



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

01-25-00-0276

RE: Final Chapter 3745-35 Permit To Operate

PDV Midwest Refining, L.L.C.
Carl Venzke
6433 Cosgray Road
Dublin, OH 43016-8737

Dear Carl Venzke:

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, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Central District Office
Jim Orlemann, DAPC Engineering
Becky Castle, DAPC PMU

US EPA



PERMIT TO OPERATE AN EMISSIONS UNIT

Effective Date: 12/14/97

Facility ID: 01-25-00-0276

Expiration Date: 12/14/00

FINAL ISSUE

This document constitutes issuance for:

PDV Midwest Refining, L.L.C.
6433 Cosgray Road
Dublin, OH 43016-8737

of a permit to operate for:

J001 (Loading Rack)
Three (3) Bay Fuel Loading Rack with Vapor Recovery Unit

PART I General Terms & Conditions

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.

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, 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 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.

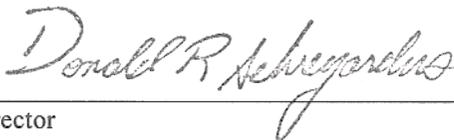
The following Ohio EPA District Office or local air agency has jurisdiction in the area in which the facility is located:

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

A handwritten signature in cursive script that reads "Donald R. Scheyardus". The signature is written in black ink and is positioned above a horizontal line.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
3-bay truck loading rack for gasoline and distillates loading controlled by a carbon adsorption/gasoline absorption vapor recovery unit (VRU).	OAC Rule 3745-21-09(Q)	Limitation applicable to the loading of unleaded gasoline, additives, and interface material: 0.67 pound of VOC per 1,000 gallons (80 mg/l) of gasoline, additives, and interface loaded into the delivery vessel.
	OAC Rule 3745-35-07	Limitation applicable to the loading of diesel and kerosene: 0.019 pound of VOC per 1,000 gallons of diesel and kerosene loaded into the delivery vessel.
	OAC Rule 3745-35-07	The total annual VOC emissions from this emissions unit shall not exceed 79.9 tons per year (including fugitive emissions).
	OAC Rule 3745-35-07	The annual combined and individual HAP emissions from all emissions units at this facility shall not exceed 25 tons per year and 10 tons per year, respectively.

2. Additional Terms and Conditions

None

B. Operational Restrictions

1. 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.
2. 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 connected.

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Facility Name: PDV Midwest Refining, L.L.C.
Facility ID: 01-25-00-0276
Emissions Unit: Loading Rack (J001)

B. Operational Restrictions (continued)

3. Compliance with the emission limitations as stated in Section A.1 shall be achieved by restricting annual throughputs of gasoline (i.e., gasoline, additives, and interface) and distillates (i.e., diesel and kerosene). The annual throughputs of gasoline and distillates shall not exceed 220,000,000 gallons per year and 185,500,000 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	27,500,000	23,187,500
1-2	55,000,000	46,375,000
1-3	82,500,000	69,562,500
1-4	110,000,000	92,750,000
1-5	123,750,000	104,343,750
1-6	137,500,000	115,937,500
1-7	151,250,000	127,531,250
1-8	165,000,000	139,125,000
1-9	178,750,000	150,718,750
1-10	192,500,000	162,312,500
1-11	206,250,000	173,906,250
1-12	220,000,000	185,500,000

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

4. All fuel loading lines and vapor lines shall be equipped with fittings which are vapor tight.
5. 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.
6. The permittee shall repair within fifteen (15) days any leaks from the vapor collection system and the vapor control system which are employed to meet the requirements of OAC rule 3745-21-09 (Q)(1) when such a leak is equal to or greater than one hundred percent (100%) of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10.
7. Any tank truck used in conjunction with this emissions unit must comply with the requirements of OAC rule 3745-21-09(V), if applicable.
8. The vapor recovery unit (VRU) shall be kept in good working order and shall be used at all times during the transfer of gasoline or distillates into fuel tank trucks (as defined by 40 CFR 60.501). 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 Ohio EPA Central District Office in accordance with paragraph (B) of OAC rule 3745-15-06.
9. The following VRU parameters have been identified as key operating parameters for which acceptable operating ranges have been established. The permittee shall operate the VRU 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 Hg. The air purge solenoid shall also remain open during the regeneration cycle.
 - 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 temperatures, at all levels, shall not exceed 150 degrees F.

Operation of the VRU 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 further investigation to establish correct operation.
10. Any liquid gasoline returned to a stationary storage tank from the vapor control system shall be free of entrained air to the extent possible with good engineering design.

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Facility Name: PDV Midwest Refining, L.L.C.

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Facility ID: 01-25-00-0276

Emissions Unit: Loading Rack (J001)

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 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. 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; and
 - 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.
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.

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

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.9 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).
3. The permittee shall submit an annual report of the total throughputs, in gallons, for gasoline and distillates during the calendar year, and the estimated total VOC, single HAP, and total HAP emissions from this emissions unit. The report shall also include total VOC and HAP emissions from all emissions units at the facility. This annual report shall be submitted by April 15 of each year and shall address the data obtained for the previous calendar year (January through December).

E. Testing Requirements

1. 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 211,539 gallons (800,673 liters) of gasoline are loaded. (The test should be conducted at the maximum gasoline throughput possible.)

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

Emission Limitation: 0.67 pound VOC per thousand gallons of gasoline loaded.
Applicable Compliance Method: OAC Rule 3745-21-10(E)

Emission Limitation: 0.019 pound VOC per thousand gallons of distillates loaded.
Applicable Compliance Method: Use an emission factor from AP-42, 5th Edition, Table 5.2-5, of 0.016 pound of VOC per thousand gallons of kerosene and an emission factor of 0.014 pound VOC per thousand gallons of diesel.

Emission Limitation: 10 tons per year for any single HAP and 25 tons per year for any combination of HAPs.
Applicable Compliance Method: For every individual HAP, multiply the following emission factor by the actual annual VOC emission rate for the year (in tons per year) for all 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 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

3. VOC fugitive emissions (e.g., valves, fittings, and pumps) from the loading rack shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
4. VOC emissions from gasoline truck loading operations shall be determined using the most recent VOC stack test results and a vapor-tightness loss rate of 9 mg/l (0.074 lbs VOC/1000 gallons gasoline loaded) 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. VOC emissions from the storage tanks shall be determined using the most recent version of USEPA's "Tanks" program.

Miscellaneous Requirements

1. Sections A,B,C,D,E and F of these terms and conditions constitute the federally enforceable portions of this permit.