



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker
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Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

Date: May 1, 2015

Mr. William Bruneau
Vice President Manufacturing
Walter A. Furman Company, LLC
180 Liberty Street
Fall River, MA 02724

RE: FALL RIVER
Transmittal No.: X265036
Application No.: SE-15-009
Class: SM79-7
FMF No.: 119769
AIR QUALITY PLAN APPROVAL

Dear Mr. Bruneau:

The Massachusetts Department of Environmental Protection (“MassDEP”), Bureau of Air and Waste, has reviewed your Limited Plan Application (“Application”) listed above. This Application concerns the proposed construction and operation of a new spray booth and flash drying oven at your existing architectural woodworking facility located at 180 Liberty Street in Fall River, Massachusetts (“Facility”).

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 “Air Pollution Control,” regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP’s review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator (“Permittee”) must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. DESCRIPTION OF FACILITY AND APPLICATION

Walter A. Furman Company is a manufacturer of architectural millwork including paneling, moldings, decorative trim work, countertops, shelving for installation in new or renovated structures. The wood products contain veneers, laminates, composites, solid woods, joinery, framing, adhesives, hardware, and finishes. The facility consists of two buildings connected via vestibule that includes the manufacturing and office areas for production of various wood products. The manufacturing operations consist of wood storage area, milling area, assembly area including gluing and wood surface coating area.

Existing Spray Booth Operations Approved Under Non-Major Comprehensive Plan Approval (NMCPA) No. 4P00068:

Wood surface coating operations include two existing spray booths: Spray Booth A – JBI, SDA-28-PSB Custom, Spray Booth B – JBI, IDB-28 Special Custom (Note: Spray Booth C has been decommissioned/longer in use). The two existing spray booths [A & B] are used to spray solvent based sealers, primers, toners, clear and pigmented topcoats – i.e., Pre-Catalyzed Lacquer, Conversion Varnish, Polyurethane, Polyester, and toners made from dye stain; and are also used for hand wiping Semitransparent stains mixed with these products and lacquer thinner or Acetone. NMCPA Approval No. 4P00068 limited facility-wide (i.e. wood surface coating operations) emissions of Hazardous Air Pollutants¹ (HAP) to less than major source levels as defined in 40 CFR Part 63.2.

The existing milling area includes sanders, chop saws, table saws, miter saws, routers and CNC machines. The exhaust from these operations vent through a dust collection system, which then returns the air back inside the building.

Proposed Modifications:

The Permittee is constructing a new addition to the facility. The new addition will modify wood surface coating operations by housing a new paint spray booth (Global Finishing Solutions, Model IFPG-360916-SC-S, or equivalent) identified in this application as Spray Booth D (or Emission Unit D), and one new Batch Process Drying/Flash Enclosure (Global Finishing Solutions, Model ENCG-240924-SM-RR-LT-S, or equivalent). One of the currently approved paint spray booths (Spray Booth A - JBI, SDA-28-PSB Custom) will be relocated, in accordance with 310 CMR 7.02(2)(b)27., from the old section of the building to the new addition. The relocated existing Spray Booth A shall continue to comply with the requirements of NMCPA No. 4P00068 except as modified by this approval. The new Spray Booth and Batch Process/Flash Drying Enclosure's air makeup units and other proposed heating equipment are natural gas fired and meet the criteria for exemption at 310 CMR 7.02(2)(b)15.

The Spray Booth D may use a variety of solvent and aqueous-based coatings with different formulation content of VOC, HAP, Solids or Non-Criteria air pollutant constituents with the limit for VOC/Gal Solids Applied in compliance with 310 CMR 7.18(23) Wood Products Surface Coating. Lower VOC/HAP and Aqueous based coatings will be used whenever possible to minimize the use of solvent based coatings. The Permittee has proposed to modify NMCPA

¹ Hazardous Air Pollutants are as listed in the 1990 Clean Air Act (CAA) Amendments, Section 112(b).

Approval No. 4P00068 by updating facility-wide emission limits for HAP to remain an area source as defined at 40 CFR Part 63(2), and by updating facility-wide emission limits for non-criteria pollutant Acetone. The Permittee is also establishing a facility-wide emission limit for the non-criteria pollutant t-butyl acetate. The VOC emission limits and coating formulation limits for the existing spray booths contained in NMCPA approval No. 4P00068 will not be changed by this approval.

Best Available Control Technology is defined in Table 2.

2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1			
EU#	Description	Design Capacity	Pollution Control Device (PCD)
A	<u>Existing Spray Booth A</u> Manufacturer: JBI Model: SDA-28-PSB Custom	N/A	HVLP spray gun (or equivalent) Fabric Filter
B	<u>Existing Spray Booth B</u> Manufacturer: JBI Model IDB-28 Special Custom	N/A	HVLP spray gun (or equivalent) Fabric Filter
D	<u>New Spray Booth D</u> Manufacturer: Global Finishing Systems (or equivalent) Model: IFPG-360916-SC-S (or equivalent)	Working dimensions: 36ft width x 9ft ht x 16ft deep two 1.575MMBtu/hr Natural Gas fired Air Makeup units	HVLP spray gun (or equivalent) Fabric Filter

Table 1 Key:

EU# = Emission Unit Number

ft = foot

HVLP = high volume, low pressure

ht = height

MMBtu/hr = Million British thermal units per hour

N/A = not applicable

PCD = Pollution Control Device

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2 below:

Table 2			
EU#	Operational / Production Limit	Air Contaminant	Emission Limit
D	1. Face velocity of air at filter shall not exceed 200 feet per minute.	PM, PM₁₀, PM_{2.5}	0.05 TPM
	2. ≥ 98 % by weight particulate control.		0.40 TPY
		Opacity	0%
	3. VOC content of any coatings used shall not exceed the emission limitations contained in 310 CMR 7.18(23)(e), Table 310 CMR 7.18(23)(e)1.	VOC	<u>Semitransparent stain</u> ≤ 89.4 lbs VOC per gallon solids, as applied
			<u>Wash coat</u> ≤ 35.6 lbs VOC per gallon solids, as applied
			<u>Opaque stain</u> ≤ 13.0 lbs VOC per gallon solids, as applied
			<u>Sealer</u> ≤ 23.4 lbs VOC per gallon solids, as applied
4. VOC as contained in materials used shall not exceed 1.9 tons per month.		1.9 TPM	
5. VOC as contained in materials used shall not exceed 9.6 tons per consecutive twelve-month period.		9.6 TPY	
Facility-wide	6. HAP as contained in materials used shall not exceed 1.6 tons per month.	HAP	1.6 TPM
	7. HAP as contained in materials used shall not exceed 8.0 tons per consecutive twelve-month period.		8.0 TPY

Table 2			
EU#	Operational / Production Limit	Air Contaminant	Emission Limit
Facility-wide	8. t-Butyl Acetate as contained in materials used shall not exceed 1.9 tons per month.	t-Butyl Acetate	1.9 TPM
	9. t-Butyl Acetate as contained in materials used shall not exceed 9.0 tons per consecutive twelve-month period.		9.0 TPY
	10. Acetone as contained in materials used shall not exceed 1.6 tons per month.	Acetone	1.6 TPY
	11. Acetone as contained in materials used shall not exceed 9.0 tons per consecutive twelve-month period.		9.0 TPY
	12. Limit the VOC content of any surface preparation solution used prior to coating as required at 310 CMR 7.03(16)(g).	VOC	6.5 pounds of VOC per gallon (for plastic parts) 1.67 pounds of VOC per gallon (other substrates)

Table 2 Key:

CMR = Code of Massachusetts Regulations

EU# = Emission Unit Number

lb = pounds

PM = Total Particulate Matter

PM₁₀ = Particulate Matter less than or equal to 10 microns in diameter

PM_{2.5} = Particulate Matter less than or equal to 2.5 microns in diameter

VOC = Volatile Organic Compounds

HAP = total Hazardous Air Pollutants.

TPM = tons per month

TPY = tons per consecutive 12-month period

≥ = greater than or equal to

≤ = less than or equal to

% = percent

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

Table 3	
EU#	Monitoring and Testing Requirements
D	1. The Permittee shall monitor the pressure drop, as measured by the spray booth manometer, a minimum of once per day when operating to ensure manufacturer's recommended specifications for collection efficiency are being met.
	2. The Permittee shall monitor each month, pounds of VOC as contained in wood surface coating materials used.
A,B,D	3. The Permittee shall monitor the identity and amount, in gallons, of each wood surface coating formulation used in each spray booth each month.
Facility-wide	4. The Permittee shall monitor each month, pounds of any single HAP used in facility operations.
	5. The Permittee shall monitor each month, pounds of acetone used in facility operations.
	6. The Permittee shall monitor each month, pounds of t-butyl acetate used in facility operations.
	7. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	8. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13.

Table 3 Key:

CMR = Code of Massachusetts Regulations
 EU# = Emission Unit Number
 HAP = total Hazardous Air Pollutants
 USEPA = United States Environmental Protection Agency
 VOC = Volatile Organic Compounds

Table 4	
EU#	Record Keeping Requirements
D	1. The Permittee shall maintain a record of the pressure drop, as measured by the spray booth manometer, a minimum of once per day when operating to ensure manufacturer's recommended specifications for collection efficiency are being met.

Table 4	
EU#	Record Keeping Requirements
A,B,D	2. The Permittee shall maintain a record (e.g. Manufacturer’s formulation data, Safety Data Sheet, etc.) of each formulation used, to include formulation density, VOC content by weight, total HAP content by weight, individual HAP content by weight, acetone content by weight, t-butyl acetate content by weight, other non-voc liquid content by weight and solids content by weight.
Facility-wide	3. The Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve month period (current month plus prior eleven months). These records shall be compiled no later than the 15 th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/dep/air/approvals/aqforms.htm#report .
	4. The Permittee shall maintain records of monitoring and testing as required by Table 3.
	5. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) and PCD(s) approved herein on-site.
	6. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
	7. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s), PCD(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.
	8. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	9. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.
	10. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.

Table 4 Key:
 CMR = Code of Massachusetts Regulations
 EU# = Emission Unit Number
 HAP = Hazardous Air Pollutant(s)
 PCD = Pollution Control Device
 SOMP = Standard Operating and Maintenance Procedure
 USEPA = United States Environmental Protection Agency
 VOC = Volatile Organic Compound(s)

Table 5	
EU#	Reporting Requirements
D	1. The Permittee shall notify the Southeast Regional Office of MassDEP, AQ Permit Chief, when the approved equipment has been installed and is operational.
Facility-wide	2. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a “Responsible Official” as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	3. The Permittee shall notify the Southeast Regional Office of MassDEP, Compliance & Enforcement Chief by telephone 508-946-2817 or fax 508-947-6557, as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to Compliance & Enforcement Chief at MassDEP within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	4. The Permittee shall report to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval.
	5. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30-days from MassDEP’s request.
	6. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.
	7. The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.

Table 5 Key:

AQ = Air Quality

CMR = Code of Massachusetts Regulations

EU# = Emission Unit Number

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

- A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6	
EU#	Special Terms and Conditions
Facility-wide	1. Spray guns shall be cleaned in a device that minimizes solvent evaporation during the cleaning, rinsing, and draining operations; re-circulates solvent during the cleaning operation so that the solvent is reused; and collects spent solvent in a container with a tight fitting cover so that it is available for proper disposal or recycling. No halogenated solvents shall be used in spray gun cleaning.
	2. The Permittee shall store and dispose of volatile organic compounds in a manner which will minimize evaporation to the atmosphere. Proper storage shall be in a container with a tight fitting cover.
	3. The facility shall comply with any applicable requirements at 310 CMR 7.18 <u>Volatile and Halogenated Organic Compounds</u> including §7.18(30) <u>Adhesives and Sealants</u> .
	4. The Permittee may reconcile the VOC, HAP, acetone, and/or t-butyl acetate contained in any hazardous waste shipped during a month when determining monthly emissions. The facility shall maintain hazardous waste disposal records and purchase records for VOC, HAP, acetone, and/or t-butyl acetate containing materials for this purpose. Such records shall verify the VOC, HAP, acetone, and/or t-butyl acetate quantity present in the waste being shipped if reconciling monthly emissions.
	5. This Plan approval supersedes the HAP and Acetone Raw Material Restrictions contained in Section C. 2., Table C.2., and the HAP and Acetone Emission Limitations contained in Section D.1., Table D.1., of Conditional Approval No. 4P00068 issued on June 29, 2001. All other provisions of Conditional Approval No. 4P00068 shall remain in effect.
	6. In accordance with 310 CMR 7.00 Definitions, the following compound(s) are Volatile Organic Compounds (VOC) for the purpose of all recordkeeping, emission reporting, photochemical modeling, and inventory requirements which apply to VOC and shall be uniquely identified in emission reports but are not VOC for the purposes of VOC emission limitations or VOC content requirements: 540-88-5 CAS, t-butyl acetate.
	7. Any prior Plan Approvals issued under 310 CMR 7.02 shall remain in effect unless specifically changed or superseded by this Plan Approval. The Facility shall not exceed the emission limits and shall comply with approved conditions specified in the prior Plan Approval(s) unless specifically altered by this Plan Approval.

Table 6 Key:

CAS = Chemical Abstract Service
 CMR = Code of Massachusetts Regulations
 EU# = Emission Unit Number

HAP = Hazardous Air Pollutant(s)
VOC = Volatile Organic Compound(s)

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as “shanty caps” and “egg beaters.” The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7 below, for the Emission Units that are regulated by this Plan Approval:

Table 7				
EU#	Stack Height Above Ground (feet)	Stack Inside Exit Dimensions (inches)	Stack Gas Exit Velocity Range (feet per second)	Stack Gas Exit Temperature Range (°F)
D	38	34	44-45	70-110
A, B	As approved in Plan Approval No. 4P00068, Transmittal No. 137863; or comply with 310 CMR 7.03(16)(i)			

Table 7 Key:

EU# = Emission Unit Number

°F = Degree Fahrenheit

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.

- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. The Permittee shall conduct emission testing, if requested by MassDEP, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13. If required, a pretest protocol report shall be submitted to MassDEP at least 30 days prior to emission testing and the final test results report shall be submitted within 45 days after emission testing.
- K. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Enclosed is a stamped approved copy of the application submittal.

Should you have any questions concerning this Plan Approval, please contact Peter Russell by telephone at 508-946-2821, or in writing at the letterhead address.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Thomas Cushing
Permit Chief
Bureau of Air and Waste

Enclosure

ecc: Fall River Board of Health
Fall River Fire Department
Bill Judd, Industrial Compliance Group
MassDEP/Boston - Yi Tian
MassDEP/SERO - Maria Pinaud, Laura Black, Peter Russell