



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-16133

DATE: 6/25/2002

Velotta Paving Co Inc
Mike Velotta
PO Box 1930
Willoughby, OH 44096

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

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 6/25/2002
Effective Date: 6/25/2002**

FINAL PERMIT TO INSTALL 02-16133

Application Number: 02-16133
APS Premise Number: 0204010445
Permit Fee: **\$700**
Name of Facility: Velotta Paving Co Inc
Person to Contact: Mike Velotta
Address: PO Box 1930
Willoughby, OH 44096

Location of proposed air contaminant source(s) [emissions unit(s)]:

**2110 State Rd
Ashtabula, Ohio**

Description of proposed emissions unit(s):

160 TPH Drum Mix Asphalt Batch Plant.

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.

Velotta Paving Co Inc
PTI Application: 02-16133
Issued: 6/25/2002

Facility ID: 0204010445

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>
PE	61.1
SO2	1.3
NOx	6.6
CO	15.6
OCs	5.4

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 - Unpaved roadways and parking areas - asphalt plant traffic	OAC rule 3745-31-05(A)(3)	46.1 tons per year of particulate emissions (PE). No visible particulate emissions except for a period of time not to exceed 3 minutes during any 60 minute period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Additional Terms and Conditions A.2.b through A.2.h.
	OAC rule 3745-17-07(B)(5)	The limits based on OAC rule 3745-17-07 are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)(2)	The limits based on OAC rule 3745-17-08 are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a All unpaved roadways and parking areas at the facility are covered by this permit and subject to the above-mentioned requirements.
- 2.b The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee’s permit application, the permittee has committed to resurface the unpaved roadways and parking areas with limestone and/or

treat the unpaved roadways and parking areas with water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for an unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.d** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled using appropriate dust control measures for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to a visible emission limitation of no visible particulate emissions except for 3 minutes during any 60-minute period.
- 2.e** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.f** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.g** A maximum speed limit of 10 miles per hour shall be posted and enforced for all vehicles on all unpaved roadways as identified in section A.I.2.a.
- 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

1. When a dust suppressant is used for controlling fugitive dust from the unpaved road segments and parking areas, the following restrictions shall be followed:
 - a. The permittee shall certify or possess certification that all dust suppressants used to control fugitive dust meet the PCB limitations set forth in 40 CFR 761, and that there are no listed hazardous wastes or characteristic hazardous wastes as set forth in 40 CFR 261.
 - b. The permittee shall not apply used oil as defined by OAC rule 3745-279-01(A)(12) as a dust suppressant.
 - c. The dust suppressant shall be applied in such a manner as to prevent pollution of waters of the State as required by the Ohio Revised Code, section 6111.

C. Monitoring and/or Recordkeeping Requirements

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

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Velott

PTI A

Issued: 6/25/2002

Emissions Unit ID: **F001**

were sufficient to not require the control measures.

The information required in 4.d. 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. Emissions Limitation:

No visible particulate emissions except for a period of time not to exceed 3 minutes during any 60 minute period.

Applicable Compliance Method:

Compliance with the visible emissions limitation for the unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

2. Emissions Limitation:

46.1 tons per year of PE

Applicable Compliance Method:

Compliance shall be based on a one-time calculation using the most recent revisions to AP-42 Chapter 13.2.2, equation 1 (currently September 1998). The calculation is as follows, and is equivalent to the emissions unit's annual potential to emit:

$$E = k \times (s/12)^a \times (W/3)^b / (m/0.2)^c$$

Emissions Unit ID: **F001**

$$E = (10) (6.4/12)^{0.8} \times (30/3)^{0.5} / (0.2/0.2)^{0.4} = 19.13 \text{ lbs/VMT}$$

Vehicle miles traveled (VMT) = 160 tons/hr x 1500 hrs/yr x 1 load/30 tons x 1 mile roadway x 2
 (aggregate delivered and asphalt shipped) = 16,000 miles/yr

$$\text{Emissions} = (19.13 \text{ lbs/VMT}) \times (16,000 \text{ VMT}) \times (1 \text{ ton}/2000 \text{ lbs}) \times (1 - 0.70) = 45.9 \text{ tons/yr}$$

Where:

k is a constant, 10 for PE

s is the surface material silt content, 6.4

a is a constant, 0.8

W is the mean vehicle weight, in tons (30)

b is a constant, 0.5

m is the surface material moisture content % (2.0%)

c is a constant, 0.4

VMT = 16,000 miles

CE is the control efficiency for watering, conservatively estimated at 70%.

F. Miscellaneous Requirements

1. None

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

A. Applicable Emissions Limitations and/or Control Requirements

- The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, <u>and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-17-08(B)(6)
F002 - Load in and load out of storage piles supporting the asphalt plant.	OAC rule 3745-31-05(A)(3)	
Wind erosion from storage piles.	OAC rule 3745-31-05(A)(3)	
Load-in and load-out of storage piles, and wind erosion from storage piles.	OAC rule 3745-17-07(B)(6)	

Applicable Emissions
Limitations/Control Measures

6.6 tons per year of particulate emissions (PE).

No visible emissions except for a period of time not to exceed one minute in any hour.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Additional Terms and Conditions A.2.b, A.2.c, and A.2.f.

No visible emissions except for a period of time not to exceed one minute in any hour.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Additional Terms and Conditions A.2.d through A.2.f.

The limits based on OAC rule 3745-17-07 are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3).

The limits based on OAC rule 3745-17-08 are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a All storage piles at the facility are covered by this permit and subject to the above-mentioned requirements.
- 2.b The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to minimize drop height to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- 2.d The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to minimize drop height to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.f Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

B. Operational Restrictions

- 1. 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 at the facility on a daily basis.
2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile at the facility on a daily basis.
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 at the facility on a daily basis.
4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the Ohio EPA, Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
7. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control

measure(s).

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

D. Reporting Requirements

1. 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. Emissions Limitation:

No visible emissions from load in and load out operations and/or from wind erosion, except for a period of time not to exceed one minute in any hour.

Applicable Compliance Method:

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").

2. Emissions Limitation:

6.6 tons per year of PE

Applicable Compliance Method:

Compliance shall be based on a one-time calculation based on the most recent revisions to AP-42

Emissions Unit ID: **F002**

Chapter 13.2.4, equation 1 (currently January 1995). The calculation is as follows, and is equivalent to the emissions unit's annual potential to emit:

$$E_L = (k) \times (0.0032) \times (U/5)^{1.3} \times [1 / (M/2)^{1.4}]$$

$$E_L = 0.74 (0.0032) \times (11.3/5)^{1.3} \times [1 / (2/2)^{1.4}] = 0.00683 \text{ lb/ton}$$

Emissions from load-in/load-out operations = 0.00683 lb/ton x (4 piles) x (160 tons/hr) x (1,500 hrs/yr) x (1 ton/2000 lbs) = 3.28 tons/yr

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

$$E_w = 1.7 \times (6.4/1.5) \times (365-164.7/235) \times (44.48/15) = 18.3 \text{ lbs/day/acre}$$

Emissions from wind erosion = 18.3 lbs/day/acre x 365 day/yr x 1 ton/2000 lbs = 3.34 tons/yr

Total emissions = 3.28 tons + 3.34 tons = 6.6 tons/yr

Where:

E_L is the emission factor from load-in/load-out operations, in tons per year

E_w is the emission factor from wind erosion of active storage piles, in lbs/day/acre

k is a constant (0.74 for PE)

s is the silt content of aggregate (6.4%)

p is the number of days with less or equal to 0.25mm (0.01 inch) of precipitation per year (164.7 for Erie, PA)

f is the % of time that the unobstructed wind speed exceeds 5.4 m/second (12 mi/hr) at the mean of the pile height (44.48 for Erie, PA)

U is the mean wind speed (11.3 for Erie, PA)

M is the moisture content (2.0%)

160 is the maximum process rate, in tons per hour

1,500 is the permit allowable total annual operating hours

2,000 is the conversion to tons

F. Miscellaneous Requirements

1. 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>
P901 - 160 TPH Counterflow Drum Mix plant. Burner size is 50 mmbtu/hr. Two-drum inline system with separate drying and mixing drums. Manufacturer is ADM (Asphalt Drum Mixers). Baghouse flow rate is 30,000 ACFM pulse jet dry filter system baghouse. Two 100 ton asphalt silos.	OAC rule 3745-31-05 (A)(3)
Aggregate handling (load in to hoppers)	NSPS (40 CFR Part 60, Subpart I)
	OAC rule 3745-35-07(B)

		<p style="text-align: center;"><u>Applicable Emissions Limitations/Control Measures</u></p>
	OAC rule 3745-17-07(B)	<p>Emissions from the asphalt drum mixer and silos shall not exceed the following limits:</p> <p>20.8 lbs CO/hr 1.8 lbs SO₂/hr 4.2 lbs NO_x/hr 7.0 lbs OC/hr 11.2 lbs PE/hr (Particulate emissions)</p>
OAC rule 3745-21-08(B)		
OAC rule 3745-21-07(B)		
OAC rule 3745-23-06(B)	OAC rule 3745-17-07(A)(1)	<p>The requirements of this rule also include compliance with the requirements of 40 CFR 60 subpart I.</p>
OAC rule 3745-18-06		
	OAC rule 3745-17-11(B)	<p>PE shall not exceed 0.04 gr/dscf of exhaust gases.</p>
OAC rule 3745-17-08(B)		<p>Visible particulate emissions from the asphalt drum mix stack shall not exceed 20% opacity.</p>
		<p>Emissions from the asphalt drum mixer and silos shall not exceed the following limits:</p>
		<p>15.6 tons CO per rolling 12 months 1.3 tons SO₂ per rolling 12 months 6.6 tons NO_x per rolling 12 months 5.3 tons OC per rolling 12 months 8.4 tons PE per rolling 12 months</p>
		<p>Operating hours shall be limited to 1,500 hours per rolling 12 months.</p>
		<p>See A.2.b.</p>

See A.2.b.

See 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).

Minimize visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper, opacity shall not exceed 10 percent.

Visible particulate emissions from material transfer shall not exceed 20% opacity.

The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the elevator loading area.

The aggregate loaded into the storage bins shall have a moisture content sufficient to minimize the visible emissions of fugitive dust from conveyors and transfer points to the dryer.

The visible particulate emissions limitation for fugitive dust, as specified by this rule, is less stringent than the emission limitation established pursuant to OAC rule 3745-17-08(B).

The visible particulate emissions limitation for the stack, as specified by this rule, is less stringent than the emission limitation established pursuant to 40 CFR 60, Subpart I.

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

- 2.a** Best Available Technology (BAT) for the asphalt plant includes the following construction features:
- i. use of a Hauck Eco-Star low oxides of nitrogen (NOx) and low carbon monoxide (CO) burner, or equivalent; and
 - ii. installation of "blue smoke" preventing equipment.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) and the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.
- 2.c** The permittee shall use only natural gas or #2 fuel oil. Used (waste) oil shall not be used in this unit.
- 2.d** The permittee shall ensure that the baghouse is operated with sufficient air volume to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible with good engineering design.

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 3.0 to 8.0 inches of water while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual.
2. The maximum hours of operation for this emissions unit shall not exceed 1,500 hours per rolling, 12-month summation of the monthly hours of operation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Operation, hours/yr</u>
1	360

1-2	720
1-3	1,080
1-4	1,440
1-5	1,500
1-6	1,500
1-7	1,500
1-8	1,500
1-9	1,500
1-10	1,500
1-11	1,500
1-12	1,500

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual hours of operation limitation shall be based upon a rolling, 12 month cumulative summation of the operating hours.

3. The source comprising this permit to install shall combust only natural gas, or #2 fuel oil of no more than 0.5% sulfur content by weight. Combustion of any other fuel will constitute a violation of this term.
4. Use of any other material, except virgin aggregate will require a modification to this permit; reclaimed asphalt pavement (RAP) shall not be used in this emissions unit.
5. All aggregate transferred to the elevated storage bins shall contain sufficient moisture so as to minimize or eliminate visible emissions of fugitive dust.
6. During the loading of the aggregate conveyor or storage bins, the drop height of the front-end loader shall be minimized in order to minimize or eliminate the visible emissions of fugitive dust. The cold aggregate elevator shall be covered at all times.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each month;
 - b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month; and
 - c. beginning after the first 12 calendar months of operation following the issuance of this

permit, the rolling, 12-month cumulative summation of the operating hours.

2. The permittee shall maintain monthly records of the rolling 12-month cumulative summation of asphalt produced (in tons) and the cumulative rolling 12-month emissions, calculated as required in the testing section.
3. The permittee shall record the pressure drop across the baghouse, while the emissions unit is in operation, on a daily basis.
4. The permittee shall collect or require the oil supplier to collect a representative grab sample of each shipment of #2 fuel oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analysis for sulfur content (percent) and heat content (Btu/gallon) in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Ohio EPA Northeast District Office. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, and the permittee's or oil supplier's analyses for sulfur content and heat content.
5. The permittee shall maintain records of the daily average operating temperature in degrees Fahrenheit.
6. The permittee shall maintain records of the daily peak production rate in tons per hour.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels, as per Section B.2.
3. The permittee shall submit deviation (excursion) reports that identify any exceedance of the cumulative rolling, 12-month emission limitations.
4. The permittee shall submit deviation (excursion) reports which identify any exceedances of the allowable sulfur content (percent) of the #2 fuel oil.
5. The permittee shall submit deviation (excursion) reports which identify any exceedances of the maximum allowable operating temperature (degrees Fahrenheit), as established during the most recent

stack test that demonstrated the emissions unit to be in compliance.

6. The permittee shall submit deviation (excursion) reports which identify any exceedances of the maximum allowable operating production rate (tons per hour), from that which was established during the most recent stack test, that demonstrated the emissions unit to be in compliance.
7. The permittee shall submit deviation (excursion) reports which identify the use of RAP or any material other than virgin aggregate. The date and amount of material used shall be included in the quarterly report.
8. The permittee shall submit deviation (excursion) reports that identify any time period when the opacity limit is exceeded from the asphalt mix stack; and/or from fugitive emissions from material transfer and/or from the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper(s).
9. The reports denoted by terms D.1. through D.8. are to be submitted quarterly and due by the dates and as described in the General Terms and Conditions of this permit under Part 1, Section (A)(2).
10. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or #2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
11. Except as otherwise provided in the terms and conditions of this permit, the permittee shall submit 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 record keeping requirements specified in this permit, (b) the probable cause of such deviations and, (c) any corrective actions or preventative measures that have been or will be take, shall be submitted to the Ohio EPA's Northeast District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.
12. This emissions unit is subject to the applicable provisions of Subpart I of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

- a. construction date (no later than 30 days after such date);
- b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. actual start-up date (within 15 days after such date); and
- d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
 DAPC- Air Quality Modeling and Planning
 Lazarus Government Center
 122 S. Front St.
 Columbus, OH 43215

and

Northeast District Office
 Division of Air Pollution Control
 2110 E. Aurora Rd.
 Twinsburg, OH 44087

E. Testing Requirements

- 1. Emission Limitation:

0.04 grain of particulate matter per dry standard cubic foot

Applicable Compliance Method:

Compliance shall be determined by emission testing as specified in section E.15.

- 2. Emission Limitation:

11.2 pounds of particulate matter per hour

Applicable Compliance Method:

Compliance shall be determined by emission testing as specified in section E.15.

- 3. Emission Limitation:

8.4 tons of particulate emissions per rolling 12 months

Applicable Compliance Method:

Compliance shall be determined based upon the following formula:

$$E = A \times B [1 \text{ ton} / 2,000 \text{ lbs}]$$

Where:

E = particulate matter emission rate in tons per rolling 12-month period

A = emission rate as determined during the most recent stack test that demonstrated the emission unit to be in compliance, in pounds per hour (lbs/hr)

B = rolling 12-month summation of operating hours

4. Emission Limitation:

4.2 pounds of NO_x per hour

Applicable Compliance Method:

Compliance shall be determined by emission testing as specified in section E.15.

5. Emission Limitation:

6.6 tons of NO_x per rolling 12 months

Applicable Compliance Method:

Compliance shall be determined based upon the following formula:

$$E = A \times B [1 \text{ ton} / 2,000 \text{ lbs}]$$

Where:

E = NO_x emission rate in tons per rolling 12-month period

A = emission rate as determined during the most recent stack test that demonstrated the emission unit to be in compliance, in pounds per hour (lbs/hr)

B = rolling 12-month summation of operating hours

6. Emission Limitation:

20.8 pounds of CO per hour

Applicable Compliance Method:

Compliance shall be determined by emission testing as specified in section E.15.

7. Emission Limitation:

15.6 tons of CO per rolling 12 months

Compliance shall be determined based upon the following formula:

$$E = A \times B [1 \text{ ton} / 2,000 \text{ lbs}]$$

Where:

E = CO emission rate in tons per rolling 12-month period

A = emission rate as determined during the most recent stack test that demonstrated the emission unit to be in compliance, in pounds per hour (lbs/hr)

B = rolling 12-month summation of operating hours

8. Emission Limitation:

1.8 pounds of SO₂ per hour

Applicable Compliance Method:

Compliance shall be determined by emission testing as specified in section E.15.

9. Emission Limitation:

1.3 tons of SO₂ per rolling 12 months

Compliance shall be determined based upon the following formula:

$$E = A \times B [1 \text{ ton} / 2,000 \text{ lbs}]$$

Where:

E = SO₂ emission rate in tons per rolling 12-month period

A = emission rate as determined during the most recent stack test that demonstrated the emission unit to be in compliance, in pounds per hour (lbs/hr)

B = rolling 12-month summation of operating hours

10. Emission Limitation:

7.0 pounds of OC per hour

Applicable Compliance Method:

Compliance shall be determined by emission testing as specified in section E.15.

11. Emission Limitation:

5.3 tons of OC per rolling 12 months

Compliance shall be determined based upon the following formula:

$$E = A \times B [1 \text{ ton} / 2,000 \text{ lbs}]$$

Where:

E = OC emission rate in tons per 12-month rolling period

A = emission rate as determined during the most recent stack test that demonstrated the emission unit to be in compliance, in pounds per hour (lbs/hr)

B = rolling 12-month summation of operating hours

12. Emission Limitation:

Visible particulate emissions from the asphalt drum mixer stack shall not exceed 20% opacity.

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

13. Emission Limitation:

Visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper shall not exceed 10 percent opacity.

Applicable Compliance Method:

Compliance shall be demonstrated by use of good engineering practices for the operations of this equipment. If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

14. Emission Limitation:

Visible emissions of fugitive dust from material transfer shall not exceed 20 percent opacity.

Applicable Compliance Method:

Compliance shall be demonstrated by use of good engineering practices for the operations of aggregate transfer equipment and storage bins. If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

15. The permittee shall conduct an initial emissions stack test for particulate, NO_x, organic compounds (OC), CO, sulfur dioxide (SO₂), and visible emissions while burning #2 fuel oil. The test shall be performed at an operating temperature and production rate that the permittee wishes to establish as the unit operating temperature and maximum production rate.

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 3 months after startup of this emissions unit.
- b. The test shall be performed while burning #2 fuel oil.
- c. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates, NO_x, CO, OC, SO₂, and for visible emissions.
- d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Particulates	-	Method 5 of 40 CFR Part 60, Appendix A
NO _x	-	Method 7, 7E of 40 CFR Part 60, Appendix A
CO	-	Method 10 of 40 CFR Part 60, Appendix A
OC	-	Method 18, 25, or 25A of 40 CFR Part 60, Appendix A
SO ₂	-	Method 6 of 40 CFR Part 60, Appendix A
Visible emissions		Method 9 of 40 CFR Part 60, Appendix A

- e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office, prior to test day.
- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).
- g. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to

Emissions Unit ID: **P901**

ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

- h. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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>
T001 - 20,000 gallon asphalt storage tank	OAC rule 3745-31-05(A)(3) 40 CFR 60, Subpart Kb	OC emissions shall not exceed 0.1 ton per year. Submerged fill Record keeping (See Monitoring and/or Record Keeping Requirement C.2 below)

2. Additional Terms and Conditions

2.a None

B. Operational Restrictions

- The permittee shall store only asphaltic concrete in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

- The permittee shall maintain records of the throughput of the asphaltic concrete stored in the tank (in gallons per calendar year).
- In accordance with 40 CFR 60.116b (a) and (b), the owner and operator of this emissions unit shall keep readily accessible records showing the dimensions of the emissions unit and an analysis showing the capacity of the emissions unit.

D. Reporting Requirements

1. The permittee shall submit deviation reports that identify the use of any material, other than asphaltic concrete, in this tank. Each report shall be submitted within 30 days after the deviation occurs.
2. This emissions unit is subject to the applicable provisions of Subpart Kb of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

- a construction date (no later than 30 days after such date);
- b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. actual start-up date (within 15 days after such date); and
- d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC- Air Quality Modeling and Planning
Lazarus Government Center
122 S. Front St.
Columbus, OH 43215

and

Northeast District Office
Division of Air Pollution Control
2110 E. Aurora Rd.
Twinsburg, OH 44087

E. Testing Requirements

1. Emission Limitation:

Velotta Paving Co Inc
PTI Application: 02 16122
Issued

Facility ID: 0204010445

Emissions Unit ID: T001

0.1 ton per year of OC emissions

Applicable Compliance Method:

To demonstrate compliance with the annual limit of 0.1 ton per year of OC emissions, the permittee shall calculate the annual OC emissions in ton per year using the most recent version of USEPA's tanks software (4.08 or later revision).

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Velott

PTI A

Issued: 6/25/2002

Emissions Unit ID: **T001**

F. Miscellaneous Requirements

1. None