



State of Ohio Environmental Protection Agency

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

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: 01-08311

DATE: 3/13/2001

Central Ohio Contractors
Joseph Loewendick
2879 Jackson Pike
Grove City, OH 43123-9737

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

CC: USEPA

CDO



Permit To Install

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

FINAL PERMIT TO INSTALL 01-08311

Application Number: 01-08311
APS Premise Number: 0125041915
Permit Fee: **\$400**
Name of Facility: Central Ohio Contractors
Person to Contact: Joseph Loewendick
Address: 2879 Jackson Pike
Grove City, OH 43123-9737

Location of proposed air contaminant source(s) [emissions unit(s)]:
2879 Jackson Pike
Grove City, Ohio

Description of proposed emissions unit(s):
Roadways.

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 Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

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 application must be made to the Director for the installation or modification of any other emissions unit(s).

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 thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

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>
PM (F001)	0.2
PM (F002)	3.1

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>
F001 - Material handling for the disposal of construction and demolition debris including cover soil loading and unloading	OAC rule 3745-31-05 (A)(3)	<p>Particulate emissions shall not exceed 0.2 ton/yr.</p> <p>Visible emissions of fugitive dust shall not exceed 20% opacity as a 3 minute average.</p> <p>Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b).</p> <p>See II.A.2.a-b below.</p>

2. Additional Terms and Conditions

- 2.a The annual emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b The employee shall employ reasonably available control measures during material unloading and loading 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 ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

B. Operational Restrictions

1. Water shall be applied at all points necessary to ensure compliance with the visible emission limitations.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when material handling is taking place and when the weather conditions allow, for any visible fugitive particulate emissions from any material extraction and handling operations. 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 operations 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 actions taken to eliminate the visible emissions.

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 this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director of the Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation:
Particulate emissions shall not exceed 0.2 tons per year.

Applicable Compliance Method:
Compliance shall be demonstrated by utilizing the material handling equation, $E = k$

$(0.0032) (\mu/5)^{1.3} / (M/2)^{1.44}$ which is provided by the USEPA in AP-42 13.2.4-3. This equation yields the emission factor that is multiplied by the total maximum production of both the construction and debris (C&D) activities as well as the cover soil activities(cs) and then divided by 2,000 lbs/ton. Finally, add the tons/yr of each of the C&D activities and the cs activities to get the total tons per year.

$$E(\text{C\&D}) = 200,000 \text{ tons/yr} * 0.0016 \text{ lb/ton} / 2,000 \text{ lbs/ton} = 0.16 \text{ tons/yr}$$

$$E(\text{cs}) = 20,000 \text{ tons/yr} * 0.0016 * 2(\star) * 2,000 \text{ lbs/ton} = 0.03 \text{ ton/yr}$$

$$\text{Total emissions} = E(\text{C\&D}) + E(\text{cs})$$

$$\mathbf{0.16 + 0.03 = 0.2 \text{ ton/yr}}$$

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 - Paved roadways	OAC rule 3745-31-05 (A)(3)	Particulate emissions shall not exceed 0.5 ton/yr. No visible particulate emissions except for one minute during any 60-minute period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.a-h).
Unpaved roadways	OAC rule 3745-31-05 (A)(3)	Particulate emissions shall not exceed 2.6 tons/yr. Visible emissions of fugitive dust shall not exceed 20% opacity as a 3 minute average, except as provided by rule. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c through A.2.h).

2. Additional Terms and Conditions

- 2.a The permittee shall employ best available control measures on all paved 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 paved roadways by water truck and sweeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.b** The permittee shall employ best available control measures on the unpaved shoulders of all paved roadways 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 shoulders of all paved roadways with water truck(s) 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 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 with water truck(s) at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** 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 a paved or 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.e** 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 the visible emission limitation for paved roadways and parking areas.
- 2.f** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has

Emissions Unit ID: **F002**

been deposited by trucking or earth moving equipment or erosion by water or other means.

- 2.g** 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.h** 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.

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>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
All paved roadways	Daily

<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
All unpaved roadways	Daily

- 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 appropriate Ohio EPA District Office or local air agency, 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.

The information required in 4.d. shall be kept separately for the paved roadways and 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

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation for unpaved roadways:
Particulate emissions shall not exceed 3.1 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by utilizing the emission factor equation for unpaved roadways (AP-42 13.2.2-4): $E = [k (s/12)^a (W/3)^b / (M_{dry} / 0.2)^c] * [(365-p) / 365]$; and the emission factor equation for paved roadways (AP-42 13.2.1): $E = k (sL/2)^{0.65} (W/3)^{1.5}$. These equations yield the emission factors that are multiplied by the total maximum production of both the paved and unpaved roadways and then divided by 2,000 lbs/ton. Finally, add the tons/yr of each of the paved and unpaved roadways to get the total tons per year.

Emissions Unit ID: **F002**

$$E \text{ (unpaved)} = [10 (5/12)^{0.8} (12/3)^{0.5} / (30/0.2)^{0.4}] * [(365-135) / 365]$$

$$\text{Total controlled emissions} = 0.85 \text{ lb/VMT} * 6,000 \text{ VMT/yr} = 5100 \text{ lbs/yr}$$

$$\mathbf{5,100 \text{ lbs/yr} / 2,000 \text{ lbs/ton} = 2.6 \text{ tons/yr (unpaved)}}$$

$$E \text{ (paved)} = 1.1 \text{ lbs/VMT} * 3,00 \text{ VMT/yr} * (1-0.7) / 2,000 \text{ lbs/ton}$$

$$\mathbf{E = 0.5 \text{ tons/yr (paved)}}$$

$$\mathbf{\text{Total emissions for unpaved and paved roads (F002)} = 2.6 + 0.5 = 3.1 \text{ tons/yr}}$$

2. Compliance with the emission limitation for the paved and unpaved roadways 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

1 NEW SOURCE REVIEW FORM B

PTI Number: 01-08311

Facility ID: 0125041915

FACILITY NAME Central Ohio Contractors

FACILITY DESCRIPTION Paved and unpaved roadways

CITY/TWP Grove City

Emissions Unit ID: **F002**

SIC CODE 4953

SCC CODE 3-05-010-90

EMISSIONS UNIT ID F002

EMISSIONS UNIT DESCRIPTION Paved roadways and unpaved roadways

DATE INSTALLED 3/31/01

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment		2.6		2.6
PM ₁₀					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Particulate emission limits of 0.5 ton/yr (paved) and 2.6 tons/yr (unpaved); visible emission limits and best available control measures.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ N/A

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 01-08311

Facility ID: 0125041915

FACILITY NAME Central Ohio Contractors

FACILITY DESCRIPTION Paved and un paved roadways

CITY/TWP Grove City

Emissions Unit ID: **F002**

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

Please fill out the following. If the checkbox does not work, replace it with an 'X'

	<u>Electronic</u>	<u>Additional information File Name Convention (your PTI # plus this letter)</u>	<u>Hard Copy</u>	<u>None</u>
<u>Calculations (required)</u>	<input checked="" type="checkbox"/>	000000c.wpd	<input type="checkbox"/>	
<u>Modeling form/results</u>	<input type="checkbox"/>	000000s.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>PTI Application (complete or partial)*</u>	<input type="checkbox"/>	000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>BAT Study</u>	<input type="checkbox"/>	000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Other/misc.</u>	<input type="checkbox"/>	000000t.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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

NSR Discussion

Central Ohio Contractors Inc. plans to operate a facility for the disposal of construction and demolition debris. This facility will be located at 2879 Jackson Pike Road, Grove City, Franklin County, Ohio. This PTI is for debris disposal, cover soil loading and unloading as well as paved and unpaved roadways.

The operation will consist of two (2) emission units (F001 and F002). The facility is located in a non-appendix A area and is, therefore, not subject to OAC rules 3745-17-07 and 3745-17-08. Moreover, the facility does not utilize crushing activities, thus 40 CFR, Part 60, Subpart OOO does not apply.

Wet suppression, employing water trucks, is required as BAT.

All annual maximum capacities are from the application and based on either maximum rated capacity or physical limitations of the equipment.

The following calculations are specific to each type of operation:

F001: Material handling for the disposal of construction and demolition (C&D) debris including loading and unloading of cover soil

Assumptions/emission factors:

Material handling equation (AP-42 13.2.4-3) - $E = k (0.0032) (\mu/5)^{1.3} / (M/2)^{1.44}$

NEW SOURCE REVIEW FORM B

PTI Number: 01-08311

Facility ID: 0125041915

FACILITY NAME Central Ohio Contractors

FACILITY DESCRIPTION Paved and unnaved roadwavs

CITY/TWP Grove Citv

Emissions Unit ID: **F002**

Where: E = emission factor
 K = particle size multiplier (0.74)
 μ = mean wind speed (10 mph)
 M = material moisture content (5% for both C&D debris and cover soil)

Maximum C&D production - 200,000 tons/yr

Maximum cover soil handling - 20,000 tons/yr

Construction & Debris (C&D) material:

$$E(\text{C\&D}) = 0.74 (0.0032) (10/5)^{1.3} / (5/2)^{1.4}$$

$$E(\text{C\&D}) = 0.0024 (2.46/3.61)$$

$$E(\text{C\&D}) = 0.0016 \text{ lb/ton}$$

$$E(\text{C\&D}) = 200,000 \text{ tons/yr} * 0.0016 \text{ lb/ton} / 2,000 \text{ lbs/ton} = 0.16 \text{ tons/yr}$$

Cover soil(cs):

$$E(\text{cs}) = 0.74 (0.0032) (10/5)^{1.3} / (5/2)^{1.4}$$

$$E(\text{cs}) = 0.0024 (2.46/3.61)$$

$$E(\text{cs}) = 0.0016 \text{ lb/ton}$$

★Rate doubled to account for both the loading and unloading activities

$$E(\text{cs}) = 20,000 \text{ tons/yr} * 0.0016 * 2(\star) * 2,000 \text{ lbs/ton} = 0.03 \text{ ton/yr}$$

Total emissions for material handling:

$$\text{Total emissions} = E(\text{C\&D}) + E(\text{cs})$$

$$0.16 + 0.03 = 0.2 \text{ ton/yr}$$

F002: Paved and unpaved roadways

Assumptions/emission factors for unpaved roads:

Annual vehicle miles traveled (VMT/yr) - 6,000

Emission factor equation (AP-42 13.2.2-4) - $E = [k (s/12)^a (W/3)^b / (M_{\text{dry}} / 0.2)^c] * [(365-p) / 365]$

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

*s = surface material silt content (10%)

*W = mean vehicle weight (12 tons)

*M = surface material moisture content under dry, uncontrolled conditions (15%)

*p = number of days with at least 0.254mm (0.01 in.) of precipitation per year (135)

*a = constant (0.8)

*b = constant (0.5)

*c = constant (0.4)

*k = constant (30)

* PM-30 particulate emissions

Unpaved roads (uncontrolled):

FACILITY DESCRIPTION	Paved and unpaved roadways	CITY/TWP	Grove City
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$$E = [10 (10/12)^{0.8} (12/3)^{0.5} / (15/0.2)^{0.4}] * [(365-135) / 365]$$

$$E = [(10) (0.86) (2) / 5.6] * 0.63$$

$$E = 1.9 \text{ lbs/VMT}$$

Unpaved roads (controlled - required as BAT):

Where: $s = 5\%$

$M = 30\%$

$$E = [10 (5/12)^{0.8} (12/3)^{0.5} / (30/0.2)^{0.4}] * [(365-135) / 365]$$

$$E = [(10) (0.5) (2) / 7.4] * 0.63$$

$$E = 0.85 \text{ lb/VMT}$$

$$\text{Total controlled emissions} = 0.85 \text{ lb/VMT} * 6,000 \text{ VMT/yr} = 5100 \text{ lbs/yr}$$

$$\mathbf{5,100 \text{ lbs/yr} / 2,000 \text{ lbs/ton} = 2.6 \text{ tons/yr}}$$

$$\text{Efficiency} = (1.9 - 0.85) / 1.9 = 55\%$$

Assumptions/emission factors for paved roads:

Annual vehicle miles traveled (VMT/yr) - 3,000

Emission factor equation (AP-42 13.2.1) - $E = k (sL/2)^{0.65} (W/3)^{1.5}$

Where: E = particulate emission factor (lb/VMT)

k = base emission factor for PM-30 (0.082 - AP-42, Table 13.2.1-1)

sL = road surface silt loading $[21.3 (\text{avg. daily traffic } (100))^{-0.41} = 4.3 \text{ g/m}^2]$

W = average weight of vehicles (12 tons)

Paved roads (uncontrolled):

$$E = 0.082 (4.3/2)^{0.65} (12/3)^{1.5}$$

$$E = 0.082 (1.65) (8)$$

$$E = 1.1 \text{ lbs/VMT}$$

Paved roads (controlled - required as BAT)

Where: efficiency for watering - 50%

efficiency for sweeping - 20%

$$E = 1.1 \text{ lbs/VMT} * 3,000 \text{ VMT/yr} * (1-0.7) / 2,000 \text{ lbs/ton}$$

$$E = \mathbf{0.5 \text{ tons/yr}}$$

Total emissions for unpaved and paved roads (F002) = 2.6 + 0.5 = 3.1 tons/yr

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

Synthetic Minor Determination and/or Netting Determination
Permit To Install ENTER PTI NUMBER HERE

A. Source Description

2 NEW SOURCE REVIEW FORM B

PTI Number: 01-08311 Facility ID: 0125041915

FACILITY NAME Central Ohio Contractors

FACILITY DESCRIPTION Paved and unaved roadways CITY/TWP Grove Citv

Emissions Unit ID: **F002**

B. Facility Emissions and Attainment Status

C. Source Emissions

D. Conclusion

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

Please complete:

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM (F001)	0.2
PM (F002)	3.1