

Part 70 Operating Permit Amendment

Permit Amendment No.: **3296-013-0005-V-01-1** Effective Date: **August 11, 2004**

Facility Name: **Johns Manville Corp. Winder Facility**

Facility Address 713 Bankhead Hwy
Winder, Georgia 30680 (Barrow County)

Mailing Address: 713 Bankhead Hwy
Winder, Georgia 30680

Parent/Holding Company: Johns Manville Corporation

Facility AIRS Number: 04-13-013-00005

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued an amendment to the Part 70 Operating Permit for:

Authorization to include an oxidation-reduction agent in the raw material mix injected into the glass melters for Line 106.

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit Amendment and Permit No. 3296-013-0005-V-01-0. Unless modified or revoked, this Permit Amendment expires simultaneously with Part 70 Permit No. 3296-013-0005-V-01-0.

This Permit Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. TV-14422 dated April 4, 2003; any other applications upon which this Permit Amendment or Permit No. 3296-013-0005-V-01-0 are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Permit Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **9** pages, which pages are a part of this Permit Amendment, and which hereby become part of Permit No. 3296-013-0005-V-01-0.

Director
Environmental Protection Division

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- B. Insignificant Activities Checklist, Insignificant Activities Based on Emission Levels and Generic Emission Groups**

PART 1.0 FACILITY DESCRIPTION

MODIFIED CONDITION

1.3 Process Description of Modification

Johns Manville manufactures fiberglass insulation products. The facility manufacturing operations involve processing of raw materials to manufacture fiberglass insulation followed by collection, forming, curing, trimming and packaging of fiberglass to produce residential and commercial products. This facility operates 2 process lines, designated as Line 105 and Line 106, that employ Horizontal Collection, Electric Melt, Rotary Fiberization and Modular Construction (HERM) technology.

The proposed modification to the permit will authorize the use of an oxidation-reduction agent, in the raw materials being added to Line 106 glass Melter 631E and 632E.

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PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

MODIFIED CONDITION

3.1 Emission Units

Table 3.1a: List of Applicable Emission / Process Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
521E	Line 105 Blender	391-3-1-.02(2)(b), 391-3-1-.02(2)(e)	3.4.3, 3.4.4	521C	Baghouse
522E	Line 105 Receiver	391-3-1-.02(2)(b), 391-3-1-.02(2)(e)	3.4.3, 3.4.4, 5.2.2, 5.2.4, 5.2.5	522C	Baghouse
554E	Line 105 Curing Oven	40 CFR 60 Subpart PPP, 40 CFR 52.21 Avoidance, 391-3-1-.02(2)(oo), 391-3-1-.02(2)(b), 391-3-1-.02(2)(g)	3.3.8, 3.3.9, 3.3.10, 3.3.11, 3.4.2, 3.4.3, 3.4.5, 5.2.2, 5.2.9, 6.1.7	554C	High efficiency air filter (HEAF), a moving media flat filter system.
620E	Line 106 Mixer	40 CFR 52.21, 391-3-1-.02(2)(b), 391-3-1-.02(2)(e)	3.4.3, 3.4.4, 4.2.7, 5.2.1	620C	Baghouse
621E	Line 106 Receiver	40 CFR 52.21, 391-3-1-.02(2)(b), 391-3-1-.02(2)(e)	3.3.7, 3.4.3, 3.4.4, 5.2.1, 5.2.2, 5.2.5, 5.2.8, 5.2.14, 5.3.4, 6.1.7	621C	Baghouse
622E	Line 106 Cullet Bin	40 CFR 52.21, 391-3-1-.02(2)(b), 391-3-1-.02(2)(e)	3.3.7, 3.4.3, 3.4.4, 5.2.2, 5.2.5, 5.2.8, 5.3.4, 6.1.7	622C	Baghouse
623E	Line 106 Day Bin (Melter 1)	40 CFR 52.21, 391-3-1-.02(2)(b), 391-3-1-.02(2)(e)	3.3.7, 3.4.3, 3.4.4, 5.2.2, 5.2.5, 5.2.8, 5.3.4, 6.1.7	623C	Baghouse
624E	Line 106 Day Bin (Melter 2)	40 CFR 52.21, 391-3-1-.02(2)(b), 391-3-1-.02(2)(e)	3.3.7, 3.4.3, 3.4.4, 5.2.2, 5.2.5, 5.2.8, 5.3.4, 6.1.7	624C	Baghouse
631E	Line 106 Melter 1	40 CFR 52.21, 391-3-1-.02(2)(b), 391-3-1-.02(2)(e)	3.3.7, 3.4.3, 3.4.4, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7, 4.2.8, 4.2.9, 4.2.105.2.1, 5.2.2, 5.2.5, 5.2.11, 5.2.13, 5.2.14, 5.3.4, 6.1.7, 6.2.3, 6.2.4, 6.2.5	631C	Baghouse

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632E	Line 106 Melter 2	40 CFR 52.21, 391-3-1-.02(2)(b), 391-3-1-.02(2)(e)	3.3.7, 3.4.3, 3.4.4, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7, 4.2.8, 4.2.9, 4.2.10, 5.2.1, 5.2.2, 5.2.5, 5.2.11, 5.2.13, 5.2.14, 5.3.4, 6.1.7, 6.2.3, 6.2.4, 6.2.5	632C	Baghouse
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* Generally applicable requirements contained in this permit may also apply to emission units listed above.

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3.3 Equipment Federal Rule Standards

MODIFIED CONDITION

3.3.5 The Permittee shall fire the Regenerative Thermal Oxidizer (APCD ID No. 654C) with natural gas or liquid petroleum gas (LPG) only.
[40 CFR 52.21]

MODIFIED CONDITION

3.3.7 The Permittee shall not discharge or cause the discharge into the atmosphere from the processes and stacks listed in Table 3.3a more than the pollutant emission limits listed.
[40 CFR 52.21]

Table 3.3a: Emission Limits on Process Line 106

System	EU ID Number	Stack ID Number	PM* (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Raw Material Handling	011E	011V	0.804**	-	-	-
	012E	012V		-	-	-
	013E	013V		-	-	-
	014E	014V		-	-	-
	015E	015V		-	-	-
	016E	016V		-	-	-
	017E	017V		-	-	-
	018E	018V		-	-	-
		027E	027V	0.122	-	-
Line 106 Preparation	621E	621P	0.672	-	-	-
	622E	622P	0.042	-	-	-
	623E	623V	0.233	-	-	-
	624E	624V	0.233	-	-	-
	628E	628V	0.028	-	-	-
	631E	630P	3.247	0.228	9.122	3.84
Line 106 Forming and Curing	641E	641P	9.449	12.24	86.979	12.147
	643E	643P	9.449	12.24	86.979	12.147
	653E	653P	0.980	1.318	1.971	2.481
	654E	654P	2.338	12.30	1.979	1.227
Line 106 Finishing, Handling and Packaging	661E	661V	0.200	-	-	-
	662E	662V	0.500	-	-	-
	664E	664V	-	0.078	1.971	-
	666E	666V	0.200	-	-	-
	667E	667V	0.200	-	-	-
	668E	668V	-	0.038	0.008	0.0021

* The facility did not take credit for the difference between PM and PM₁₀ in their analysis; therefore PM will be used as a surrogate for PM₁₀ emissions.

** This is the limit for the total emissions from stacks 011V through 018V

3.4 Equipment SIP Rule Standards

MODIFIED CONDITION

3.4.5 The Permittee shall only fire natural gas or liquid petroleum gas (LPG) in Emission Unit Nos. 541E, 542E, 543E, 554E, 641E, 643E, 654E, 664E, and 668E.
[391-3-1-.02(2)(g) and 40 CFR 52.21]

PART 4.0 REQUIREMENTS FOR TESTING

4.1 General Testing Requirements

MODIFIED CONDITION

4.1.3 k. Method 6 or 6C shall be used for the determination of Sulfur Dioxide concentration.

4.2 Specific Testing Requirements

NEW CONDITION

4.2.5 Within 120 days after the facility begins using the oxidation-reduction agent(s), the Permittee shall conduct an initial CO performance test on stack code 630P (which services Emission Unit Nos. 631E and 632E) to verify compliance with the applicable CO emission limit specified in Condition **3.3.7**. The CO test shall be performed with the glass pull rate, oxidation-reduction agent(s) injection rate and cullet glass injection rate, maintained at or near the maximum design capacity.
[391-3-1.02(6)(b)(i), 40 CFR 52.21, BACT Limit]

NEW CONDITION

4.2.6 Within 120 days after the facility begins using the oxidation-reduction agent(s), the Permittee shall conduct an initial SO₂ performance test on stack code 630P (which services Emission Unit Nos. 631E and 632E). The SO₂ test shall be performed with the glass pull rate, oxidation-reduction agent(s) injection rate and cullet glass injection rate, maintained at or near the maximum design / usage capacity.
[391-3-1.02(6)(b)(i) and 40 CFR 52.21]

NEW CONDITION

4.2.7 The Permittee shall monitor and record the following parameters during the tests required per Conditions **4.1.1**, **4.2.5**, **4.2.6** and **4.2.9** on stack code 630P (which services Emission Unit Nos. 631E and 632E):
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i) and 391-3-1-.02(2)(iii)7.(ix)]

- a. The glass pull rate, in pounds per hour, from each Line 106 Melter (631E and 632E) as measured by the monitors required by Condition **5.2.1.j**.
- b. The start time that the raw material batch transport signal is received by the batch house and oxidation-reduction agent addition system to start sending the batch to the Line 106 Mixer 620E during the testing period.
- c. The mass of each batch transported to the Line 106 Mixer 620E, during the testing period.

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- d. The mass of cullet glass material in each batch transported to the Line 106 Mixer 620E, during the testing.
- e. The most recent mass of oxidation-reducing agent per batch calculated as contained in the log required by Condition **6.2.4**, during the testing period.

NEW CONDITION

- 4.2.8 In any report submitted for a performance test of CO and SO₂ from Melters 631E and 632E, done in accordance with Conditions **4.1.1**, **4.2.5**, **4.2.6** and **4.2.9**, the Permittee shall include (with the emission test results) the following:
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i) and 391-3-1-.02(2)(iii)7.(ix)]
- a. The average pull rate, in pounds per hour, from each Line 106 Melter 631E and 632E as measured by the monitoring system required by Condition **5.2.1.j**.
 - b. The calculated hourly average oxidation-reduction agent injection rate (lb/hr), using data gathered during the test runs.
 - c. The hourly average cullet glass injection rate (lb/hr), during the test runs.
 - d. The hourly average injection rate (lb/hr) of the total batch mass injected into Melters 631E and 632E measured during the performance test runs.
 - e. The sulfur analysis performed for the sample(s) taken during that test, per condition **6.2.3**.

NEW CONDITION

- 4.2.9 Within 90 days of a change to the valved pipe section (spool piece) on the oxidation-reduction agent addition system, as recorded per Condition **6.3.4**, with a spool piece larger than one previously installed during any previous CO or SO₂ performance test, the Permittee shall conduct a new CO and SO₂ performance test on stack code 630P (which services Emission Unit Nos. 631E and 632E). The CO and SO₂ tests shall be performed and documented as outlined in Conditions **4.2.6** through **4.2.8**.

NEW CONDITION

- 4.2.10 The facility shall ensure that the raw material throughput rate and mixture used during the testing, done in accordance with Conditions **4.1.1**, **4.2.5**, **4.2.6** and **4.2.9**, has been injected into the Line 106 Melters 631E and 632E for a sufficient amount of time prior to the testing such that the Line 106 melters 631E and 632E emissions have reached a steady state condition and have reached their maximum expected rate. Data as recorded and reported per Conditions **4.2.7** and **4.2.8** shall include sufficient information to show that a steady state level of operation of the melters was achieved.

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

5.2 Specific Monitoring Requirements

MODIFIED CONDITION

5.2.1 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

j. The glass pull rate, in pounds per hour, from each Line 106 Melter; 631E and 632E.

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS

6.2 Specific Record Keeping and Reporting Requirements

NEW CONDITION

6.2.3 During any performance test required by Conditions **4.1.1**, **4.2.5**, **4.2.6** and **4.2.9** the Permittee shall obtain a sample of each sulfur-containing raw material constituent used in the Line 106 Melters (631E and 632E) and perform an analysis of that constituent for sulfur content (percent). The samples of each sulfur-containing raw material constituent shall be acquired and analyzed by methods acceptable to the Division. For each analysis, the Permittee shall record the percent sulfur for each constituent. These records shall be retained in a permanent form suitable and available for inspection or submittal to the Division upon request. In lieu of performing this analysis, data provided by the material suppliers specifying the sulfur content of the material used during the performance test can be utilized.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]

NEW CONDITION

6.2.4 The Permittee shall maintain logs to record each instance when the valved section of pipe (spool piece) on the oxidation-reduction agent addition system is changed. Such logs shall indicate the date and time of the change, the mass of agent pulled per batch that corresponds to the spool piece installed and the spool piece physical dimensions. This data shall be recorded in a suitable manner acceptable to the Division and be available for inspection by or submission to the Division upon request.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]

NEW CONDITION

6.2.5 The Permittee shall maintain logs to record when, for Line 106, the batch formulation for either the total batch mass or amount of cullet material added per batch is changed. Such logs shall indicate the new batch mass and mass of cullet material added per batch under the new formulation. This data shall be recorded in a suitable manner acceptable to the Division and be available for inspection by or submission to the Division upon request.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]

PART 8.0 GENERAL PROVISIONS

8.14 Compliance Requirements

MODIFIED CONDITION

8.14.1 Compliance Certification

The Permittee shall provide written certification to the Division and to the EPA, at least annually, of compliance with the conditions of this Permit. The annual written certification shall be postmarked no later than January 30 of each year and shall be submitted to the Division and to the EPA. The certification shall include, but not be limited to, the following elements:

[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(5)]

- a. The identification of each term or condition of the Permit that is the basis of the certification;
- b. The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in paragraph c below. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred;
- c. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period and whether such methods or other means provide continuous or intermittent data;
- d. Any other information that must be included to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information; and
- e. Any additional requirements specified by the Division.

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MODIFIED TABLE

INSIGNIFICANT ACTIVITIES BASED ON EMISSION LEVELS

Description of Emission Units / Activities	Quantity
Process Water Storage / User / Surge Tanks	6
Vaporizers	2
Cooling tower	3
Battery Charger Station	1
Inking Station	4
Production Heaters with emission unit ID's 84 through 86 (0.4x10 ⁶ Btu/hr heat input each)	3
Warehouse direct gas-fired space heaters with emission unit ID's 88 and 89 (8.8x10 ⁶ Btu/hr heat input each)	2
Warehouse direct gas-fired space heaters with emission unit ID's 90 through 93 (10.31x10 ⁶ Btu/hr heat input each)	4

MODIFIED TABLE

GENERIC EMISSION GROUPS

Emission units/activities appearing in the following table are subject only to one or more of Georgia Rules 391-3-1-.02 (2) (b), (e) &/or (n). Potential emissions of particulate matter, from these sources based on TSP, are less than 25 tons per year per process line or unit in each group. Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Emissions Units / Activities	Number of Units (if appropriate)	Applicable Rules		
		Opacity Rule (b)	PM from Mfg Process Rule (e)	Fugitive Dust Rule (n)
Truck / Railcar Unloading	1	X	X	

The following table includes groups of fuel burning equipment subject only to Georgia Rules 391-3-1-.02 (2) (b) & (d). Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Fuel Burning Equipment	Number of Units
Fuel burning equipment with a rated heat input capacity of less than 10 million BTU/hr burning only natural gas and/or LPG.	0
Fuel burning equipment with a rated heat input capacity of less than 5 million BTU/hr, burning only distillate fuel oil, natural gas and/or LPG.	0
Any fuel burning equipment with a rated heat input capacity of 1 million BTU/hr or less.	2