



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

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

Lazarus Gov.
Center

RE: **FINAL PERMIT TO INSTALL MODIFICATION** CERTIFIED MAIL
LUCAS COUNTY
Application No: 04-00975

DATE: 4/9/2002

Johns Manville Plant 1
Steve Shelt
6050 River Rd
Waterville, OH 43566

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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

TDES



**Permit To Install
Terms and Conditions**

**Issue Date: 4/9/2002
Effective Date: 4/9/2002**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 04-00975

Application Number: **04-00975**
APS Premise Number: **0448000012**
Permit Fee: **\$0**
Name of Facility: **Johns Manville Plant 1 Shelt**
Person to Contact: **Steve**
Address: **6050 River Rd
Waterville, OH 43566**

Location of proposed air contaminant source(s) [emissions unit(s)]:
**6050 River Rd
Waterville, OHIO**

Description of modification:
Administrative modification to update AP42 emission factors.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: **0448000012**

GENERAL PERMIT CONDITIONS

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.

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: 0448000012

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 AND OPERATION AFTER COMPLETION OF CONSTRUCTION

If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 source(s) covered by this permit.

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.

Johns Manville Plant 1

PTI Application: 04-00975

Modification Issued: 4/9/2002

Facility ID: **0448000012**

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: **0448000012**

Ohio EPA Source <u>Number</u>	Source Identification <u>Number</u>	BAT <u>Determination</u>	Applicable Federal & <u>OAC Rules</u>	Permit Allowable Mass Emissions and/or Control/Usage <u>Requirements</u>
--	---	-----------------------------	--	---

AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Johns Manville Plant 1** located in **LUCAS** County. The emissions units 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 <u>Number</u>	P013	Source Identification <u>Description</u>	Furnace 9211 - 150 tons/day textile fiber-glass furnace, forehearth and forming operations
P001		Furnace 9211 - 165 tons/day textile fiber-glass furnace, forehearth and forming operations	
	P013 Cont'd		

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: **0448000012**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
		0.34 lb CO/ton		3745-17-11 (B)
		3.6 lbs NO _x /ton		3745-17-07 (A)(1)
		1.3 lbs PM/ton opacity = 20% as a six-minute average		(a) & (b)
		2.8 lbs So _x /ton ≤.5% S in fuel		3745-18-06 (D)
		1.5 lb VOC/ton		3745-21-07 (B)
		0.24 lb methanol/ton		
			<u>Applicable Federal & OAC Rules</u>	
		0.34 lb CO/ton	3745-31-05	
		3.6 lbs NO _x /ton	3745-21-08 (B)	
		1.3 lbs PM/ton opacity = 20% as a six-minute average	3745-23-06 (B)	
		2.9 lbs SO _x /ton ≤.5% S in fuel	3745-17-11 (B)	
		1.0 lb VOC/ton	3745-17-07 (A)(1)	
		0.15 lb methanol/ton	(a) & (b)	
		1.6 lbs/ton fluorides	3745-18-06 (D)	
			3745-21-07 (B)	

3745-31-05
3745-21-08 (B)
3745-23-06 (B)

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: 0448000012

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
	minute average	9.7 lbs VOC/hr		
	2.8 lbs SO _x /ton	43 tons VOC/yr		
Permit Allowable Mass Emissions and/or Control/Usage Requirements	19 lbs SO _x /hr	0.24 lb methanol/ton		
	84 tons SO _x /yr	0.15 lb methanol/ton		
	≤0.5% S in fuel	1.5 lb methanol/hr		
	1.0 lb VOC/ton	6.6 tons methanol/yr		
	7.3 lbs VOC/hr	1.6 lbs/ton fluorides		
	32 tons VOC/yr	9.8 lbs fluorides/hr		
	0.15 lb methanol/ton	43 tons fluorides/yr		
	1 lb methanol/hr			
	4.5 tons methanol/yr			
0.34 lb CO/ton	1.6 lbs/ton fluorides			
2.3 lbs CO/hr	11 lbs fluorides/hr			
10.2 tons CO/yr	47 tons fluorides/yr			
3.6 lbs NO _x /ton	0.34 lb CO/ton			
24 lbs NO _x /hr	2.1 lbs CO/hr			
107 tons NO _x /year	9.3 tons CO/yr			
	3.6 lbs NO _x /ton			
	22 lbs NO _x /hr			
	98 tons NO _x /year			
1.3 lbs PM/ton	1.3 lbs PM/ton			
9.0 lbs PM/hr	8.2 lbs PM/hr			
39 tons PM/yr	36 tons PM/yr			
opacity = 20% as a six minute average	opacity = 20% as a six minute average			
	2.8 lbs SO _x /ton			
	18 lbs SO _x /hr			
	77 tons SO _x /yr			
	≤0.5% S in fuel			
	1.5 lb VOC/ton			

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: **0448000012**

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>	<u>Allowable-Actual Increase</u>
CO	19.5	15.6
NO _x	205	27
PM	75	0.2 decrease
SO _x	161	25
VOC	75	32
Fluorides	90	0
HAPs (as methanol)	11	4.1

CONSTRUCTION STATUS

The **Toledo Division of Environmental Services** shall be notified in writing as to (a) the construction starting date, (b) the construction completion date, and (c) the date the facilities were placed into operation for the following sources: ****<P001 and P013>****.

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: **0448000012**

PERFORMANCE TEST REQUIREMENTS

The permittee shall conduct, or have conducted, performance testing on the air contaminant source(s) in accordance with procedures approved by the Agency. Two copies of the written report describing the test procedures followed and the results of such tests shall be submitted and signed by the person responsible for the test. The Director, or an Ohio EPA representative, shall be allowed to witness the test, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

- A. A completed Intent to Test form shall be submitted to the appropriate Ohio EPA District Office or Local Air Pollution Control Agency where the original permit application was filed. This notice shall be made 30 days in advance and shall specify the source operating parameters, the proposed test procedures, and the time, date, place and person(s) conducting such tests.
- B. Two copies of the test results shall be submitted within 30 days after the completion of the performance test.
- C. Tests shall be performed for the following source(s) and pollutant(s):

Source

P001 and P013

Pollutant(s)

F
So_x
PM

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio 43602.**

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: **0448000012**

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.

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: **0448000012**

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 **to Toledo Pollution Control Division, 348 South Erie Street, Toledo, Ohio 43602.**

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

1. Production Limitations - a design operating rate maximum of 165 tons per day of glass produced in furnace 9211 (P001) and a maximum of 150 tons per day of glass produced in furnace 9212 (P013) has

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: **0448000012**

been assigned. Any increase in production beyond these rates must be demonstrated, by performance test data, to not exceed the hourly permit allowable emission rates. Any change in operation or modification to this process which may result in an increase in emissions must be reported to the Toledo Division of Environmental Services as required by OAC 3745-31-02(A).

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: 0448000012

2. Fuel Restriction - The sources comprising this permit to install shall combust only natural gas. Combustion of any other fuel will constitute a violation of this term.
3. Opacity Restriction - Maximum discharge opacity from these emission units shall not exceed 20% as a six-minute average, except for 1 six-minute period in any continuous 60 minutes during which opacity shall not exceed 30% as a six-minute average.
4. Routine Maintenance - During routine maintenance of the pollution control equipment, the owner/operator of the sources comprising this permit to install shall be exempted from the stated emission limitations and monitoring requirements if the conditions of OAC 3745-15-06 (A)(3) are met, and:
 - a. Routine maintenance in each calendar year does not exceed 6 days;
 - b. Routine maintenance is conducted in a manner consistent with good air pollution control practices for minimizing emissions;
 - c. A report is submitted to the Toledo Division of Environmental services 10 days before the start of the routine maintenance and the report contains an explanation of the schedule of the maintenance. If 10 days cannot be provided, the report must be submitted as soon as practicable; and
 - d. A report is submitted to the Toledo Division of Environmental Services within 10 days of the completion of the routine maintenance and the report contains the actual pollution control equipment downtime required for the maintenance and an estimation of the quantities of pollutants released during the event.
5. Malfunction Reporting - These emissions units and any associated air pollution control systems shall be maintained regularly in accordance with good engineering practices in order to minimize air contaminant emissions. Any malfunction of these emission units or any associated air pollution control systems shall be reported immediately to the Toledo Division of Environmental Services in accordance with OAC rule 3745-15-06(B). Except as provided in that rule and in special terms and conditions #4, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system shall be accompanied by the shutdown of the emissions units that are served by such control system.
6. Testing Requirements - Within 120 days of process startup, successful compliance testing of the furnace discharge for fluorides, total suspended particulate, and sulfur dioxide shall be performed at a glass pull rate within 90% of the design maximum production rate for both sources. USEPA reference methods 1-4, method 13A or 13B, method 5 modified to include condensible matter as outlined in OEPA engineering guide #40 (attached as Appendix A), and method 6 or 6C shall be followed. Retesting will be required

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: 0448000012

within 6 months prior to permit to operate expiration.

Compliance with the emission limitations will be demonstrated by the simultaneous testing of sources P001 and P013 at the single pollution control device with either test A or test B of the following:

		<u>Fluoride</u>	<u>Particulate¹</u>	<u>SO₂</u>
test A	For either Source	≤0.07 lb/ton	≥0.41 lb/ton	≤2.8 lbs/ton
test B	Removal efficiency, and	60%	-	-
	either production ² rate <90% of maximum rate, or	≤0.24 lb/ton	≥0.41 lb/ton	≤2.8 lbs/ton
	Production rates ² of both ≥ 90% of Maximum rate.	≤3.2 lb/ton	≥5.4 lb/ton	≤37 lbs/ton

¹ defined as the dry filter particulate catch obtained by a Method 5 test at 248±25°F

² production rates and emission limitations are based on tons of glass pulled.

Any alteration to this testing procedure will require previous approval by the Toledo Division of Environmental Services.

7. New Product/Control Equipment Testing - Prior to the initiation of any process change, on-line or off-line testing of a new product, material, control equipment, or process under research and/or development, Schuller International Inc., will submit in writing to the Toledo division of Environmental Services a request to conduct the proposed exercise. This written request shall contain, at a minimum, the following information:

- a description of the proposed process change or research-and-development (R&D) test to be conducted;

Johns Manville Plant 1
PTI Application: 04-00975
Modification Issued: 4/9/2002

Facility ID: 0448000012

- b. the expected length of time the proposed process change or R&D test will take place;
- c. a list of all raw materials and output rate to be used in the proposed process for R&D test;
- d. The nature and estimated quantity of emissions of air contaminants are likely to occur from the proposed process change or R&D test; and
- e. Schuller International Inc., shall notify Toledo Division of Environmental Services of the completion of the process change or R&D test and that the source has returned to normal operating conditions.

This exemption is subject to approval by the director under the requirements of OAC 3745-31-03(A)(2).

- 8. Recordkeeping Requirements - The owner/operator of this source shall maintain the following records for each source identified by this permit to install:
 - 1. the daily production of sources P001 and P013;
 - 2. test reports documenting results of all performance tests;
 - 3. the specific identification of each period of excess emissions that occurs during malfunction of the process, or the air pollution control equipment; and
 - 4. the total process operating time of sources P001 and P013 during the reporting period.

These records shall be maintained for a period of 5 years and will be made available to a representative of the Ohio Environmental Protection Agency, or Toledo Division of Environmental Services during normal working hours.