline throughput limitation until the permittee submits and obtains a modified permit that specifically addresses the use of transmix and additional additives.

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual gasoline and distillate 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 fuel into tank trucks.

3. The loading rack shall be equipped with a vapor collection system whereby during the transfer of gasoline and distillates 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 fuel from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

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

7. a. The design of the vapor collection system shall prevent vapors collected at one loading rack from passing to another loading rack.

   b. Gasoline shall be loaded only into gasoline tank trucks equipped with vapor collection equipment compatible with the terminal's vapor collection system.

   c. The terminal's and the tank truck's vapor collection systems shall be connected during each loading of a gasoline tank truck at this emissions unit.

   d. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4500 pascals (450 mm of water) during product loading. This level shall not be exceeded when measured by the procedures specified in 40 CFR 60.503(d).

   e. No pressure-vacuum vent in the terminal's vapor collection system shall begin to open at a system pressure less than 4500 pascals (450 mm of water).

B. Operational Restrictions (continued)

8. Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:

   a. Obtain the vapor tightness documentation described in 40 CFR 60.505(b) for each gasoline tank truck loaded at this emissions unit.

   b. Require the tank identification number to be recorded as each gasoline tank truck is loaded at this emissions unit.

   c. Cross-check each tank identification number obtained in Section B.8.b. above with the file for tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded.

   d. Notify the owner or operator of each nonvapor-tight gasoline tank truck loaded at this emissions unit within 3 weeks after the loading has occurred.

   e. Not allow the reloading of nonvapor-tight gasoline trucks at this emissions unit until the vapor tightness documentation for the truck is obtained.

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

10. 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, the absorber pressure shall be maintained between 8 psi and 15 psi.

    d. To ensure proper adsorption, the carbon bed temperature, at all levels, shall not exceed 150 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.

11. 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.

12. Any tank truck used in conjunction with J001 must comply with the requirements of OAC rule 3745-21-09(V), if applicable.

C. Monitoring and/or Record Keeping Requirements

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

   a. the total throughputs, in gallons, of gasoline and distillates for each calendar month;

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

   c. beginning after the first twelve (12) calendar months of operation following the issuance of this permit, the rolling 12-month summations of the total gasoline and distillates throughputs, in gallons, for each calendar month;

   d. the calculated annual HAP (individual and combined) and VOC emissions from gasoline and distillates loading for all emissions units at the facility, in tons per year; and

   e. the total emissions of VOC from J001 and the rolling 12-month summation of VOC emissions from J001 for each calendar month, in tons.

C Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall implement, within 90 days of the issuance of this permit, a preventive maintenance program (program) for the McGill VRU which has been approved by the Central District Office. The program shall include an annual inspection of the VRU 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 Central District Office.

3. The permittee shall maintain the data required by the manufacturer's recommended daily operating guidelines on a daily basis. The permittee shall submit such a checklist to the Central District Office within 90 days of the issuance of this permit. Any subsequent changes to this checklist shall be mutually agreeable to the permittee and the Central District Office.

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 associated emissions unit was in operation;

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

   c. the gasoline supply temperature, in degrees F;

   d. the absorber pressure, in psi; and

   e. the carbon bed temperatures, in degrees F.

5. The permittee shall maintain records, at the terminal, of the tank truck vapor tightness documentation required under Section B.8.a, in accordance with 40 CFR 60.505(b). The documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by 40 CFR Part 60, Appendix A, Method 27.

6. The permittee shall maintain records of each monthly leak inspection required under Section C.8, in accordance with 40 CFR 60.505(c).

7. The permittee shall maintain records of all notifications required under Section B.8.d.

8 The permittee shall maintain records for all replacements or additions of components performed on the vapor processing system.

9. Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for organic compound liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.

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 throughputs of gasoline 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. the rolling 12-month emission limitation for VOC

   These reports shall be submitted by February 15 and August 15 of each year and shall address the data obtained during the previous six-month calendar period (July to December and January to June, respectively).

2 The permittee shall submit semi-annual deviation (excursion) reports that identify any parameter readings that are outside of the acceptable range for each VRU key operating parameter established in B.10 above. Each report shall include a written description of why the unacceptable reading occurred, and an explanation of any action taken or required to correct the unacceptable reading. These reports shall be submitted by February 15 and August 15 of each year, and shall address the data obtained during the previous six-month calendar period (January to June, July to December, respectively). 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.

D. Reporting Requirements (continued)

3. The permittee shall also submit annual reports of the total gasoline and distillates throughputs, in gallons, the total VOC emissions for J001, and the total individual and combined HAP emissions for all emissions units at the facility. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. 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 250,000 gallons (946,350 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).

2. Emission Limitation:
34.26 tons of VOC per year from gasoline/distillate loading, as a rolling, 12-month summation

Applicable Compliance Method:
The actual emissions for gasoline and distillates shall be calculated as the product of the loading losses (L obtained from the loading loss equation (in pounds of VOC per 1,000 gallons of gasoline/distillate loaded) times the gallons of each loaded during the rolling 12-month period, summed, and then divided by 2,000.

Loading Losses (L) = 12.46*((S*M*P)/(T))*(1-(eff/100))
where:
S = saturation factor
P = true vapor pressure of fuel
M = molecular weight of fuel vapors
T = temperature of fuel
eff = reduction efficiency

3. Emission Limitation:
59.38 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.2. above and the total actual VOC emissions from all other emissions units at the facility. (See Section C.1. above.)

E. Testing Requirements (continued)

4. To calculate VOC emissions for the purpose of determining compliance with the facility-wide VOC emission limitation in section A.1, the permittee shall comply with the following:

   a. VOC emissions from the storage tanks shall be determined using the most recent version of USEPA's "Tanks" program.

   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).

5. Emissions Limitation:
   9.9 tons per year for any individual HAP and 24.9 tons per year 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 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.

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

   The HAP emissions from distillates (loading and fugitives) shall be determined using USEPA's "VOC/PM Speciation Data System", version 1.50, October, 1992.

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

   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 Ashland Petroleum Company.

F. Miscellaneous Requirements

1. Sections A,B,C,D,E and F of these terms and conditions constitute the federally enforceable portions of this permit pursuant to OAC rule 3745-35-07.