OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

Re: Permit to Install
Summit County
Application No: 16-1786
SYNTHETIC MINOR

CERTIFIED MAIL

July 1, 1998

OWENS CORNING - TALLMADGE
BRUCE KLINE
PO BOX 37, 170 SOUTH AVE
TALLMADGE, OH 44278

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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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

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

cc: AKRON METRO AREA TRANS STUDY

cc: US EPA
AKRON AIR POLLUTION CONTROL

OhioEPA

State of Ohio Environmental Protection Agency

Permit to Install
Terms and Conditions

Application No. 16-1786
APS Premise No. 1677120043
Permit Fee: $200.00

Name of Facility: OWENS CORNING - TALLMADGE

Person to Contact: BRUCE KLINE

Address: PO BOX 37, 170 SOUTH AVE
TALLMADGE, OH 44278

Location of proposed source(s): 170 SOUTH AVENUE
TALLMADGE, OHIO

Description of proposed source(s):
NORTEX GRINDER - RECYCLED POLYSTYRENE FROM DENSIFIED SCRAP F
OAM MATERIALS.

Date of Issuance: July 1, 1998

Effective Date: July 1, 1998

The above named entity is hereby granted a permit to install for the above described source(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 source(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 source(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

Donald R. Schregardus

Director

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(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 are inadequate or cannot meet applicable standards.

If the construction of the proposed source(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 Ohio Administrative Code (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 applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

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.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

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.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION 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 and regulations.

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for OWENS CORNING - TALLMADGE located in Summit County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio EPA Source Number	Source Identification Description	BAT Determination	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage Requirements
P012	Vortex Grinder-Recycled polystyrene from densified scrap foam materials.	Baghouse filter - No photochemically reactive materials.	3745-31-05 3745-17-07 3745-17-11 3745-21-07 (G)	20% opacity as a six-minute average. 3.82 lbs/hr PM (Table 1 - 1800 lbs/hr maximum rate) 16.73 TPY PM 35.26 lbs/hr OC 3.98 TPY OC

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
OC	3.98
PM	16.73

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to Akron Air Pollution Control, 146 South High St., Room 904, Akron, Ohio 44308.

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the Akron Air Pollution Control, 146 South High St., Room 904, Akron, Ohio 44308.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

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.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 0.5 and 2.0 inches of water while the emissions unit is in operation.

2. The maximum annual polystyrene usage for this emissions unit shall not exceed 200,000 pounds R&D scrap polystyrene foam and 3,120,000 pounds scrap expanded polystyrene foam, based upon a rolling, 12-month summation of the polystyrene foam usage figures.

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

Month(s)	Maximum Allowable R&D Scrap Polystyrene (PS) (Pounds)	Maximum Allowable Scrap Expanded PS (Pounds)
1	25,000	390,000
1-2	50,000	780,000
1-3	75,000	1,170,000
1-4	100,000	1,560,000
1-5	125,000	1,950,000
1-6	150,000	2,340,000
1-7	175,000	2,730,000
1-8	200,000	3,120,000
1-9	200,000	3,120,000
1-10	200,000	3,120,000
1-11	200,000	3,120,000
1-12	200,000	3,120,000

4. After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual polystyrene usage limitation shall be based upon a rolling, 12-month summation of the polystyrene usage figures.

B. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse 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(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

2. The permittee shall maintain monthly records of the following information:

   a. the amount of polystyrene used for each category (R&D scrap foam and scrap expanded foam), in pounds;

b. the number of hours the emission unit was in operation grinding each category of polystyrene foam;

c. the calculated average hourly organic compound emission rate for the polystyrene foam grinding operation, in pounds per hour (average); and,

d. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the PS usage figures.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative PS usage, for each category, for each calendar month.

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 the permit. Such records may be maintained in computerized form.

C. Monitoring Requirements

1. The permittee shall permit pressure drop deviation (excursion reports) that identify that 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 limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative polystyrene usage levels.

3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the permit allowable mass emission rate for organic compounds.

4. 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 Akron Air Pollution Control 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 Akron Air Pollution Control 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.)

D. Testing Requirements

1. Compliance with the emission limitations in permit to install number 16-1786 shall be determined in accordance with the following methods:

   a. Emission Limitation

      20 percent opacity as a 6-minute average

      Applicable Compliance Method

      OAC rule 3745-17-03 (B)(1)

   b. Emission Limitation

      3.82 pounds/hour particulate matter
      (based upon 1800 pounds/hour maximum process rate)

      Applicable Compliance Method

      If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03 (B)(10).

   c. Emission Limitation

      35.26 pounds/hour OC

      Applicable Compliance Method

      The permittee shall maintain records of the monthly usage rate of each category of polystyrene processed, and the hours of operation. Compliance shall be demonstrated by multiplying the maximum hourly usage rate by the appropriate OC emission factor.

R&D scrap PS: 0.0176 pound OC per pound PS processed scrap expanded PS: 0.0014 pound OC per pound PS.

The emission factors were provided by the facility and are based on analytical sampling that was performed on various batched of polystyrene scrap foam.