



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



ATTACHMENT #1

STATE OF CONNECTICUT )
DEPT. OF ENVIRONMENTAL PROTECTION )
VS. )
RAYMARK INDUSTRIES, INC. )
DIV. OF RAYMARK CORPORATION )
STRATFORD, CONNECTICUT )
STATE ORDER NO. 8013
Proposed Order-January 15, 1987
Final Order- February 10, 1987

WHEREAS, Raymark Industries, Inc., (hereinafter, the "Company") a Division of Raymark Corporation, a Connecticut Corporation doing business at 75 East Main Street, Stratford, Connecticut operates manufacturing equipment subject to the standards and limitations of the Administrative Regulations for the Abatement of Air Pollution (hereinafter, "Regulations"); and

WHEREAS, the Company operates resin and adhesive manufacturing reactor vessels, vacuum pumps, saturating tanks, curing ovens, an autoclave, an adhesive spray booth, VOC condensate burning boiler, air drying areas and storage tanks which cause "actual" emissions of Volatile Organic Compounds in excess of one hundred (100) tons per year; and

WHEREAS, Section 22a-174-20(ee) of the Regulations requires that any premise with "actual" emissions, as currently defined in the Connecticut Administrative Regulations for the Abatement of Air Pollution, of Volatile Organic Compounds in excess of one hundred (100) tons per year utilize Reasonably Available Control Technology (RACT) to limit the discharge of volatile organic compounds by December 31, 1985 unless an extension to implement Reasonably Available Control Technology is granted pursuant to Section 22a-174-20 (ee)(3) of the Regulations; and

WHEREAS, Reasonably Available Control Technology is defined as the lowest emission limitation that a facility is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility when the determination of "potential" emissions is based upon, in part, maximum rated capacity and Federally enforceable operating conditions and requirements; and

Phone

165 Capitol Avenue • Hartford, Connecticut 06106

An Equal Opportunity Employer

WHEREAS, the Company submitted information on the facility-wide emissions of Volatile Organic Compounds on May 2, 1986 and Supplementary VOC Source Emission and Budgetary Cost Data on February 13, 1987 which, upon review by Department of Environmental Protection staff, has resulted in the RACT determination represented by this order; and

WHEREAS, the Company and this Department each acknowledges that final approval of the RACT proposal must be issued by the United States Environmental Protection Agency in that approval of RACT proposals required pursuant to Section 22a-174-20(ee) of the Regulations must be submitted as revisions to Connecticut's State Implementation Plan.

NOW, THEREFORE, by authority of Section 22a-178, et. seq., of the Connecticut General Statutes and Section 110(a) of the Clean Air Act, as amended, 42 U.S.C. Section 7410(a), the Commissioner of the Department of Environmental Protection hereby orders Raymark Industries to complete the following measures further delineated by the Compliance Timetable which is hereby incorporated by reference in this order. The applicable requirements are as follows:

1) RACT for the VOC emissions generated by the transfer pumps has been determined by the Department to be a maximum quarterly allowable emission rate of .1179 tons of VOC. Restrictions on the hours of operation of the pumps to ensure compliance with the above enforceable emission limitation are described in the Compliance Timetable.

2) RACT for the VOC emissions generated by the storage tanks and condensate storage tank has been determined by the Department to be a maximum quarterly allowable emission rate of .2118 tons of VOC. The Department shall enforce this limit through recordkeeping requirements as described in the Compliance Timetable.

Any storage tank greater than 10,000 gallons volume and containing a VOC with a vapor pressure of 1.5 pounds per square inch absolute at its maximum operating temperature shall have a conservation vent valve which is maintained in good operating condition and which is set to release at no less than 0.7 pounds per square inch gauge of pressure or 0.3 pounds per square inch gauge of vacuum or the highest possible pressure and vacuum in accordance with State and local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department.

3) The Company shall institute a system of monthly measurements on all packing glands and quarterly measurements on all mechanical seals using a hydrocarbon detection meter.

4) The Company shall measure the temperature in the radiant section of the Wickes Boiler to verify if the boiler is achieving the high destruction efficiencies determined to be occurring, according to the consultant, for destruction of the VOC condensate. RACT for the destruction of the VOC condensate produced by the manufacturing of resins has been determined by the Department to be incineration in the Wickes Boiler with a minimum destruction efficiency of 90 percent.

5) RACT for the Wet Friction Process which includes saturators 95, 96 and 101 with precuring ovens and batch cure ovens as specified in the Compliance Timetable has been determined by the Department to be incineration with a 90 percent overall efficiency.

6) RACT for Special Products Manufacturing has been determined by the Department to be a maximum monthly allowable emission rate of 2.166 tons of VOC. This will be verified through recordkeeping as described in the Compliance Timetable.

7) A recordkeeping system shall immediately be implemented to determine if VOC emissions from the adhesive spray booth and adhesive manufacturing process exceeds 8 pounds per hour or 40 pounds per day. If VOC emissions are less than the above-referenced limits, these processes will be exempted from implementing RACT if the Company commits to keeping VOC emissions below these levels. If the emissions exceed the above-referenced limits, RACT shall be implemented. RACT for the above processes has been determined to be an 80 percent reduction in VOC emissions.

8) The Company shall develop and maintain a daily recordkeeping system on all VOC's used in each process as per the compliance timetable.

9) Submission of all required reports and data by the dates specified by the Compliance Timetable.

10) The implementation of the RACT determinations represented by the order does not excuse the source from compliance with any future source-specific VOC emission limitations which may be adopted, nor does it excuse the Company from responsibility to comply with Section 22a-174-29 of the Regulations concerning Hazardous Air Pollutants or Section 22a-174-23 concerning Control of Odors.

It is acknowledged that failure to comply with the requirements of this Order as well as to comply with the terms and conditions set forth in the Compliance Timetable (which is hereby incorporated, by reference, in this Order) shall constitute a violation of the Regulations of the Department and shall subject the Company to further enforcement action in accordance with applicable laws and regulations which may include liability for civil assessments up to \$25,000 plus \$1,000 per day pursuant to Section 22a-6b (a)(3) of the Connecticut General Statutes and Section 22a-6b-603 of the Department's Regulations. Failure to submit a Progress Report by the date(s) set forth in the Compliance Timetable may subject the Company to liability for civil assessments pursuant to Section 22a-6b (a)(3) of the General Statutes and Section 22a-6b-601 of the Department's Regulations. Departmental action under this authority in no way prevents the Commissioner from seeking, in addition or separately, an injunction enforcing this State Order together with penalties of up to Five Thousand Dollars (\$5,000.00) per week in court proceedings under Section 22a-180 of the General Statutes.

Entered as a final decision of the Commissioner of Environmental Protection this 17 day of August, 1987.

  
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Leslie Carothers  
Commissioner  
Dept. of Environmental Protection

Raymark Industries, Inc.  
Stratford, Connecticut

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STATE ORDER NO. 8013  
January 15, 1987

As a duly authorized representative of Raymark Corporation, I hereby consent to the terms and conditions of this Order and do hereby waive the right to appeal this Order pursuant to Section 22a-174-12 (b)(4) of the Regulations this \_\_\_\_\_ day of \_\_\_\_\_ 1987.

RAYMARK INDUSTRIES

By: \_\_\_\_\_

Title: \_\_\_\_\_

LC

Enc.

<b>COMPLIANCE TIMETABLE</b>
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TYPE OF SOURCE:

 MAJOR MINOR PROCEDURAL OTHER \_\_\_\_\_

PRIME CONTACT: K. Scott Jetter	SOURCE NAME: Raymark Industries, Inc.
TITLE OF CONTACT PERSON: Environmental Engineer	PREMISE NO.: 178-006 CLIENT NO.: 002139
SOURCE ADDRESS: 75 East Main Street Stratford, Connecticut	ORDER NO.: 8013 DATE ISSUED: 1/15/87
TELEPHONE NO.: 371-0101	N.V. NO.: 10810 DATE ISSUED: 2/4/86
VIOLATION SUBSECTION: 22a-174-20 (ee)	EQUIPMENT TYPE: Wicks Boiler, Vac. Pumps, Ovens Adhesive Mfg., Saturators &
	REG. NO.: storage tanks INSPECTOR AND NO.: D.N. - #56

STEP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.
	<p>Raymark Corporation is subject to the requirements of Section 22a-174-20(ee) concerning Reasonably Available Control Technology (RACT) for the control of Volatile Organic Compound (VOC) emissions. This Compliance Timetable is divided into nine (9) parts. The first seven (7) parts contain the work schedules for implementing the RACT determinations made by the Department on equipment subject to Section 22a-174-20(ee) and the documenting of overall control efficiencies of existing control equipment which has been determined to represent RACT on other equipment subject to Section 22a-174-20(ee). The eighth (8) part contains the monitoring and recordkeeping requirements and Part IX the progress report submission schedule.</p> <p><b>PART I - TRANSFER PUMPS</b></p> <p>Raymark operates fourteen (14) transfer pumps which utilize packing glands and have VOC emissions. A list of these pumps and the materials handled by the pumps was presented in Table 3.1 of Raymark's February 13, 1987 submittal to the Department. Using fugitive emission factors developed by EPA for pumps handling light liquids the consultant calculated the combined VOC emissions from these pumps to be .39 tons of VOC per year. The Department has determined RACT for these pumps to be a maximum quarterly allowable VOC emission limit of .0975 tons of VOC. The Department shall enforce this limit by restricting the transfer pumps operating hours to two (2) hours per day, five (5) days per week for fifty-two (52) weeks per year. Compliance with this section of State Order No. 8013 does not excuse Raymark from complying with other requirements of Section 22a-174-20 which may apply.</p>			

## COMPLIANCE TIMETABLE

SOURCE NAME: Raymark Industries, Inc.	PREMISE NO.: 178-006	CLIENT NO.: 002139
VIOLATION SUBSECTION: 22a-174-20 (ee)	ORDER NO.: 8013	DATE ISSUED: 1/15/87

STEP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.
	<p>Whenever a transfer pump has expended its useful life and is to be replaced with a new transfer pump, this new transfer pump shall have mechanical seals to better control VOC emissions.</p> <p>PART II - STORAGE TANKS AND CONDENSATE STORAGE TANK</p> <p>Raymark maintains storage tanks to hold VOC's used in their resin making and other operations. The Company also has a storage tank which collects condensate from the condensers on the resins manufacturing process. Fugitive VOC emissions are generated from the filling of these tanks and thermal expansion of the liquid VOC's. A list of the tanks and the VOC stored, the tank capacities and the maximum vent size per tank are included on Table 3.3 of Raymark's February 13, 1987 submittal. The consultant calculated the VOC emissions for these tanks based on the annual throughput of each tank in 1985. Total VOC emissions from filling and thermal changes amounted to .8475 tons per year. RACT for the storage tanks listed in Table 3.3 which contain VOC emitting materials has been determined to be a maximum quarterly allowable emission limit of .2118 tons of VOC. The Department shall enforce this limit through recordkeeping requirements. Any storage tank greater than 10,000 gallons volume and containing a VOC with a vapor pressure of 1.5 pounds per square inch absolute at its maximum operating temperature shall have a conservation vent valve which is maintained in good operating condition and which is set to release at no less than 0.7 pounds per square inch gauge of pressure or 0.3 pounds per square inch gauge of vacuum or the highest possible pressure and vacuum in accordance with State and local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department. Any installations of conservation vent valves shall be completed by 9/1/87.</p>	10/1/87		

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STEP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.
	<p>PART III - WICKS BOILER (#5) - CONDENSATE DESTRUCTION</p> <p>VOC's are collected in a storage tank resulting from the condensing of vapors from the manufacture of VOC containing resins in the reactor vessels. These stored VOC's are injected into the #5 Wicks boiler and destroyed. A May 2, 1986 submittal from a consultant hired by the Company claimed that 99% of the VOC emissions are destroyed. The consultant, through purchase records, determined that 657,317 lbs. of VOC were injected into the boiler. VOC emissions at a 99% destruction efficiency were 6,574 lbs. of VOC. This figure was a best engineering practice judgement by the consultant. Typical industrial boilers operate at approximately 2600°F with a few seconds retention time in the radiant section of the boiler. At such conditions, EPA studies on the destruction of hazardous liquid wastes in industrial boilers have shown destruction efficiencies as high as 99.99 percent. The references to these EPA studies used by the consultant are contained in a submittal received from Raymark dated February 13, 1987. Comparing similar data and using best engineering practice, it appears Raymark's Wicks Boiler (#5) can easily achieve a VOC destruction efficiency greater than 90 percent which is the minimum destruction efficiency the Department will accept. The Department has determined that incineration by the Wicks Boiler (#5) of the VOC condensate produced by the condensing of VOC's from the reactor vessels manufacturing resin represents RACT. The Department will require a continuous weekly temperature recorder on the boiler. The placement of a thermocouple in the exhaust stack will be determined during a temperature profile study of the radiant section of the boiler. The temperature profile study will measure the temperature changes across the radiant section of the boiler and provide information on the retention time of VOC condensate emissions in the boiler to verify a minimum 90 percent destruction is occurring. This information will be correlated with temperature readings in the exhaust stack to set a temperature which ensures a minimum 90 percent destruction efficiency.</p>			



<b>COMPLIANCE TIMETABLE</b>
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SOURCE NAME: <b>Raymark Industries, Inc.</b> VIOLATION SUBSECTION: <b>22a-174-20 (ee)</b>	PREMISE NO.: <b>178-006</b> ORDER NO.: <b>8013</b>	CLIENT NO.: <b>002139</b> DATE ISSUED: <b>1/15/87</b>
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STEP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.
	<p>An alarm is also required on the temperature recorder or a boiler man present whenever the Wicks Boiler is burning VOC to determine if the combustion temperature drops below the level necessary to achieve a 90 percent destruction efficiency. If this situation occurs, the VOC condensate being injected into the boiler will immediately be shut off to ensure that excess VOC emissions are not being released. During a malfunction or scheduled shutdown of the Wicks boiler, any other boiler used to destroy the VOC condensate shall meet the identical operating requirements as the Wicks boiler to ensure proper destruction of the VOC's.</p>			
1.	Complete temperature measurements and temperature profile to determine location of the thermocouple for the continuous weekly temperature recorder.	10/1/87		
2.	Issue purchase orders for continuous weekly temperature recorder and any other necessary equipment.	10/15/87		
3.	Receive continuous weekly temperature recorder and all other necessary equipment and begin installation.	11/1/87		
4.	Complete installation of continuous weekly temperature recorder and all other necessary equipment.	12/1/87		
5.	Be in compliance with Section 22a-174-20(ee). Compliance with these requirements do not relieve Raymark from compliance with any applicable State or Federal requirements governing the disposal of hazardous waste.	12/1/87		

**COMPLIANCE TIMETABLE**

SOURCE NAME: <b>Raymark Industries, Inc.</b>	PREMISE NO.: <b>178-006</b>	CLIENT NO.: <b>002139</b>
VIOLATION SUBSECTION: <b>22a-174-20 (ee)</b>	ORDER NO.: <b>8013</b>	DATE ISSUED: <b>1/15/87</b>

STEP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.															
6.	<p>Complete and submit Registration Forms for any involved equipment and control apparatus as they will be operated in compliance. If a Registration for any involved equipment has been completed previously submit a new Registration Form using the same Application No. in Box No. 1 except mark "Amended" in the Box. Identify the form with this State Order.</p> <p><b>PART IV - WET FRICTION PRODUCTS MANUFACTURING</b></p> <p>-- Saturator Ovens Nos. 95, 96 and 101 - Vent #27</p> <p>-- Batch Cure Ovens and #47 Oven - Vent #26</p> <p>The wet friction process uses a covered saturation tank which impregnates blank paper wafers with VOC containing resin. Rollers squeeze out excess saturant at the end of the tank. Once the wafers leave the rollers they are conveyed to a precuring oven where a vacuum at elevated temperatures removes approximately 96.6 percent of the absorbed VOC according to the consultant. This VOC is then sent to an incinerator to be destroyed. Previous testing has shown the incinerator to be capable of destroying 96.9% of these VOC's. The wafers are then trucked to the final cure ovens where the remaining 3.4 percent of the absorbed VOC is either driven off or emitted fugitively before entering the final cure ovens. The final cure ovens used in the wet friction process do not have control equipment to reduce emissions. The final cure and batch cure ovens used exclusively for curing wet friction products are</p> <table style="margin-left: 40px; border: none;"> <tr> <td>70A - 1, 2, 3</td> <td>74 - 1, 2</td> <td>51A - 1, 2, 3</td> </tr> <tr> <td>70B - 1, 2, 3</td> <td>75 - 1, 2</td> <td>51B - 1, 2, 3</td> </tr> <tr> <td>71A - 1, 2, 3</td> <td>76 - 1, 2</td> <td></td> </tr> <tr> <td>72 - 1, 2</td> <td>77 - 1, 2</td> <td></td> </tr> <tr> <td>73 - 1, 2</td> <td>#47</td> <td></td> </tr> </table>	70A - 1, 2, 3	74 - 1, 2	51A - 1, 2, 3	70B - 1, 2, 3	75 - 1, 2	51B - 1, 2, 3	71A - 1, 2, 3	76 - 1, 2		72 - 1, 2	77 - 1, 2		73 - 1, 2	#47		12/1/87		
70A - 1, 2, 3	74 - 1, 2	51A - 1, 2, 3																	
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72 - 1, 2	77 - 1, 2																		
73 - 1, 2	#47																		

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VIOLATION SUBSECTION:	ORDER NO.:	DATE ISSUED:

STEP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.												
	<p>RACT for the Wet Friction Manufacturing Process has been determined by the Department to be incineration with an overall capture and destruction efficiency of 90 percent of the VOC's for the saturation tanks, precuring ovens, batch cure ovens and final cure ovens described above. Figure 3.2 in Raymark's February 13, 1987 submittal documents that the wet friction process is currently meeting a 90% overall efficiency.</p> <p><b>PART V - SPECIAL PRODUCTS MANUFACTURING</b></p> <ul style="list-style-type: none"> <li>-- Dip Tank Room - Room Exhaust</li> <li>-- Batch Cure Ovens and #3 Oven - Vent #26</li> <li>-- Steam Autoclave - Vent #30</li> </ul> <p>Special products manufacturing follows the same basic sequence as wet friction products with the exception that each operation is performed manually as opposed to automatically. Saturation is performed by manually dipping trucks into saturant and precuring is performed by air drying.</p> <p>Final curing or batch curing completes the operation. None of the VOC's from this process are controlled. The final cure or batch ovens used exclusively for curing special products are</p> <table style="margin-left: 40px;"> <tr> <td>78</td> <td>84</td> <td>88</td> <td>3</td> </tr> <tr> <td>80</td> <td>85</td> <td>90</td> <td></td> </tr> <tr> <td>81</td> <td>87</td> <td>91</td> <td></td> </tr> </table> <p>The consultant calculated the VOC emissions for Special Products Manufacturing to be 26 tons of VOC per year. RACT for this process has been determined by the Department to be a maximum monthly allowable emission limit of 2.166 tons of VOC. The Department shall enforce this limit through recordkeeping requirements.</p>	78	84	88	3	80	85	90		81	87	91				
78	84	88	3													
80	85	90														
81	87	91														

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<b>SOURCE NAME:</b> Raymark Industries, Inc.	178-006	002139
22a-174-20 (ee)	<b>PREMISE NO.:</b> 8013	<b>CLIENT NO.:</b> 1/15/87
<b>VIOLATION SUBSECTION:</b>	<b>ORDER NO.:</b>	<b>DATE ISSUED:</b>

STEP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.
	<p>The Department will require that all dip tanks containing saturant have covers installed to minimize fugitive VOC emissions. As a work practice requirement, any special product which is saturated longer than five (5) minutes in the dip tank will be required to have the cover closed until the saturation process is completed. Whenever work is not being performed in the dip tank or no work is scheduled the cover(s) shall remain closed.</p>			
1.	Issue purchase orders for dip tank covers.	Completed (6/1/87)		
2.	Receive dip tank covers and begin installation.	(7/1/87)		
3.	Complete installation of dip tank covers and begin work practice requirements.	(8/1/87)		
	<p><u>Special:</u> RACT for Special Products Manufacturing has been determined to be economically infeasible for installing a new incinerator which meets a minimum 90 percent overall efficiency. If at some future date the Wet Friction Process Manufacturing equipment is removed from the existing Raymark facility and the existing incinerator used to destroy VOC emissions remains, an economic feasibility study will be immediately undertaken to determine if it may now be economically feasible to destroy VOC emissions from Special Products Manufacturing to a minimum 90 percent overall efficiency. The VOC emissions from Special Products Manufacturing are currently uncontrolled.</p>			

**COMPLIANCE TIMETABLE**

<b>Raymark Industries, Inc.</b>	178-006	002139
SOURCE NAME: 22a-174-20 (ee)	PREMISE NO.: 8013	CLIENT NO.: 1/15/87
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STEP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.
	<p><b>PART VI - SPECIAL PRODUCTS - ADHESIVE SPRAYING</b></p> <p>Some special products are sprayed with adhesive before they are bonded to other materials. The spraying of this adhesive emits VOC's. The company shall immediately institute a recordkeeping system to determine if the VOC emissions exceed 8 pounds per hour and 40 pounds per day. If VOC emissions are less than 8 pounds per hour and 40 pounds per day, RACT will not have to be implemented. If the VOC emissions exceed either of the above emission standards the Department will impose RACT or Raymark can commit to keeping the VOC emissions to less than 8 pounds per hour and 40 pounds per day. RACT for adhesive spraying has been determined by the Department to be an 80 percent reduction in VOC emissions.</p>			
1.	Develop and begin recordkeeping on the adhesive spray booth to determine if VOC emissions are less than 8 pounds per hour and 40 pounds per day.	Completed (4/1/87)		
2.	<p>Complete determination on compliance status of adhesive spray booth.</p> <p>If VOC emissions are less than 8 pounds per hour and 40 pounds per day proceed to Step No. 11.</p> <p>If VOC emissions are greater than 8 pounds per hour and 40 pounds per day proceed to Step No. 3.</p>	10/1/87		
3.	Retain consultant to study and design a system capable of reducing VOC emissions by 80 percent or commit to reducing emissions to less than 8 pounds per hour and 40 pounds per day.	10/1/87		
4.	Issue purchase orders for all required equipment and control apparatus.	10/1/87		

**COMPLIANCE TIMETABLE**

<b>Raymark Industries, Inc.</b>	178-006	002139
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STEP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.
5.	Submit a Permit to Construct/Operate application for approval by D.E.P.	10/1/87		
6.	Submit "Intent to Test" Form if necessary.	10/1/87		
7.	Receive all equipment and begin installation.	10/1/87		
8.	Complete installation of all equipment.	10/15/87		
9.	Complete emission tests and capture efficiency determinations per D.E.P.-approved procedure if necessary.	11/1/87		
10.	Submit emission test reports to D.E.P.	12/1/87		
11.	Be in compliance with Section 22a-174-20 (ee) by either reducing VOC emissions by 80 percent or if VOC emissions have been reduced to or are less than 8 pounds per hour or 40 pounds per day, commit to staying below these levels.	12/1/87		
12.	Complete and submit Registration Forms for any involved equipment and control apparatus as they will be operated in compliance. If a Registration for any involved equipment has been completed previously submit a new Registration Form using the same Application No. in Box No. 1 except mark "Amended" in the Box. Identify the form with this State Order.	12/1/87		
<p><b>VII. ADHESIVE MANUFACTURING</b></p> <p>Adhesives are manufactured in small reaction vessels. These vessels are jacketed and temperature is controlled with cooling water. The manufacturing process consists of adding solids to the reaction vessel, then pumping in the VOC, mixing the ingredients and holding the ingredients until they dissolve and react. The mixture is then put into containers. VOC's can be emitted during the container filling operation. Raymark shall institute a recordkeeping system to determine if</p>				

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	VOC emissions are greater than 8 pounds per hour and 40 pounds per day. If VOC emissions are less than 8 pounds per hour and 40 pounds per day the adhesive manufacturing operation would be exempt from implementing RACT providing Raymark committed to keeping VOC emissions below the above emission standard. If the emissions exceed the above standards RACT has been determined by the Department to be an 80 percent reduction in VOC emissions.			
1.	Develop and begin recordkeeping on the adhesive manufacturing operation to determine if VOC emissions are less than 8 pounds per hour and 40 pounds per day.	10/1/87		
2.	Complete determination on compliance status of adhesive manufacturing process.  If VOC emissions are less than 8 pounds per hour and 40 pounds per day proceed to Step No. 11.  If VOC emissions are greater than 8 pounds per hour and 40 pounds per day proceed to Step No. 3.	10/1/87		
3.	Retain a consultant to study and design a system capable of reducing VOC emissions by 80 percent or commit to reducing emissions to less than 8 pounds per hour and 40 pounds per day.	10/1/87		
4.	Issue purchase orders for all required equipment and control apparatus.	10/1/87		
5.	Submit a Permit to Construct/Operate application for approval by D.E.P.	10/1/87		
6.	Submit "Intent to Test" Form if necessary.	10/1/87		

**COMPLIANCE TIMETABLE**

SOURCE NAME: <b>Raymark Industries, Inc.</b>	PREMISE NO.: <b>178-006</b>	CLIENT NO.: <b>002139</b>
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STEP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.
7.	Receive all equipment and begin installation.	11/1/87		
8.	Complete installation of all equipment.	11/15/87		
9.	Complete emission tests and capture efficiency determinations per D.E.P.-approved procedures if necessary.	11/15/87		
10.	Submit emission test reports to D.E.P.	12/15/87		
11.	Be in compliance with Section 22a-174-20 (ee) through either reducing emissions by 80 percent or be exempted from RACT by the commitment to maintain VOC emissions to 8 pounds per hour and 40 pounds per day.	12/15/87		
12.	Complete and submit Registration or Permit Forms for any involved equipment and control apparatus as they will be operated in compliance. If a Registration for any involved equipment has been completed previously submit a new Registration Form using the same Application No. in Box No. 1 except mark "Amended" in the Box. Identify the form with this State Order.	12/15/87		



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FACILITY NAME: <b>Raymark Industries, Inc.</b>	PREMISE NO.: <b>178-006</b>	CLIENT NO.: <b>002139</b>
SECTION SUBSECTION: <b>22a-174-20 (ee)</b>	ORDER NO.: <b>8013</b>	DATE ISSUED: <b>1/15/87</b>

EP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.
	<p style="text-align: center;"><b>PART VIII. RECORDKEEPING, MONITORING, AND REPORTING REQUIREMENTS</b></p> <p>Part VIII describes the required recordkeeping systems necessary to demonstrate RACT or a RACT exemption once the designated RACT requirements have been implemented or a RACT exemption documented to ensure continued compliance. These record-keeping systems are also required during the implementation of the designated RACT requirements so that progress towards the final achievement of RACT can be monitored. All records required by this Compliance Timetable shall be kept on file for a period of three (3) years and submitted or made available immediately upon request by the Commissioner.</p> <p><b>A. GENERAL RECORDKEEPING AND REPORTING REQUIREMENTS</b></p> <p>1) The Company shall monitor its vacuum pumps, storage tanks, condensate storage tank, boiler used for condensate destruction, saturators, precuring ovens, batch ovens (final curing ovens), adhesive spray booth, autoclave and adhesive manufacturing process in the manner described by this Compliance Timetable and as further described within State Order No. 8013. The following conditions apply to the above-referenced operations until such time as this order may be amended or otherwise altered in a manner approved by the Commissioner of Environmental Protection.</p> <p>2) Quarterly reports will be submitted to the Department beginning on July 1, 1987 and end on January 1, 1988. They shall continue to be compiled and kept on file by the Company and made available on request by the Commissioner.</p> <p>3) Annual VOC emissions totals will be compiled from January 1 until December 31 of each year. Upon demonstrating compliance with the terms of this order, additional record-keeping requirements</p>			

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SOURCE NAME: Raymark Industries, Inc.	PREMISE NO.: 178-006	CLIENT NO.: 002139
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	<p>shall consist of: an annual submittal of VOC usage data as described in the following sections with the Pre-Inspection Questionnaire for the most recent VOC emission year until notified otherwise by the Department at some future date.</p> <p>4) The Company shall distinctly mark each piece of process or control equipment in the facility that is owned and/or operated by Raymark and for which Raymark is responsible for the VOC emissions. The markings shall clearly differentiate Raymark's equipment from any equipment owned and/or operated by Brake Systems Inc.</p> <p>B) TRANSFER PUMPS (14 Pumps)</p> <p>1) Maintain continuous use of packing glands on all transfer pumps. The packing glands are subject to the following:</p> <p style="margin-left: 40px;">a) Monthly measurements of performance using a hydrocarbon detection meter.</p> <p style="margin-left: 40px;">b) Replace mechanical seal within 15 days whenever hydrocarbon emission readings indicate a 15% increase in VOC emissions over baseline emissions. Baseline is defined as a maximum of six thousand (6000) parts per million of VOC. The Company can make a request to the Commissioner to delay a repair of a fugitive emission source until the next turnaround if the repair is infeasible for technical or safety reasons without a complete or partial shutdown of the process unit can be made to the Commissioner. The hydrocarbon testing shall be in conformance with EPA Method 21 in 40 CFR, Appendix A, Part 60 or the use of any other DEP-approved leak detection method.</p>			

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	<p>c) Maintain daily records on the hours of operation of each pump which is not to exceed two (2) hours per day, five (5) days per week for fifty-two weeks per year.</p> <p>d) Based on the recorded hours of operation, calculate the VOC's being emitted from the transfer pumps in tons of VOC on a quarterly basis.</p> <p>e) The above-referenced measurements and VOC emission calculation shall be submitted quarterly according to the Compliance Timetable for the duration of this State Order.</p> <p>2) On an annual basis the Company shall compile a complete detailed record of total VOC emissions from the transfer pumps and submit this information with the Pre-Inspection Questionnaire in the same format as the quarterly reports.</p> <p><b>C) STORAGE TANKS AND CONDENSATE STORAGE TANK</b></p> <p>1) Maintain a recordkeeping system for each tank listed in Table 3.3 of Raymark's February 13, 1987 submittal. At a minimum this record shall include:</p> <p>a) VOC stored in the tank</p> <p>b) the tank identification number</p> <p>c) the tank capacity</p> <p>d) the maximum vent size in cubic feet per minute</p>			

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	<p>e) delivery date of VOC</p> <p>f) the amount of VOC delivered</p> <p>2) Based on the above information the Company shall calculate the quarterly emissions from filling and thermal losses in tons of VOC for submittal according to the Compliance Timetable. This data is due quarterly.</p> <p>3) On an annual basis the Company shall compile a complete detailed record of total VOC's entering and being emitted by the storage tanks and submit this information with the Pre-Inspection Questionnaire in the same format as the quarterly reports.</p> <p>D) WICKS BOILER (#5) - CONDENSATE DESTRUCTION</p> <p>1) Install a continuous weekly temperature recorder on the boiler to ensure the destruction of VOC's injected from the storage tank. The combustion temperature and the location of the thermocouple in the exhaust stack shall be determined during the temperature profile measurements. An alarm or boilerman present whenever VOC condensate is being burned is required to determine if the combustion temperature drops below the level necessary to maintain a minimum 90 percent destruction efficiency of the VOC's being injected.</p> <p>2) Develop and maintain a daily recordkeeping system on the amount of VOC injected into the boiler for destruction and calculate the VOC reduction in pounds from incineration and report these figures with the quarterly reports for the duration of this State Order.</p>			

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	<p>3) During a malfunction or scheduled shutdown of the Wicks boiler any other boiler used to destroy the VOC condensate shall meet the identical record-keeping and operational requirements as the Wicks boiler to ensure a proper destruction efficiency.</p> <p>4) On an annual basis the Company shall compile a complete detailed record of total VOC's entering and destroyed in the boiler and submit this information with the Pre-Inspection Questionnaire in the same format as the quarterly reports.</p> <p><b>E) WET FRICTION PRODUCTS MANUFACTURING</b></p> <p>-- Saturator Ovens Nos. 95, 96 and 101 - VENT #27</p> <p>-- Batch Cure Ovens and #47 Oven - Vent #26</p> <p>1) Develop and maintain a recordkeeping system of daily VOC usage for each saturation tank including any additions of VOC to the resin mixture at irregular intervals.</p> <p>2) Develop and maintain a recordkeeping system on all resin manifested as waste on a monthly basis.</p> <p>3) Submit a summary of total VOC usage on a per saturation tank basis quarterly for the duration of this State Order expressed in tons of VOC.</p> <p>4) Submit a summary of the total resin amount manifested as waste quarterly expressed in tons of VOC.</p> <p>5) On an annual basis the Company shall compile a complete detailed record of total VOC usage in tons by each saturant tank and the amount of VOC destroyed by the incinerator and submit this information with the Pre-Inspection Questionnaire.</p>			

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	<p>6) The incinerator on saturator ovens Nos. 95, 96 and 101 (precurring ovens) shall have a continuous weekly temperature recorder to ensure destruction of the VOC's being captured. The temperature of the incinerator shall be maintained at the level which will achieve a 90 percent overall destruction efficiency for the Wet Friction Process VOC emission.</p> <p>An alarm shall be installed to warn of a temperature drop below the level which would reduce the overall destruction efficiency to less than 90 percent minimum.</p> <p>7) An inspection maintenance program shall be established for weekly visible inspections of fugitive emission leaks from all hooding and duct-work from the ovens to the incinerator and oven door gaskets. If visible emissions are observed, repairs will be initiated immediately. Any fugitive emission observations as well as any repairs sustained shall be documented and kept on file for the Department's review.</p> <p>F) SPECIAL PRODUCTS SATURATION AND AIR DRYING</p> <ul style="list-style-type: none"> <li>-- Dip Tank Room - Room Exhaust</li> <li>-- Batch Cure Ovens and #3 Oven - Vent #26</li> <li>-- Steam Autoclaving - Vent #30</li> </ul> <p>1) Develop and maintain a recordkeeping system of daily VOC usage for each dip tank in pounds of VOC including any additions of VOC to the resin mixture at irregular intervals.</p> <p>2) Develop and maintain a recordkeeping system on all resin manifested as waste on a monthly basis.</p> <p>3) Submit a summary of total VOC usage on a per dip tank basis quarterly for the duration of this State Order expressed in tons of VOC.</p> <p>4) Submit a summary of the total resin amount manifested as waste quarterly expressed in tons of VOC.</p>			

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	<p>5) On an annual basis the Company shall compile a detailed record of total VOC usage and VOC manifested as waste in tons and submit this information with the Pre-Inspection Questionnaire.</p> <p>G) ADHESIVE SPRAY BOOTH</p> <p>1) Develop and maintain a recordkeeping system of daily VOC usage in pounds of VOC.</p> <p>2) Develop and maintain a recordkeeping system on all adhesive manifested as waste on a monthly basis expressed in pounds of VOC.</p> <p>3) Submit a summary of total VOC usage for the adhesive spray booth quarterly for the duration of this State Order expressed in pounds of VOC.</p> <p>4) Submit a summary of the total adhesive amount manifested as waste quarterly expressed in pounds of VOC.</p> <p>5) On an annual basis the Company shall compile a complete detailed record of total VOC usage and VOC manifested as waste in tons for the adhesive spray booth and submit this information with the Pre-Inspection Questionnaire.</p> <p>H) ADHESIVE MANUFACTURING</p> <p>1) Develop and maintain a recordkeeping system of daily VOC usage in pounds of VOC.</p> <p>2) Develop and maintain a recordkeeping system on all adhesive manifested as waste on a monthly basis expressed in pounds of VOC.</p> <p>3) Submit a summary of total VOC usage for the adhesive manufacturing process quarterly for the duration of this State Order expressed in pounds of VOC.</p> <p>4) Submit a summary of total adhesive manifested as waste quarterly for the duration of this State Order expressed in pounds of VOC.</p>			

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	<p>5) On an annual basis the Company shall compile a complete detailed record of total VOC usage and VOC manifested as waste in tons for the adhesive manufacturing process and submit this information with the Pre-Inspection Questionnaire.</p> <p><b>PART IX - PROGRESS REPORT SCHEDULE</b></p> <p>The progress report schedule requires monthly updates on control equipment installation and modification milestones. The quarterly reports require the above-referenced information and the usage data described in Parts A through Part VIII of this Compliance Timetable.</p>			
	1) Submit quarterly usage and Volatile Organic Compound emission report.	(7/1/87)		
	2) Submit Quarterly usage and Volatile Organic Compound emission report.	10/1/87		
	3) Submit Progress Report.	10/1/87		
	4) Submit Progress Report.	11/1/87		
	5) Submit Quarterly usage and Volatile Organic Compound emission report.	12/1/87		
	6) Submit Annual usage and Volatile Organic Compound emission report.	12/31/87		
	7) Be in compliance with Section 22a-174-20 (ee).	12/31/87		



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	8) Complete and submit Registration Forms for any involved equipment and control apparatus as they will be operated in compliance. If a Registration for any involved equipment has been completed previously submit a new Registration Form using the same Application No. in Box No. 1 except mark "Amended" in the Box. Identify the form with this State Order.	12/31/87		
	9) Submit Progress Report; and continue submitting Progress Reports at precisely one month intervals if you are delinquent in complying with any steps of this order.	12/31/87		