



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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September 4, 2015

Sean Fleming, Plant Manager
RubbAir LLC
100 Groton-Shirley Road
Ayer, MA 01432

RE: Ayer
Transmittal No.: X266292
Application No.: CE-15-012
Original Transmittal No.: X237036
Class: *SM-25*
FMF No.: 130198
Plan Approval Administrative Amendment

Dear Mr. Fleming:

The Massachusetts Department of Environmental Protection (“MassDEP”), Bureau of Air and Waste, has received Transmittal # X266292, an Administrative Amendment Application (“Application”) for Plan Approval X237036, on June 22, 2015. This Application indicated that Eckel Industries sold the assets of operating division RubbAir Door to RubbAir LLC at your facility located at 100 Groton-Shirley Road in Ayer Massachusetts (“Facility”). MassDEP also received your Emission Notification Form to cap the Facility’s emissions to 25 percent of all applicable thresholds.

In accordance with the Administrative Amendment submitted to the MassDEP, RubbAir LLC is now the Permittee. The MassDEP has modified your status in our database to reflect the name change, specifically for the permits/registrations for the air quality program. MassDEP issued separately the 25 % Facility Emission Cap Approval on August 11, 2015; your change in classification will be reflected in our database as well; and the annual emission limits are incorporated in this amended Plan Approval. The original Restricted Emission Status Approval issued on September 9, 1995 is now null and void.

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-O, 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 Amended 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 Amended Plan Approval.

This Plan Approval, Transmittal No. X266292, replaces in its entirety Transmittal No. X237036.

1. DESCRIPTION OF FACILITY AND APPLICATION

The Permittee is a manufacturer of commercial doors for use in an array of supermarket, retail, restaurant and manufacturing applications. These operations were in place at the time of the issuance of the Restricted Emission Status (“RES”) Approval in 1995. Beginning in October of 2009, the Permittee started manufacturing Acoustic Functional Panels which are used in auditoriums, gymnasiums, and a variety of other applications to help reduce the reverberation of noise, thereby reducing and controlling sound levels in those environments. The acoustic panels required additional spray painting capacity and so a new spray booth was installed in August 2010.

The different operations use and emit various organic compounds as solvents. These organic compounds are classified as Volatile Organic Compounds (“VOC”), Hazardous Air Pollutants (“HAP”), and non-photochemically reactive hydrocarbons (“HYC”). The RES limited the annual output of VOCs to 18 tons annually and no more than 10 tons of any single HAP.

Door frames are assembled either by applying adhesive or by welding. Door panels are constructed by bonding a vinyl or plastic face sheet over a rubber or plastic sub frame. The adhesive contains VOC and HAP which are emitted during curing of the adhesive. A small amount of VOC solvent is used to clean up adhesive after the panels are joined.

The acoustic panels are assembled by riveting structural diaphragms to a perforated metal facing. The assembled panels are cleaned with acetone, which is emitted as HYC, to prepare them for painting. The primary emissions of VOC and HAP emissions are from the coating used to paint the panels.

The first step in the painting process is prepping the panel for spraying by manually cleaning each panel with acetone (HYC) to remove any residual oil or particulate that may be left on the panel. The acetone is stored in 55 gallon drums and then transferred to a 2 quart plunge-can which dispenses the acetone directly to clean rags which are then used to wipe each panel.

After cleaning, the panel is sprayed in one of two booths using an electrostatic spray gun. Miscellaneous parts are also painted in one of two booths. The older spray booth is a 10 feet by 21 feet DeVilbiss booth. The new spray booth is a 14 feet by 28 feet Col-Met booth. Evaporated paint solvent is emitted as VOC. Particulate matter from paint overspray is captured on the filters of the spray booths.

MassDEP has issued the following approvals to the Permittee:

<u>Date</u>	<u>Approval No.</u>	<u>Approved Project</u>
February 9, 1995	77988	Restricted Emission Status (“RES”)
June 6, 2011	X237076	Non Major Comprehensive Plan Approval
August 11, 2015	Not Applicable	25% Facility Emission Cap

Both the DeVilbiss and the Col-Met paint spray booths use electrostatic spraying. Electrostatic spraying significantly increases the paint transfer efficiency, resulting in lower emissions of VOC per unit of product. MassDEP determined, in Plan Approval Transmittal No. X237076, that electrostatic paint spraying was considered Best Available Control Technology (BACT) for this application.

MassDEP also determined that BACT for the VOC, HAP, and HVC emissions was utilizing good housekeeping or best management practices throughout the Facility. Good housekeeping shall include but not be limited to storing, using and disposing of VOC in a manner which will minimize evaporation to the atmosphere. Proper storage shall include at a minimum the use of containers with tight fitting covers.

Pursuant to a change of ownership, the Permittee submitted the present Administrative Amendment application, Transmittal No. X266292, to MassDEP on June 22, 2015. In addition, the Permittee has requested a 25 % Facility Emission Cap to supersede the RES. That reduction in emissions is reflected in this Plan Approval.

Applicable Regulatory Requirements

The Permittee has indicated that the Facility is not subject to any Subparts in 40 CFR 60 or 40 CFR 63.

2. EMISSION UNIT 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)
1	Door Assembly	Standard models: 2 doors per day and 520 doors per year Poly Kor models: 8 doors per day and 2,080 doors per year	none
2	Acoustic Panel Assembly	20,800 panels per year	none
3	Spray Booths	250 square feet per hour	Spray booth filters

Table 1 Key:

EU = Emission Unit Number

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:

Table 2			
EU	Operational / Production Limit	Air Contaminant	Emission Limit
1,2, and 3		HAP (single)	0.4 TPM 2.5 TPY
		Total HAP	1.1 TPM 6.25 TPY
		HYC	0.57 TPM 3.43 TPY
		PM 10	4.2 TPM 25 TPY
		VOC	2.5 TPM 15 TPY

Table 2 Key:

EU = Emission Unit Number

HAP (single) = maximum single Hazardous Air Pollutant

% = percent

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

HAP (total) = total Hazardous Air Pollutants. TPM = tons per month
HYC = Non-Photochemically Reactive Hydrocarbons, TPY = tons per consecutive 12-month period
such as Acetone
≥ = greater than or equal to VOC = Volatile Organic Compounds

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:

Table 3	
EU	Monitoring and Testing Requirements
3	1. The Permittee shall monitor the pressure filter gauge prior to each use to verify that the filter panels are operating at 97 % or more efficiency.
1, 2, and 3	2. The Permittee shall monitor, on a monthly basis, the usage rates of all HYC containing materials and assume 100 % of the HYC is emitted as fugitive emissions.
	3. The Permittee shall monitor, on a monthly basis, the usage rates of all VOC and HAP containing materials and assume 100 % of the VOC and HAP is emitted as fugitive emissions.
Facility-wide	4. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	5. 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.
	6. At least 30 days prior to emission testing, the Permittee shall submit to MassDEP for approval a stack emission pretest protocol.
	7. Within 45 days after emission testing, the Permittee shall submit to MassDEP a final stack emission test results report.

Table 3 Key:

EU = Emission Unit Number % = percent
HAP = Hazardous Air Pollutant VOC = Volatile Organic Compounds
HYC = Non-Photochemically Reactive Hydrocarbons, such as Acetone

Table 4

EU	Record Keeping Requirements
3	1. The Permittee shall keep maintenance records of paint booth filter pad replacement and disposal.
1,2, and 3	2. The Permittee shall prepare and maintain for each calendar month sufficient records of all coating, paint, adhesive, thinner, solvent, and cleaning materials or formulations to demonstrate compliance with Table 2 of this Plan Approval. For each formulation as applied, such records shall include, but are not limited to: <ol style="list-style-type: none"> a. Gallons used, b. Coating density, c. Pounds of VOC per gallon formulation, d. Pounds of each HAP per gallon of formulation, and e. Calculated Facility monthly emissions of HAPs, HVCs, and VOC.
Facility-wide	3. The Permittee shall maintain adequate records on-site to demonstrate compliance status 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/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping .
	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:

EU = Emission Unit Number	PCD = Pollution Control Device
SOMP = Standard Operating and Maintenance Procedure	USEPA = United States Environmental Protection Agency
HAP = Hazardous Air Pollutant	VOC = Volatile Organic Compounds
HYC = Non-Photochemically Reactive Hydrocarbons, such as Acetone	

Table 5	
EU	Reporting Requirements
Facility-wide	1. 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).
	2. The Permittee shall notify the Central Regional Office of MassDEP, Bureau of Air and Waste Permit Chief by telephone: 508-767-2845, email: Roseanna.Stanley@massmail.state.ma.us, or fax : 508-792-7621, as soon as possible, but no later than three (3) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted Permit Chief at MassDEP within ten (10) 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).
	3. The Permittee shall report every three years 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. The Permittee shall provide detailed emission estimates for all criteria and hazardous air pollutants emitted from the Facility pursuant to 310 CMR 7.12 (3).

Table 5 Key:

EU = Emission Unit Number

4. SPECIAL TERMS AND CONDITIONS

A. The Permittee is subject to, and shall comply with, the Special Terms and Conditions as contained in Table 6 below:

Table 6	
EU	Special Terms and Conditions

Table 6	
EU	Special Terms and Conditions
3	1. The Permittee shall ensure that all spray guns utilize electrostatic technology.
3	2. The Permittee shall ensure that the face velocity of air at the spray booth filters shall not exceed 200 feet per minute.
	3. The Permittee shall turn on the spray booth exhaust fan and check the pressure gauge to verify paint filters are working at 97% efficiency or greater.
	4. The spray booths shall utilize 2 or more layers of dry fiber mat filters with a total thickness of at least 2 inches that achieve a particulate control efficiency of at least 97% by weight.
	5. Spray gun cleaning shall be performed inside a totally enclosed gun washing system and any spray cleanup solution shall be recirculated or disposed of in a manner which will minimize evaporation to the atmosphere.
1, 2, and 3	6. The Permittee shall seal adhesive dispensing pots after each use and store residual adhesive in pot for reuse.
	7. The Permittee shall remove dispensing brushes and soak them in an enclosed container of methyl ethyl ketone (MEK).
	8. The Permittee shall minimize VOC emissions from adhesive application by the use of pneumatic brushes and efficient application techniques. Brush cleanup shall be done in enclosed containers.
	9. The Permittee shall transfer from hazardous material storage to dispensers as follows: a. Acetone is transferred to 2 quart plunger can(s) and b. Paint and solvent are pre-measured to correct 4-1-1 ration and then mixed together in a 2.5gallon paint pot(s).
	10. The Permittee shall employ good housekeeping practices throughout the facility. Good housekeeping shall include but not be limited to storing, using and disposing of VOC in a manner which will minimize evaporation to the atmosphere. Proper storage shall include at a minimum the use of containers with tight fitting covers.
	11. This Plan Approval, Tr. No. X266292, supersedes the Plan Approval, Tr. No. X237036, issued to the Permittee on June 6, 2011, in its entirety, with the exception that all plan application materials submitted as part of the Plan Approval Tr. No. X237036, become part of this Plan Approval, Tr. No. X266292.
	12. The Permittee shall not allow nuisance odors caused by the operation of production lines beyond the facility boundary as determined by MassDEP.

Table 6 Key:

EU = Emission Unit Number
MEK = methyl ethyl ketone

VOC = Volatile Organic Compounds
% = percent

- 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.”

- C. The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7, 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)
3 (old booth)	14	36	25	ambient
3 (new booth)	30	36	25	ambient

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. 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 feel free to contact me by telephone at 508-767-2845, or in writing at the letterhead address.

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.

Roseanna E. Stanley
Permit Chief
Bureau of Air and Waste

Enclosure

ecc: Ayer Board of Health
Ayer Fire Department
MassDEP/Boston - Yi Tian