

STATE OF CONNECTICUT DEPARTMENT OF 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 and Section 22a-174-3a of the Regulations of Connecticut State Agencies.

Owner/Operator:	Supreme Lake Manufacturing, Inc.
Address:	455 Atwater Street, Plantsville, Connecticut 06479
Equipment Location:	455 Atwater Street, Plantsville, Connecticut 06479
Equipment Description:	Ultra Kool Batch Vapor Degreaser, Model #108-24-33

Permit Number:	168-0047
Town/Premises Numbers:	168/110
Original Permit Issue Date:	10/3/2000
Modification Issue Date:	5/20/06
Expiration Date:	NONE

Gina McCarthý Commissioner

5/20/06

Date



STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

The conditions on all pages of this permit and attached appendices shall be verified at all times except those noted as design specifications. Design specifications need not be verified on a continuous basis; however, if requested by the Commissioner, demonstration of compliance shall be shown.

PART I. OPERATIONAL CONDITIONS

Solvent Metal Cleaning Process

A. Enforceable Conditions:

1.	Allowabl	e Solve	ent(s	s): Methyle	ene Chloride	(Dichloro	methane)	
					Consumption			

"Net Consumption" is the amount of solvent added to the degreaser minus the amount of solvent manifested as hazardous waste.

B. Design Specifications:

1. Type of Solvent Cleaning Machine:

\boxtimes	Open	Top	Vapo	r	(Batch)
	Conve	eyori	lzed	(I	n-line)
\Box	Cold	(Bat	ch)		(Batch) in-line)

- 2. Solvent Recovery Still: X Yes No
- 3. Stack Height (ft): Fugitive emissions exhaust through
- a roof vent at a height of 7 feet 4. Exhaust Gas Flow Rate (acfm): 10,200 5. Minimum Distance of Exhaust Point to Property Line (ft): 120

PART II. CONTROL EQUIPMENT

Control Combination Option 1 (40 CFR Part 63 Subpart T):

Freeboard Refrigeration Device Freeboard Ratio of 1.0 Superheated Vapor

CONTINUOUS EMISSION MONITORING REQUIREMENTS AND ASSOCIATED PART III. EMISSION LIMITS

N/A

FIRM NAME: Supreme Lake Manufacturing, Inc. EQUIPMENT LOCATION: 455 Atwater Street, Plantsville, Connecticut 06479 EQUIPMENT DESCRIPTION (MODEL, I.D. #): Ultra Kool Batch Vapor Degreaser Model # 108-24-33

STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

PART IV. MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

Solvent Metal Cleaning Process

A. Monitoring Requirements

- 1. The Permittee shall conduct monitoring of each control device (i.e., freeboard refrigeration device, freeboard ratio of 1.0, and superheated vapor). [40 CFR §63.463(e)(1)]
- 2. During each monitoring period, the Permittee shall ensure that the chilled air blanket temperature (in °F or °C), of the freeboard refrigeration device, measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point. The Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode. [40 CFR §63.463(e)(2)(i) & 40 CFR §63.466(a)(1)]
- 3. If the temperature requirement in Part 2. of this section is exceeded and not corrected within 15 days of detection, adjustments or repairs shall be made to the vapor degreaser or to the freeboard refrigeration device to reestablish required levels. The temperature must be remeasured immediately upon adjustment or repair and demonstrated to be within the limit required by this permit. [40 CFR §63.463(e)(2)(ii)]
- 4. The Permittee shall ensure compliance with the following requirements when using a superheated vapor system:
 - a. Ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10°F above the solvent's boiling point. [40 CFR §63.463(e)(2)(vi)(A)]
 - b. Ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system is followed. [40 CFR §63.463(e)(2)(vi)(B)]
 - c. Ensure that parts remain within the superheated vapor for at least the minimum proper dwell time. [40 CFR §63.463(e)(2)(vi)(C)]
 - d. The Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the superheated vapor zone while the vapor degreaser is in the idling mode. [40 CFR §63.466(a)(2)]
- 5. If the Permittee does not comply with the requirements of Parts 1-4 of this section and not corrected within 15 days of detection, and exceedance has occurred. Adjustments or repairs shall be made to the solvent cleaning system or control device to reestablish required levels. The parameter must be remeasured immediately upon adjustment or repair and demonstrated to be within required limits. [40 CFR §63.463(e)(3)(i)-(ii)]
- 6. The Permittee shall determine their potential to emit from all solvent cleaning operations on the premises. The premises' total potential to emit for each individual cleaning operation, plus all HAP emissions from other sources within the premises.

FIRM NAME:	Supreme 1	Lake	Manufacturing,	Inc.				
EQUIPMENT	LOCATION:	455	Atwater Street	, Plants	sville,	Connecti	cut 06479	
EQUIPMENT	DESCRIPTION	V (MC	DEL, I.D. #):	Ultra H	Kool Bat	ch Vapor	Degreaser	
			-	Model #	# 108-24	1-33		

Town No: 168 ORIGINAL

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STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS, cont. PART IV.

a. Determine the potential to emit for each individual solvent cleaning machine using the following equation: $PTE_i = H_i \times W_i \times SAI_i$ Where, PTE_i = the potential to emit for solvent cleaning machine i (kilograms of solvent per year) H_i = hours of operation for solvent cleaning machine i (hours per year) W_i = the working mode uncontrolled emission rate (kilograms per square meter per hour) SAI, = solvent/air interface area of solvent cleaning machine i (square meters) (Solvent/air interface area is the surface area of the vapor zone that is exposed to the air. [40 CFR §63.465(e)(1)]

- b. Cleaning machines that do not have solvent/air interface shall calculate a solvent/air interface area using the following equation: $SAI = 2.20 \times (Vol)^{0.6}$
 - Where, SAI = the solvent/air interface area (square meters)
 - · Vol = the cleaning capacity of the solvent cleaning machine (cubic meters) [40 CFR §63,465(e)(2)]
- c. Sum the PTEi for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the premises. [40 CFR §63.465(e)(3)]
- 7. The Permittee shall monitor the hoist speed as described below:
 - a. The Permittee shall determine the hoist speed by measuring the time it takes for the hoist speed measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute). [40 CFR §63.466(c)(1)]
 - b. The monitoring shall be conducted monthly. If after the first year, no exceedances of the hoist speed are measured, the Permittee may begin monitoring the hoist speed quarterly. [40 CFR §63.466(c)(2)]
 - c. If an exceedance of the hoist speed occurs during quarterly monitoring, the monitoring frequency returns to monthly until another year of compliance without an exceedance is demonstrated. [40 CFR §63.466(c)(3)]
 - d. If the Permittee can demonstrate to the Administrator's of Commissioner's satisfaction in the initial compliance report that the hoist speed cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including the first year of compliance. [40 CFR §63.466(c)(4)]
- 8. The Permittee using control devices listed in Part 1. of this section can use alternative monitoring procedures approved by the Administrator or the Commissioner. [40 CFR §63.466(q)]

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Town No: 168 ORIGINAL

Premise No. 110 Permit No. 0047 Stack No. 01

STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

PART IV. MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS, cont

B. Record Keeping Requirements

- 1. The Permittee shall make and keep records of the monthly and consecutive twelve (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 eleven (11) months. The Permittee shall make these calculations on a monthly basis.
- 2. The Permittee shall maintain the following records in written or electronic form for the lifetime of the machine:
 - a. Owner's manuals, or if not available, written maintenance and operating procedures, for the solvent cleaning machine and control equipment. [40 CFR §63.467(a)(1)]
 - b. The date of installation for the solvent cleaning machine and all of its control devices. If the exact date for installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted. [40 CFR §63.467(a)(2)]
 - c. Records of the halogenated HAP solvent content for each solvent cleaning machine. [40 CFR §63.467(a)(5)]
- 3. Results of the control device monitoring required under Part IV.A. of this permit. [40 CFR §63.467(b)(1)]
- 4. The Permittee shall keep records on premise indicating continual compliance with all above conditions at all times and shall make them available upon request by the Commissioner for the duration of this permit, or for the previous five (5) years, whichever is less.

C. Reporting Requirements

- 1. The Permittee shall submit to the Administrator and Commissioner an annual report by February 1 of the year following the one for which the reporting is being made. This report shall include the requirements specified below:
 - d. A signed statement from the Permittee or his/her designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in §63.463(d)(10)." [40 CFR §63.468(f)(1)]
 - e. An estimate of solvent consumption for each solvent cleaning machine during the reporting period. [40 CFR §63.468(f)(2)]
- 2. The Permittee shall submit an exceedance report to the Administrator or Commissioner if it is determined on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, and exceedance occurs. Once an exceedance has occurred the Permittee shall follow a quarterly reporting format until a request to reduce reporting frequency under this section is approved.

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STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

PART IV. MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS, cont

- 3. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the applicable information below:
 - a. Information on actions taken to comply with the "Monitoring and Testing Requirements" section. This information shall include records of written or verbal orders for replacement parts, a description of the repair made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels. [40 CFR §63.468(h)(1)]
 - b. If an exceedance has occurred, the reason for the exceedance and a description of the actions taken. [40 CFR §63.468(h)(2)]
 - c. If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report. [40 CFR §63.468(h)(3)]
- 4. A Permittee who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the following conditions are met:
 - a. The source has demonstrated a full year of compliance without an exceedance. [40 CFR §63.468(i)(1)]
 - b. The Permittee continues to comply with all relevant record keeping and monitoring requirements specified in Subpart A of the General Provisions and 40 CFR Part 63 Subpart T. [40 CFR §63.468(i)(2)]
 - c. The Administrator and Commissioner do not object to a reduced frequency of reporting for this vapor degreaser as provided in paragraph (e)(3)(iii) of Subpart A of the General Provisions. [40 CFR §63.468(i)(3)]

PART V. ALLOWABLE EMISSION LIMITS:

The Permittee shall meet the emission limits stated herein at all times.

Criteria Pollutants	#/hr (8-hr avg.)	MASC* (ug/m ³)	TPY
Exempt VOC	15.2		14.95
Non-Criteria Pollutants			
Methylene Chloride	15.2	398,729	14.95

*Maximum Allowable Stack Concentration

PART VI. STACK EMISSION TEST REQUIREMENTS

Stack emission testing shall not be required at this time.

FIRM NAME	: Supreme	Lake	Manufac	cturing,	Inc.				
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EQUIPMENT	DESCRIPTIO	N (MC	DDEL, I.	D. #):	Ultra	Kool B	atch Vapor	Degreaser	
						# 108-		***************************************	

Town No: 168 ORIGINA

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PART VII. APPLICABLE REGULATORY REFERENCES (The Regulations of Connecticut State Agencies, hereinafter referred to as the Regulations)

22a-174-3a; 22a-174-18; 22a-174-29(b)

These references are not intended to be all inclusive - other sections of the Regulations may apply.

PART VIII. SPECIAL REQUIREMENTS

- A. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations.
- B. The permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor that constitutes a nuisance beyond the property boundary of the premises as set forth in RCSA Section 22a-174-23.
- C. 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.
- D. The Permittee shall comply with all applicable sections of the following National Emission Standard(s) at all times. (Applicable if -X- checked) 40 CFR Part 63, Subpart <u>x</u> T <u>x</u> A (See Appendix C for Detailed Requirements)

PART IX. 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.

FIRM NAME:	Supreme	Lake	Manufac	turing,	Inc.						
EQUIPMENT	LOCATION:	455	Atwater	Street	, Plan	tsvill	e, Co	nnecti	cut 06479)	
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				-	Model	# 108	-24-3	3		******	



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PART IX. ADDITIONAL TERMS AND CONDITIONS, continued

- 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 fifteen 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; Compliance & Field Operations Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

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