



State of Ohio Environmental Protection Agency

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

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-14432

DATE: 1/9/2001

Unilock Ohio Inc
Mike McIntyre
12560 Sheets Rd
Rittman, OH 44270

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

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

FINAL PERMIT TO INSTALL 02-14432

Application Number: 02-14432
APS Premise Number: 0285020406
Permit Fee: **\$2000**
Name of Facility: Unilock Ohio Inc
Person to Contact: Mike McIntyre
Address: 12560 Sheets Rd
Rittman, OH 44270

Location of proposed air contaminant source(s) [emissions unit(s)]:
12560 Sheets Rd
Rittman, Ohio

Description of proposed emissions unit(s):
Concrete mixer, tumbler, 2 cement storage silos.

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

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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

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Environmental Protection Agency if the proposed sources are inadequate 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 prove to be inadequate 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.

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14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	1.13

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 - Concrete paver manufacturing plant consisting of cement silo #1 and #2, each controlled by a fabric filter, a mixing operation controlled by a fabric filter and a tumbler, uncontrolled.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-08 OAC rule 3745-17-11(A)(1)(f)	See A.2.a, A.2.b, A.2.c, A.2.d and A.2.e below. The requirements of this rule are not applicable as the facility is not located in an Appendix A area. The requirements of this rule are not applicable as the emissions unit is subject to OAC rule 3745-17-08.

2. Additional Terms and Conditions

- 2.a The visible emissions from any building open shall not exceed 5% opacity, on a three-minute average.
- 2.b The visible emissions from cement silo #1 vent shall not exceed 5% opacity, on a three-minute average.
- 2.c The visible emissions from cement silo #2 vent shall not exceed 5% opacity, on a three-minute average.
- 2.d The visible emissions from the cement paver tumbler shall not exceed 5% opacity, on a three-minute average.
- 2.e Particulate emissions shall not exceed 1.13 tons per year.

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Emissions Unit ID: F001

B. Operational Restrictions

1. The cement silo #1 vent and the cement silo #2 vent shall be controlled by a fabric filter or similar control device at all times the cement silos are loaded or unloaded.
2. The cement mixer shall be controlled by a fabric filter or similar control device at all times the cement mixer is loaded or in operation.
3. The permittee shall apply water as a dust suppressant to the cement pavers prior to the introduction into the tumbler.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document:
 - a. all times when the cement silo #1 vent was not controlled by a fabric filter while the source was in operation;
 - b. all times when the cement silo #2 vent was not controlled by a fabric filter while the source was in operation;
 - c. all times when the cement mixer was not controlled by a fabric filter while the source was in operation; and
 - d. all times when water was not used a dust suppressant in the tumbler.

D. Reporting Requirements

1. The permittee shall notify the Director (Ohio EPA, Northeast District Office) in writing of any daily record showing that:
 - a. the cement silo #1 vent was not controlled by a fabric filter while the source was in operation;
 - b. the cement silo #2 vent was not controlled by a fabric filter while the source was in operation;
 - c. the cement mixer was not controlled by a fabric filter while the source was in operation; and

- d. water was not used a dust suppressant in the tumbler.

The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emissions limits in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:
1.13 tons per year of particulate emissions.

Applicable Compliance Method:

Compliance with this emissions limit shall be the sum of the emissions from silo #1, silo #2, sand and gravel bins, weigh bins, mixer and tumbler and shall be determined according to the sum of the following equations:

Cement silo #1 = $(0.24 \text{ lb/ton product}) \times (5880 \text{ tons/yr}) \times (\text{ton}/2000 \text{ lbs}) \times (1-0.99)$

Cement silo #2 = $(0.24 \text{ lb/ton product}) \times (5880 \text{ tons/yr}) \times (\text{ton}/2000 \text{ lbs}) \times (1-0.99)$

Sand & gravel bins = $(67,642 \text{ tons /yr}) \times (0.029 \text{ lb/hr}) \times (\text{ton}/2000 \text{ lbs}) \times (1-0.70)$

Weigh hopper = $(0.02 \text{ lb/ton product}) \times (30 \text{ tons product/hr}) \times (\text{ton}/2000 \text{ lbs}) \times (8760 \text{ hr/yr}) \times (1-0.70)$

Mixer = $(84,000 \text{ tons/yr}) \times (0.04 \text{ lb PM/ton mixed}) \times (\text{ton}/2000 \text{ lbs PM}) \times (1-0.99)$

Tumbler = $(0.00070 \text{ lb/ton}) \times (42,588 \text{ tons/yr}) \times (\text{ton}/2000 \text{ lbs})$

Where:

0.24 lb/ton product is the emissions factor from AP-42, Chapter 11.12 "Concrete Batching" 10/86, cement unloading to elevated storage silo, bucket elevator;

5880 tons per year is the maximum concrete loaded into the silo;

99% is the control efficiency of the fabric filter controlling the silo vent;

67,642 tons per year is the maximum sand and gravel loaded into the bins;

0.029 lb/ton product is the emission factor from AP-42, Chapter 11.12 "Concrete Batching" 10/86, sand and aggregate transfer to elevated bin;

70% is the control efficiency of a total enclosure without a fabric filter according to RACM table,

0.02 lb/ton product is the emissions factor from AP-42, Chapter 11.12 "Concrete Batching" 10/86, weigh hopper loading;

30 tons per hour is the maximum process rate of the weigh hopper loading;

84,000 tons per year is the maximum process rate of the mixer;

0.04 lb/ton product is the emissions factor from AP-42, Chapter 11.12 "Concrete Batching" 10/86, mixer loading;

99% is the control of the fabric filter on the mixer vent;

0.00070 lb/ton is the emissions factor from AP-42, Chapter 11.19.2 "Crushed Stone

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Emissions Unit ID: F001

Processing"1/95, Primary Crushing; and
42,588 tons/yr is the maximum process weight rate of the tumbler.

- b. Emissions Limitation:
Visible emissions shall not exceed 5% opacity from any building opening, on a 3-minute average.
- Compliance shall be determined by US EPA Method 9, (40 CFR Part 60, Appendix A).
- c. Emissions Limitation:
Visible emissions shall not exceed 5% opacity from cement silo #1 vent, on a 3-minute average.
- Applicable Compliance Method:
Compliance shall be determined by US EPA Method 9, (40 CFR Part 60, Appendix A).
- d. Emissions Limitation:
Visible emissions shall not exceed 5% opacity from cement silo #2 vent, on a 3-minute average.
- Applicable Compliance Method:
Compliance shall be determined by US EPA Method 9, (40 CFR Part 60, Appendix A).
- e. Emissions Limitation:
Visible emissions shall not exceed 5% opacity from the cement paver tumbler, on a 3-minute average.
- Applicable Compliance Method:
Compliance shall be determined by US EPA Method 9, (40 CFR Part 60, Appendix A).

F. Miscellaneous Requirements

None.

NEW SOURCE REVIEW FORM B

PTI Number: 02-14432 Facility ID: 0285020406

FACILITY NAME Unilock Ohio Inc

FACILITY DESCRIPTION Concrete Paver Manufacturing Facility CITY/TWP Rittman

SIC CODE 3271 SCC CODE 33-05-011-07 EMISSIONS UNIT ID F001

EMISSIONS UNIT DESCRIPTION Concrete paver manufacturing plant consisting of two cement silos and a mixing operation.

DATE INSTALLED 9/99

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	N/A	0.436	N/A	1.13
PM ₁₀					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

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

less than 5% opacity as a 3-minute average from any emission point, based on similar sources and engineering judgement.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

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

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-14432 Facility ID: 0285020406

FACILITY NAME Unilock Ohio Inc

FACILITY DESCRIPTION Concrete Paver Manufacturing Facility CITY/TWP Rittman

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

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

	<u>Electronic</u>	<u>Additional information File Name Convention (your PTI # plus this letter)</u>	<u>Hard Copy</u>	<u>None</u>
<u>Calculations (required)</u>	<input checked="" type="checkbox"/>	0214432c.wpd	<input type="checkbox"/>	
<u>Modeling form/results</u>	<input type="checkbox"/>	0000000s.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>PTI Application (complete or partial)*</u>	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>BAT Study</u>	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Other/misc.</u>	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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

NSR Discussion

NONE

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

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

- A. Source Description
- 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>
<u>PM</u>	<u>1.13</u>

NEW SOURCE REVIEW FORM B

PTI Number: 02-14432

Facility ID: 0285020406

FACILITY NAME Unilock Ohio Inc

FACILITY DESCRIPTION Concrete Paver Manufacturing Facility CITY/TWP Rittman