Instructions for Attachment E207
METAL CLEANING DEGREASERS
Supplemental Application Form
(Instructions for Completing DEEP-NSR-APP-207)

All applications for a permit to construct and operate a stationary source shall provide the information listed in the Regulations of Connecticut State Agencies (RCSA) section 22a-174-3a(c). This supplemental application form shall be completed for new or modified metal cleaning sources such as cold cleaning, open top vapor and conveyorized degreasers.

This equipment is defined in the following manner: (1) A cold cleaning degreaser is the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing, or immersion while maintaining the degreasing solvent below its boiling point; (2) An open top vapor degreaser is the batch process of cleaning and removing soils from metal surfaces by condensing hot degreasing solvent vapor on the colder metal surfaces; (3) A conveyorized degreaser is the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized degreasing solvents.

Complete a separate form for each degreaser unit. Complete each item as appropriate. If a specific item does not apply to your situation indicate N/A (not applicable). If additional space is needed to answer a question stated in the application, attach separate sheet(s) as necessary, clearly identifying the applicant name, form name and Part number, and unit number.

**Note:** The data provided in these forms will be used to define the operating limits in your permit.

Questions? Visit the [Air Permitting](#) web page or contact the Air Permitting Engineer of the Day at 860-424-4152 (between 8:30 AM and 4:30 PM, Monday through Friday).

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**Applicant Name:** Provide the applicant name as previously indicated on the Permit Application for Stationary Sources of Air Pollution form (DEEP-NSR-APP-200).

**Unit Number:** Provide the unit number of the subject unit as previously assigned on the Permit Application for Stationary Sources of Air Pollution form (DEEP-NSR-APP-200). Please use a consistent reference number for each unit throughout the application package.

**Part I: General**

*Degreaser Type* – Indicate the type of degreaser. If other, specify type. Check one.

*Manufacturer and Model Number* - Provide the manufacturer and model number of the degreaser. This information can be obtained from the manufacturer.

*Construction Date* - Provide the actual or anticipated construction date of the unit.

*Begin actual construction* means in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operating this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

*Is this unit subject to Title 40 CFR Part 60, NSPS?* Indicate if the unit is subject to Title 40 of the Code of Federal Regulations (CFR) Part
60, New Source Performance Standards (NSPS). If yes, specify the appropriate subpart(s).

Is this unit subject to Title 40 CFR Part 63, MACT?: Indicate if the unit is subject to Title 40 CFR Part 63, National Emissions Standards for Hazardous Air Pollutants (NESHAP). If yes, specify the appropriate subpart(s).

Title 40 CFR Part 60 and Title 40 CFR Part 63 regulations can be found on the U.S. Government Printing Office Website.

Inside Dimensions of Tank - Provide the inside dimensions of the tank, i.e., the width, length, and depth, in feet. This information can be obtained from the manufacturer.

Tank Volume – Provide the tank's capacity in gallons. This information can be obtained from the manufacturer.

Freeboard Height and Ratio - Provide the freeboard height and ratio. This information can be obtained from the manufacturer.

Freeboard Height means:

- for a cold cleaning degreaser, the distance from the liquid solvent in the degreasing tank to the lip of the tank;
- for an open top vapor degreaser, the distance from the mid-line height of the primary condenser coils to the lip of the tank;
- for a vapor conveyorized degreaser, the distance from the mid-line height of the primary condenser coils to the bottom of the entrance or exit opening, whichever is lower; and
- for a cold conveyorized degreaser, the distance from the liquid solvent level to the bottom of the entrance or exit opening, whichever is lower, as measured during idling mode.

Freeboard Ratio means the freeboard height divided by the smaller interior dimension (length, width, or diameter) of the degreaser.

Solvent/Air Interface Area - Provide the solvent/air interface area in square feet.

Solvent/Air Interface Area means:

- for a cold cleaning degreaser, the surface area of the liquid solvent that is exposed to the air;
- for an open top vapor degreaser, the surface area of the solvent vapor zone that is exposed to the air; and
- for a conveyorized degreaser, the total surface area of all the sumps.

Safety Switches - Indicate the types of safety switches that the degreaser is equipped with. If other, specify the type. Check all that apply.

Maximum Operating Schedule - Provide the maximum anticipated operating schedule in hours per day and hours per year.

Solvent Type - Provide the type of solvent (cleaning agent) that is to be used in the degreaser by chemical name, (e.g. Perchloroethylene (PCE), etc.). Attach a Material Safety Data Sheet for the solvent used as Attachment 207-B.

Maximum Temperature of Solvent Bath/Sump - Provide the maximum operating temperature of the solvent bath/sump in degrees Fahrenheit (°F) or degrees Celsius (°C).

Solvent Recovery Still – Indicate if the unit is equipped with a solvent recovery still.

Solvent Density - Provide the solvent's density in pounds per gallon at the temperature of the solvent bath/sump. This value can be obtained from the solvent supplier or from standard reference texts.

Maximum Solvent Use - Provide the maximum anticipated amount of solvent to be used, manifested, recycled and emitted per hour, per month and per year, in pounds.

Make-Up Rate (Amount Used) is the amount of solvent which is periodically added to compensate for amounts evaporated.

Amount Manifested is the amount of solvent
which is no longer usable and is documented and disposed of in accordance with any applicable waste regulations.

Amount Recycled is the amount of solvent which is distilled, i.e., cleaned, and reused.

Amount Emitted equals the Amount Used minus the Amount Manifested and/or Recycled.

**Part II: Cold Cleaning Degreasers Only**

Degreaser Type – Indicate the type of cold cleaning degreaser: dip tank or spray tank. Check one.

If the cold cleaning degreaser is a Spray Tank:

- Indicate if it has a Solid Fluid Stream (low pressure stream), atomized or shower type spray (high pressure spray).
- Provide the spray pressure in pounds per square inch (psi) as measured at the pump outlet.
- Indicate if spraying is performed within the confines of the cold cleaner.

Is Degreaser Equipped with a Cover? - Indicate if the degreaser is equipped with a cover.

Is Degreaser Equipped with a Drainage Facility (Board)? - Indicate if the degreaser is equipped with a drainage facility and whether it is internal or external. If External, indicate if the degreaser is equipped with a drainage return.

Control Devices – Indicate the controls used. If other, specify the type. Check all that apply.

**Part III: Open Top Vapor Degreasers Only**

Tank Cover - Indicate the type of tank cover used. Check one.

Control Devices – Indicate the controls used. If other, specify the type. Check all that apply.

Is Degreaser Equipped with a Lip Exhaust? – Indicate if degreaser is equipped with a lip exhaust and if Yes, if the cover is located below the lip exhaust.

**Part IV: Conveyorized Degreasers Only**

Degreaser Type - Indicate the type of conveyorized degreaser.

Conveyor Speed - Provide the degreaser's actual conveyor speed in feet per minute.

Controls Devices – Indicate the controls used. If other, specify the type.

If equipped with a Carbon Adsorption System:

- Provide the ventilation rate in cubic feet per minute per square foot (ft³/min/ft²) of solvent/air area when downtime covers are open.
- Provide the exhaust concentration in parts per million (ppm) of degreasing solvent by volume averaged over each complete adsorption cycle.

**Part V: Attachments**

This section offers a checklist of all the attachments necessary to complete this application. All listed Attachments are REQUIRED.

Check the appropriate box by each attachment being submitted as verification that all applicable attachments have been submitted. Please label all attachments as referenced in the permit application form and these instructions and be sure to include the name of the applicant as indicated on the application form.
Attachment E207-A: Process Information and Flow Diagram, REQUIRED
Submit a process flow diagram indicating all related equipment, air pollution control equipment and stacks, as applicable. Identify all materials entering and leaving each such device indicating quantities and parameters relevant to the proper operation of the device. Indicate all monitoring devices and controls.

Attachment E207-B: Material Safety Data Sheets, REQUIRED
Submit a Material Safety Data Sheet for each product used in a tank by this unit. These are available from the product’s supplier or are shipped with the product when purchased.

Attachment E207-C: Manufacturer Specification Sheets, REQUIRED
Submit a Manufacturer Specification Sheet for the degreaser and any air pollution control equipment and monitoring systems. These are available from the manufacturer.

Note: When completing the Unit Emissions Form (DEEP-NSR-APP-212), potential emissions from degreasers should preferably be determined from manufacturer’s or other data (e.g., emissions testing, mass balance, etc.) from like-kind similarly operated units. Potential emissions from degreasers may also be calculated using equations in section 63.465(e) of 40 CFR Part 63 Subpart T. Potential emissions from degreaser operations should not be calculated using AP-42.