OhioEPA

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: 04-1199

DATE: December 8, 1999

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
X	**NSPS**
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

Sunoco, Inc. (R &M)
Elaine M Moore
PO Box 920
Toledo, 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
TOLEDO DIVISION OF ENVIRONMENTAL SERVICES

FINAL PERMIT TO INSTALL 04-1199

Application Number: 04-1199

APS Premise Number: 0448010246

Permit Fee: **$1000**

Name of Facility: Sunoco, Inc. (R &M)

Person to Contact: Elaine M Moore

Address: PO Box 920
Toledo, OH 43616

Location of proposed air contaminant source(s) [emissions unit(s)]:
1819 Woodville Road
Oregon, **Ohio**

Description of proposed emissions unit(s):
AMINE UNIT RELIABILITY PROJECT - REMOVES HYDROGEN SULFIDE FROM REFINERY GAS AND C3 STREAMS.

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 emission limitations, operational restrictions, and control device operating parameter limitations, 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.11 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 applicable, the permittee shall 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"); and, pursuant to 40 CFR 68.215(a), the permittee shall submit either of the following:

a. a compliance plan for meeting the requirements of 40 CFR Part 68 by the date specified in 40 CFR 68.10(a) and OAC 3745-104-05(A); or

b. as part of the compliance certification submitted under 40 CFR 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management 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 obtained before 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.

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 are inadequate 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 prove to be inadequate 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. 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.

10. 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.

11. 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	2.06

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

A. State and Federally 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
Amine Unit Reliability Project	NSPS 40 CFR 60 subpart GGG	see section A.I.2.a. through 2.e.
	OAC rul 3745-21-09(T)	see section A.I.2.f.

NOTE: All CFR rule references in this permit are from Chapter 40. The terms and conditions may not reflect the exact language of the rule, however, the CFR rules take precedence.

2. Additional Terms and Conditions

2a. The permittee subject to the provisions of 40 CFR 60 subpart GGG shall comply with the requirements of 40 CFR 60 subpart VV, parts 60.482-1 to 60.482-10 as soon as practicable, but no later than 180 days after initial startup.

2b. The permittee may elect to comply with the requirements of 40 CFR 60.483-1 and 60.483-2 [see section A.III.].

2c. The permittee may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in 40 CFR 60 subpart GGG. In doing so, the permittee shall comply with the requirements of 40 CFR 60.484.

2d. Each permittee shall comply with the provisions of 40 CFR 60.485 except as provided in the exceptions listed in 40 CFR 60.593.

2e. Each permittee shall comply with the provisions of 40 CFR 60.486 and 60.487 of subpart VV [see sections A.III. and A.IV.]

2f. Except as otherwise provided in sections A.III.10. and A.III.11., each permittee of a petroleum refinery shall comply with the monitoring, record-keeping and reporting requirements found in sections A.III.9. through 14. and A.IV.2.

II. Operational Restrictions

1. [60.482-1] STANDARDS: GENERAL

   a. [60.482-1(a)] The permittee shall demonstrate compliance with the requirements of 40 CFR 60.482-1 to 60.482-10 [see section A.III.] for all equipment within 180 days of initial startup.

   b. [60.482-1(b)] Compliance with 60.482-1 to 60.482-10 [see section A.III.] will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 60.485 [see section A.V.].

   c. [60.482-1(c)]

      i. The permittee may request a determination of equivalence of a means of emission limitation to the requirements of 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8 and 60.482.10. [see section A.III.] as provided in 40 CFR 60.484.

      ii. If the Administrator or Toledo Division of Environmental Services (TDOES) makes a determination that a means of emission limitation is at least equivalent to the requirements of 60.482-2, 60.482-3, and 60.482-5, 60.482-6, 60.482-7, 60.482-8 and 60.482.10. [see section A.III.], the permittee shall comply with the requirements of that determination.

   d. [60.482-1(d)]
   Equipment that is in vacuum service is excluded from the requirements of 60.482-2 to 60.482-10 [see section A.III.] if it is identified as required in 60.486(e)(5) [see section A.III.].

   [OAC 3745-21-09(T)]

2. All pipeline valves in gas service and pressure relief valves in gas service shall be clearly marked and identified in such a manner that they will be obvious to both refinery personnel performing monitoring and to the director.

3. If a leak is identified as a result of the monitoring program required by section A.III.9. and the concentration of VOC exceeds ten thousand parts per million by volume, a tag shall immediately be placed on the leaking component. The tag shall be readily visible and weatherproof; it shall bear an identification number; and it shall clearly indicate the date the leak was detected. The tag shall remain in place until the leaking component is repaired.

4. The permittee shall repair and retest any leaking component, which is tagged and identified in accordance with section A.II.3., as soon as possible but no later than fifteen days after the leak is found unless the leaking component cannot be repaired until a process unit turnaround occurs.

III. Monitoring and/or Recordkeeping Requirements

1. [60-482-2] PUMPS IN LIGHT LIQUID SERVICE

a. [60.482-2(a)]

i. Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 60.485(b) [see section A.V.], except as provided in 60.482-1(c) [see section A.II.] and paragraphs d., e., and f. of this section.

ii. Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

b. [60.482-2(b)]

i. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

ii. If there are indications of liquids dripping from the pump seal, a leak is detected.

c. [60.482-2(c)]

i. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 60.482-9 [see section A.III.].

ii. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

d. [60.482-2(d)]
Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph a. of this section, provided the following requirements are met:

i. Each dual mechanical seal system is-

ia. Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

ib. Equipment with a barrier fluid degassing reservoir that is connected by a closed vent system to a control device that complies with the requirements of 40 CFR 60.482-10; or

ic. Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

ii. The barrier fluid system is in heavy liquid service or is not in VOC service.

iii. Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

iv. Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

va. Each sensor as described in paragraph d.iii. of this section is checked daily or is equipped with an audible alarm, and,

vb. The permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

vi.a. If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph d.vi.(b) of this section, a leak is detected.

vi.b. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 60.482-9 [see section A.III.].

vi.c. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

e. [60.482-2(e)]
Any pump that is designated, as described in 60.486(e)(1) and (2) [see section A.III.], for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs a., c. and d. of this section, if the pump:

i. Has no externally actuated shaft penetrating the pump housing,

ii. Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 60.485(c) [see section A.V.], and,

iii. Is tested for compliance with paragraph e.ii. of this section initially upon designation, annually, and at other times requested by the Administrator or TDOES.

f. [60.482-2(f)]
If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from paragraphs a. through e. of this section.

2. [60.482-6] OPEN ENDED VALVES OR LINES

a. [60.482-6(a)]

i. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 60.482-1(c) [see section A.II.].

ii. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

b. [60.482-6(b)]
Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

c. [60.482-6(c)]
When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph a. of this section at all other times.

3. [60.482-7] VALVES IN GAS/VAPOR SERVICE & IN LIGHT LIQUID SERVICE

a. [60.482-7(a)]
Each valve shall be monitored monthly to detect leaks by the methods specified in 60.485(b) [see section A.V.] and shall comply with paragraphs b. through e. of this section, except as provided in paragraphs f., g., and h. of this section, 60.483-1, 2 [see section A.III.] and 60.482-1(c) [see section A.II.].

b. [60.482-7(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

c. [60.482-7(c)]
i. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

ii. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

d. [60.482-7(d)]

i. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 60.482-9 [see section A.III.].

ii. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

e. [60.482-7(e)]
First attempts at repair include, but are not limited to, the following best practices where practicable:

i. Tightening of bonnet bolts;

ii. Replacement of bonnet bolts;

iii. Tightening of packing gland nuts;

iv. Injection of lubricant into lubricated packing.

f. [60-482-7(f)]
Any valve that is designated, as described in 60.486(e)(2) [see section A.III.], for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph a. of this section if the valve:

i. Has no external actuating mechanism in contact with the process fluid,

ii. Is operated with emissions less than 500 ppm above background as determined by the method specified in 60.485(c) [see section A.V.], and,

iii. Is tested for compliance with paragraph f.ii. of this section initially upon designation, annually, and at other times requested by the Administrator or TDOES.

g. [60-482-7(g)]
Any valve that is designated, as described in 60.486(f)(1) [see section A.III.], as an unsafe-to-monitor valve is exempt from the requirements of paragraph a. of this section if:

i. The permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph a. of this section, and,

ii. The permittee of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

h. [60-482-7(h)]

Any valve that is designated, as described in 60.486(f)(2) [see section A.III.], as a difficult-to-monitor valve is exempt from the requirements of paragraph a. of this section if:

i. The permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

ii. The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 60.15 or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and,

iii. The permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

4. [60.482-8] PUMPS & VALVES IN HEAVY LIQUID SERVICE, FLANGES AND OTHER CONNECTORS

a. [60.482-8(a)]
Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within 5 days by the method specified in 60.485(b) [see section A.V.] if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

b. [60.482-8(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

c. [60.482-8(c)]

i. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 60.482-9 [see section A.III.].

ii. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

d. [60.482-8(d)]
First attempts at repair include, but are not limited to, the best practices described under 60.482-7(e) [see section A.III].

5. [60.482-9] DELAY OF REPAIR

a. [60.482-9(a)]

Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

b. [60.482-9(b)]
Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

c. [60.482-9(c)]
Delay of repair for valves will be allowed if:
i. The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and,

ii. When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10.

d. [60.482-9(d)]
Delay of repair for pumps will be allowed if:
i. Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and,

ii. Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

e. [60.482-9(e)]
Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

6. [60.483-1] ALTERNATIVE STANDARDS FOR VALVES- ALLOWABLE PERCENTAGE OF VALVES LEAKING
a. [60.483-1(a)]
The permittee may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

b. [60.483-1(b)]
The following requirements shall be met if the permittee wishes to comply with an allowable percentage of valves leaking:
i. The permittee must notify the Administrator or TDOES that the permittee has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in 60.487(b) [see section A.III].

ii. A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator or TDOES.

iii. If a valve leak is detected, it shall be repaired in accordance with 60.482-7(d) and (e) [see section A.III.].

c. If the permittee elects to comply with 40 CFR 60.483-1, the permittee shall also comply with 40 CFR 60.483-1(c) and (d) and other applicable parts of 40 CFR 60 subpart VV.

7. [60.483-2] ALTERNATIVE STANDARDS FOR VALVES-SKIP PERIOD LEAK DETECTION AND REPAIR
The permittee may elect to comply with one of the alternative work practices specified in 40 CFR 60.483-2(b)(2) and (3). The permittee must first notify the Administrator or TDOES before implementing one of the alternative work practices and comply with the recordkeeping stated in 40 CFR 60.483-2.

8. [60.486] RECORDKEEPING REQUIREMENTS FOR SUBPART VV (GGG)
a. [60.486(a)]
i. The permittee shall comply with the recordkeeping requirements of this section.

ii. The permittee of more than one affected facility subject to the provisions of subpart VV may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.

b. [60.486(b)]
When each leak is detected as specified in 60.482-2 [see section A.III.], 40 CFR 60.482-3, 60.482-7, 60.482-8, and 60.483-2 [see section A.III.], the following requirements apply:
i. A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

ii. The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 60.482-7(c) [see section A.III.] and no leak has been detected during those 2 months.

iii. The identification on equipment except on a valve, may be removed after it has been repaired.

c. [60.486(c)]
When each leak is detected as specified in 60.482-2 [see section A.III.], 40 CFR 60.482-3, 60.482-7, 60.482-8, and 60.483-2 [see section A.III.], the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
i. The instrument and operator identification numbers and the equipment identification number.

ii. The date the leak was detected and the dates of each attempt to repair the leak.

iii. Repair methods applied in each attempt to repair the leak.

iv. "Above 10,000" if the maximum instrument reading measured by the methods specified in 60.485(a) [see section A.V.] after each repair attempt is equal to or greater than 10,000 ppm.

v. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

vi. The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.

vii. The expected date of successful repair of the leak if a leak is not repaired within 15 days.

viii. Dates of process unit shutdown that occur while the equipment is unrepaired.

ix. The date of successful repair of the leak.

d. [60.486(e)]
The following information pertaining to all equipment subject to the requirements in 60.482-1 to 60.482-10 [see section A.III.] shall be recorded in a log that is kept in a readily accessible location:

i. A list of identification numbers for equipment subject to the requirements of 40 CFR 60 subpart VV.

ii.a. A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 60.482-2(e), 60.482-3(i) and 60.482-7(f) [see section A.III.].

ii.b. The designation of equipment as subject to the requirements of 60.482-2(e), 60.482-3(i) and 60.482-7(f) [see section A.III.] shall be signed by the permittee.

iii. A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 60.482-4.

iv.a. The dates of each compliance test as required in 60.482-2(e), 60.482-7(f) [see section A.III.], 40 CFR 60.482-3(i) and 40 CFR 60.482-4.

iv.b. The background level measured during each compliance test.

iv.c. The maximum instrument reading measured at the equipment during each compliance test.

v. A list of identification numbers for equipment in vacum service.

e. [60.486(f)]
The following information pertaining to all valves subject to the requirements of 60.482-7(g) and (h) [see section A.III.] shall be recorded in a log that is kept in a readily accessible location:

i. A list of identification numbers for valves that are designated as unsafe-to-monitor, an explanation for each valve stating why the valve is unsafe-to-monitor, and the plan for monitoring each valve.

ii. A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each value.

f. [60.486(g)]
The following information shall be recorded for valves complying with 60.483-2 [see section A.III.]:

i. A schedule of monitoring.

ii. The percent of valves found leaking during each monitoring period.

g. [60.486(h)]
The following information shall be recorded in a log that is kept in a readily accessible location:

i. Design criterion required in 60.482-2(d)(5) [see section A.III.] and 40 CFR 60.482-3(e)(2) and explanation of the design criterion; and,

ii. Any changes to this criterion and the reasons for the changes.

h. [60.486(j)]
Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

i. [60.486(k)]
The provisions of 40 CFR 60.7(b) and (d) do not apply to affected facilities subject to 40 CFR 60 subpart VV.

[OAC 3745-21-09(T)]

9. Except as otherwise indicated in section A.III.10., a monitoring program shall be developed and implemented which incorporates the following provisions:

a. Yearly monitoring of all pump seals, pipeline valves in liquid service and process drains in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code;

b. Quarterly monitoring of all compressor seals, pipeline valves in gas service and pressure relief valves in gas service in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code;

c. Monthly monitoring of all pump seals by visual methods;

d. Monitoring of any pump seal in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code within five working days after any liquids are observed dripping from the seal;

e. Monitoring of any relief valve in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code within five working days after the valve has vented to the atmosphere; and,

f. Monitoring of any component in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code within five working days after the repair of a leak.

10. Pressure relief devices which are connected to an operating flare header, vapor recovery devices, valves which are located in pipelines containing kerosene or heavier liquids, storage tank valves and valves which are not externally regulated are exempt from the monitoring requirements contained in section A.III.9.

11. For any pipeline or pressure relief valves in gas or liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in section A.III.9. as follows:
    a. The valve is designated as difficult to monitor and is monitored each calendar year, provided the following conditions are met:
        i. Construction of the process unit commenced prior to March 27, 1981;
        ii. The permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than six feet above a support surface; and,
        iii. The permittee of the valve has a written plan that requires monitoring of the valve at least once per year;

    b. The valve is designated as unsafe to monitor and is monitored as frequently as practical during safe to monitor times, provided the following conditions are met:
        i. The permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of monitoring on a quarterly or yearly basis as specified in section A.III.9.; and,
        ii. The permittee of the valve adheres to a written plan that requires monitoring of the valve as frequently as practical during process unit turnarounds and other safe to monitor times.

12. A monitoring log shall be maintained for all leaking components which are tagged in accordance with section A.III.9. The monitoring log shall contain, at a minimum, the following data:
    a. The name of the process unit where the leaking component is located;

    b. The type of leaking component (such as valve, seal, or other component);

c. The tag number of the leaking component;

d. The date on which the leaking component was detected;

e. The date on which the leaking component was repaired;

f. The date and results of the monitoring performed within five working days after the leaking component was repaired;

g. A record of the calibration of the monitoring instrument;

h. A list of those leaking components which cannot be repaired until the next process unit turnaround; and,

i. The total number of components monitored and the total number of components found leaking during the calendar year;

13. A copy of any monitoring log shall be retained by the permittee for a minimum of two years after the date on which the record was made or the report was prepared; and

14. A copy of any monitoring log shall immediately be made available to the director or an authorized representative of the director, upon verbal or written request, at any reasonable time.

IV. Reporting Requirements

1. [60.487]
   a. [60.487(a)]
   The permittee shall submit semiannual reports to the Toledo Division of Environmental Services (TDOES) beginning six months after the initial start up date.

   b. [60.487(b)]
   The initial semiannual report to TDOES shall include the following information:
      i. Process unit identification.

      ii. Number of valves subject to the requirements of 60.482-7 [see section A.III.], excluding those valves designated for no detectable emissions under the provisions of 60.482-7(f) [see section A.III.].

      iii. Number of pumps subject to the requirements of 60.482-2 [see section A.III.], excluding those pumps designated for no detectable emissions under the provisions of 60.482-2(e) [see section A.III.] and those pumps complying with 60.482-2(f) [see section A.III.].

c. [60.487(c)]
All semiannual reports to TDOES shall include the following information, summarized from the information in 60.486 [see section A.III.]:

i. Process unit identification.

ii. For each month during the semiannual reporting period,

ii.a. Number of valves for which leaks were detected as described in 60.482(7)(b) or 60.483-2 [see section A.III.],

ii.b. Number of valves for which leaks were not repaired as required in 60.482-7(d)(1) [see section A.III.],

ii.c. Number of pumps for which leaks were detected as described in 60.482-2(b) and (d)(6)(i) [see section A.III.],

ii.d. Number of pumps for which leaks were not repaired as required in 60.482-2(c)(1) and (d)(6)(ii) [see section A.III.],

ii.e. The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

iii. Dates of process unit shutdowns which occurred within the semiannual reporting period.

iv. Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.

d. [60.487(d)]
The permittee electing to comply with the provisions of 60.483-1 and 60.483-2 [see section A.III.] shall notify TDOES of the alternative standard selected 90 days before implementing either of the provisions.

e. [60.487(e)]
The permittee shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of subpart VV except that the permittee must notify the TDOES of the schedule for the initial performance tests at least 30 days before the initial performance tests.

f. [60.487(f)]
The requirements of paragraphs a. through c. of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance

adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs a. through c. of this section, provided that they comply with the requirements established by the State.

[OAC 3745-21-09(T)]

2. A report shall be submitted to the director by the fifteenth day of January, April, July and October that gives the total number of components monitored during the previous three calendar months, gives the total number of components found leaking during the previous three calendar months, identifies all components which were found leaking during the previous three calendar months but which were not repaired within fifteen days and identifies all leaking components which cannot be repaired until the next process unit turnaround.

V. Testing Requirements

1. [60.485] TEST METHODS & PROCEDURES FOR SUBPART VV (GGG)

a. [60.485(a)]
In conducting the performance tests required in 40 CFR 60.8, the permitee shall use as reference methods and procedures the test methods in 40 CFR 60, appendix A or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).

b. [60.485(b)]
The permittee shall determine compliance with the standards in 60.482 [see section A.III.], 40 CFR 60.483, and 40 CFR 60.484 as follows:

i. Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

i.a. Zero air (less than 10 ppm of hydrocarbon in air); and,

i.b. A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

c. [60.485(c)]
The permittee shall determine compliance with the no detectable emission standards in 60.482-2(e) [see section A.III.], 40 CFR 60.482-3(i), 40 CFR 60.482-4, 60.482-7(f) [see section A.III.], and 40 CFR 482-10(e) as follows:

i. The requirements of paragraph b. of this section shall apply.

ii. Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicates by the instrument and the background level is compared with 500 ppm for determining compliance.

d. [60.485(d)]
The permittee shall test each piece of equipment unless he demonstrates that a process unit is not in VOC series, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

i. Procedures that conform to the general methods in ASTM E-260, E-168, E-169 (incorporated by reference-see 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

ii. Organic compounds that are considered by the Toledo Division of Environmental Services to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

iii. Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Toledo Division of Environmental Services disagrees with the judgment, paragraphs d.i. and d.ii. of this section shall be used to resolve the disagreement.

e. [60.485(e)]
The permittee shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

i. The vapor pressure of one or more of the components is greater than 0.3 kPa at 20°C. Standard reference texts or ASTM D-2879 (incorporated by reference--see 40 CFR 60.17) shall be used to determine the vapor pressures.

ii. The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20°C is equal to or greater than 20 percent by weight.

iii. The fluid is a liquid at operating conditions.

f. [60.485(f)]
Samples used in conjunction with paragraphs d., e., and g. of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

g. [60.485(g)]
The permittee shall determine compliance with the standards of flares as provided in 40 CFR 60.485(g).

[OAC rule 3745-21-09(T)]

2. The methods and procedures of OAC rule 3745-21-10(F) are applicable to the detection of fugitive leaks of VOC into the ambient air from this emissions unit.

VI. Miscellaneous Requirements

[OAC rule 3745-21-09(T)]

1. The director may require a process unit turnaround to occur earlier than the normally scheduled date if the number and severity of leaking components awaiting a turnaround warrant such action. Any such process unit turnaround shall be required by means of an order issued by the director to the permittee of the petroleum refinery pursuant to division (R) of section 3704.03 of the Revised Code.

2. The director may accept an alternative monitoring, recordkeeping and reporting program for that required by section A. I.2.f., if the permittee can demonstrate to the satisfaction of the director that the alternative program is at least as effective in identifying, documenting and reporting leaks from petroleum refinery equipment as the program outlined in section A.I.2.f. For purposes of this paragraph, any proposed alternative program which the director finds comparable to the requirements of paragraph (DD)(12) or (DD)(13) of OAC rule 3745-21-09 shall be acceptable to the director.

B. 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
Amine Unit Reliability Project	OAC rule 3745-31-05	2.06 tons VOC per year

2. Additional Terms and Conditions

None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

1. Compliance with the emission limitations in the Air Emission Summary of this permit to install shall be determined in accordance with the following methods:

   Emission Limitation:
   2.06 tons VOC per year

Applicable Compliance Method:
Compliance shall be demonstrated by the monitoring and recordkeeping of A.III. or calculate the fugitive emissions for the valves, flanges and pumps using the equations and emission factors from Table 2-10 and 2-14 in the U.S. EPA publication EPA 453/R-95-017, "Protocol for Equipment Leak Emission Estimates", November, 1995.

VI. Miscellaneous Requirements

None.