



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

DEVAL L. PATRICK
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Lieutenant Governor

RICHARD K. SULLIVAN JR.
Secretary

KENNETH L. KIMMELL
Commissioner

November 2, 2011

Mr. Michael Kocsik, General Manager
Cuming Microwave Corporation
225 Bodwell Street
Avon, MA 02322

RE: PLAN APPROVAL
Application No. SE-11-027
Transmittal No.: X239181
Source No. 119-3470

AT: Cuming Microwave Corporation
244 Bodwell Street
264 Bodwell Street
1 Ledin Avenue
12 Ledin Drive
Avon, MA 02322

Dear Mr. Kocsik:

The Department of Environmental Protection, Bureau of Waste Prevention, has reviewed Limited Plan Application (LPA) No. SE-11-027, received by the Department on September 30, 2011. The application requests Department approval for modifications to an existing Facility at Cuming Microwave Corporation (collectively referred to herein as "Cuming Microwave" or "Permittee") located at the addresses identified above.

The application was submitted in accordance with Section 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control Regulations" adopted by the Department pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-E, and Chapter 21C, Section 4 and 6.

The Department's review has been limited to air pollution regulation compliance and does not relieve you of the obligation to comply with all other permitting requirements.

FACILITY / PROJECT DESCRIPTION:

Cuming Microwave will relocate Aerospace operations from 12 Ledin Ave to a new building at 264 Bodwell St, which is considered part of the same Facility. As part of the relocation, Cuming Microwave will expand production, resulting in increased the usage of the “all other VOC containing material” and the acetone emission categories contained in Tables B-1 and B-2 of this Plan Approval.

Emissions from the Facility include volatile organic compounds (VOCs), hazardous air pollutants (HAPs), non-criteria pollutants (acetone), and particulate. The particulate includes total particulate matter (PM), particulate with an aerodynamic diameter of 10 microns and less (PM₁₀), and particulate with an aerodynamic diameter of 2.5 microns and less (PM_{2.5}).

Cuming Microwave Corporation manufactures two product lines, as follows:

1. Microwave absorber / reflector – 244 Bodwell Street, 1 Ledin Ave
Foam is cut to shape then dipped in a carbon black solution. The product may be painted and / or coated with adhesive to meet the customer’s requirements. After coating, the product is dried in one of six drying ovens. Emissions of particulate matter are controlled by the spray booth fabric filters and one dust collector with cartridge filters. All fuel burning activities associated with Microwave absorber production, which includes the natural gas fired drying ovens and the propane fired make-up air heaters on the spray booths are exempt from plan approval in accordance with 310 CMR 7.02(2)(b)15a.
2. Aerospace – 264 Bodwell Street
Aerospace consists of molded plastic parts using urethane resins. Some of the parts are painted or coated with adhesive, after which they may be dried in one of three electrically heated drying ovens. Emissions of particulate matter are controlled by the spray booth fabric filters. All fuel burning activities associated with Aerospace, which includes propane fired make-up air heaters on the spray booths are exempt from plan approval in accordance with 310 CMR 7.02(2)(b)15a.

The Department is of the opinion that the application is in conformance with current air pollution control engineering practices and hereby approves the application, with the following provisions:

A. OPERATIONAL LIMITS

1. Cuming Microwave shall limit the monthly and annual use of raw materials in accordance with Table A, which provide “Federal Enforceability” for VOCs, HAPs, and noncriteria pollutant emissions.
2. Cuming Microwave shall limit the maximum VOC content of raw material in accordance with the maximum allowable content identified in Table A.
3. Cuming Microwave may proportionally increase the use of lower VOC / HAP content paints, coatings, and adhesives, as identified in Table A, in place of the “High” VOC / HAP

paints, coatings, and adhesives, provided the emission limits on Tables B-1 and B-2 are not exceeded.

4. Cuming Microwave shall maintain the following minimum overall control efficiencies for all filters controlling particulate emissions at the Facility:
 - a. Cartridge filters: 99% (wgt).
 - b. Fabric filters: 98% (wgt).

B. PRODUCTION LIMITS

None.

C. EMISSION LIMITS

1. Cuming Microwave shall limit annual and monthly emissions of VOCs, maximum single hazardous air pollutant (HAP), total HAPs, particulate matter (PM/PM₁₀/PM_{2.5}), and noncriteria pollutants from manufacturing operations in accordance with Table B-1 and Table B-2.

D. MONITORING AND RECORD KEEPING

1. Records shall be maintained on a monthly basis and on a consecutive 12-month period basis (the total from the latest month plus the sum for the eleven months preceding the latest month). These records, including any other "credible evidence," shall document the compliance status of the Facility regarding the conditions, provisions, and limits contained in this Plan Approval.
2. Cuming Microwave shall maintain a record of maintenance and repair work performed on air pollution control equipment at the Facility. Recordkeeping shall, at a minimum, include:
 - a. A record of all maintenance activities performed on emission control and monitoring equipment. These records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed; and
 - b. A record of all malfunctions that occur on emission control and monitoring equipment. These records shall include, at a minimum:
 - i. The date and time the malfunctions occurred,
 - ii. a description of the malfunctions and the corrective actions taken,
 - iii. the date and time corrective actions were initiated,
 - iv. the date and time corrective actions were completed, and
 - v. the date and time emission control equipment and/or monitoring equipment returned to operational status.
3. A copy of these records must be kept readily available on-site for a period of five (5) years and shall be available to Department and/or US EPA personnel upon request.

4. Cuming Microwave may reconcile VOCs, HAPs, and noncriteria pollutants contained in any hazardous waste shipped during the month when determining monthly emissions. The Permittee shall maintain beginning and end of year inventory records, hazardous waste disposal records, and purchase records for materials containing VOCs, HAPs, and noncriteria pollutants, such that the Department may check these for consistency with plant logs. Such records shall verify the VOC, HAP, and noncriteria pollutant content and quantity present in the waste being shipped if reconciling monthly emissions.

E. NOTIFICATIONS AND REPORTING

1. The Department's Compliance / Enforcement Chief for the Bureau of Waste Prevention Southeast Regional Office, must be notified by telephone, or by fax within twenty-four (24) hours, and with written notification within ten (10) days, after the occurrence of any upsets or malfunctions to the Facility equipment, air pollution control equipment, or monitoring equipment that result in an excess emission to the air and/or a condition of air pollution.
2. All notifications and reporting required by this Plan Approval shall be made to the attention of:

Department of Environmental Protection
Bureau of Waste Prevention
20 Riverside Drive
Lakeville, Massachusetts 02347

Attn: Compliance and Enforcement Section

Telephone: (508) 946-2878
Fax: (508) 947-6557
(508) 946-2865

F. SPECIAL CONDITIONS

1. This Plan Approval supersedes the following Department Approvals:
 - a. Conditional Approval no. 4P99060, transmittal no. W008823, dated March 1, 2001.
 - b. Conditional Approval no. 4P01037, transmittal no. W023642, dated March 20, 2002
 - c. Final Approval 4P01010, transmittal no. W018634, dated May 23, 2001
 - d. Final Approval 4P09039, transmittal no. X230871
 - e. Administrative Amendment to Conditional Approval 4P11010, dated March 1, 2011

The above listed plan approvals shall be deemed null and void.

2. Whenever dust emitting equipment or processes are operating, the corresponding dust cartridge filter or fabric filter shall be operated.

3. All spray booths shall be operated in a manner consistent with Department Regulation 310CMR7.03(16) "Paint Spray Booths." These requirements include, but are not limited to use of High Volume Low Pressure (HVLP) or equivalent spray guns and using a dry fiber mat with a particulate control efficiency of at least 97% by weight.¹ Notwithstanding the previous sentences, the Permittee is not subject the material usage limitations contained in 310CMR7.03(16)(a) and the coating formulations requirements of 310CMR7.03(16)(c), but instead is subject to the coating formulation (maximum VOC content) requirements and material usage limitations contained in this Plan Approval.
4. Cuming Microwave has determined that they are not subject to USEPA Regulation 40CFR63, Subpart HHHHHH – "National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources." Accordingly, the Permittee shall not conduct spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), to any part or product made of metal or plastic².
5. The terms "annual" and "per year" as used in this Plan Approval shall mean a consecutive twelve-month period. A consecutive twelve-month period is the total from the latest month plus the sum for the eleven preceding months.

G. GENERAL CONDITIONS

1. If any nuisance condition(s) should be generated by the operation of this Facility, then the Permittee shall take immediate appropriate steps to abate the nuisance condition(s), including shutdown if necessary.
2. If asbestos remediation/removal should be required as a result of the approved construction, reconstruction, or alteration of this Facility, removal/remediation of asbestos shall be done in accordance with Regulation 310 CMR 7.15 in its entirety and 310 CMR 4.00.
3. The Permittee shall allow Department and/or USEPA personnel access to the plant site, buildings, and all pertinent records at all times for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
4. Please be advised that this Plan Approval does not negate the responsibility of the Permittee to comply with other applicable federal, state, or local regulations now or in the future.
5. This Plan Approval may be suspended, modified, or revoked by the Department if, at any time, the Department determines that the Permittee is violating any condition or part of this Plan Approval.

¹ Refer to 310 CMR 7.03(16) for details on "equivalent" spray guns and additional fiber mat requirements.

² Refer to 40CFR63, Subpart HHHHHH for the definition of "plastic."

6. The Department's Compliance/Enforcement Chief for the Bureau of Waste Prevention at this Office must be notified by telephone, or fax as soon as possible after the occurrence of any upsets or malfunctions to the Facility equipment, air pollution control equipment, or monitoring equipment that result in an excess emission to the air and/or a condition of air pollution.
7. Emissions from the Facility approved herein shall be reported on subsequent source registrations as required by 310 CMR 7.12.
8. Any proposed increase in emissions above the limits contained in this Plan Approval must first be approved in writing by the Department pursuant to the Department's Air Pollution Control Regulations. In addition, any increase may subject the Permittee to additional regulatory requirements.
9. The ability of the Permittee to maintain emission rates at or below the levels stated in this Plan Approval shall be demonstrated to the Department in the future if deemed necessary.
10. Any future compliance tests that may be required at this Facility shall be conducted in accordance with procedures set forth by the appropriate EPA Reference Test Methods and Air Pollution Control Regulations, 310 CMR 7.00, Section 7.13. A written pretest protocol must be submitted to this Office for written Department approval at least 30 days prior to the actual test. A test results report shall be submitted to this Office within 30 days after the completion of any required compliance testing.
11. The Permittee shall comply with all provisions contained in this Plan Approval. Should there be any differences between provisions contained in "General Conditions" and provisions contained elsewhere in the Plan Approval, the latter shall govern.
12. The Facility shall be constructed and operated in strict accordance with the application approved herein. Should there be any differences between the aforementioned application and this approval letter, this approval letter shall govern.

The Department has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Environmental Affairs, for air quality control purposes, was not required prior to this action by the Department. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and Regulations 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.

The enforceable conditions contained herein, establish the federally enforceable status of this **PLAN APPROVAL**. The Department reserves the right to require changes in the standard operating and/or maintenance procedures and record keeping systems, and to require additional process monitoring if it is determined necessary by the Department to ensure continuous compliance with the Air Quality Control Regulations contained in 310 CMR 7.00.

This Approval is an action of the Department; you have a limited right to appeal. Please refer to the enclosed "APPEAL" information.

Enclosed is one stamped approved copy of the application submittal.

Should you have any questions pertaining to this PLAN APPROVAL, please contact Thomas Cushing at the Regional Office at (508) 946-2824.

Very truly yours,

*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.*

John K. Winkler, Chief
Permit Section
Bureau of Waste Prevention

W/TC

Enclosure

cc: John Winkler
ecc: Avon Board of Health
Avon Fire Department
E. Pearson, ESS Group, Inc.
L. Carlson, Deputy Regional Director DEP/BWP/SERO
L. Black DEP/SERO
Yi Tian DEP/Boston

ATTACHMENT No. 1
APPEAL OF APPROVAL

This Approval is an action of the Department. 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 Approval.

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

The hearing request along with a valid check payable to 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

The 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.

The Department 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.

Table A
Cuming Microwave Corp.
Operational Limitations

<i>Emission Source¹</i>	<i>Maximum VOC Content</i>	<i>Maximum Monthly Usage (pounds)</i>	<i>Maximum Annual Usage² (pounds)</i>
“Low” VOC paints & coatings ⁴	0.015 lb VOC / lb material ³	6,000	36,000
“High” VOC paints & coatings ⁴	0.8 lb VOC / lb material ³	1,000	3,900
“Low” VOC adhesives ⁴	0.025 lb VOC/ lb material, no HAPs	1,500	5,500
“High” VOC adhesives ⁴	0.8 lb VOC / lb material ³	3,000	24,500
All other VOC containing material	100%	2,000	8,000
Acetone		6,000	24,000

Notes:

1. Limitations apply to raw materials that contain VOC.
2. Annual usage based on a consecutive 12-month period.
3. Same emission limit applies to HAPs.
4. Cuming Microwave may proportionally increase the use of lower VOC / HAP content materials in place of the “High” VOC / HAP materials provided the emission limits on Tables B-1 and B-2 are not exceeded.
5. Based on average concentrations from the listed ranges on the Material Safety Data Sheets.

Table B-1
Cuming Microwave Corp.
Monthly - Maximum Allowable Emissions

<i>Emission Source</i>		<i>Emissions Tons per Month</i>				
		<i>VOC</i>	<i>Maximum Single HAP²</i>	<i>Total HAPs</i>	<i>PM / PM10 / PM2.5</i>	<i>Noncriteria (acetone)</i>
Microwave & Aerospace	"Low" VOC paints & coatings	0.05	1.0	0.50	0.50	
	"High" VOC paints & coatings	0.4				
	"Low" VOC adhesives ³	0.1				
	"High" VOC adhesives	1.2				
	All other VOC containing material	1.0		0.50		
	Acetone					3.0
TOTAL		2.75	1.0	1.0	0.5	3.0

Table B-2
Cuming Microwave Corp.
Annual - Maximum Allowable Emissions

<i>Emission Source</i>	<i>Emissions Tons per year¹</i>				
	<i>VOC</i>	<i>Maximum Single HAP²</i>	<i>Total HAPs</i>	<i>PM / PM10 / PM2.5</i>	<i>Noncriteria (acetone)</i>
"Low" VOC paints & coatings	2.7	4.0	5.4	2.0	
"High" VOC paints & coatings	1.6				
"Low" VOC adhesives ³	0.1				
"High" VOC adhesives	9.8				
All other VOC containing material	4.0		1.3		
Acetone					12.0
TOTAL	18.2	4.0	6.7	2.0	12.0

Notes for Tables B-1 and B-2:

1. Tons per year based on a consecutive 12-month period.
2. n-hexane is the maximum single HAP.
3. "Low" VOC adhesives contain no HAPs.

VOC - Volatile Organic Compound

HAP – Hazardous Air Pollutant

PM / PM₁₀ / PM_{2.5} – Particulate matter / particulate 10 microns in diameter or less / particulate 2.5 microns or less