



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
FRANKLIN COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 01-08829

DATE: 8/6/2004

Olen Corporation Plant 43PP1
Leroy Walls
4755 South High Street
Columbus, OH 43207-4028

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
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

CDO



**Permit To Install
Terms and Conditions**

**Issue Date: 8/6/2004
Effective Date: 8/6/2004**

FINAL PERMIT TO INSTALL 01-08829

Application Number: 01-08829
APS Premise Number: 0125943047
Permit Fee: **\$2700**
Name of Facility: Olen Corporation Plant 43PP1
Person to Contact: Leroy Walls
Address: 4755 South High Street
Columbus, OH 43207-4028

Location of proposed air contaminant source(s) [emissions unit(s)]:
**4755 South High Street
Columbus, Ohio**

Description of proposed emissions unit(s):
Portable topsoil shredder.

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. 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

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of 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.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions 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. 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 emissions unit(s) that is (are) served by such control system(s).

6. 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.

7. 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.

8. 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.

9. 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.

10. 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.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. 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.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

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Olen Corporation Plant 43PP1
PTI Application: 01-08829
Issued: 8/6/2004

Facility ID: 0125943047

Olen Corporation Plant 43PP1

PTI Application: 01-08829

Issued: 8/6/2004

Facility ID: 0125943047

14. 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.

15. 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.

B. 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

<u>Pollutant</u>	<u>Tons Per Year</u>
Particulate emissions	26
Sulfur dioxide (SO ₂)	0.7
Nitrogen oxides (NO _x)	10.6
Organic Compounds (OC)	0.9
Carbon monoxide (CO)	2.3

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

A. 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P001 - 200TPH Portable Mark II Topsoil Shredder, with diesel engine, shredder, screening, and conveyor; also known as Plant 43PP1	<p>OAC rule 3745-31-05(A)(3)</p> <p>OAC rule 3745-17-07(A)</p> <p>OAC rule 3745-17-11(B)(5)(a)</p> <p>OAC rule 3745-21-08(B)</p> <p>OAC rule 3745-23-06(B)</p> <p>OAC rules 3745-18-06(G)</p>

Applicable Emissions Limitations/Control Measures	opacity. See Sections A.2.a through h, below
Particulate emissions from the shredder, conveyor, and screening operations shall not exceed 11.0 lbs/hr and 1.6 tons per year.	The requirements established pursuant to this rule also include the compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B)(5)(a), 3745-21-08(B), 3745-23-06(B), and 3745-18-06(G).
Emissions from the diesel engine shall not exceed the following limits:	Visible particulate emissions from the engine stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
Particulate emissions (PE) shall not exceed 0.17 lb/hr and 0.7 ton per year.	The particulate emissions from the engine's exhaust shall not exceed 0.310 lb/MMBtu of actual heat input.
Sulfur dioxide (SO ₂) emissions shall not exceed 0.16 pound per hour and 0.7 ton per year.	None, see Section A.2.e. below.
Nitrogen oxides (NO _x) emissions shall not exceed 2.4 pounds per hour and 10.6 tons per year.	None, see Section A.2.d. below.
Organic Compound (OC) emissions shall not exceed 0.2 pound per hour and 0.9 ton per year.	None, see Section A.2.f below.
Carbon monoxide (CO) emissions shall not exceed 0.52 pound per hour and 2.3 tons per year.	
Visible emissions of fugitive dust shall not exceed 15%	

2. Additional Terms and Conditions

- 2.a** The permittee shall employ best available control measures during all shredding operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by applying water at sufficient frequencies to maintain the material in a moist condition and ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.b** The hourly and ton per year emission limitations for the diesel engine were established to reflect the potential to emit. Therefore, with the exception of monitoring the sulfur content of the diesel fuel, it is not necessary to develop additional monitoring, record keeping, and/or reporting requirements to ensure compliance with these limits.
- 2.c** The hourly particulate emission limitation for the shredder, conveyor, and screening operations was established to reflect the hourly potential to emit of the process. Therefore, it is not necessary to develop daily monitoring and record keeping requirements to ensure compliance with the hourly limit.
- 2.d** The design of the emissions unit and the technology associated with the current operating practices will satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06.
- 2.e** The design of the emissions unit and the technology associated with the current operating practices will satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.f** Per OAC 3745-18-06(B), fuel burning equipment, stationary gas turbines, and stationary internal combustion engines which have rated heat input capacities equal to or less than ten MMBtu per hour total rated capacity are exempt from 3745-18-06 (G).
- 2.g** The hourly emission limitations from the diesel engine were established to reflect the

Emissions Unit ID: P001

potential to emit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

- 2.h** This emissions unit shall burn only number 2 fuel oil with a sulfur content no greater than 0.5% by weight.

B. Operational Restrictions

1. Water shall be applied at points necessary to ensure compliance with the visible emission limitations specified above for the emission unit.
2. The maximum annual material throughput for this emissions unit shall not exceed 60,000 tons. This restriction shall be based on the material throughput of the shredder.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks when equipment is in operation and when weather conditions allow, for any visible particulate emissions from the emission unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operation log:
 - a. whether the emissions are representative of normal operations;
 - b. if the emissions are not representative of normal conditions, the cause of the abnormal emissions;
 - c. the total duration of any visible emission incident; and
 - d. any corrective action taken to eliminate the visible emissions.
2. For each day during which the permittee burns a fuel other than no. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
3. For each shipment of fuel oil received for burning in this emissions unit, the permittee shall maintain records of the permittee's or supplier's analyses for sulfur content and BTU heating value.
4. The permittee shall maintain monthly records of the amount of material processed through the shredder, in tons per month and total tons, to date, for the calendar year.

D. Reporting Requirements

1. The permittee shall submit semiannual reports which (a) identify all days during which any abnormal visible fugitive particulate emissions were observed from shredding and/or conveying operations and (b) describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than number 2 fuel oil with a sulfur content of no less than 0.5% by weight is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit annual deviation (excursion) reports that identify any exceedance of the annual material throughput limitation, as well as the corrective actions that have been taken to maintain the annual throughput to 60,000 tons. If no deviations occurred during the calendar year, the permittee shall submit an annual report which states that no deviations occurred during the calendar year. These reports shall be submitted by January 31 of each year. If the throughput is exceeded in any year and corrective actions to reduce the throughput have not been proposed, the Ohio EPA, Central District Office may request a revised permit application to modify this permit to reflect the expected process throughput.

E. Testing Requirements

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

1. Emission Limitation:

Particulate emissions shall not exceed 11.0 lbs/hour and 1.6 tons/yr from the shredding process

Applicable Compliance Method:

The limitation for particulate emissions was established by summing emissions from the shredder, conveyors, and screening operations. The limitation for each process was established by multiplying the following emission factors for particulate emissions, from U.S.EPA's AP-42, Compilation of Air Pollution Emission Factors, Chapter 11, Section 11.19.2 (1/95), table 11.19.2-2, by the emission unit's maximum hourly throughput (200 tons of soil/hour). The ton per year limit is established the same, using 60,000 tons of soil per year.

Shredder:

Emissions Unit ID: P001

$(0.0024 \text{ lb PM}^{10}/\text{ton} \times 2.1 \text{ tons PE/ton PM}^{10}) (200 \text{ tons/hr}) = 1.0 \text{ lb/hr}$; and
 $(0.0024 \text{ lb PM}^{10}/\text{ton} \times 2.1 \text{ tons PE/ton PM}^{10}) (60,000 \text{ tons/yr}) / 2000 \text{ lbs/ton} = 0.15 \text{ ton/yr}$

Transfer points:

$(0.0014 \text{ lb PM}^{10}/\text{ton} \times 2.1 \text{ tons PE/ton PM}^{10}) (200 \text{ tons/hr}) (6 \text{ transfer points}) = 3.53 \text{ lbs/hr}$; and
 $(0.0014 \text{ lb PM}^{10}/\text{ton} \times 2.1 \text{ tons PE/ton PM}^{10}) (60,000 \text{ tons/yr}) (6 \text{ transfer points}) / 2000 \text{ lbs/ton} = 0.53 \text{ ton/yr}$.

Screening:

$(0.015 \text{ lb PM}^{10}/\text{ton} \times 2.1 \text{ tons PE/ton PM}^{10}) (200 \text{ tons/hr}) = 6.3 \text{ lb/hr}$; and
 $(0.015 \text{ lb PM}^{10}/\text{ton} \times 2.1 \text{ tons PE/ton PM}^{10}) (60,000 \text{ tons/yr}) / 2000 \text{ lbs/ton} = 0.95 \text{ ton/yr}$

Total:

$1.0 \text{ lbs/hr} + 3.53 \text{ lbs/hr} + 6.3 \text{ lbs/hr} = 11.0 \text{ lbs/hr}$; and
 $0.15 \text{ ton/yr} + 0.53 \text{ ton/yr} + 0.95 \text{ ton/yr} = 1.63 \text{ tons/yr}$

2. Emission limitation:

Visible emissions of fugitive dust shall not exceed 15% opacity.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures are specified in OAC rule 3745-17-03(B)(1).

3. Emission Limitation:

Visible emissions from the engine shall not exceed 20% opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures are specified in OAC rule 3745-17-03(B)(1).

4. Compliance with the emission limitations from the diesel engine shall be determined in accordance with the following methods:

a. Emission Limitations:

Particulate emissions shall not exceed 0.310 lb/MMBtu actual heat input

Applicable Compliance Method:

This limit was established from the rule, 3745-17-11(B)(5), and the emission factor from U.S.EPA's AP-42, Compilation of Air Pollution Emission Factors, Chapter 3, Table 3.3-1 (Gasoline and Diesel Industrial Engines, 10/96). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

b. Emission Limitation:

PE from the engine exhaust shall not exceed 0.17 lb/hr and 0.7 ton/yr

Applicable Compliance Method:

This limit was established using the particulate emission factor of 0.310 lb/MMBtu from U.S.EPA's AP-42, Compilation of Air Pollution Emission Factors, Chapter 3, Table 3.3-1 (Gasoline and Diesel Industrial Engines, 10/96) and the maximum rated Btu value of 0.55MMBtu/hr. The hourly emissions are then multiplied by 8760 hours/2000 lbs to derive the yearly emissions total.

$(0.55 \text{ MMBtu/hr}) (0.31 \text{ lb PE/MMBtu}) = 0.17 \text{ lb/hr} (8760/2000) = 0.7 \text{ TPY PE from diesel engine}$

If required, compliance shall be demonstrated based upon emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

c. Emission Limitations:

SO₂ emissions shall not exceed 0.16 pound per hour and 0.7 TPY .

Applicable Compliance Method:

This limit was established using an emission factor of 0.29 lb SO₂/MMBtu from U.S.EPA's AP-42, Compilation of Air Pollution Emission Factors, Chapter 3, Table 3.3-1 (Gasoline

and Diesel Industrial Engines, 10/96) and the maximum rated Btu value of 0.55 MMBtu/hr. The hourly emissions are then multiplied by 8760 hours/2000 pounds to derive the yearly emissions total.

$(0.55 \text{ MMBtu/hr}) (0.29 \text{ lb SO}_2/\text{MMBtu}) = 0.16 \text{ lb/hr} (8760/2000) = 0.7 \text{ TPY SO}_2 \text{ from diesel engine}$

If required, the permittee shall demonstrate compliance with the emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 6C.

d. Emission Limitations:

NO_x emissions shall not exceed 2.4 pounds per hour and 10.6 TPY.

Applicable Compliance Method:

This limit was established using an emission factor of 4.41 lbs NO_x/MMBtu from U.S.EPA's AP-42, Compilation of Air Pollution Emission Factors, Chapter 3, Table 3.3-1 (Gasoline and Diesel Industrial Engines, 10/96) and the maximum rated Btu value of 0.55 MMBtu/hr. The hourly emissions are then multiplied by 8760 hours/2000 lbs to derive the yearly emissions total.

$(0.55 \text{ MMBtu/hr}) (4.41 \text{ lb NO}_x/\text{MMBtu}) = 2.4 \text{ lbs/hr} (8760/2000) = 10.6 \text{ TPY NO}_x \text{ from diesel engine}$

If required, the permittee shall demonstrate compliance with the emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 7E.

e. Emission Limitations:

OC emissions shall not exceed 0.2 pound per hour and 0.9 TPY.

Applicable Compliance Method:

This limit was established using an emission factor of 0.36 lb OC/MMBtu from U.S.EPA's AP-42, Compilation of Air Pollution Emission Factors, Chapter 3, Table 3.3-1 (Gasoline and Diesel Industrial Engines, 10/96) and the maximum rated Btu value of 0.55 MMBtu/hr. The hourly emissions are then multiplied by 8760 hours/2000 lbs to derive the

yearly emissions total.

$(0.55 \text{ MMBtu/hr}) (0.36 \text{ lb OC/MMBtu}) = 0.2 \text{ lb/hr} (8760/2000) = 0.9 \text{ TPY OC from diesel engine}$

If required, the permittee shall demonstrate compliance with the emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 18, 25 or 25A.

f. Emission Limitations:

CO emissions shall not exceed 0.52 pound per hour and 2.3 TPY.

Applicable Compliance Method:

This limit was established using an emission factor of 0.95 lb CO/MMBtu from U.S.EPA's AP-42, Compilation of Air Pollution Emission Factors, Chapter 3, Table 3.3-1 (Gasoline and Diesel Industrial Engines, 10/96) and the maximum rated Btu value of 0.55 MMBtu/hr. The hourly emissions are then multiplied by 8760 hours/2000 lbs to derive the yearly emissions total.

$(0.55 \text{ MMBtu/hr}) (0.95 \text{ lb CO/MMBtu}) = 0.52 \text{ lb/hr} (8760/2000) = 2.3 \text{ TPY CO from diesel engine}$

If required, the permittee shall demonstrate compliance with the emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, and Method 10.

F. Miscellaneous Requirements

1. For permittees who applied for a portable source as defined in OAC Rule 3745-31-01, the permittee is subject to the following terms and conditions:

Notice to Relocate a Portable or Mobile Source

Pursuant to Ohio Administrative Code (OAC) rule 3745-31-03(A)(1)(p)(i), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI providing the following criteria are met:

- a. the portable emissions unit is equipped with the best available control technology for such portable emissions unit (as defined in section A.1 of this permit);

- b. the portable emissions unit is operating pursuant to a currently effective permit to install, permit to operate, or permit for registration status;
- c. the applicant has provided proper notice of intent to relocate the portable emissions unit to the Director (the appropriate field office having jurisdiction over the new site) within a minimum of thirty days prior to the scheduled relocation; and
- d. in the Director's and/or the appropriate field office's judgement, the proposed site is acceptable under the rule 3745-15-07 of the Administrative Code.

As an alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI providing the criteria of OAC rule 3745-31-05(F) are met.

In order for the Director and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the owner or operator of the portable or mobile emissions unit must file a "Notice of Intent to Relocate", within the specified time frame prior to the relocation of the emissions unit with the Director and the appropriate field office having jurisdiction over the new site.

Upon receipt of the notice, the Director and/or appropriate field office having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive the Ohio EPA's approval prior to relocation of the emissions unit may result in fines and civil penalties.

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

A. 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
F001 - Storage piles	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-08(B)(6)
Load-in and load-out of storage piles	
Wind erosion from storage piles	OAC rule 3745-17-07 (B)(6)

**Olen C
PTI A
Issued: 8/6/2004**

Emissions Unit ID: **F001**

Applicable Emissions
Limitations/Control
Measures

Particulate emissions (PE) shall not exceed 17.0 tons/yr from wind erosion and load-in and load-out operations.

There shall be no visible emissions of fugitive dust except for a period of time not to exceed one minute during any sixty-minute observation period.

The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.2.b, A.2.c, and A.2.f).

There shall be no visible emissions of fugitive dust except for a period of time not to exceed one minute during any sixty-minute observation period.

The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.2.d through A.2.f).

The visible emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

The control measures specified by these rules are equal to or less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3), See Sections A.2.a through A.2.f.

2. Additional Terms and Conditions

- 2.a** The storage piles that are covered by this permit and subject to the requirements of OAC rule 3745-31-05(A)(3) are listed below:

All storage piles of soil

- 2.b** The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to maintaining the moisture content of the material sufficient to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- 2.d** The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to maintaining the moisture content of the material sufficient to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
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All material piles	Daily
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2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
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All material piles	Daily
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3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
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All material piles	Daily
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4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

6. The permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
7. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

1. In accordance with the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

E. Testing Requirements

Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

1. Emission Limitation:

No visible emissions from load-in/load-out activities and wind erosion except for one minute in any hour.

Applicable Compliance Method:

If required, compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

2. Emission Limitation:

Particulate Emissions shall not exceed 17.0 tons/yr.

Applicable Compliance Method:

Compliance with the above annual particulate emission limitation shall be determined by summing the fugitive particulate emissions calculated in the following equations, for load-in/load-out operations and from wind erosion of the storage piles:

Load-in/Load-out emissions calculated using from U.S.EPA's AP-42, Compilation of Air Pollution Emission Factors, Chapter 13, Section 13.2.4 (Aggregate Handling and Storage Piles), dated 1/1995:

$$E_f = k \times 0.0032 \times [(U/5)^{1.3} / (M/2)^{1.4}]$$

$$E_l = E_f \times P / 2,000 \text{ lbs}$$

where:

E_l = annual emissions from load-in/load-out operations: 0.816 ton/yr;

E_f = emission factor, in pounds per ton: 0.0136 lb/ton;

k = particle size multiplier (dimension less): 0.74 for PE;

U = mean wind speed: 9.1 mph;

M = material moisture content: 4.0%; and

P = maximum annual process weight (load-in and load-out): 60,000 tons/yr x 2 = 120,000 tons.

Wind erosion emissions from storage piles calculated using U.S. EPA's "Control of Open Fugitive

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Olen C

PTI A

Issued: 8/6/2004

Emissions Unit ID: **F001**

Dust Sources" September 1988:

$$E_f = 1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15)$$

$$E_w = (E_f \times 365 \text{ days} \times 1 \text{ Acre}) / 2,000 \text{ lbs}$$

where:

E_w = annual emissions from wind erosion: 15.91 tons

E_f = total annual particulate emission rate lb/day/acre: 43.6 lb/day/acre;

s = silt content of the stored material, weight percent: 60% for soil;

p = number of days with > 0.01 inch of precipitation per year: 136.7 days;

f = percentage of time the unobstructed wind speed exceeds 12 mph, at the mean pile height and in Central Ohio: 9.90 %; and

A = maximum total surface area of storage piles: 2.0 acres.

For total particulate emissions:

E = [sum of particulate emissions from each load-in/load-out operation (E_l)] + [total annual particulate emissions from wind erosion (E_w)]

Total emissions = 0.816 ton/yr + 15.91 tons = 16.73 tons PE/year

F. Miscellaneous Requirements

None

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

A. 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F002 -Unpaved roadways and parking areas (see Section A.2.b)	OAC rule 3745-31-05(A)(3)	Particulate emissions from unpaved roadways and parking areas shall not exceed 6.7 tons per year
	OAC rule 3745-17-07 (B)(5)	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust
	OAC rule 3745-17-08 (B)	No visible particulate emission except for 3 minutes during any 60-minute period
		Less stringent than the above-mentioned visible emissions limit.
		Less stringent than the above-mentioned control measure requirements

2. Additional Terms and Conditions

- 2.a The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

unpaved roadways:

Service road, and haul road

unpaved parking areas:

Parking Area

- 2.b** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for an unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.d** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to a visible emission limitation of no visible particulate emissions except for one minute during any 60 minute period.
- 2.e** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from roadways onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.f** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.g** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.
- 2.h** Application of waste oil as a dust suppressant is prohibited.

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Olen C

PTI A

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Emissions Unit ID:**F002**

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

<u>unpaved roadways</u>	<u>minimum inspection frequency</u>
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Service road, haul road	Daily
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<u>Un paved parking areas</u>	<u>minimum inspection frequency</u>
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Parking area	Daily
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2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee may, upon receipt of written approval from the Ohio EPA Central District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

Olen Corporation Plant 43PP1

PTI Application: 01 08870

Issued

Facility ID: 0125943047

Emissions Unit ID:**F002**

The information required in 4.d shall be kept separately for the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

Compliance with emission limitations specified in section A.I of these terms and conditions shall be determined in accordance with the following methods:

1. Emission Limitation:

Particulate emissions shall not exceed 6.7 tons per year from unpaved roadways and parking areas.

Applicable Compliance Method:

Compliance with annual emissions limitations are based on the following calculations for unpaved roads, from U.S.EPA's AP-42, Compilation of Air Pollution Emission Factors, Chapter 13, Section 13.2.2 (December, 1903):

$$E = k(s/12)^a(W/3)^b \quad (\text{equation 1a})$$

$$E_{\text{ext}} = E [(365-p)/365] \quad (\text{equation 2})$$

where:

E = size-specific emission factor (lb/VMT): 11.2 lbs/VMT

E_{ext} = annual size-specific emission factor, extrapolated for natural mitigation: 7.0 lbs/VMT

k = constant (dimensionless): 4.9

s = silt content of road surface material (%): 10.0 %

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Olen C

PTI A

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Emissions Unit ID:**F002**

W = mean vehicle weight (tons) = 25 tons

p = number of days with > 0.01 inch of precipitation per year: 136.7 days;

a = 0.7 (dimensionless constant)

b = 0.45 (dimensionless constant)

Maximum vehicle miles traveled = 9,600 VMT/year

$(9,600 \text{ VMT/yr})(7.0 \text{ lbs/VMT}) (1 \text{ ton}/2000 \text{ lbs}) = 33.6 \text{ tons of PE/year}$

Assume 80% control for roadway watering

$(33.6 \text{ tons of PE/year}) (0.20) = 6.72 \text{ tons of particulate controlled/year}$

2. Emission Limitation:

No visible particulate emission except for 3 minutes during any 60-minute period

Applicable Compliance Method:

Compliance with the visible emission limitation for unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

F. Miscellaneous Requirements

None