



**BUREAU OF AIR MANAGEMENT  
 NEW SOURCE REVIEW PERMIT  
 TO CONSTRUCT AND OPERATE A STATIONARY SOURCE**

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-3a of the Regulations of Connecticut State Agencies (RCSA).

<b>Owner/Operator</b>	Stanley Tools Division of The Stanley Works
<b>Address</b>	600 Myrtle Street, New Britain, CT 06053
<b>Equipment Location</b>	600 Myrtle Street, New Britain, CT 06053
<b>Equipment Description</b>	Tape Rule Roll Coating Line No. 3
<b>Collateral Conditions</b>	Four Reverse Roll Coating Line Nos. 3, 4, 5, and a Grandfathered Line No. 1 (NSR Permit Nos. 110-0012, 110-0013, and 110-0019) share a Regenerative Thermal Oxidizer
<b>Town-Permit Numbers</b>	110-0012
<b>Premises Number</b>	282
<b>Stack Numbers</b>	24 (RTO) and 25 (Coating Line No. 3)
<b>Modification Issue Date</b>	January 31, 2024
<b>Prior Permit Issue Dates</b>	March 7, 2004 April 26, 2003 November 30, 1979
<b>Expiration Date</b>	None

*Katherine S. Dykes*  
 Katherine S. Dykes  
 Commissioner

for

January 31, 2024  
 \_\_\_\_\_  
 Date

This permit specifies necessary terms and conditions for the operation of this equipment to comply with state and federal air quality standards. The Permittee shall at all times comply with the terms and conditions stated herein.

## **PART I. DESIGN SPECIFICATIONS**

### **A. General Description**

The manufacturing of metal tape rulers includes a coating process where a continuous coiled metal strip undergoes successive roll coatings on a reverse roll coater and is then fed through an electric infrared drying oven and recoiled. Stanley Black & Decker, Inc. operates a custom-built reverse roll coating line that is capable of processing up to two coils simultaneously. The equipment is physically capable of processing coils with thickness of 0.15 millimeters (0.006 inches) or more; however, Stanley Black & Decker, Inc. only processes coils with thickness of less than 0.15 millimeters.

A regenerative thermal oxidizer (RTO) is used to control emissions resulting from the operation of this coating line and three other reverse roll coating lines associated with NSR Permit Nos. 110-0013, 110-0019 and a grandfathered coater. The grandfathered coater has a fuel-fired drying oven.

### **B. Equipment Design Specifications**

1. Reverse Roll Coil Coating Line
  - a. Maximum Coating Applicator Rate (gal/hr): 5
  - b. Maximum Number of Coils Processed Simultaneously: 2
2. Infrared Drying Oven (electromagnetic waves generating thermal energy)

### **C. Control Equipment Design Specifications**

1. Control Type: Regenerative Thermal Oxidizer (RTO)
2. Pollutant(s) Controlled: VOC, HAP
3. Make and Model: CMM Group-RTO-15000-M-95-2C
4. Fuel Type: Natural Gas
5. Maximum Design Fuel Firing Rate (ft<sup>3</sup>/hr): 5,000
6. Maximum Design Heat Capacity (MMBtu/hr): 5
7. Operating Temperature Range (°F): 1,450 – 1,550
8. Minimum Residence Time (sec): 0.6
9. Minimum VOC/HC Destruction for:
  - a. RTO inlet concentration less than 1,000 ppm: ≤ 30 ppm average total outlet VOC<sup>(i)</sup>
  - b. RTO inlet concentration between 1,000 ppm and 10,000 ppm: 98 %

<sup>(i)</sup> as C<sub>3</sub> (3 carbon-chain)

#### D. Stack Parameters

Stack Info.	Minimum Stack Height (ft)	Minimum Exhaust Gas Flow Rate (acfm)	Minimum Stack Exit Temperature (°F)	Minimum Distance from Stack to Nearest Property Line (ft)
Stack No. 24 RTO	50	10,000	100	353
Stack No. 25 Coating Line No. 3	41	4,000	60	95

### PART II. OPERATIONAL CONDITIONS

#### A. Equipment

Reverse Roll Coil Coating Line

1. Maximum VOC Content of Coatings Used (lb VOC/gal of coating, excludes water and exempt VOCs): 2.4
2. Maximum Coating Applicator Rate (gal/hr): 5
3. Maximum Annual Throughput of Coatings (gal of coating/yr): 43,800
4. Maximum Coil Thickness (in): 0.006 (0.15 mm)

#### B. Control Equipment

Regenerative Thermal Oxidizer

1. Maximum Annual Fuel Consumption over any consecutive 12 month period for NSR Permit Nos. 110-0012, 110-0013, and 110-0019 and the grandfathered coater combined (MMft<sup>3</sup>/yr): 43.8
2. Operating Temperature Range (°F): 1,450 – 1,550
3. Minimum Overall Control Efficiency (%): 88.2

### PART III. ALLOWABLE EMISSION LIMITS

The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time.

#### A. Criteria Pollutants

Reverse Roll Coil Coating Line No. 3 Oven Emissions from Stack 24 (RTO)

Pollutant	lb/hr	tpy
VOC	1.31	5.74

Reverse Roll Coil Coating Line No. 3 Coating Head Emissions from Stack 25

Pollutant	lb/hr	tpy
VOC	1.22	5.34

Regenerative Thermal Oxidizer (RTO) Emissions from Fuel Combustion

Pollutant	lb/hr	tpy
PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.038	0.166
SO <sub>2</sub>	0.003	0.013
NO <sub>x</sub>	0.500	2.190
VOC	0.028	0.120
CO	0.420	1.840

3 Permitted Coating Lines, Non-Permitted Grandfathered Coating Line, and RTO Combined

Pollutant	lb/hr	tpy
PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.046	0.200
SO <sub>2</sub>	0.004	0.016
NO <sub>x</sub>	0.600	2.628
VOC	10.142	44.451
CO	0.504	2.208

**B. Hazardous Air Pollutants**

This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous air pollutant (HAP) emitted and listed in RCSA Section 22a-174-29. [STATE ONLY REQUIREMENT]

**C. Opacity**

This equipment shall not exceed 10% opacity during any six minute block average as measured by 40 CFR 60, Appendix A, Reference Method 9.

**D. Demonstration of compliance with the above emission limits may be met by calculating the emission rates using emission factors from the following sources:**

- VOC from coating operation: Material Balance using VOC content from Material Safety Data Sheets and coating usage amounts
- All pollutants from RTO operation: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Section 1.4 Natural Gas Combustion, July 1998

The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

## **PART IV. MONITORING, REPORTING AND RECORD KEEPING REQUIREMENTS**

### **A. Monitoring**

1. The Permittee shall monitor VOC content in coating (pounds of VOC per gallon of coating) to achieve compliance with the limit in this permit.
2. The Permittee shall monitor metal coil thickness to comply with the limit in this permit.
3. The Permittee shall continuously monitor fuel consumption using non-resettable totalizing fuel meter.
4. The Permittee shall continuously monitor and continuously record the RTO's combustion chamber temperature using a thermocouple. The Permittee shall maintain this parameter within the range recommended by the manufacturer to achieve compliance with the emission limits in this permit.
5. The Permittee shall perform inspections of the control device as recommended by the manufacturer.

### **B. Record Keeping**

1. The Permittee shall make and keep records of the daily, monthly and consecutive 12 month quantity of all coatings and diluents used to determine VOC emissions. Such records are as follows:
  - a. description of each coating, including coating name and the density (lb/gal);
  - b. the MSDS or technical data from the manufacturer;
  - c. VOC content by weight;
  - d. water and exempt VOC content by weight;
  - e. non-volatile content of each coating by volume and weight;
  - f. amount of each coating used in gallons;
  - g. the percent by weight of solids in the coating; and
  - h. total amount of diluent used for each coating in pounds and in gallons.
2. The Permittee shall make and keep the following records:
  - a. calculations, parameters, and data, including source test data, relevant to the emission factors used to determine the emission rate for pollutant from this unit;
  - b. the name, type and quantity of any non-water solvent that is used in the cleaning of any equipment associated with this unit shall be made for each day;
  - c. the name, type and quantity of any non-water solvent that is spilled, evaporated, or manifested as waste material shall be made for each day; and
  - d. calculations of the actual pollutant mass emissions from this unit shall be made for each month and rolling twelve months. Such calculations shall use emissions factors which are not less than those most recently determined through Department approved source testing of this source where such factors are available. Documentation in support of any assumptions or data used in these calculations shall also be maintained.
3. The Permittee shall keep records of the monthly and consecutive 12 month fuel consumption for the RTO and the gas fired drying oven for the grandfather coater. The consecutive 12 month fuel consumption shall be determined by adding the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of each month.

4. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC, and CO emissions in units of tons for this unit. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month.
5. The Permittee shall maintain a log of the RTO's operations, including the RTO's combustion temperature records and all maintenance performed on the RTO. Such log shall include the date and nature of all services performed.
6. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request.

**C. Reporting**

1. The Permittee shall review all recorded data daily and report to the commissioner within three working days the details of:
  - a. any exceedance of an emission limit;
  - b. any apparent deviations from any conditions of this permit;
  - c. any apparent deviation from normal operation; and
  - d. while adjusting for load, any apparent deviation from operation during an approved compliant emissions test
2. The Permittee shall provide the records specified above to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require.

**PART V. STACK EMISSION TEST REQUIREMENTS**

Stack emission testing shall be performed in accordance with the Emission Test Guidelines available on the DEEP website at [www.ct.gov/deep/stacktesting](http://www.ct.gov/deep/stacktesting).

The Permittee shall conduct stack testing within 180 days of the issuance of this modified permit. The Permittee shall submit test results within 60 days after completion of testing.

**A. Stack No. 24**

Initial stack testing shall be required for the following:

- PM     PM<sub>10</sub>     PM<sub>2.5</sub>     SO<sub>2</sub>     NO<sub>x</sub>     CO  
 VOC     Opacity     Overall Control Efficiency (%)

Initial stack testing for Stack 24 shall include two tests as follows: An emissions test shall be conducted with all four coating lines (three permitted and one grandfathered line) in operation at no less than 90% of maximum VOC loading capacity for each line. Additionally, an emission test shall be conducted with a single permitted line (Line 3, 4, or 5) in operation at said line's typical operational VOC loading.

Each test shall consist of three runs. Each test shall be designed to determine the RTO's VOC capture and destruction efficiencies to ascertain compliance with the permitted emissions limits and overall control efficiency for VOC.

Recurrent stack testing for the above pollutant/parameter shall be conducted within five years of the date of the previous stack test.

Stack test results shall be reported as follows: VOC in units of lb/hr and Overall Control Efficiency in %.

**B. Stack No. 25**

Initial stack testing shall be required for the following pollutant(s):

PM     PM<sub>10</sub>     PM<sub>2.5</sub>     SO<sub>2</sub>     NO<sub>x</sub>     CO  
 VOC     Opacity

Stack test results shall be reported as follows: VOC in units of lb/hr.

**PART VI. OPERATION AND MAINTENANCE REQUIREMENTS**

- A. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations. The Permittee shall maintain a full, legible copy of the manufacturer's specifications and written operations manual on-site at all times. The permittee shall provide a copy of the manufacturer's specifications and written operations manual upon request of the Commissioner or his/her agent.
- B. The Permittee shall properly operate the control equipment at all times that this equipment is in operation and emitting air pollutants.
- C. The Permittee shall only allow personnel who have been trained in the proper operation of the control equipment to operate such equipment.

**PART. VII. SPECIAL REQUIREMENTS**

- A. The Permittee shall conduct a thermocouple calibration test for the combustion chamber. The test shall be conducted in accordance with the State of Connecticut Department of Energy and Environmental Protection Resource Recovery Facility Guideline Policy; Thermocouple Calibration/Retention Time Determination Procedures for Meeting Permit/Order Requirements -- Thermocouple Calibration Procedure. The first test for the thermocouple shall be completed within 180 days of permit issuance. Subsequent thermocouple testing shall occur annually from date of first test, and as needed.

**B. Premises Emissions Summary**

- 1. On January 1<sup>st</sup> of each calendar year, if the potential emissions of NO<sub>x</sub> or VOC from the premises are equal to or greater than 25 tons per year per pollutant, then for such pollutant(s), the Permittee shall:
  - a. Monitor NO<sub>x</sub> and/or VOC emissions, as applicable, from the premises for such calendar year.
  - b. Calculate and record annual NO<sub>x</sub> and/or VOC emissions, as applicable, from the premises for such calendar year, in units of tons. The Permittee shall make these calculations on or before February 1<sup>st</sup> of the following year with respect to the previous calendar year. Such records shall include a sample calculation(s).
  - c. If actual NO<sub>x</sub> and/or VOC emissions, as applicable, from the premises are equal to or greater than 25 tons for such calendar year, the Permittee shall submit to the commissioner, on or before March 1<sup>st</sup> of the following year, an annual emissions

summary with respect to the premises for the previous calendar year. Such summary shall be submitted on forms prescribed or provided by the commissioner.

2. A Permittee is exempt from Part VII.B.1 requirements of this permit if, on January 1st of the subject year, the premises was operating in accordance with any of the following:
  - a. A valid Title V permit issued pursuant to RCSA Section 22a-174-33;
  - b. RCSA Section 22a-174-33a; or
  - c. RCSA Section 22a-174-33b
- C. The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor beyond the property boundary of the premises that constitutes a nuisance as set forth in RCSA Section 22a-174-23. [STATE ONLY REQUIREMENT]
- D. The Permittee shall operate this facility at all times in a manner so as not to violate or contribute significantly to the violation of any applicable state noise control regulations, as set forth in RCSA Sections 22a-69-1 through 22a-69-7.4. [STATE ONLY REQUIREMENT]

## **PART VIII. ADDITIONAL TERMS AND CONDITIONS**

- A. This permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the regulated activity in compliance with all applicable requirements of any federal, municipal or other state agency. Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B. Any representative of the DEP may enter the Permittee's site in accordance with constitutional limitations at all reasonable times without prior notice, for the purposes of inspecting, monitoring and enforcing the terms and conditions of this permit and applicable state law.
- C. This permit may be revoked, suspended, modified or transferred in accordance with applicable law.
- D. This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material, nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby. This permit shall neither create nor affect any rights of persons or municipalities who are not parties to this permit.
- E. Any document, including any notice, which is required to be submitted to the commissioner under this permit shall be signed by a duly authorized representative of the Permittee and by the person who is responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."
- F. Nothing in this permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.



- G.** Within 15 days of the date the Permittee becomes aware of a change in any information submitted to the commissioner under this permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the commissioner.
- H.** The date of submission to the commissioner of any document required by this permit shall be the date such document is received by the commissioner. The date of any notice by the commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.
- I.** Any document required to be submitted to the commissioner under this permit shall, unless otherwise specified in writing by the commissioner, be directed to: Office of Director; Enforcement Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.