COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF ENVIRONMENTAL PROFECTIONS - BUREAU OF AIR QUAL

OPERATING PERMIT

(Revised December 2, 1999)

REC 1 0 1999

In accordance with provisions of the Air Pollution Control Act, the act of January 18 of the Rules and after due consideration of an application received under Chapter 127 of the Rules and Regulations of the Department of Environmental Protection, the Department hereby issues this permit for the operation of the air contamination source(s) described below:

Permit No.	OP-15-0014A	Source(s)	Facility NOx and VOC Sources	
Owner	Norwood Industries, Inc.	Air	Thermal Oxidizers	
Address	57 Morehall Road	Cleaning		
	Frazer, PA_19355	Device		
Attention	Mr. William Dowlin	Location	57 Morehall Road	
	Environmental Coordinator		East Whiteland Township	
			Chester County	

This permit is subject to the following conditions:

- That the source(s) and any associated air cleaning devices are to be:
 - a. operated in such a manner as not to cause air pollution;
 - b. in compliance with the specifications and conditions of all applicable Plan Approvals issued;
 - operated and maintained in a manner consistent with good operating and maintenance practices.
- This permit is valid only for the specific equipment, location and owner named above.

(SEE ADDITIONAL CONDITIONS ATTACHED)

Failure to comply with the conditions placed on this permit is a violation of Section 127.444. Violation of this or any other provision of Article III of the Rules and Regulations of the Department of Environmental Protection will result in suspension or revocation of this permit and/or prosecution under Section 9 of the Air Pollution Control Act.

12/20/1996

Francine Carlini Regional Manager Carle

Expires

Issued

12/20/2001

Air Quality

cc: Division of Permits, RCSOB Administration

SEFO

Re (RN98)252

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OPERATING PERMIT CONDITIONS PERMIT NO. OP-15-0014A NORWOOD INDUSTRIES, INC. (Revised December 2, 1999)

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CONDITIONS (continued):

- This-Operating Permit is issued to the owner and operator for the operation of the sources listed below. The Department has also determined Reasonably Available Control Technology (RACT) as required under 25 Pa. Code § 129.91 for the sources listed in 3C and 3D below.
 - A. surface coating line Nos. 1 and 3, mixing room, and pilot line controlled by thermal oxidizers No. 1 or No. 2.
 - B. surface coating line No. 2 controlled by thermal oxidizer No. 1.
 - C. cleanup operations:

line equipment and parts cleaning; equipment cleaning in compounding rooms; equipment cleaning in foam room; foam line purge.

D. combustion sources and units listed below:

Source	ces	No. of Units	Capacity MMBTU/hour (each)
Space Heaters		6	0.096
Line 1 Ovens		2	3.5
Line 2 Ovens		5	2
Line 3 Ovens		5	2.16
Pilot Line Ove	ns	2	0.5
Air Makeup U	nits	4	3
Front Office H	eaters	2	0.15
Pilot Line Hea	ters	2	0.12
Slit Room Hea	ters	2	0.115
QA/QC Hcater		1	0.06
Air Makcup W	arehouse	1	0.4
R & D Heaters		2	0.15
Emergency Ge	nerator	10	1.09

- E. Medical Device Manufacturing Process
- 4. The expiration date shown on the Operating Permit is for state purposes. For Federal enforcement purposes, the RACT provisions of the Operating Permit shall remain in effect as part of the State Implementation Plan (SIP), until replaced pursuant to 40 C.F.R. 51 and approved by the U.S. Environmental Protection Agency (EPA).

CONDITIONS (continued):

- This Operating Permit supersedes all previously issued Operating Permits and Temporary Operating Permits bearing the No. 15-318-012.
- Operating Requirements for the Surface Coating Lines and Cleanup Operations:
 - A. Requirements for the 100% enclosure system:
 - The enclosure system on surface coating process line No. 3 shall be operated in the same manner as those regulated under 40 C.F.R. 60.713(b)(5)(i) to demonstrate a 100% enclosure around the surface coating line No. 3.
 - A differential manometer or equivalent shall be installed and maintained to measure the pressure differential between the inside and outside of the enclosure.
 - B. Requirements for the Thermal Oxidizers:
 - The burners associated with the thermal oxidizers shall be set so as to maintain a
 minimum combustion chamber exit gas temperature of 1400°F. This temperature
 shall be attained before the start of any solvent coating operations.
 - The combustion chamber exit gas temperature of 1400°F shall be maintained for at least 15 minutes after the last application of solvent coatings and the subsequent solvent cleanup operations.
 - The company shall maintain a temperature measuring and recording device on each of the thermal oxidizers to indicate and record the temperature of the gases exiting the combustion chambers.
 - 4. The thermal oxidizers shall not be by-passed unless the surface coating lines are applying coatings, which comply with 25 Pa. Code Section 129.52(b)(1).
 - The thermal oxidizers shall be operated and maintained in accordance with manufacturer's specifications and good air pollution control practices.

CONDITIONS (continued):

6. The thermal oxidizers shall be operated to achieve an overall efficiencies specified in 25 Pa. Code Section 129.52 for surface coatings. For solvent cleanup operations conducted after the application of solvent based coatings, the minimum overall efficiency specified below shall be maintained:

Coating Lines	Overall Efficiency		
Line 1	75%		
Line 2	85%		
Line 3	90%		
Pilot Line	75%		

C. Operating Requirements:

- The company shall apply solvent coatings on only two of the three surface coating process lines at the same time.
- The exhaust from surface coating line No. I shall be ducted to thermal oxidizer No. 2 while both surface coating lines No. I and No. 2 are applying solvent coatings at the same time.

D. Emission Limitations:

- The operation of surface coating process lines No. 1 and No. 2 shall not result in emitting, in total, more than 2,160 pounds per day and 240 tons per year of volatile organic compounds (VOCs) as determined on a 12-month rolling average basis.
- The operation of surface coating process line No. 3 and the pilot line, including cleanup operations, shall not result in total VOC emissions more than 377 pounds per day and 44.7 tons per year on a 12-month rolling basis.
- The VOC emissions generated from a by-pass when applying coatings, which
 comply with 25 Pa. Code Section 129.52(b)(1) shall also conform to the VOC
 emission limitations specified above.
- The VOC emissions from cleanup operations specified in Condition 3.C shall not, in total, exceed 4.5 tons per year in a 12-month consecutive period.
- 5. The NOx emissions from dimethyformanide (HCON(CH₃)₂) or DMF combustion shall not exceed 115 tons per year in a 12-month consecutive period.

CONDITIONS (continued):

- E. New Source Performance Standards for Surface Coating Process Line No. 3:
 - Surface coating process line No. 3 is subject to Subpart RR of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 C.F.R. Section 60.4 requires submission of copies of all requests, reports, applications, submittals, and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director Air Protection Division US EPA, Region III 1650 Arch Street Philadelphia, PA 19103

- The company shall comply with the standards for VOCs in accordance with 40 C.F.R. Sections 60.442 and 60.443.
- The company shall comply with the requirements of recordkeeping and monitoring of operations in accordance with 40 C.F.R. Section 60.445.
- The company shall submit reports to both the U.S. EPA and the Department in accordance with 40 C.F.R. Section 60.447.

F. Recordkeeping Requirements:

- The company shall record the following information for each of the sources covered by this Operating Permit:
 - daily coating quantity in gallons and pounds of coating as applied and,
 - b. the coating composition:
 - i. percent solids by volume
 - ii. percent solvent by volume
 - iii. percent water by volume
 - iv. pounds of VOC per gallon minus water
 - v. solvent density
 - monthly quantity of all the solvents, thinners and any VOC emitting materials used on the sources.
 - d. monthly quantity of dimethyformanide [HCON(CH₃)₂]

CONDITIONS (continued):

- The owner shall keep on hand the material safety data sheet (MSDS), from the suppliers, for the materials applied on the surface coating lines covered by this operating permit.
- Data or information required under this operating permit shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.
- The owner shall maintain records that show the amount of each solvent used for cleanup purpose and the amount of solvent waste shipped for disposal.
- The owner shall maintain records that clearly demonstrate to the Department that the sources are in compliance with Condition 6.D of this Operating Permit.
- Except as required in Conditions 6.E and G, the records required under this
 Operating Permit shall be retained for at least seven (7) years and shall be made
 available to the Department on request.
- G. Rule Effectiveness Program for Surface Coating Sources:
 - The company shall provide at least 41 hours of introductory training to new
 employees, and 25 hours per year of refresher training on the proper operation and
 maintenance of the source/control device. The company shall keep records of the
 type and amount of training provided to each operator. The records of training
 shall be kept for a minimum of two years and be made available to the
 Department upon request.
 - 2. The source(s) and air pollution control device(s) shall be operated and maintained in a manner consistent with the Master Operations and Maintenance Instructions (O & M) supplied by the manufacturer. A copy of the O & M instructions shall be kept at the site and be made available to the Department upon request. Operators must follow the O & M instructions and/or checklists and sign off daily. The records under the Rule Effectiveness Program shall be kept for a minimum of two years and be made available to the Department upon request.
 - 3. The company shall conduct a stack test once every five years to determine the overall control efficiency of the control device for VOC emissions. The company shall use the test methods and procedures approved by the Department's Source Testing and Monitoring Section. The test shall be conducted within the final year before the operating permit expires. Results shall be submitted to the Department for review at least 60 days prior to the expiration of the operating permit.

CONDITIONS (continued):

- Coating composition and usage records required in Condition No. 6.F. are required for the Rule Effectiveness Program. These records shall be submitted to the Department once every six months.
- Requirements for Sources Specified in Condition 3D:
 - A. The sources shall be operated and maintained in accordance with manufacturer's specifications and good air pollution control practices.
 - B. The operation of the emergency generator shall not exceed 500 hours per year.
 - C. The owner and operator shall record the date and operating hours for the emergency generator.
- 8. Requirements for Medical Device Manufacturing Process:
 - A. The following conditions apply to the medical device manufacturing process. The following conditions are not a determination of RACT. This Operating Permit incorporates the requirements of Plan Approval Nos. 15-314-002, 15-314-003, 15-314-004, PA-15-0014A, and PA-15-0014B.
 - B. The owner/operator shall operate this manufacturing process so as to limit the VOC atmospheric emissions from the process and the storage area to 8.0 tons per year in a 12-month consecutive period.
 - C. The owner/operator shall record the amount of solvent processed into the system and each of the six tanks and keep additional records, such as purchase orders, to confirm VOC emissions in Condition 8.B, above.
 - D. A temperature indicator and recorder shall be installed at the outlet of the condenser in the Solvent Recovery Unit. A temperature of equal to or less than minus 50°F shall be maintained at this condenser.
 - E. The owner/operator shall operate sensors to detect VOC fugitive losses and conduct maintenance on all equipment with a fugitive leak in excess of 10,000 ppm.
 - F. The owner/operator shall operate and maintain the cartridge-type fabric collectors in accordance with manufacturer's specifications and good air pollution control practices.
 - G. The fabric collectors must be equipped with a device for measuring the pressure differential across the collector. The pressure differential across the collectors shall be maintained at more than 2 inches water gage (w.g.).

CONDITIONS (continued):

- H. The particulate matter emissions from each fabric collector shall not exceed 0.02 grains per day standard cubic foot.
- I. The owner/operator shall keep on hand a sufficient quantity of spare cartridge-type elements for the fabric collector(s) associated with the aforementioned source(s), in order to be able to immediately replace any cartridge-type elements requiring replacement due to deterioration resulting from routine operation of the sources(s) and fabric collector(s).

General Conditions:

- A. If, at any time, the Department has cause to believe that air contaminant emissions from the aforementioned source(s) may be in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection, the company shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s). Such testing shall be conducted in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.
- B. The company, within one hour of occurrence, shall notify the Department, at 610-832-6241, of any malfunction of the source(s) or associated air cleaning device(s) which results in, or may possibly be resulting in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection. A written report shall be submitted to the Department within two working days following the incident describing the malfunctions and corrective actions taken.
- C. If, at any time, the permittee causes, permits or allows any modification (as that term is defined in Chapter 121 of Title 25, the Rules and Regulations of the Department of Environmental Protection) of the aforementioned air contamination source(s), the operation and use of which is authorized by this permit, or causes, permits or allows any modifications, malfunction or removal of any air pollution control device required as a condition of this permit, then and in that event, this permit shall be suspended, and the permittee shall not thereafter continue to operate or use said air contamination source(s).

CONDITIONS (continued):

- H. The particulate matter emissions from each fabric collector shall not exceed 0.02 grains per day standard cubic foot.
- I. The owner/operator shall keep on hand a sufficient quantity of spare cartridge-type elements for the fabric collector(s) associated with the aforementioned source(s), in order to be able to immediately replace any cartridge-type elements requiring replacement due to deterioration resulting from routine operation of the sources(s) and fabric collector(s).

9. General Conditions:

- A. If, at any time, the Department has cause to believe that air contaminant emissions from the aforementioned source(s) may be in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection, the company shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s). Such testing shall be conducted in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.
- B. The company, within one hour of occurrence, shall notify the Department, at 610-832-6241, of any malfunction of the source(s) or associated air cleaning device(s) which results in, or may possibly be resulting in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection. A written report shall be submitted to the Department within two working days following the incident describing the malfunctions and corrective actions taken.
- C. If, at any time, the permittee causes, permits or allows any modification (as that term is defined in Chapter 121 of Title 25, the Rules and Regulations of the Department of Environmental Protection) of the aforementioned air contamination source(s), the operation and use of which is authorized by this permit, or causes, permits or allows any modifications, malfunction or removal of any air pollution control device required as a condition of this permit, then and in that event, this permit shall be suspended, and the permittee shall not thereafter continue to operate or use said air contamination source(s).

CONDITIONS (continued):

D. For New Source Review purposes, below is the VOC allowable emission increase in the facility since 1994:

Plan Approval No.	Issue Date	VOC net change (TPY)
PA-15-0014A	January 27, 1999	5.38

(KAL97)74-11

CONDITIONS (continued):

D. For New Source Review purposes, below is the VOC allowable emission increase in the facility since 1994:

Plan Approval No.	Issue Date	VOC net change (TPY)
PA-15-0014A	January 27, 1999	5.38

(KAL97)74-11