State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

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

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

RE: FINAL PERMIT TO INSTALL
LUCAS COUNTY
Application No: 04-01259

CERTIFIED MAIL

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

DATE: 8/14/2001

CITGO Petroleum Corp - Toledo Terminal
Pete Krivas
1840 Otter Creek Road
Oregon, OH 43616

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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 within thirty (30) days after the notice of the Directors 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

Very truly yours,

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

CC: USEPA **TDES**

FINAL PERMIT TO INSTALL 04-01259

Application Number: 04-01259

APS Premise Number: 0448010220

Permit Fee: **$2100**

Name of Facility: CITGO Petroleum Corp - Toledo Terminal

Person to Contact: Pete Krivas

Address: 1840 Otter Creek Road
Oregon, OH 43616

Location of proposed air contaminant source(s) [emissions unit(s)]:
1840 Otter Creek Road
Oregon, Ohio

Description of proposed emissions unit(s):
Installation of 1 new gasoline loading arm on an existing load rack, installation of 1 new distillate loading rack and change of service of 2 storage tanks.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written 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. See B.10 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. 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, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06**.** Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be <u>obtained before</u> the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is

granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements 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 of state-only enforceable 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 state-only required 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.)

3. Permit Transfers

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

4. 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.

5. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may

be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

6. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

7. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

8. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

9. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

10. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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.

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
VOC	95
Total combined HAPs	**24.5**
Individual HAP	**9.9**

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - S PECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
J001 - Loading Rack 3 with three gasoline, two diesel and one jet kerosene loading arms; Loading Rack 4 with three gasoline and two diesel loading arms; Loading Rack 5 with two jet kerosene loading arms; and, Regenerative carbon adsorber	OAC rule 3745-21-09(Q)	The mass emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3); Also see B.I.2.b through B.I.2.e
	OAC rule 3745-31-05(A)(3)	18.62 lbs/hr and 25.03 tons/yr volatile organic compounds (VOC) from the carbon adsorber exhaust; 17.33 tons per year fugitive VOC emissions from truck loading; The requirements of this rule also include the requirements of OAC rule 3745-21-09(Q) and 40 CFR Part 60 Subpart XX
	OAC rule 3745-31-05(D)	See B.I.2.f
	40 CFR 60 Subpart XX	See B.I.2.a

2. Additional Terms and Conditions

2.a The emissions to the atmosphere from the vapor collection system due to loading of liquid product into gasoline tank trucks are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded.

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

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

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

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

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

ii. 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.

2.d 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.

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

2.f The emissions of VOC and hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from all emissions units at this facility, shall not exceed 95 tons per year VOC, 9.9 tons per year of any individual HAP, or 24.5 tons per year for any combination of HAPs, as rolling 12-month summations.

II. Operational Restrictions

1. 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.

2. 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 one hundred percent (100%) of the lower explosive limit as propane, as determined by OAC rule 3745-21-10(K).

3. Each vapor collection system shall be designed to prevent any total organic compound vapors collected at one loading rack from passing to another loading rack.

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

   a. the permittee shall obtain the vapor tightness documentation described in 40 CFR 60.505(b) for each gasoline tank truck which is to be loaded at the facility.

   b. the permittee shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the affected facility.

c. The permittee shall cross-check each tank identification number obtained in paragraph b. of this section with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded, unless either of the following conditions is maintained:

c.i If less than an average of one gasoline tank truck per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or

c.ii. If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually.

c.iii. If either the quarterly or semiannual cross-check provided in paragraphs 4.c.i through 4.c.ii of this section reveals that these conditions were not maintained, the permittee must return to biweekly monitoring until such time as these conditions are again met.

d. The permittee shall notify the owner or operator of each non-vapor-tight gasoline tank truck loaded at the affected facility within 1 week of the documentation cross-check in paragraph c. of this section.

e. The permittee shall take steps assuring that the non-vapor-tight gasoline tank truck will not be reloaded at the affected facility until vapor tightness documentation for that tank is obtained.

f. Alternate procedures to those described in paragraphs 4.a through 4.e of this section for limiting gasoline tank truck loadings may be used upon application to, and approval by, the Administrator of USEPA.

5. The permittee shall act to assure that loadings of gasoline tank trucks are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.

6. The permittee shall act to assure that the terminal's and the truck's vapor collection systems are connected during each loading of a gasoline tank truck. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the loading racks.

7. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified in 40 CFR 60.503(d).

8. No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water).

9. The following carbon adsorption/gasoline absorption vapor recovery unit (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 of Hg. This vacuum level shall be maintained while the air purge solenoid is open, during the carbon polishing phase (final minutes) of the regeneration;

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

   c. to ensure proper flow of gasoline to the adsorber nozzle and the seal cooler when the vapor recovery unit is operating, a differential pressure of 49 inches of water column shall be maintained across the orifice plate, located in the gasoline supply; and,

   d. to ensure proper adsorption, the carbon bed temperature, 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. The annual gasoline and kerosene throughput for this emissions unit shall not exceed 171,513,171 gallons and 280,320,000 gallons respectively, based upon a rolling, 12-month summation of the daily throughputs.

    The permittee shall comply with the rolling 12-month throughput limitation immediately upon startup under this permit based on past gasoline throughput.

11. Best available technology is control of emissions from loading of all fuels with a regenerative carbon adsorber.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure in the vapor collection system, while the emissions unit is in operation, to demonstrate compliance with the pressure range established in section B.I.2.b.ii. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

   Also, the permittee shall properly install, operate, and maintain equipment to monitor the gasoline supply temperature, the absorber pressure, the carbon bed temperature (at all levels), and the carbon bed vacuum while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

2. The permittee shall collect and record the following information once each day (Monday through Friday, excluding holidays):

   a. the temperature of the carbon bed after any regeneration cycle, including any cooling cycle(s);

   b. the temperature of the carbon bed, at all levels;

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

   d. the maximum carbon bed vacuum in inches of mercury during regeneration of the recorded bed;

   e. the gasoline supply temperature, in degrees F;

   f. the differential pressure across the orifice plate in the gasoline supply line in psi; and,

   g. the pressure in the vapor collection system, in inches of water column.

3. 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 total organic compounds liquid or vapor leaks. 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.

4. The tank truck vapor tightness documentation required under 40 CFR 60.502(e)(1) shall be kept on file at the terminal in a permanent form available for inspection.

5. The documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results, as determined by Method 27 of 40 CFR Part 60, Appendix A. This documentation shall include, as a minimum, the following information:

   a. test title (Gasoline Delivery Tank Pressure Test - EPA Reference Method 27);
   b. tank owner and address;
   c. tank identification number;
   d. testing location;
   e. date of test;
   f. tester name and signature;
   g. name, signature, and affiliation of witnessing inspector, if any; and
   h. test results, including the actual pressure change in 5 minutes, in mm of water column (average for 2 runs).

6. A record of each monthly leak inspection required under 40 CFR 60.502(j) shall be kept on file at the terminal. Inspection records shall include, as a minimum, the following information:

a. date of inspection;
b. findings (may include no leak(s) discovered, or the location, nature and severity of leak(s));
c. leak determination method;
d. corrective action taken, including the date each leak was repaired and the reason for any repair interval in excess of 15 days; and
e. inspector name and signature.

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

a. the total, individual throughputs of gasoline, distillates and kerosene;

b. the rolling, 12-month summations of the total individual throughputs of gasoline, distillates and kerosene, in gallons; and,

c. the calculated, total HAP (individual and combined HAPs) and VOC emissions and the rolling, 12-month summations of HAP (individual and combined HAPs) and VOC emissions from gasoline, distillates and kerosene for all emissions units at the facility, in tons.

8. The permit to install for this emissions unit (J001) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's “Review of New Sources of Air Toxic Emissions” policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the “worst case” pollutant(s):

Pollutant: Methyl tertiary butyl ether (MTBE)

TLV (mg/m3): 144.5

Maximum Hourly Emission Rate (lbs/hr): 1.30

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 3,060

MAGLC (ug/m3): 3,440

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the “Air Toxic Policy” is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the “Air Toxic Policy” will still be still satisfied. If, upon evaluation, the permittee determines that the “Air Toxic Policy” will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the “Air Toxic Policy” include the following:

a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Air Toxic Policy” will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a “modification” under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the “Air Toxic Policy:”

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the “Air Toxic Policy” for the change.

9. All records required under section B.III of this permit shall be maintained in accordance with the Records Retention Requirements of Part I - General Terms and Conditions.

IV. Reporting Requirements

1. The permittee shall submit pressure deviation (excursion) reports that identify all periods of time during which the pressure in the vapor collection system did not comply with the allowable range of minus 6 to plus 18 inches of water gauge pressure specified in B.I.2.b.ii.

2. The permittee shall submit deviation (excursion) reports which identify any parameter readings that are outside of the acceptable value or range for each vapor collection system and VRU key operating parameter established in sections B.II.7 through B.II.9.

3. The permittee shall notify the Toledo Division of Environmental Services in writing of any monthly record indicating that a leak was not repaired within 15 days. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the leak was discovered.

4. The permittee shall submit semi-annual deviation (excursion) reports that identify all exceedances of the rolling, 12-month gasoline throughput limitation. If no deviations occurred, the permittee shall submit a semi-annual report, which states that no deviations occurred during the 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation in section B.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      35 mg of total organic compounds per liter of gasoline loaded

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance through emissions testing performed in accordance with the procedures and method(s) detailed in 40 CFR 60.503. The most recent test was performed on May 23, 2000 and resulted in an emission rate of 8.1 mg of total organic compounds per liter of gasoline loaded.

   b. Emission Limitation:

      18.62 pounds per hour VOC

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements of section B.III.7 of this permit.

To calculate the hourly VOC emission rate, multiply the VOC emission factor generated during the most recent compliance demonstration by the daily throughput volume of gasoline loaded recorded in section B.III.7, and divide this product by 24 hours/day.

If required, the permittee shall demonstrate compliance through emissions testing performed in accordance with the procedures and method(s) detailed in 40 CFR 60.503 and OAC rule 3745-21-10(E).

c. Emission Limitation:

25.03 tons per year VOC from carbon adsorber exhaust

Applicable Compliance Method:

Compliance with the hourly emission limit and the operational restriction under B.II.10 demonstrates compliance with the annual emission limit.

d. Emission Limitation:

17.33 tons per year fugitive VOC

Applicable Compliance Method:

Compliance will be based on the emission factors contained in AP-42 Section 5.2 dated January 1995 and the draft revisions to section 5.2 dated December 1995. Multiply the AP-42 uncontrolled emission factor for gasoline of 15.47 lbs/1000 gallons by the AP-42 estimated amount of vapor not captured by the control equipment of (1-0.987), multiply the previous product by the annual throughput recorded under B.III.7 and divide by 2000 lbs/ton and add the maximum potential fugitive emission rate for kerosene loading of 0.08 tons per year VOC.

e. Emission Limitation:

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 9.9 tons per year of any individual HAP, and 24.5 tons per year for any combination of HAPs, as rolling 12-month summations.

Applicable Compliance Method:

To calculate HAP emissions for the purpose of determining compliance with the applicable emission limitations in Section B.I.1, the permittee shall comply with the following procedures. 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.

i. The HAP emissions from truck loading and storage shall be determined using the following emission factors:

For HAP Emissions from Gasoline (Table 3-1 of "Gasoline Distribution Industry (Stage I) - Background Information for Proposed Standards" EPA-453/R-94-002a January 1994)
2,2-4 Trimethylpentane - 16 pounds per ton of VOC; Benzene - 18 pounds per ton of VOC; Ethyl benzene - 2 pounds per ton of VOC; Hexane - 32 pounds per ton of VOC; MTBE - 140 pounds per ton of VOC; Toluene - 26 pounds per ton of VOC; Xylenes- 10 pounds per ton of VOC

For HAP emissions from Diesel (From Tanks 4.0 speciation)
Benzene - 440 pounds per ton of VOC; Cumene - 8 pounds per ton of VOC;Ethyl benzene - 40 pounds per ton of VOC; Hexane - 360 pounds per ton of VOC; Toluene - 240 pounds per ton of VOC; Xylenes- 120 pounds per ton of VOC

For HAP emissions from Kerosene (From Tanks 4.0 speciation)
Benzene - 100 pounds per ton of VOC; Cumene - 4 pounds per ton of VOC;Ethyl benzene - 20 pounds per ton of VOC; Hexane - 920 pounds per ton of VOC; Toluene - 120 pounds per ton of VOC; Xylenes- 100 pounds per ton of VOC

f. Emission Limitation:

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 9.9 tons per year of any individual HAP, and 24.5 tons per year for any combination of HAPs, as rolling 12-month summations.

Applicable Compliance Method:

To calculate HAP emissions for the purpose of determining compliance with the applicable emission limitations in Section A.2, the permittee shall comply with the following procedures. For every individual HAP, multiply the following emission factors by the actual annual VOC emission rate for the year

g. Emission Limitation:

Combined annual emissions from all emissions units located at this facility shall not exceed 95 tons of VOC

Applicable Compliance Method:

Compliance with the annual VOC emission limitation shall be demonstrated by calculating the sum of emissions determined by B.V.g.i. through B.V.g.v.

i. VOC emissions from all storage tanks at the facility shall be determined by estimating emissions using the most recent version of EPA's Tanks computer software or the most recent emission factors for storage tanks contained in AP-42 Chapter 7.

ii. Fugitive VOC emissions from equipment leaks shall be determined by using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates".

iii. VOC emissions from gasoline truck loading shall be determined using AP-42section 5.2 dated January 1995, the most recent VOC stack test results for the control efficiency, and a collection efficiency of 98.7 percent(AP-42, Notice of Proposed Change to AP-42 Section 5.2, dated December 15, 1995).

iv. VOC emissions from distillate loading shall be determined using AP-42 Section 5.2, dated January, 1995.

v. VOC emissions from kerosene loading shall be determined using AP-42 Section 5.2, dated January, 1995.

h. Should more accurate emission factors be developed during, the permittee shall use them, provided the new emission factors are mutually agreeable in a written agreement to the Ohio EPA, the Toledo Division of Environmental Services and CITGO Petroleum Corporation.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 04-550 as modified on May 12, 1999.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Tank 210 - 70,486 BBL Internal Floating Roof Tank	3745-21-09(L)	See A.I.2.a
	OAC rule 3745-31-05	7.9 tons/yr OC
	40 CFR 60 Subpart Kb	The requirements established pursuant to this rule also include compliance with the requirements of 40 CFR 60 Subpart Kb. See A.I.2.b

2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The permittee shall equip the storage vessel with a fixed roof in combination with an internal floating roof meeting the following specifications:

i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(a) A foam or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(b) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

(c) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

iii. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

II. Operational Restrictions

The maximum annual throughput for this emissions unit shall not exceed 142,099,776 gallons as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the throughput levels specified in the following table:

Month	Maximum Allowable Throughput
1	11,841,648
1-2	23,683,296
1-3	35,524,944
1-4	47,366,592
1-5	59,208,240
1-6	71,049,888
1-7	82,891,536
1-8	94,733,184
1-9	106,574,832
1-10	118,416,480
1-11	130,258,128
1-12	142,099,776

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

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall:

   a. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with volatile organic liquid (VOL). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

   b. For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is

detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Toledo Division of Environmental Services in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

c. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraph 1.b.

2. The permittee shall:

a. Keep a record of each inspection performed as required by A.III.1.a, 1.b and 1.c above. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

3. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept for the life of the source.

4. The permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

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

a. The throughput for each month.

b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the throughputs.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative throughput for each calendar month.

IV. Reporting Requirements

1. The permittee shall meet the following requirements:

   a. Furnish the Toledo Division of Environmental Services with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).

   b. If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the Toledo Division of Environmental Services within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

   c. After each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the Toledo Division of Environmental Services within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR 61.112b(a)(1) or 40 CFR 60.113b(a)(3) and list each repair made.

2. Notify the Toledo Division of Environmental Services in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs A.III.1.a and A.III.1.c to afford the Toledo Division of Environmental Services the opportunity to have an observer present. If the inspection required by paragraph A.III.1.c is not planned and the permittee could not have known about the inspection 30 days in advance or refilling the tank, the permittee shall notify the Toledo Division of Environmental Services at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Toledo Division of Environmental Services at least 7 days prior to the refilling.

3. The permittee shall submit semi-annual deviation (excursion) reports to the Toledo Division of Environmental Services that identify all exceedances of the rolling, 12-month throughput limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative production levels. These reports are due by January 30 and June 30 of each year and shall cover the previous six calendar months.

V. Testing Requirements

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

   Emission Limitation

   7.9 tons per year OC

   Applicable Compliance Method

2. Compliance shall be determined by estimating emissions using the most recent version of EPA's Tanks computer software or the most recent emission factors contained in AP-42 Chapter 7.

VI. Miscellaneous Requirements

1. Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.

   a. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

   b. The vapor pressure may be obtained by the following:

      i. Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see 40 CFR 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

      ii. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

   c. For other liquids, the vapor pressure:

      i. May be obtained from standard reference texts; or

      ii. Determined by ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR 60.17); or

iii. Measured by an appropriate method approved by the Administrator; or

iv. Calculated by an appropriate method approved by the Administrator

NEW SOURCE REVIEW FORM B

PTI Number: 04-01259 Facility ID: 0448010220 Emissions Unit ID: T037

FACILITY NAME CITGO Petroleum Corp - Toledo Terminal

FACILITY DESCRIPTION Bulk petroleum terminal CITY/TWP Oregon

SIC CODE 5171 SCC CODE 40400119 EMISSIONS UNIT ID J001

EMISSIONS UNIT DESCRIPTION Gasoline Loading Rack

DATE INSTALLED 1939

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	N/A				
PM_{10}	unclassified				
Sulfur Dioxide	non-attainment				
Organic Compounds	attainment	18.62 lbs/hr	42.36	***18.62*** lbs/hr	42.36
Nitrogen Oxides	unclassified				
Carbon Monoxide	Unclassified				
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? XX NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination Compliance with NSPS Subpart XX and use of VRU for diesel and kerosene loading

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES ____ NO

IDENTIFY THE AIR CONTAMINANTS: Methyl tertiary butyl ether (MTBE)

NEW SOURCE REVIEW FORM B

PTI Number: 04-01259 Facility ID: 0448010220

FACILITY NAME CITGO Petroleum Corp - Toledo Terminal

FACILITY DESCRIPTION Bulk petroleum terminal CITY/TWP Oregon

SIC CODE 5171 SCC CODE 40400302 EMISSIONS UNIT ID T014

EMISSIONS UNIT DESCRIPTION 70,486 BBL Internal Floating Roof Tank

DATE INSTALLED 1937

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	Attainment	N/A	7.9	N/A	7.9
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? Kb NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination Compliance with NSPS Subpart Kb

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 04-01259 Facility ID: 0448010220

FACILITY NAME CITGO Petroleum Corp - Toledo Terminal

FACILITY DESCRIPTION Bulk petroleum terminal CITY/TWP Oregon

Ohio EPA Permit to Install Information Form Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit hard copy items to **Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to **airpti@epa.state.oh.us**

Please fill out the following. If the checkbox does not work, replace it with an 'X'	Electronic	**Additional information** File Name Convention (your PTI # plus this letter)	Hard Copy	None
Calculations (required)	☒	0401259c.wpd	☐	
Modeling form/results	☒	Included in this file	☐	☐
PTI Application (complete or partial)*	☐	0000000**a**.wpd	☐	☐
BAT Study	☐	0000000**b**.wpd	☐	☐
Other/misc.	☐	0000000**t**.wpd	☐	☐

* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion (See Updated NSR Discussion at top of ths document)

A. Source Description

This facility is a bulk petroleum terminal. The terminal currently operates 2 loading racks identified as Rack No. 3 and Rack No. 4 permitted under J001. Rack Nos. 3 and 4 currently have 5 loading arms each (Rack 3 has 2 gasoline, and 2 diesel and 1 jet kerosene, while Rack 4 has 3 gasoline and 2 diesel loading arms). The vapor displaced during loading is captured and routed to a control system. The collected vapor first enters a condensation tank which captures condensed liquid from the gasoline tank trucks. The vapor is then routed to 1 of 2 carbon beds depending on which bed is in regeneration mode. After passing through the carbon, the exhaust is vented to the atmosphere. During regeneration of the carbon, hydrocarbons are desorbed by creating a vacuum across the bed. The vacuum pump discharges to a separator vessel where hydrocarbons are stripped from the hydrocarbon/air mixture and a fresh gasoline stream is mixed with the hydrocarbon/air mixture stream to strip out the hydrocarbons. The liquid collected is discharged to a holding tank while the hydrocarbon/air mixture is recycled back to the carbon bed.

This permit to install is for the addition of 1 gasoline loading arm on Rack No. 3 and installation of an additional loading rack containing 2 loading arms for jet kerosene. This permit to install also includes the change of service of 2 existing storage tanks. Tank 210 (T014) is a fixed roof storage tank that is being converted to an internal floating roof tank to allow it to be used for gasoline service. Tank 116 (T037) is an unpermitted tank that was installed in 1942. This tank is going to be placed into gasoline service.

B. Facility Emissions and Attainment Status

Pollutant	Classification
PM-10	Unclassified
Sulfur Dioxide	Non-attainment

NEW SOURCE REVIEW FORM B

PTI Number: 04-01259 Facility ID: 0448010220

FACILITY NAME CITGO Petroleum Corp - Toledo Terminal

FACILITY DESCRIPTION Bulk petroleum terminal CITY/TWP Oregon

Nitrogen Oxides	Unclassified
Carbon Monoxide	Attainment
Lead	Unclassified
Ozone	Attainment 1-hr, Unclassified 8-hr

Prior to this Permit to Install, the potential emissions from the facility are:

VOC	71.25 tons/yr
Single Largest HAP	4.34 tons/yr
Total HAPs	13.17 tons/yr

Prior to this Permit to Install, this facility is a minor source of VOC. Therefore, the potential emissions **increase** in this PTI must exceed 100 tons/yr VOC before being considered a major modification for PSD purposes.

C. Source Emissions

See attached calculations from CITGO file name 0401259c.wpd

Actual Emissions

Load Rack Emissions

From Emission Reporting Forms

2000 Gasoline = 44,641,000 gallons = 168984567 liters
Diesel = 39,430,000 gallons

1999 Gasoline = 31,441,000 gallons = 119017132 liters
Diesel = 46,048,000 gallons

**Check 1999 fee report: total SCC throughput does not correlate with SCC comments

Stack Test data

5/2000 8.64 mg/l gasoline

5/1999 1.02 mg/l gasoline

Actual Emissions from gasoline loading

2000 = 1.61 tons from VRU
*Fugitive = 0.20 lb/1000 gal * 44,641 1000 gal / 2000 lb/ton = 4.5 tons

1999 = 0.13 tons from VRU
*Fugitive = 0.20 lb/1000 gal * 31,048 1000 gal / 2000 lb/ton = 3.1 tons

NEW SOURCE REVIEW FORM B

PTI Number: 04-01259 Facility ID: 0448010220

FACILITY NAME CITGO Petroleum Corp - Toledo Terminal

FACILITY DESCRIPTION Bulk petroleum terminal CITY/TWP Oregon

*Fugitive Emissions are based on the AP-42 factor of 98.7% capture efficiency & 15.7 lb/1000 gallons uncontrolled emissions [15.7 x (1-.987) = 0.2 lb/1000 gal] AP-42 Notice of proposed changes to AP-42 Section 5.2 dated December 15, 1995.

Actual Emissions from diesel loading

Emission Factor from PTI application
0.0014 lb/1000 gallons diesel

2000 = 0.03 ton

1999 = 0.03 ton

Total Actual emissions from Gasoline & Diesel loading

2000 = 6.1 tons VOC
1999 = 3.2 tons VOC

Average loading rack emissions for 2 year period = 4.7 tons/yr

Tank T014 was not used for gasoline service in the past 2 years

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NEW SOURCE REVIEW FORM B

PTI Number: 04-01259 Facility ID: 0448010220

FACILITY NAME CITGO Petroleum Corp - Toledo Terminal

FACILITY DESCRIPTION Bulk petroleum terminal CITY/TWP Oregon

D. Applicable Requirements

OAC 3745-21-09(Q)	Vapor balance system emitting no more than 0.67 lb/1000 gallons
OAC 3745-21-09(L)	Requires internal floating roof
OAC 3745-31-05(A)(3)	BAT - BAT is compliance with NSPS and control for diesel & kerosene
40 CFR 60 Subpart Kb	Requires floating roof tank. T014 is being converted to an internal floating roof tank and is considered a modification under both 40 CFR 60 and OAC rule 3745-31.
40 CFR 60 Subpart XX	Vapor balance system emitting no more than 35 mg/l (0.2918 lb/1000 gallons) and monitoring and recordkeeping
40 CFR 63 Subpart R	This rule is not applicable since potential HAP emissions from the facility are less than 10 tons/yr for each individual HAP and 25 tons/yr total HAPs.
OEPA Air Toxics Policy	Air toxics emitted at a rate greater than 1 ton per year include: hexane, toluene and MTBE. MTBE is emitted in the greatest amount and also has the lowest TWA, so modeling was performed for MTBE.

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NEW SOURCE REVIEW FORM B

PTI Number: 04-01259 Facility ID: 0448010220

FACILITY NAME CITGO Petroleum Corp - Toledo Terminal

FACILITY DESCRIPTION Bulk petroleum terminal CITY/TWP Oregon

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

☒ **Synthetic Minor Determination and/or** ☐ **Netting Determination**

Permit To Install **04-01259**

A. Source Description

This facility is a bulk petroleum terminal. Potential emissions from the facility are currently 71 tons per year VOC and are less than all major source levels. The terminal currently operates 2 loading racks identified as Rack No. 3 and Rack No. 4 permitted under J001. Rack Nos. 3 and 4 currently have 5 loading arms each (Rack 3 has 2 gasoline, and 2 diesel and 1 jet kerosene, while Rack 4 has 3 gasoline and 2 diesel loading arms). The vapor displaced during loading is captured and routed to a vapor recovery unit control system.

This permit to install is for the addition of 1 gasoline loading arm on Rack No. 3 and installation of an additional loading rack containing 2 loading arms for jet kerosene. This permit to install also includes the change of service of 1 existing storage tank. Tank 210 (T014) is a fixed roof storage tank that is being converted to an internal floating roof tank to allow it to be used for gasoline service.

B. Facility Emissions and Attainment Status

The potential emissions from the facility prior to this permit to install is 71 tons/yr VOC. This facility is currently a minor source of VOC.

Pollutant	Classification
PM-10	Unclassified
Sulfur Dioxide	Non-attainment
Nitrogen Oxides	Unclassified
Carbon Monoxide	Attainment
Lead	Unclassified
Ozone	Attainment 1-hr, Unclassified 8-hr

C. Source Emissions

J001 Petroleum fuel loading rack = 84.7 tons/yr VOC, restricted by a throughput limitation
T014 Internal floating roof tank = 7.9 tons/yr VOC, restricted by a throughput limitation

Past actual emissions from J001 = 4.7 tons/yr VOC as a 2-yr average

NET Increase = 84.7 + 7.9 + 2.5 - 4.7 = 90.4 tons/yr VOC

Total Facility HAPs are limited to a maximum individual HAP of 9.5 tons/yr (MTBE) and total HAPs are limited to 19.43 tons/yr.

D. Conclusion

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NEW SOURCE REVIEW FORM B

PTI Number: 04-01259 Facility ID: 0448010220

FACILITY NAME CITGO Petroleum Corp - Toledo Terminal

FACILITY DESCRIPTION Bulk petroleum terminal CITY/TWP Oregon

The net increase of emissions is 90.4 tons/yr VOC and is less than the major source threshold of 100 tons per year VOC and less than the major HAP thresholds of 10 tons per year of each individual HAP and 25 tons/yr of all HAPs combined.. This permit to install results in a synthetic minor increase of VOC emissions and a synthetic minor source of HAPs for the facility.

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

Please complete:

SUMMARY (for informational purposes only)

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
VOC	95

NEW SOURCE REVIEW FORM B

PTI Number: 04-01259 Facility ID: 0448010220

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