

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	Ametek, Specialty Metal Products Division
Address	21 Toelles Road, P.O. Box 5807, Wallingford, CT
Equipment Location	21 Toelles Road, Wallingford, CT
Equipment Description	Ultra-Kool In-Line Vapor Degreaser
Town-Permit Numbers	189-0241
Premises Number	142
Stack Number	45
Modification Issue Date	May 12, 2026
Prior Permit Issue Date	November 26, 2012
Expiration Date	None

for Tracy Babbidge
Katherine S. Dykes
Commissioner

May 12, 2026
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

Ametek Specialty Metal Products Division produces metal strips and specialty wire products for a variety of industrial applications. Ametek uses metal cleaning degreasers for the degreasing of rolled metal that passes directly from the degreaser into an existing annealing furnace on a semi-continuous basis.

B. Equipment Design Specifications

1. Type of Solvent Cleaning Machine: Conveyorized (In-line)
2. Solvent Recovery Still: Yes
3. Solvent/Air Interface Area (ft²): 47.1
4. Hourly Solvent Consumption (lb/hr): 4.3
5. This Solvent Cleaning Machine shall have:
 - a. Freeboard Ratio of 1.0 or greater.
 - b. A safety switch to shut off sump heat if the sump liquid solvent level drops to the sump heater coils.
 - c. A vapor level control thermostat to shut off the sump heat if the vapor level rises above the height of the primary condenser.
 - d. A primary condenser.
 - e. A condenser flow switch and thermostat to shut off sump heat if the condenser coolant is not circulating or too warm.
 - f. A spray safety switch which shuts off the spray pump if the vapor level drops more than 10 centimeters (4 inches) below the lowest condensing coil.

C. Control Equipment Design Specifications

1. Superheated Vapor and Refrigerated Chiller [RCSA §22a-174-20(l)(5)(A)]
2. Squeegee System [RCSA §22a-174-20(l)(5)(E)]

D. Stack Parameters

1. Minimum Stack Height (ft): 23
2. Minimum Exhaust Gas Flow Rate (acfm): 35,000
3. Minimum Stack Exit Temperature (°F): 70
4. Minimum Distance from Stack to Nearest Property Line (ft): 225

PART II. OPERATIONAL CONDITIONS

A. Operational Limits

1. Allowable Solvents: FluoSolv HT-G20 (Non-PFAS) Ultra; or FCS Fluorinated Cleaning Solvent
2. Maximum Solvent Consumption (lb/12 consecutive months): 37,695

Solvent Consumption means the amount of solvent added to the degreaser during the measurement period plus any differential in the solvent contained in the reservoir at the beginning and ending of the measurement period.

Solvent Removed means the amount of solvent removed from the degreaser less contaminants during the measurement period.

Solvent Emitted means Solvent Consumption less Solvent Removed during the measurement period.

B. Work Practices

The Permittee shall meet all of the following required work and operational practices in subparagraphs "1" - "14" specified below and as having been set forth in RCSA §22a-174-20(l)(5):

1. Any spraying operations shall be conducted in a section of the degreaser that is not directly exposed to the ambient air (i.e. a baffled or enclosed area of the degreaser).
2. During startup of the degreaser, the primary condenser shall be turned on before the sump heater.
3. During shutdown of the degreaser, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.
4. When solvent is added or drained from the degreaser, the solvent shall be transferred using threaded or other leak-proof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
5. The degreaser and associated controls shall be maintained as recommended by the manufacturer of the equipment or using alternative maintenance practices that have been demonstrated to the Commissioner's satisfaction to achieve the same or better results as those recommended by the manufacturer.
6. Sponges, fabric, wood, and paper products shall not be cleaned. This prohibition does not apply to absorbent materials used as part of the cleaning process of continuous web cleaning machines, including rollers and roller covers.
7. Waste solvent, still bottoms, sump bottoms and waste absorbent materials used in the cleaning process for continuous web cleaning machines 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. The Permittee shall ensure that the amount of waste degreasing solvent that evaporates into the atmosphere during disposal or transfer to another party does not exceed twenty (20) percent of the solvent (by weight).
8. Rack parts to allow complete drainage.

9. Use a drying tunnel, rotating basket, or other equivalent method to prevent cleaned parts from carrying out solvent liquid.
10. Place covers over the entrances and exits immediately after conveyors and exhausts are shutdown, leaving them in place until just prior to start-up.
11. Minimize openings during operation so that entrances and exits will silhouette workloads with an average clearance between the parts and the edge of the degreasing unit opening of less than ten (10) centimeters (4 inches) or less than ten (10) percent of the width of the opening.
12. Prevent water from being visually detectible in solvent exiting the water separator.
13. Do not provide exhaust ventilation exceeding twenty (20) cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreasing unit open area, unless necessary to meet OSHA requirements.
14. Do not operate the unit upon the occurrence of any visible solvent leak until such leak is repaired.

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

Pollutant	lb/month	tpy
VOC	3,141	18.8

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 RCSCA 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: Material balance per Part IV.B.4 and 5 of this permit.

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, RECORD KEEPING AND REPORTING REQUIREMENTS

A. Monitoring Requirements

1. For the refrigerated chiller, the Permittee shall measure the chilled air blanket temperature at the centroid of the degreaser during idling mode at the coldest point to ensure that it is no greater than 34 °F in accordance with RCSA 22a-174-20(l)(1)(J). This measurement shall be taken at least once per week while in idling mode.
2. The Permittee shall monitor the amount of solvent added and the amount of solvent removed from the degreaser unit.
3. The Permittee shall visually inspect each continuous web part exiting the degreaser to ensure that no solvent film is visible on the part. [RCSA 22a-174-20(l)(5)(E).
4. The Permittee shall measure the temperature of the solvent vapor at the center of the superheated vapor zone during idling mode to ensure it is not lower than 127 °F. This measurement shall be taken at least once per week while in idling mode.
5. The Permittee shall follow the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system and ensure that parts remain within the superheated vapor for at least the minimum proper dwell time.
6. The Permittee shall determine the maximum product throughput for the squeegees and ensure squeegees are replaced at or before the maximum product throughput is attained.

B. Record Keeping

1. The Permittee shall post a permanent, conspicuous label on or near the degreaser summarizing the applicable operating requirements [RCSA §22a-174-20(l)].
2. The Permittee shall keep records of the test used, and results obtained in determining the maximum product throughput for the squeegees,
3. The Permittee shall keep records of the visual inspection of parts exiting the degreaser for visible solvent film as required in Part IV.A.3 of this permit.
4. The Permittee shall keep weekly records of the chilled air blanket temperature measurements taken. Such records shall include the maximum temperature allowed and the actual temperature observed.
5. The Permittee shall keep weekly records of the solvent vapor temperature measurements taken. Such records should include the minimum temperature allowed and the actual temperature observed.
6. The Permittee shall calculate and record the monthly and consecutive 12 month solvent consumption, solvents removed, and solvents emitted, in pounds and tons (lb/month, lb/yr, ton/yr). 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.

7. The Permittee shall calculate the monthly and consecutive 12 month VOC emitted in pounds and tons (lb/month, lb/yr, ton/yr). The consecutive 12 month VOC emitted shall be determined by adding each month's VOC emitted to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the previous month.
8. The Permittee shall keep records on premises 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. [RCSA §22a-174-20(l)]
9. 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.

Reporting

1. The Permittee shall notify the commissioner in writing of any exceedance or deviation of an emission limitation or operating parameter and shall identify the cause or likely cause of such exceedances or deviations, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures taken no later than ten days after such exceedance commenced.

PART V. OPERATIONS 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 VII. SPECIAL REQUIREMENTS

A. Premises Emissions Summary

1. On January 1st of each calendar year, if the potential emissions of NO_x 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_x and/or VOC emissions, as applicable, from the premises for such calendar year.
 - b. Calculate and record annual NO_x 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 1st of the following year with respect to the previous calendar year. Such records shall include a sample calculation(s).
 - c. If actual NO_x 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 1st 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.D.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

B. 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]

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