



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

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

Lazarus Gov. Center

**RE: DRAFT PERMIT TO INSTALL
STARK COUNTY**

CERTIFIED MAIL

Application No: 15-01471

DATE: 9/18/2001

Stark C&D Disposal
Richard Eslich
3525 Broadway Avenue NE
Louisville, OH 44641

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$800** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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

CC: USEPA

Canton LAA

Stark County Area Trans Study

WV

PA



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 15-01471

Application Number: 15-01471
APS Premise Number: 1576001703
Permit Fee: **To be entered upon final issuance**
Name of Facility: Stark C&D Disposal
Person to Contact: Richard Eslich
Address: 3525 Broadway Avenue NE
Louisville, OH 44641

Location of proposed air contaminant source(s) [emissions unit(s)]:
**7280 Lisbon Street
Osnaburg Twp., Ohio**

Description of proposed emissions unit(s):
Portable concrete crushing operation.

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

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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

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lead to such sanctions

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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

- 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

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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.

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

Pollutant

Tons Per Year

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PE	3.77
NOx	4.68
CO	0.48
OC	0.37

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>
F003 - recycled aggregate processing, including crushing, screening, material handling, and truck dumping of raw material into crusher hopper	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-08(B) 40 CFR, Part 60, Subpart OOO

OAC rule 3745-17-07(B)

Applicable Emissions
Limitations/Control Measures

Visible particulate emissions of fugitive dust shall not exceed 10% opacity, as a six-minute average.

Particulate emissions (PE) shall not exceed 0.85 lb/hr and 1.11 tons/yr.

Nitrogen oxides (NOx) emissions shall not exceed 3.6 lbs/hr and 4.68 tons/yr.

Carbon monoxide (CO) emissions shall not exceed 0.366 lb/hr and 0.48 ton/yr.

Organic compound (OC) emissions shall not exceed 0.285 lb/hr and 0.37 ton/yr.

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

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

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

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

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Emissions Unit ID: **F003**

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2. Additional Terms and Conditions

2.a The water sprays located on top of the crusher shall be operating at all times while the crusher is in operation. Also, water sprays shall be operated at all other points necessary to ensure compliance with the visible emission limitation specified above.

2.b The hourly and annual particulate emission limitations are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

B. Operational Restrictions

1. The maximum monthly operating hours for this emissions unit shall not exceed 217 and total annual operating hours for this emissions unit shall not exceed 2600 hours.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall conduct visible emission evaluations in accordance with USEPA's Reference Method 9 of 40 CFR, Part 60, Appendix A at a minimum annually or upon relocation of the emissions unit. The visible emission evaluations shall be performed during the period of May 1 through September 30. The duration of the Method 9 observations shall be 3 hours (30 six-minute averages). However, the duration of the Method 9 observations can be reduced to 1 hour (10 six-minute averages) if the following conditions apply: (1) there are no individual readings greater than 10% opacity and (2) there are no more than 3 readings of 10% opacity for the one-hour period.
2. The permittee shall maintain monthly records of the operating hours for this emissions unit.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions. The presence or absence of any visible fugitive particulate 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. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall notify the Canton local air agency (LAA) of any Method 9 evaluation that did not demonstrate compliance with the opacity limitation specified above. The notification shall be in writing and shall include a copy of such record and shall be sent to the Canton LAA within 30 days after the exceedance occurs.
2. The permittee shall submit annual reports which identify any exceedances of the monthly operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. This permittee shall conduct, or have conducted, visible emission tests at a minimum annually or upon relocation of this emissions unit in order to demonstrate compliance with the specified allowable visible emission limitation. The visible emission tests shall be conducted in accordance with USEPA's Reference Method 9 of 40 CFR, Part 60, Appendix A.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test notification to Canton LAA. The Intent to Test notification shall describe in detail the proposed test methods and procedures, the emissions unit's operating parameters, the time(s) and date(s) of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in Canton LAA's refusal to accept the results of the visible emissions test.

Personnel from Canton LAA shall be permitted to witness the test. The permittee shall acquire data and information regarding the emissions unit's operating parameters (including, but not limited to, water flow rates of the control system used to control fugitive dust at the facility).

A comprehensive written report on the results of the visible emission test (including opacity readings and the emissions unit operating parameters) shall be signed by the person(s) responsible for the test and submitted to Canton LAA within 30 days following the completion of the test.

2. Compliance with the emission limitations specified in section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

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Visible particulate emissions of fugitive dust shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the above visible emission limitation shall be determined by USEPA's Reference Method 9 in 40 CFR, Part 60, Appendix A.

b. Emission Limitation:

Particulate emissions shall not exceed 0.85 lb/hr.

Applicable Compliance Method:

Compliance with the above hourly particulate emission limitation shall be determined using the emission factors for crushing, screening, and material handling operations in AP-42, Chapter 11.19.2 (Crushed Stone Processing), Fifth Edition, dated 1/1995 and the emissions factor for the motor of 41 gr/hr.

c. Emission Limitation:

Particulate emissions shall not exceed 1.11 tons/yr.

Applicable Compliance Method:

Compliance with the above annual particulate emission limitation shall be determined by multiplying the hourly allowable emission rate (0.85 lb/hr) by the number of hours this emissions unit operated each year and dividing by 2,000 lbs/ton.

d. Emissions Limitation:

Nitrogen oxides (NO_x) emissions shall not exceed 3.6 lbs/hr.

Applicable Compliance Method:

Use the Caterpillar emissions factor of 1,632 grams/hour.

e. Emissions Limitation:

Carbon monoxide (CO) emissions shall not exceed 0.366 lb/hr.

Applicable Compliance Method:

Use the Caterpillar emissions factor of 166 grams/hour.

f. Emissions Limitation:

Organic compound (OC) emissions shall not exceed 0.285 lb/hr.

Applicable Compliance Method:

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Use the Caterpillar emissions factor of 129 grams/hour.

- g. Emissions Limitation:
Nitrogen oxides (NO_x) emissions shall not exceed 4.68 tons/yr.

Start

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Emissions Unit ID: **F003**

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Applicable Compliance Method:

Compliance with the above annual NO_x emission limitation shall be determined by multiplying the hourly allowable emission rate (3.6 lbs/hr) by the number of hours this emissions unit operated each year and dividing by 2,000 lbs/ton.

h. Emissions Limitation:

Carbon monoxide (CO) emissions shall not exceed 0.48 ton/yr.

Applicable Compliance Method:

Compliance with the above annual CO emission limitation shall be determined by multiplying the hourly allowable emission rate (0.366 lb/hr) by the number of hours this emissions unit operated each year and dividing by 2,000 lbs/ton.

i. Emissions Limitation:

Organic compound (OC) emissions shall not exceed 0.37 ton/yr.

Applicable Compliance Method:

Compliance with the above annual OC emission limitation shall be determined by multiplying the hourly allowable emission rate (0.285 lb/hr) by the number of hours this emissions unit operated each year and dividing by 2,000 lbs/ton.

3. Compliance with the operational limitations in section B of these terms and conditions shall be determined in accordance with the following methods:

a. Operational Limitation

The maximum monthly operating hours for this emissions unit shall not exceed 217.

Applicable Compliance Method

Monitoring and recordkeeping as required in section C.2.

F. Miscellaneous Requirements

1. Notice to Relocate a Portable or Mobile Emissions Unit

Pursuant to 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

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portable emissions unit;

- b. the portable emissions unit is operating pursuant to a currently effective permit to operate (PTO);

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- c. the applicant has provided proper notice of intent to relocate the portable emissions unit to Canton LAA and the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site within a minimum of thirty days prior to the scheduled relocation; and
 - d. in Canton LAA's and the appropriate Ohio EPA District Office's or local air agency's judgement, the proposed site is acceptable under OAC rule 3745-15-07.
2. In the 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 following criteria of OAC rule 3745-31-05(F) are met:
 - a. the permittee of the portable emissions unit possesses an effective Ohio EPA PTI, PTO or registration status;
 - b. the portable emissions unit is equipped with best available technology;
 - c. the portable emissions unit's owner has identified the proposed site to Ohio EPA;
 - d. Ohio EPA has determined that the portable emissions unit, at the proposed site, will have an acceptable environmental impact;
 - e. a public notice, consistent with OAC Chapter 3745-47, is published in the county where the proposed site is located;
 - f. the owner of the proposed site has provided the portable emissions unit's owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable emissions unit to this proposed site; and
 - g. the portable emissions unit's owner has provided Ohio EPA with fifteen days' written notice of the relocation.
3. Any site approvals issued by Ohio EPA, pursuant to F.2. above, shall be valid for no longer than three years and are subject to renewal.

In order for Canton LAA and the appropriate Ohio EPA District Office or local air agency 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 (30 or 15 days) prior to the relocation of the emissions unit with Canton LAA and the appropriate Ohio EPA District Office or local air agency having jurisdiction over the

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new site. Upon receipt of the notice, Canton LAA and/or the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

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Emissions Unit ID: F004

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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>	
F004 - load-in and load-out of storage piles (see section A.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(B)
wind erosion from storage piles (see section A.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-08(B)
load-in and load-out of storage piles and wind erosion from storage piles	OAC rule 3745-31-05(A)(3)	

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Issued: To be entered upon final issuance

Emissions Unit ID: **F004**

Applicable Emissions
Limitations/Control Measures

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).

Particulate emissions shall not exceed 2.66 tons/year from wind erosion and load-in and load-out operations.

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

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

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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 are listed below:

- crushed stone aggregates (3)
- rubble (concrete, rebar, and brick)
- steel

2.b The permittee shall employ best available control measures for 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 watering the storage piles as needed 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 measures 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 measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during any such operation until further observation confirms that use of the measure 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 watering the storage piles as needed 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 measures 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 measures are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measures 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 rules 3745-17-08 and 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 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>
- crushed stone aggregates (3)	daily
- rubble (concrete, rebar, and brick)	daily
- steel	daily

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>
- crushed stone aggregates (3)	daily
- rubble (concrete, rebar, and brick)	daily
- steel	daily

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>
- crushed stone aggregates (3)	daily
- rubble (concrete, rebar, and brick)	daily
- steel	daily

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Emissions Unit ID: **F004**

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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.

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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 for 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 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.
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 measure(s);
 - c. the dates the control measure(s) were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) 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 measures.

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. The permittee shall submit 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.

Stark C&D Disposal
PTI Application 15-01471
Issue

Facility ID: 1576001703

Emissions Unit ID: F004

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

Start

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Issued: To be entered upon final issuance

Emissions Unit ID: F004

E. Testing Requirements

1. Compliance with the emission limitations specified in section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. 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.
 - b. Emissions Limitation:
Particulate emissions shall not exceed 2.66 tons/year from wind erosion and load-in and load-out operations.

Applicable Compliance Method:

Compliance with the above annual particulate emission limitation shall be determined by the following equations:

from AP-42, Chapter 13.2.4 (Aggregate Handling and Storage Piles), Fifth Edition, dated 1/1995, for load -in and load-out operations,

$$El = k \times 0.0032 \times [(U/5)^{1.3} / (M/2)^{1.4}] \times P / 2,000$$

where:

El = annual particulate emission rate (TPY);

k = particle size multiplier (dimension less), 0.74 for PE and 0.35 for PM-10;

U = mean wind speed, 9.5 mph;

M = material moisture content, 2%;

P = maximum yearly process rate, in tons/yr, 300,000 tons/yr.

$$El = 0.74 \times 0.0032 \times [(9.5/5)^{1.3} / (2/2)^{1.4}] \times 300,000 / 2,000$$

$$El = 0.74 \times 0.0032 \times [(1.9)^{1.3}/1] \times 300,000 / 2,000$$

$$El = 0.74 \times 0.0032 \times 2.3 \times 150$$

$$El = 0.82 \text{ ton PE/yr}$$

and from USEPA's Control of Open Fugitive Dust Sources September 1988 for wind erosion from storage piles:

$$Ew = 1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15) \times 365 \times A / 2,000$$

where:

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E_w = total annual particulate emission rate;
 s = silt content of the stored material, weight percent, 10%;
 p = number of days with > 0.01 inch of precipitation per year, 149 days;
 f = percentage of time wind speed exceeds 12 mph, 20%; and
 A = total surface area of storage piles, 2.

$$E_w = 1.7 \times (10/1.5) \times [(365-149)/235] \times 20/15 \times 365 \times 2/2000$$

$$E_w = 1.7 \times 6.67 \times 0.92 \times 1.33 \times 365 \times 0.001$$

$$E_w = 5.1 \text{ tons PE/yr}$$

$$5.1 \text{ tons PE/yr} \times 0.2 \text{ (80\% control)} = 1.02 \text{ tons PE/yr}$$

For total particulate emissions:

$$E = [\text{sum of particulate emissions from each load-in/load-out operation (EI)}] + [\text{total annual particulate emissions from wind erosion (E}_w\text{)}]$$

$$E = 0.82 \text{ ton PE/yr (load-in)} + 0.82 \text{ ton PE/yr (load-out)} + 1.02 \text{ tons PE/yr (wind)}$$

$$E = 2.66 \text{ tons PE/yr}$$

F. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 15-01471 Facility ID: 1576001703

FACILITY NAME Stark C&D Disposal

FACILITY DESCRIPTION Portable concrete crushing operation CITY/TWP Osnaburg Twn.

Emissions Unit ID: F004

SIC CODE 3299 SCC CODE 30502002 EMISSIONS UNIT ID F003

EMISSIONS UNIT DESCRIPTION Portable concrete crusher.

DATE INSTALLED Scheduled to be installed in June 2001.

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			0.85 lb/hr	1.11
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment			0.285 lb/hr	0.37
Nitrogen Oxides	Attainment			3.6 lbs/hr	4.68
Carbon Monoxide	Attainment			0.366 lb/hr	0.48
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? OOO NESHAP? PSD? OFFSET POLICY?

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

Enter Determination Compliance with NSPS Subpart OOO, water sprays for crusher, compliance with VE limits.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

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

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to 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: NA

NEW SOURCE REVIEW FORM B

PTI Number: 15-01471

Facility ID: 1576001703

FACILITY NAME Stark C&D Disposal

FACILITY DESCRIPTION Portable concrete crushing operation

CITY/TWP Osnaburg Twn.

Emissions Unit ID: **F004**

Calculations (required)	<input checked="" type="checkbox"/>	0000000c.wpd	<input type="checkbox"/>	
Modeling form/results	<input type="checkbox"/>	0000000s.wpd	<input type="checkbox"/>	<input type="checkbox"/>
PTI Application (complete or partial)*	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input type="checkbox"/>
BAT Study	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input type="checkbox"/>
Other/misc.	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input 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](#)

EMISSION CALCULATIONS

F003 Recycled aggregate processing, including crushing, screening, material handling, and truck dumping of raw material into crusher hopper

Crushing

Using emission factor of 0.0007 lb PE/ton of stone crushed from AP-42, Table 11.19.2-2 (uncontrolled factor).

Maximum amount of stone crushed equals 300 tons/hr.

80% control efficiency by using water sprays

$$0.0007 \text{ lb PE/ton} \times 300 \text{ tons/hr} \times 0.2 \text{ (80\% control)} = 0.04 \text{ lb PE/hr}$$

Screening

Using emission factor of 0.00084 lb PM10/ton of stone from AP-42, Table 11.19.2-2 (controlled factor).

To convert to PE multiply by 2.1.

$$0.00084 \text{ lb PE/ton} \times 300 \text{ tons/hr} \times 2.1 \text{ (PM10 to PE conversion)} = 0.53 \text{ lb PE/hr}$$

Material Handling

Using emission factor of 0.000048 lb PM10/ton of stone from AP-42, Table 11.19.2-2 (controlled factor).

Six transfer points

Use conversion factor of 2.1 for converting from PM10 to PE.

$$0.000048 \text{ lb PE/ton} \times 300 \text{ tons/hr} \times 6 \text{ (number of transfer points)} \times 2.1 \text{ (conversion)} = 0.18 \text{ lb PE/hr}$$

Truck dumping

3 NEW SOURCE REVIEW FORM B

PTI Number: 15-01471

Facility ID: 1576001703

FACILITY NAME Stark C&D Disposal

FACILITY DESCRIPTION Portable concrete crushing operation

CITY/TWP Osnaburg Twn.

Emissions Unit ID: **F004**

Emission factor of 0.000016 lb PM10/ton for AP-42, Table 11.19.2-2
 Conversion factor from PM10 to PE equals 2.1

$$0.000016 \text{ lb PE/ton} \times 300 \text{ tons/hr} \times 2.1 \text{ (conversion)} = 0.01 \text{ lb PE/hr}$$

Total = crushing + screening + material handling + trucking dumping

$$\text{Total} = 0.04 \text{ lb PE/hr} + 0.53 \text{ lb PE/hr} + 0.18 \text{ lb PE/hr} + 0.01 \text{ lb PE/hr}$$

$$\text{Total} = 0.76 \text{ lb PE/hr}$$

$$0.76 \text{ lb PE/hr} \times 2,600 \text{ hrs/yr} \times 1 \text{ ton}/2000 \text{ lbs} = 1 \text{ ton PE/yr}$$

Emissions from operating the motor

Engine is rated at 164 bkw or 220 bhp

Emission factors from Caterpillar

$$\text{OC} = 129 \text{ g/hr} \times 1 \text{ lb}/453 \text{ g} = 0.285 \text{ lb/hr} \times 2,600 \text{ hrs/yr} \times 1 \text{ ton}/2000 \text{ lbs} = 0.37 \text{ ton/yr}$$

$$\text{CO} = 166 \text{ g/hr} \times 1 \text{ lb}/453 \text{ g} = 0.366 \text{ lb/hr} \times 2,600 \text{ hrs/yr} \times 1 \text{ ton}/2000 \text{ lbs} = 0.48 \text{ ton/yr}$$

$$\text{NOx} = 1632 \text{ g/hr} \times 1 \text{ lb}/453 \text{ g} = 3.6 \text{ lb/hr} \times 2,600 \text{ hrs/yr} \times 1 \text{ ton}/2000 \text{ lbs} = 4.68 \text{ tons/yr}$$

$$\text{PE} = 41 \text{ g/hr} \times 1 \text{ lb}/453 \text{ g} = 0.09 \text{ lb/hr} \times 2,600 \text{ hrs/yr} \times 1 \text{ ton}/2000 \text{ lbs} = 0.12 \text{ ton/yr}$$

Total PE = Fugitive dust + motor

$$\text{Total PE} = 0.76 \text{ lb/hr} + 0.09 \text{ lb/hr}$$

$$\text{Total PE} = 0.85 \text{ lb/hr} \times 2600 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs}$$

$$\text{Total PE} = 1.11 \text{ tons/yr}$$

F004 Storage Piles

from AP-42, Chapter 13.2.4 (Aggregate Handling and Storage Piles), Fifth Edition, dated 1/1995, for load -in and load-out operations,

$$E_i = k \times 0.0032 \times [(U/5)^{1.3} / (M/2)^{1.4}] \times P / 2,000$$

where:

E_i = annual particulate emission rate (TPY);

k = particle size multiplier (dimension less), 0.74 for PE and 0.35 for PM-10;

U = mean wind speed, 9.5 mph;

M = material moisture content, 2%;

P = maximum yearly process rate, in tons/yr, 300,000 tons/yr.

$$E_i = 0.74 \times 0.0032 \times [(9.5/5)^{1.3} / (2/2)^{1.4}] \times 300,000 / 2000$$

$$E_i = 0.74 \times 0.0032 \times [(1.9)^{1.3}/1] \times 300,000 / 2,000$$

FACILITY DESCRIPTION Portable concrete crushing operationCITY/TWP Osnaburg Twp.

$$EI = 0.74 \times 0.0032 \times 2.3 \times 150$$

$$EI = 0.82 \text{ ton PE/yr}$$

and from USEPA's Control of Open Fugitive Dust Sources September 1988 for wind erosion from storage piles:

$$E_w = 1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15) \times 365 \times A / 2,000$$

where:

E_w = total annual particulate emission rate;

s = silt content of the stored material, weight percent, 10%;

p = number of days with > 0.01 inch of precipitation per year, 149 days;

f = percentage of time wind speed exceeds 12 mph, 20%; and

A = total surface area of storage piles, 2.

$$E_w = 1.7 \times (10/1.5) \times [(365-149)/235] \times 20/15 \times 365 \times 2/2000$$

$$E_w = 1.7 \times 6.67 \times 0.92 \times 1.33 \times 365 \times 0.001$$

$$E_w = 5.1 \text{ tons PE/yr}$$

$$5.1 \text{ tons PE/yr} \times 0.2 \text{ (80\% control)} = 1.02 \text{ tons PE/yr}$$

For total particulate emissions:

$E = [\text{sum of particulate emissions from each load-in/load-out operation (EI)}] + [\text{total annual particulate emissions from wind erosion (E}_w\text{)}]$

$$E = 0.82 \text{ ton PE/yr (load-in)} + 0.82 \text{ ton PE/yr (load-out)} + 1.02 \text{ tons PE/yr (wind)}$$

$$E = 2.66 \text{ tons PE/yr}$$

$$F003 + F004 = \text{Total PE for PTI}$$

$$1.11 \text{ TPY PE} + 2.66 \text{ TPY PE} = 3.77 \text{ TPY PE}$$

Plant Roadways and Parking Areas

This facility already has a PTI for the plant roadways and parking areas.

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

33 NEW SC

PTI Num

FACILITY

Emissions Unit ID: **F004**

FACILITY DESCRIPTION Portable concrete crushing operation

CITY/TWP Osnaburg Twp.

A. Source Description

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>
PE	3.77
NOx	4.68
CO	0.48
OC	0.37

34 NEW SOURCE REVIEW FORM B

PTI Number: 15-01471

Facility ID: 1576001703

FACILITY NAME Stark C&D Disposal

FACILITY DESCRIPTION Portable concrete crushing operation

CITY/TWP Osnaburg Twn.

Emissions Unit ID: **F004**