



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
WOOD 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: 03-13921

DATE: 1/23/2003

Turner Vault Company
Steven Turner
1021 Warwick Drive
Toledo, OH 43607

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,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

NWDO



**Permit To Install
Terms and Conditions**

**Issue Date: 1/23/2003
Effective Date: 1/23/2003**

FINAL PERMIT TO INSTALL 03-13921

Application Number: 03-13921
APS Premise Number: 0387000390
Permit Fee: **\$2000**
Name of Facility: Turner Vault Company
Person to Contact: Steven Turner
Address: 1021 Warwick Drive
Toledo, OH 43607

Location of proposed air contaminant source(s) [emissions unit(s)]:
**2221 Tracy Road
Northwood, Ohio**

Description of proposed emissions unit(s):
Cement silo, aggregate bins, paddle mixer.

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 ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

6

Turner Vault Company
PTI Application: 03-13921
Issued: 1/23/2003

Facility ID: 0387000390

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>
Particulate Emissions (PE) - stack	0.04
PE - fugitive	4.41

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>	OAC rule 3745-17-11(B)
P901 - sand and aggregate transfer to 2 indoor, underground storage bins; cement unloading to outdoor storage silo	See Below	
sand and aggregate transfer to 2 indoor, underground storage bins	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-17-07(B)	
	OAC rule 3745-17-08(A)	
cement unloading to outdoor storage silo	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-17-07(A)	

Applicable Emissions
Limitations/Control Measures

See Below

control requirements (see A.2.a.ii)

0.76 ton fugitive PE/year

visible fugitive particulate emissions shall not exceed 20% opacity as a three-minute average

see A.2.e

see A.2.d

control requirements (see A.2.a.i)

Stack Emissions: 0.01 pound PE/hour; 0.04 ton PE/year

see A.2.c

visible particulate stack emissions shall not exceed 20% opacity as a six-minute average.

see A.2.b

2. Additional Terms and Conditions

2.a "Best Available Technology" (BAT) control requirements for emissions unit P901 have been determined to be the following:

- i. Use of a baghouse (filter "sock") for pneumatic unloading of cement. The

baghouse shall achieve a 99.9 percent removal efficiency (100 percent capture).

- ii. Use of permanent total enclosure around fugitive particulate emissions operations.
- 2.b** The emission limitations established by this rule are less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
 - 2.c** The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
 - 2.d** This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B).
 - 2.e** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

B. Operational Restrictions

1. The annual throughput of sand and aggregate transferred to 2 indoor, underground storage bins shall not exceed 175,200 tons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack (fabric "sock") and for any visible fugitive particulate emissions from the permanent total enclosure around fugitive particulate emissions operations. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and

- e. any corrective actions taken to eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of the corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall collect and record the following information each month:
 - a. the total tons per month of sand and aggregate transferred to 2 underground bins;
 - b. the annual, year to date, tons of sand and aggregate transferred to 2 underground bins (sum of "a") for each calendar month to date from January to December;

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack (fabric "sock") serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the permanent total enclosure around fugitive particulate emissions operations and (c) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual deviation (excursion) reports which identify any exceedances of the annual throughput of sand and aggregate transferred to 2 indoor, underground storage bins of 175,200 tons. If no deviations occurred during the calendar year, the permittee shall submit an annual report which states that no deviations occurred during the calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:
0.76 ton fugitive PE/year from sand and aggregate transfer to 2 underground bins

Applicable Compliance Method:

The emission limitation was established by multiplying a maximum annual throughput of sand and aggregate transferred of 175,200 tons/year, the appropriate emission factor from AP-42 Table 11.12-2, revised 10/1986 (0.029 pound PE/ton), applying a control efficiency of 70% for total enclosure and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the annual throughput of sand and aggregate transferred, compliance with the fugitive PE emission limitation will be assumed. Compliance with the annual throughput of sand and aggregate transferred shall be demonstrated by the monitoring and recordkeeping in Section C.2.

- b. Emission Limitation:
0.01 pound PE/hour, 0.04 ton PE/year stack emissions from cement unloading to storage silo

Applicable Compliance Method:

The hourly PE limitation is based on the emissions unit's potential to emit*. Therefore, no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation. If required, testing shall be performed in accordance with 40 CFR Part 60 Appendix A-Methods 1 - 5.

*The potential to emit for this emissions unit was determined by multiplying the maximum amount of cement unloaded (50 tons/hour) by the appropriate emission factor from AP-42 Table 11.12-2, revised 10/1986 (0.27 pound PE/ton), and applying a control efficiency of 99.9% for use of a fabric "sock".

The annual emission limitation was developed by multiplying the pound/hour emission limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance with the hourly limitation is maintained, compliance with the annual limitation shall be ensured.

- c. Emission Limitation:
visible particulate stack emissions shall not exceed 20% opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated using test method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 1996, with the modifications in

paragraphs (a) and (b) of OAC rule 3745-17-03 (B)(3).

- d. Emission Limitation:
visible particulate stack emissions shall not exceed 20% opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated using test method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 1990.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P902 - weigh hopper loading and paddle mixer loading.	OAC rule 3745-31-05(A)(3)	control requirements (see A.2.a) 3.65 tons fugitive PE/year There shall be no visible PE from the total enclosure for fugitive PE operations associated with weigh hopper loading and paddle mixer loading
	OAC rule 3745-17-07(B)	see A.2.c
	OAC rule 3745-17-08(A)	see A.2.b

2. Additional Terms and Conditions

- 2.a "Best Available Technology" (BAT) control requirements for emissions unit P902 have been determined to be use of a permanent total enclosure around fugitive particulate emission operations associated with weigh hopper loading and paddle mixer loading.
- 2.b This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B).
- 2.c This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

B. Operational Restrictions

1. The annual throughput of material loaded into the weigh hopper shall not exceed 166,440 tons.
2. The annual throughput of material loaded into the paddle mixer shall not exceed 1,051,200 tons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month:
 - a. the total tons per month of material loaded into the weigh hopper;
 - b. the annual, year to date, tons of material loaded into the weigh hopper (sum of "a") for each calendar month to date from January to December;
 - c. the total tons per month of material loaded into the paddle mixer; and,
 - d. the annual, year to date, tons of material loaded into the mixer (sum of "c") for each calendar month to date from January to December.
2. The permittee shall perform daily checks when the emissions unit is in operation, and when weather conditions allow, for any visible particulate emissions from the total enclosure for fugitive PE operations associated with weigh hopper loading and paddle mixer loading. The presence of absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. any corrective actions taken to minimize or eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit annual deviation (excursion) reports which identify any exceedances of the annual throughput of material loaded into the weigh hopper of 166,440 tons. If no deviations occurred during the calendar year, the permittee shall submit an annual report which states that no deviations occurred during the calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

2. The permittee shall submit annual deviation (excursion) reports which identify any exceedances of the annual throughput of material loaded into the paddle mixer of 1,051,200 tons. If no deviations occurred during the calendar year, the permittee shall submit an annual report which states that no deviations occurred during the calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the total enclosure for fugitive PE operations associated with weigh hopper loading and paddle mixer loading and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
3.65 tons fugitive PE/year

Applicable Compliance Method:

The emission limitation was established by combining the uncontrolled emissions from weigh hopper loading and paddle mixer loading operations and applying a 70% control efficiency for use of a total enclosure.

Uncontrolled emissions from weigh hopper loading were calculated by multiplying a maximum annual throughput of 166,440 tons/year by the appropriate emission factor from AP-42 Table 11.12-2, revised 10/1986 (0.02 pound PE/ton, and dividing by a conversion factor of 2000 pounds/ton.

Uncontrolled emissions from paddle mixer loading were calculated by multiplying a maximum annual throughput of 1,051,200 tons/year by the appropriate emission factor from AP-42 Table 11.12-2, revised 10/1986 (0.02 pound PE/ton), and dividing by a conversion factor of 2000 pounds/ton.

Therefore, provided compliance is shown with the annual throughputs for weigh hopper and paddle mixer loading, compliance with the fugitive PE emission limitation will be assumed. Compliance with the annual throughputs of weigh hopper and paddle mixer

loading shall be demonstrated by the monitoring and recordkeeping in Section C.1.

- b. Emission Limitation:
There shall be no visible PE from the total enclosure for fugitive PE operations associated with weigh hopper loading and paddle mixer loading

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this visible PE limitation by using U.S. EPA Method 22, which is located in 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

None