

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
FIELD OPERATIONS - BUREAU OF AIR QUALITY

MAY 27 1998
DIVISION OF AIR QUALITY
DIV OF PERMITS

OPERATING PERMIT

In accordance with provisions of the Air Pollution Control Act, the act of January 8, 1960, P.L. 2119, as amended, 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.	<u>OP-15-0004</u>	Source(s)	<u>Facility VOC & NOx RACT</u>
Owner	<u>Reynolds Metals Company</u>	Air	<u></u>
Address	<u>520 Lincoln Avenue</u>	Cleaning	<u></u>
	<u>Downingtown, PA 19335-3000</u>	Device	<u></u>
Attention	<u>Mr. Larry Peaster</u>	Location	<u>Dowingtown Borough</u>
	<u>Environmental Coordinator</u>		<u>Chester County</u>

This permit is subject to the following conditions:

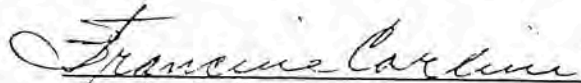
1. That the source(s) and any associated air cleaning devices are to be:
 - a. operated in such a manner as not to cause air pollution;
 - b. in compliance with the specifications and conditions of any plan approval issued;
 - c. operated and maintained in a manner consistent with good operating and maintenance practices.
2. 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.

Issued 05/08/1998

Expires 05/07/2003


Francine Carlini
Regional Manager
Air Quality

cc: Division of Permits, RCSOB
Administration
SEFO
Re (RN)241-19

OPERATING PERMIT CONDITIONS
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REYNOLDS METALS COMPANY

CONDITIONS (continued):

3. This RACT Operating Permit includes Reasonably Available Control Technology (RACT) determinations as required by Title I provisions of the CAAA, and, 25 Pa. Code Sections 129.91 through 129.95 for:
 - (a) Rotogravure presses Nos. 2 through 8, Flexographic press No. 1, and 2, Laminator No. 1, Extruder No. 2, two SWS-400 washing machines with attached condensers, one SCR-350E distillation unit, one 500 gallon dirty solvent tank, one 60 gallon clean solvent tank, and one small tank with lid to manually clean filters.
 - (b) VOC sources: seven (7) seamers, ink room operations, plant cleaning operations, and other sources identified in Condition 8, lab test equipment, tandem extruder, No. 4 fuel oil storage tank.
 - (c) NOx sources: dryer burners on rotogravure presses, flexo presses, laminator and extruder, space heaters, four (4) boilers, three (3) fume oxidizers and miscellaneous combustion sources.
- ~~4. This operating permit incorporates and supersedes Permit Nos. 15-399-037, 15-326-001, 36-320-014, and 15-320-005.~~
- ~~5. The seven (7) rotogravure, two (2) flexographic presses, Laminator No. 1, and Extruder No. 2 mentioned in Condition 3(a) shall be operated in accordance with 25 Pa. Code Sections 129.51 and Code 129.67.~~
6. RACT for the seven (7) seamers shall be visual inspection of the seam with a fluorescent dye at all times or a Department approved method to ensure that excess seaming solution is not applied.
7. RACT for the ink room shall be:
 - (a) the 55 gallon storage drums shall be equipped with a double valve system.
 - (b) mixing vats and containers shall be closed when not in use.
8. The following sources shall be operated with VOC emission rates of no greater than 3 pounds per hour, 15 pounds per day, or 2.7 tons per year: Lab Test Equipment, Tandem Extruder (non-graphic arts VOC), Underground Storage Tank (No. 4 Fuel Oil), Above Ground Storage Tanks, Ink Room Office (Miscellaneous Activities), Two (2) Pump Testing Stations and Maintenance Operations, QC Lab, Solvent Unloading Operations, two (2) Ultrasonic Cleaners, Solvent Degreasing Tanks, VOCs from Combustion Equipment, Space Heaters, Mobile Equipment, Interior/Exterior Painting, and Lawn Mowers.

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CONDITIONS (continued):

9. Solvent-laden rags shall be stored in closed containers and disposed of according to Department approved procedures.
10. The lid of drums and containers containing inks, and solvents shall be closed when the content is not being transferred.
11. Any spills of inks, and solvents shall be cleaned up as soon as possible.
12. Cleaning activities shall be inspected monthly and documented by the company.
13. Housekeeping procedures for storage, use, and disposal of solvents shall be submitted to the Department for approval.

~~14. Facility Rule Effectiveness Requirements~~

- ~~(a) 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 shall be kept for a minimum of 5 years and be made available to the Department upon request.~~
- ~~(b) 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. An outline of the O&M instructions is attached to this operating permit as an appendix. Operators must follow the O&M instructions and/or checklists and sign off daily. The records shall be kept for a minimum of 5 years and be made available to the Department upon request.~~
- ~~(c) The company shall conduct a stack test once every 5 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.~~
- ~~(d) Coating composition and usage records (RACT calculations) required in condition No. 16.d. are required for the Rule Effectiveness Program. These records shall be submitted to the Department once every 6 months.~~

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CONDITIONS (continued):

- ~~15.~~ In accordance with 25 Pa. Code Section 129.93(c), the combustion sources mentioned in Condition 3(c) shall be maintained and operated in accordance with manufacturers specifications and good air pollution control practices.
16. Company shall maintain records in accordance with the minimum recordkeeping requirements of 25 Pa. Code Section 129.95. At a minimum, this shall include:
- a. Records shall provide sufficient data and calculations to clearly demonstrate that the requirements of Conditions 5, 8, and 14 are met.
 - b. Data or information required to determine compliance with Condition 8 shall be recorded and maintained in a time frame consistent with the averaging period of the requirements.
 - c. Records of cleaning solvent use each month shall be maintained.
 - d. The company shall use the computer based Reynolds Emission Monitoring and Reporting System "REMARS" or alternate system as approved by the Department to track the volatile organic emissions associated with Rotogravure presses Nos. 2 through 8, Flexographic presses No. 1 and No. 2, Laminator No. 1 and Extruder No. 2.
 - e. The company shall keep all records and sampling results generated under the alternative standard.
 - f. Records shall be retained for at least five years and be made available to the Department upon request.

Conditions from 15-320-014 (Rotogravure Printing Presses Nos. 7 and 8)

- ~~17.~~ The catalytic oxidizer controlling two rotogravure printing presses (Nos. 7 and 8) shall operate a 100% capture efficiency and 95% destruction efficiency for an overall control efficiency of 95%.
- ~~18.~~ The operation of these two printing presses including clean-up operations shall in total not emit more than 47.6 tons/year of volatile organic compounds as determined on a 12 month rolling average basis.
- ~~19.~~ The inlet temperature to the catalyst bed shall be a minimum of 450 degree F.
- ~~20.~~ The company shall maintain a temperature measuring and recording device on the catalytic oxidizer that shows the temperature of the gases entering and exiting the catalyst bed.

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CONDITIONS (continued):

- ~~21.~~ This Operating Permit denotes a net reduction of 26.2 tons/year of volatile organic compounds due to the permitted decrease of these emissions from the press originally permitted in Plan Approval No. 15-320-009A. The 26.2 tons of volatile organic compounds may be applied to the volatile organic compound emission increases of rotogravure press No. 8 (Application No. 15- 320-009A).
- ~~22.~~ The continuous airflow through all openings shall be verified by continuous observation using streamers or by methods approved by the Department.

Conditions from Permit No. 15-326-001

- ~~23.~~ This operating permit includes the following sources: Rotogravure Press Nos. 2-6; (b) Flexographic Press No. 1; (c) Laminator No. 1; (d) Extruder No. 2.
- ~~24.~~ This operating permit includes the following control devices: M & W Control Company Catalytic oxidizer, and (b) Pillar Catalytic oxidizer.
- ~~25.~~ This operating permit is issued to Reynolds Metals Company for a twenty-four (24) hour alternative standard for surface coating and graphic arts.
- ~~26.~~ The company shall submit quarterly reports to the Department showing the emission calculations generated by Special Condition No. 16(d) for each month of operation and for each source listed in Condition No. 23.
- ~~27.~~ For verification of surface coating and graphic arts properties used in this plan, the company shall test at least 10% of all the coatings and formulations used each year. Coating formulations shall be tested randomly using method 24 and the new values shall be reflected in emission calculations. 25% of the sampling shall be conducted each quarter.
- ~~28.~~ Method 24 which includes ASTM test methods D1475, D2369, D3792, D4017 or any alternative approved by the Department will be the standard for determining the properties of any coating used in this Alternative Standard.
- ~~29.~~ An updated listing of the types and compositions of the coatings and formulations and thinners used in the aforementioned sources shall be submitted to the Department upon request.
- ~~30.~~ The company shall maintain a minimum temperature of 460 degree F in the Pillar Catalytic Oxidizer and a minimum temperature of 450 degree F in the M & W Catalytic Oxidizer, whenever any of the controlled sources are to be vented through the units. These temperatures shall be measured prior to the catalytic bed.

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CONDITIONS (continued):

- ~~31.~~ The company shall maintain a temperature sensing and recording device, on each oxidizer, that can verify the combustion chamber temperature prior to and directly after the catalytic bed.

Conditions from Permit No. 15-320-005 (Flexo Printing Press No. 2)

- ~~32.~~ This operating permit covers Flexo Printing Press No. 2 and the associated Catalytic Oxidizer.
- ~~33.~~ The company must maintain a minimum gas temperature of 460 degree F at the inlet to the catalyst section.
- ~~34.~~ Reynolds must operate the Flexographic Printing Press No. 2 in such a manner that the VOC emissions do not exceed:
- ~~a.~~ 79 tons per year; or
 - ~~b.~~ 1140 pounds per day; or
 - ~~c.~~ 95 pounds per hour

Conditions from Permit No. 15-399-037 (Washroom)

- ~~35.~~ The sources covered under this Operating Permit consists of the following equipment:
- ~~a.~~ two (2) SWS-400 washing machine with attached condensers.
 - ~~b.~~ one SCR-350E distillation unit.
 - ~~c.~~ one 500 gallon dirty solvent tank.
 - ~~d.~~ one 60 gallon clean solvent tank.
- ~~36.~~ The previous washroom consisted of the following sources:
- ~~a.~~ Bucket Tank (55 gallons)
 - ~~b.~~ Two soak drums (5 gallons)
 - ~~c.~~ Electric pump cleaner
 - ~~d.~~ Blade Tank (5 gallons)

These sources have been removed from the plant. The emissions from the new sources covered under this operating permit will be considered equal to the old sources and no offsets will be required.

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CONDITIONS (continued):

- ~~37.~~ The volatile organic compound emissions from the sources cited in Condition 35 shall be limited to 11.8 tons/yr. The company shall calculate and/or measure emission rate by methods approved by the Department.
- ~~38.~~ Reynolds shall keep records of all solvents used in the sources cited in Condition 35.
- ~~39.~~ The condensers covered under this Operating Permit must be equipped with a temperature gauge that indicates the inlet temperature of the water to the condenser.
- ~~40.~~ The inlet temperature of the water to the condenser must be a maximum of 55 degree F.
- ~~41.~~ The operation of the flexible packaging facility shall not at any time result in the emission of any 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.

General Conditions

- ~~42.~~ The company shall within an hour of occurrence notify the Department 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.
- 43. The expiration date shown on this RACT Operating Permit is for State purposes. For Federal Enforcement purposes the RACT provisions of this Operating Permit shall remain in effect as part of the State Implementation Plan (SIP) until replaced pursuant to 40 CFR 51 and approved by the US Environmental Protection Agency (EPA).
- ~~44.~~ 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 and 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).
- ~~45.~~ The aforementioned source(s) may be operated and used only so long as any associated air pollution control devices are operated and maintained in accordance with the specifications set forth in the respective plan approval(s) and the RACT application (as approved by the Department), and in accordance with any conditions set forth herein.

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CONDITIONS (continued):

- ~~46.~~ If at any time it is determined that the operation of the aforementioned source(s) is causing the emission of visible air contaminants in excess of the limitations specified in Section 123.41, or malodorous air contaminants in excess of the limitations specified in Section 123.31, or is causing the emission of these contaminants or any other type of air contaminant in excess of the limitations specified in this permit and specified in, or established pursuant to, any other applicable rule or regulation contained in Article III, the owner shall take immediate steps, including the installation of additional air cleaning device(s), if necessary, to reduce the air contaminant emissions to within the applicable limitations.
- ~~47.~~ 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 required.
- ~~48.~~ This operating permit is valid for a limited period of time and may be renewed before its expiration. Requests for an operating permit renewal must be in writing and must be accompanied by the appropriate permit application processing and annual permit administration fees as specified in Section 127.703 of the Rules and Regulations of the Department of Environmental Protection. These fees shall be paid in the form of a check payable to the "Commonwealth of Pennsylvania-Clean Air Fund." The request should be made using the appropriate application form and must be received by the Department along with a completed Air Pollution Control Act Compliance Review form no later than 60 days prior to the expiration date of this permit.

All necessary forms can be obtained from the Department upon request.

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REYNOLDS METALS COMPANY

CONDITIONS (continued):

~~49. Any notification required as a result of any condition herein should be directed to:~~

~~Regional Air Quality Manager
Department of Environmental Protection
Suite 6010
Lee Park, 555 North Lane
Conshohocken, PA 19428~~

Re 30 (RN)241-20

APPENDIX: O & M Instructions Outline Reynolds Metals Company OP-15-0004
Maintenance requirements for catalytic Oxidizer

Daily Inspections

- Verify accuracy of operating controls
- Check hand valves, manual dampers, secondary air openings and bypasses
- Check Blower for noise and shaft vibration

Monthly

- Test visual and audible alarm system for proper operation
- Check ignition spark electrodes for cracked insulator and proper gap setting
- Check valve and valve motors for free, smooth action
- Inspect thermocouples and lead wires for shorts and loose connections
- Test interlock sequence of all safety equipment. Manually make each interlock fail.
- Test safety shutoff valves for tightness of closer
- Test main fuel hand-valves for operation
- Test pressure switch settings by checking switch movements against pressure settings and comparing with actual impulse pressure.
- Inspect all electrical contacts and switches.
- Test all flame sensing devices and thermocouple fail-safe devices, making certain that the instrument drives in the proper direction.
- Inspect burners and pilots.
- Check ignition cable and transformers.
- Test all fuel lines for leaks.