Connecticut Department of

ENERGY &
ENVIRONMENTAL
PROTECTION

-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).

Owner/Operator	Braxton Manufacturing Company, Inc.
Address	858 Echo Lake Road, Watertown, Connecticut 06795
Equipment Location	858 Echo Lake Road, Watertown, Connecticut 06795
Equipment Description	Ultra-Kool Cold Trap Plus 30-30-24 Vapor Degreaser
Town-Permit Numbers	200-0053
Premises Number	0052
Stack Number	2
Minor Modification Issue Date	November 4, 2013
Prior Permit Issue Date	September 14, 2010
Expiration Date	None

/s/ Anne Gobin for
Daniel C. Esty
Commissioner

November 4, 2013
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

Braxton Manufacturing Company, Inc manufactures precision deep-drawn metal eyelets, deep-drawn metal enclosures and housings for the communications, aerospace, specialty automotive and electronics industries. Braxton operates an Ultra-Kool Cold Trap Plus 30-30-24 vapor degreaser, which uses methylene chloride as the cleaning solvent. This unit is subject to 40 CFR Part 63 Subpart T, the National Emissions Standards for Halogenated Solvent Cleaning.

B. Design Specifications

1. Type of Solvent Cleaning Machine: Open Top Vapor (Batch)

2. Solvent Recovery Still: ☐ Yes ☒ No

3. Solvent/Air Interface Area (ft^2): 12.5

4. Hourly Solvent Consumption (lb/hr): 5.0

5. This Solvent Cleaning Machine shall have:
   a. An idling and downtime mode cover that may be readily opened or closed, that completely covers the cleaning machine openings when in place, and is free of cracks, holes, and other defects.
   b. A Freeboard Ratio of 1.0 or greater.
   c. An automated parts handling system capable of moving parts or parts baskets at a speed 11 feet per minute or less from the initial loading of parts through removal of cleaned parts.
   d. A safety switch to shut off sump heat if the sump liquid solvent level drops to the sump heater coils.
   e. A vapor level control thermostat to shut off the sump heat if the vapor level rises above the height of the primary condenser.
   f. A primary condenser.

C. Control Equipment Design Specifications

This degreaser shall employ the following control equipment.

1. Freeboard Refrigerated Chiller
   a. Maximum Temperature at Center of Air Blanket (°F): 31

D. Stack Parameters

1. Area is ventilated by general building exhaust.

2. Minimum Exhaust Gas Flow Rate (acfm): 1000

3. Normal Stack Exit Temperature, Range: Ambient

4. Minimum Distance from Vent to Property Line (ft): 106

PART II. OPERATIONAL CONDITIONS

A. Operational Limits

1. Allowable Solvent: Methylene Chloride

2. Maximum Solvent Emitted (lb/12 consecutive months): 19,000

Solvent Emitted means the halogenated hazardous air pollutant solvent consumption minus the liquid halogenated hazardous air pollutant solvent removed from the machine and the halogenated hazardous air pollutant solvent removed from the machine in solid waste during the measurement period.

Solvent Removed means the amount of solvent removed from the solvent cleaning machine less contaminants during the measurement period

Solvent Consumption means the amount of solvent added to the solvent cleaning machine during the measurement period.

B. Work Practices

1. The cover of the solvent cleaning machine shall be in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover to not be in place.

2. The parts baskets or the parts being cleaned in an open-top batch vapor cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.

3. Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).

4. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed.

5. Parts baskets or parts shall not be removed from the solvent cleaning machine until dripping has stopped.

6. During startup of the vapor cleaning machine, the primary condenser shall be turned on before the sump heater.

7. During shutdown of the vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.

8. When solvent is added or drained from the solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.

9. The solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.

10. Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning procedures in 40 CFR Part 63 Subpart T, Appendix A if requested during an inspection by the Administrator.

11. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.

12. Sponges, fabric, wood, and paper products shall not be cleaned.

PART III. MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

A. Monitoring Requirements

1. The Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode on a weekly basis.

2. The Permittee shall conduct a monthly visual inspection to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes and other defects.

3. The Permittee shall determine the hoist speed monthly by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in feet divided by the time in minutes. If after the first year, no exceedances of the hoist speed are measured, the Permittee may begin monitoring the hoist speed quarterly.

4. Per 40 CFR §63.466(g), the Permittee may use alternate monitoring procedures approved by the Administrator in lieu of the above monitoring procedures provided that they are not inconsistent with any other term or condition of this permit. Any request to use alternate monitoring procedures shall be submitted in accordance with 40 CFR §63.8(f).

B. Record Keeping Requirements

1. The Permittee shall record the monthly and consecutive 12 month solvent consumption, solvents removed and solvents emitted. The consecutive 12 month solvent consumption, solvents

removed and solvents emitted shall be determined by adding each month's solvent consumption, solvents removed and solvents emitted to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the previous month.

2. The Permittee shall keep records of the air blanket temperature measurements. Records shall include the date of the measurement, the temperature and the name of the operator.

3. The Permittee shall keep records of the inspection of the cover. Records shall include the date of the inspection, the results and the name of the operator.

4. The Permittee shall keep records of the hoist speed. Records shall include the date of the measurement, the hoist speed and the name of the operator.

5. The Permittee shall keep records of degreaser operator training.

6. The Permittee shall keep all records required by 40 CFR §63.467.

7. 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 Requirements

1. The Permittee shall submit to EPA all reports required by 40 CFR §63.468.

PART IV. OPERATION AND MAINTENANCE REQUIREMENTS

A. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations.

B. The Permittee shall properly operate the control equipment at all times that this equipment is in operation and emitting air pollutants.

C. All equipment operators shall be trained in the proper operation and maintenance of both the degreaser and control devices.

PART V. 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

Pollutants	lb/month	tons/12 consecutive months
Methylene Chloride	1780	9.5

Demonstration of compliance with the above emission limits shall be met by calculating the emission rates using emission factors from the following sources:

1. Methylene Chloride: Material balance per Part III.B.1 of this permit.

The above statement shall not preclude the commissioner from requiring other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

B. Hazardous Air Pollutants

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

PART VI. SPECIAL REQUIREMENTS

A. The Permittee shall comply with all applicable sections of the following National Emission Standard(s) at all times.

Title 40 CFR Part 63, Subparts T and A

Copies of the Code of Federal Regulations (CFR) are available online at the U.S. Government Printing Office website.

B. STATE ONLY REQUIREMENT: The Permittee shall operate in compliance with the regulations for the control of noise, as set forth in RCSA Sections 22a-69-1 through 22a-69-7.4.

C. STATE ONLY REQUIREMENT: The Permittee shall operate in compliance with the regulations for the control of odor, as set forth in RCSA Section 22a-174-23.

PART VII. 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 DEEP 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; Engineering & Enforcement Division; Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

NSR Engineering Evaluation

CT Department of Energy and Environmental Protection
Bureau of Air Management

Company Name:	Braxton Manufacturing Co., Inc.	**Permit No.**:	200-0053
Equipment Location:	858 Echo Lake Road, Watertown, CT 06795	**Date App Received**:	9/13/2013
Mailing Address:	858 Echo Lake Road, Watertown, CT 06795	**SIMS No.**:	201304081
Contact Person:	Mr. Andy Barnes	**Date Prepared**:	10/23/2013
Contact Title:	Director of Engineering	**Prepared By:**	James Grillo
Contact Phone:	860-274-6781	**Single or Multiple Units:**	Single
Contact Email:	andyb@braxtonmfg.com	**Permit Type:**	Minor Mod (prepaid)
Ozone:	serious non-attainment	**Premises Size:**	Minor
PM2.5:	attainment	**Equipment Size:**	Minor
Equipment Description	Ultra-Kool Cold Trap Plus 30-30-24 Vapor Degreaser	**TV/GPLPE Permit No:**	200-0052-TV

Step 1: Complete all the fields above

Step 2: Generate Eval Step 3: Update Fields

Introduction

Reason for Application: The NSR permit has a definition of consumption that contradicts Subpart T and has caused several TV deviation reports and a subsequent NOV. The Enforcement section has reviewed the draft permit and is in agreement with the proposed changes to the definitions of solvent consumption and solvent emitted. (see e-mail from Kaitlin Stern, dated 10/08/2013)

Parts II and V of the permit contradict each other where solvent consumption (Part II) and allowable emissions (Part V) have the same limit. Since, there is no regulatory restriction on solvent consumption in either Subpart T or the RCSA Section 22a-174-20(l), the limitation on solvent consumption can be removed from the permit. The solvent emission limitation is based on BACT, the operating parameters found in Subpart T and Section -20(l) and will not change due to this modification.

The issue is caused because the current definition of consumption means ALL of the solvent added to the cleaning machine with no account for manifested waste. During periods of high production where the machine is cleaned more than once per month the consumption limit is exceeded even though the emission limit is not.

Regulatory Applicability: This minor modification to the NSR permit is being made pursuant to RCSA 22a-174-2a(e)(1).

Discussion of Modification/Revision: In Part II.A Operational Limits, *Maximum Solvent Consumption* has been changed to *Maximum Solvent Emissions*. The definitions of *Consumption* and *Emissions* have been changed to the following:

Solvent Consumption means the amount of halogentated hazardous air pollutant solvent added to the solvent cleaning machine.

Solvent Emitted means halogentated hazardous air pollutant solvent consumed (i.e halogentated hazardous air pollutant solvent added to the machine) minus the liquid halogenated hazardous air pollutant solvent removed from the machine and the halogentated hazardous air pollutant solvent removed from the machine in the solid waste.

Permit Fee(s) **(Double Click to edit)**

Equipment Size	○ Major	◉ Minor
Permit Type	Minor Permit Mod	
Permit Fee	$1,750	ea.
Municipality	☐ Yes	
# of Permits/Applications	1	$1,750
Application Fee Submitted	☑ Yes	-$940
Was Permit Fee paid with Application Fee?	☑ Yes	-810
Additional Application Fees ($1750 Each)		
	Quantity	
BACT Review	0	$0
LAER Review	0	$0
Money Owed		**$0**

Compliance History Review

Was the SIMS Enforcement Report run and reviewed for this applicant?	Yes
Were other bureaus contacted to resolve any outstanding enforcement actions shown in the SIMS Report?	N/A
What is the date on the Enforcement Section's review of air compliance email?	10/223/2013
Was the compliance record reviewed in accordance with the Environmental Compliance History Policy?	Yes

Approvals

Based on the information submitted by the applicant, this engineering evaluation and the compliance history review, the granting of a permit is recommended for Braxton Manufacturing Co., Inc..

/s/ James Grillo 10/30/13
James Grillo
APCE

/s/ Kiernan Wholean 11/1/13
Kiernan Wholean
Supervising APCE