

Facility ID: 1409010914 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1409010914 Emissions Unit ID: F002 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Paved Roads and Parking Areas - F002	OAC rule 3745-31-05(A)(3) (PTI 14-04892 modified 2/26/08)	Particulate emissions (PE) from paved roadways shall not exceed 1.76 tons per year (TPY).
		Particulate emissions with a diameter of 10 microns and less (PM10) from paved roadways shall not exceed 0.34 TPY. PE from unpaved roadways shall not exceed 4.65 TPY.
		PM10 from unpaved roadways shall not exceed 1.19 TPY. See terms A.2.a through A.2.k.
	OAC rule 3745-17-07(B)(4) and (5)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(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).

2. Additional Terms and Conditions

- (a) All paved and unpaved roadways and parking areas are covered by this permit and subject to the above-mentioned requirements.

There shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed one minute during any sixty-minute observation period.

There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed three minutes during any sixty-minute observation period.

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 and parking areas by flushing 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.

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.

Any unpaved roadways 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 using water. 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.

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.

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

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.

The permittee shall post and enforce on the property, a maximum speed limit of 10 miles per hour.

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(A)(3).

B. Operational Restrictions

1. None

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily inspections of all paved and unpaved roadways and parking areas.
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 (i) the paved roadways and parking areas and (ii) 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 in Section A of the terms and conditions of this permit shall be determined in accordance with the following method:
 - a. Emission Limitation:
Fugitive PE from paved roadways shall not exceed 1.76 tons per year (TPY)

Applicable Compliance Method:

Compliance with the fugitive PE limitation shall be determined by using the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for paved roadways. Should further updates in AP-42 occur, the most current equations for paved roads shall be used.

The annual PE emissions limitation established through OAC rule 3745-31-05(A)(3) was developed from the following equations using the information submitted by the permittee in PTI Application 14-04892, submitted on February 18, 2000 and information in AP-42. This emission limitation was based on a maximum of 1549.17 vehicle miles traveled per year, and a 80% control efficiency for PE:

$$E = k(sL/2)^{0.65}(W/3)^{1.5} - C$$

where

k is the particle size multiplier given in Table 13.2-1.2 = 0.082

E = particulate emission factor (having units matching the units of k)

sL = road surface silt loading (g/m²) = 11.86

W = average weight (tons) of the vehicles traveling the road = 37.2, and

C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear = 0.00047.

$$E = 0.082 (11.87/2)0.65 \times (37.2/3)1.5 - 0.00047 = 11.39 \text{ lb PE/VMT.}$$

$$11.39 \text{ lb PE/VMT} \times 1549.17 \text{ VMT/year} \times 1 \text{ Ton/2000 lbs} \times (1-0.80) = 1.76 \text{ TPY PE.}$$

b. Emission Limitation:

Fugitive PM10 from paved roadways shall not exceed 0.34 TPY

Applicable Compliance Method:

Compliance with the fugitive PM10 emission limitation shall be determined by using the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for paved roadways. Should further updates in AP-42 occur, the most current equations for paved roads shall be used.

The annual PM10 emission limitation established through OAC rule 3745-31-05(A)(3) was developed from the following equations using the information submitted by the permittee in PTI Application 14-04892, submitted on February 18, 2000, and information in AP-42. This emission limitation was based on a maximum of 1549.17 vehicle miles traveled per year, and a 80% control efficiency:

$$E = k(sL/2)^{0.65}(W/3)^{1.5} - C$$

where

k is the particle size multiplier given in Table 13.2-1.2 = 0.016

E = particulate emission factor (having units matching the units of k)

sL = road surface silt loading (g/m2) = 11.87

W = average weight (tons) of the vehicles traveling the road = 37.2, and

C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear = 0.00047.

$$E = 0.016 (11.87/2)0.65 \times (37.2/3)1.5 - 0.00047 = 2.22 \text{ lb PM10/VMT.}$$

$$2.22 \text{ lb PE/VMT} \times 1549.17 \text{ VMT/year} \times 1 \text{ Ton/2000 lbs} \times (1-0.80) = 0.34 \text{ TPY PM10.}$$

c. Emission Limitation:

Fugitive PE from unpaved roadways shall not exceed 4.65 TPY

Applicable Compliance Method:

Compliance with the fugitive PE limitation shall be determined by using the emission factor equation in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for unpaved roadways. Should further updates in AP-42 occur, the most current equations for unpaved roads shall be used.

The annual PE emissions limitation established through OAC rule 3745-31-05(A)(3) was developed from the following equations using the information submitted by the permittee in PTI Application 14-04892, submitted February 18, 2000 and information in AP-42. This emission limitation was based on a maximum of 2323.76 vehicle miles traveled per year and a 50% control efficiency for PM10:

$$E = k(s/12)^a(W/3)^b$$

where

k, a and b are empirical constants given in Table 13.2.2-2 = K =4.9, a = 0.7, b = 0.45

E = size specific emission factor (lb/VMT)

s = surface material silt content (%) = 4.8

W = mean vehicle weight (tons) = 37.2

$$E = 4.9(4.8/12)^{0.7}(37.2/3)^{0.45} = 8.01 \text{ lb PM10/VMT}$$

$$8.01 \text{ lb PE/VMT} \times 2323.76 \text{ VMT/year} \times 1 \text{ Ton/2000 lbs} \times (1-0.50) = 4.65 \text{ TPY PM10}$$

d. Emission Limitation:

Fugitive PM10 from unpaved roadways shall not exceed 1.19 TPY

Applicable Compliance Method:

Compliance with the fugitive PM10 limitation shall be determined by using the emission factor equation in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for unpaved roadways. Should further updates in AP-42 occur, the most current equations for unpaved roads shall be used.

The annual PM10 emission limitation established through OAC rule 3745-31-05(A)(3) was developed from the following equations using the information submitted by the permittee in PTI Application 14-04892, submitted February 18, 2000 and information in AP-42. This emission limitation was based on a maximum of 2323.76 vehicle miles traveled per year and a 50% control efficiency for PM10:

$$E = k(s/12)^a(W/3)^b$$

where k, a and b are empirical constants given in Table 13.2.2-2, k = 1.5, a = 0.9, b = 0.45

E = size specific emission factor (lb/VMT)

s = surface material silt content (%) = 4.8 and

W = mean vehicle weight (tons) = 37.2

$$E = 1.5(4.8/12)0.9(37.2/3)0.45 = 2.04 \text{ lb PM10/VMT}$$

$$2.04 \text{ lb PM10/VMT} \times 2323.76 \text{ VMT/year} \times 1 \text{ Ton/2000 lbs} \times (1-0.50) = 1.19 \text{ TPY PM10}$$

e. Emission Limitation:

There shall be no visible PE from the paved roadways and/or parking areas except for a period of time not to exceed 1 minute during any 60-minute observation period

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed 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").

f. Emission Limitation:

There shall be no visible PE from the unpaved roadways and/or parking areas except for a period of time not to exceed 3 minutes during any 60-minute observation period

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed 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").

F. **Miscellaneous Requirements**

1. None