APPLICATION FOR PERMIT TO CONSTRUCT/OPERATE SOLVENT DEGREASERS

You must complete and submit this application if you if you intend to install and/or operate a solvent degreaser to obtain an air quality permit required pursuant to 20 DCMR § 200.

I. Facility Information

1. _____
   Full Legal Name of Applicant/Organization

2. _____
   Type of Organization

3. _____
   Name of Owner(s) or Principal Partner(s) of Above Organization

4. _____
   Mailing Address of Applicant (No., Street, City, State, Zip)

5. _____
   Street Address of Facility (if different from Mailing Address)

6. Owner/Responsible Official Name:_____

   Owner/Responsible Official Title:_____

   Phone No.:_____ E-mail:_____

7. Contact Person:_____

   Contact Person Title:_____

   Phone No.:_____ E-mail:_____

8. Type of Project: ☐ New Construction ☐ Reconstruction ☐ Modification
   ☐ Initial Permitting of Existing Source ☐ Seeking Amendment to Permit Conditions

9. For renewal or modification, include existing permit number (and exp. date):

   _____

II. General Degreaser Information

1. Degreaser Name/Identification: _____

2. Source Description (brief description of solvent degreaser process, including any pollution control devices):

3. Date of installation/planned installation, or modification (if known):_____

4. Manufacturer Model:_____
(Make, Model, and Type of Equipment)

5. Serial # (if known): _____

6. Type of degreaser: ☐ Cold cleaning ☐ Airless and Air-tight cleaning
☐ Batch vapor cleaning ☐ In-line vapor cleaning

Cold cleaning machine – is the following [20 DCMR 799]:

(a) A device or piece of equipment, containing or using an unheated liquid, which contains greater than five percent (5%) VOC or five percent (5%) hazardous air pollutant (HAP) by weight, where parts are placed to remove dirt, grease, oil or other contaminants and coatings, from the surfaces of the parts or to dry the parts; and

(b) Does not include machines that do not have a solvent/air interface, such as airless and air-tight cleaning systems.

Batch vapor cleaning machine – is the following [20 DCMR 799]:

(a) A vapor cleaning machine in which individual parts or a set of parts move through the entire cleaning cycle before new parts are introduced into the cleaning machine, including but not limited to solvent cleaning machines including ferris wheel cleaners or cross rod machines, that clean multiple loads simultaneously and are manually loaded; and

(b) Does not include machines which do not have a solvent/air interface, such as airless and air-tight cleaning systems.

In-line vapor cleaning machine – a vapor cleaning machine that uses an automated parts handling system, typically a conveyor, to automatically provide a supply of parts to be cleaned. In-line vapor cleaning machines are fully enclosed except for the conveyor inlet and exit portals. [20 DCMR 799]

Airless cleaning system – a solvent cleaning machine that is automatically operated and seals at a differential pressure of five tenths of a pound (0.5 lb.) per square inch gauge (psig) or less, before the introduction of solvent or solvent vapor into the cleaning chamber, and maintains differential pressure under vacuum during all cleaning and drying cycles. [20 DCMR 799]

Air-tight cleaning system – a solvent cleaning machine that is automatically operated and seals at a differential pressure no greater than five tenths of a pound (0.5 lb.) per square inch gauge (psig), before the introduction of solvent or solvent vapor into the cleaning chamber and during all cleaning and drying cycles. [20 DCMR 799]

7. Type of solvent:_____

8. Temperature of solvent (°F): _____

9. VOC content of solvent:_____

   Volatile organic compound (VOC) – any compound of carbon, other than those organic compounds that are defined in 40 CFR Part 51 (40 C.F.R. § 51.100). [20 DCMR 199]

10. Required attachments:

    a. Please attach manufacturer's specifications and operating instructions for the unit.

    b. Please attach a Material Safety Data Sheet (MSDS) for each solvent used.

III. Specific Degreaser Type Information

Please complete the section below that is applicable to your specific type of degreaser as listed in the response to question II.6:

Cold Cleaning

1. Type of cold cleaning machine (Immersion or Remote Reservoir):

   _____

2. What is the freeboard ratio? _____

   Freeboard ratio – is the following:
   (a) For a cold cleaning machine, the distance from the liquid solvent to the top edge of the cold cleaning machine divided by the width of the cold cleaning machine. [20 DCMR 799]

3. Length and width:_____

4. Type of cover (i.e., powered or manual) (specify):_____

5. Type of spray used (if applicable) (e.g., solid fluid stream, shower spray):

   _____

6. How much solvent does the system contain?:_____

7. Based on the percent VOC of the solvent, how much VOC does the system contain?

   _____

APPLICATION CONTINUED ON NEXT PAGE

Batch Vapor Cleaning

1. Freeboard height (in.): _____
2. Length and width of the vapor cleaning machine (in.):

   _____
3. What is the freeboard ratio?_____

   Freeboard ratio – is the following:
   (b) For an operating batch vapor cleaning machine, the distance from the top of the solvent vapor layer to the top edge of the vapor cleaning machine divided by the width of the vapor cleaning machine. [20 DCMR 799]
4. Type of cover i.e. powered or manual (specify):_____
5. Does the unit have a lip exhaust? (yes/no):_____
6. Vapor level control thermostat?(yes/no): _____
7. Spray safety switch? (yes/no):_____
8. Vapor up control switch that shuts off spray pump when vapor is not present? (yes/no):

   _____
9. Automated Parts Handling System: Speed_____ Size_____
10. What is the area of the opening (sq. ft.)?:_____
11. If greater than 13 Sq. ft., what control strategies will be used to comply with 20 DCMR 765.3 and 20 DCMR 765.4?
12. What is the dwell time?_____

    Dwell – holding parts within the freeboard area of a solvent cleaning machine but above the solvent vapor zone. This action is necessary after cleaning to allow solvent to drain from the parts or parts baskets back into the solvent cleaning machine. [20 DCMR 799]

    Dwell time – the period of time between when a parts basket is placed in the vapor zone of a batch vapor or in-line vapor cleaning machine and when solvent dripping ceases. This period of time is determined by placing a basket of parts in the vapor zone and measuring the amount of time between when the parts are placed in the vapor zone and dripping ceases. [20 DCMR 799]

In Line Vapor Cleaning

1. Freeboard height (in.): _____

2. Length and width of the vapor cleaning machine (in.):

   _____

3. Freeboard ratio:_____

   Freeboard ratio – is the following:
   (b) For an in-line vapor cleaning machine, the distance from the top of the solvent vapor layer to the top edge of the vapor cleaning machine divided by the width of the vapor cleaning machine. [20 DCMR 799]

4. Control device or strategy (choose one):

   ☐ Freeboard ratio of one (1.0) and superheated vapor;

   ☐ A freeboard refrigeration device operated to ensure that the chilled air blanket temperature is no greater than thirty percent (30%) of the solvent's boiling point and a freeboard ratio of one (1.0);

   ☐ Dwell and a freeboard refrigeration device operated to ensure that the chilled air blanket temperature is no greater than thirty percent (30%) of the solvent's boiling point. Dwell shall be not less than thirty-five percent (35%) of the dwell time determined for the part or parts;

   or

   ☐ Dwell and a carbon adsorber, which reduces solvent emissions in the exhaust to a level not to exceed one hundred parts per million (100 ppm) at any time. Dwell shall be not less than thirty-five percent (35%) of the dwell time determined for the part or parts.

5. Type of cover:

   ☐ Fully enclosed design ☐ Working and downtime mode cover

6. Safety switch (thermostat and condenser flow switch) that shuts off the sump heat if the coolant is not circulating (yes/no):_____

7. Vapor up control switch? (yes/no): _____

8. Automated Parts Handling System: Speed_____ Size_____

9. Does the unit have a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils? (yes/no): _____

10. Primary condenser? (yes/no):_____

11. Does the unit have a vapor level control device that shuts off the sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser? (yes/no):

    _____

12. Lip exhaust (yes/no): _____

13. If yes, describe the control system:

    _____

14. Describe the solvent spray, if applicable:

    _____

15. What is the dwell time?_____

    Dwell – holding parts within the freeboard area of a solvent cleaning machine but above the solvent vapor zone. This action is necessary after cleaning to allow solvent to drain from the parts or parts baskets back into the solvent cleaning machine.

    Dwell time – the period of time between when a parts basket is placed in the vapor zone of a batch vapor or in-line vapor cleaning machine and when solvent dripping ceases. This period of time is determined by placing a basket of parts in the vapor zone and measuring the amount of time between when the parts are placed in the vapor zone and dripping ceases.

Airless and Air-Tight Cleaning

1. What is the cleaning capacity in cubic meters?_____
2. Does the machine have an emission control system to control solvent emissions? (yes/no):_____
3. If yes, provide description, specifications and vendor control guarantee:

   _____

   NOTE: If an alternative compliance method is desired pursuant to 20 DCMR 768, please attach a compliance plan.

IV. Notes and Required Attachments

1. AQD may require submission of additional information beyond what is requested on this form if needed to evaluate regulatory applicability. If you are aware of complex regulatory issues related to this project, AQD recommends that you proactively attach a regulatory review document to explain your understanding of the applicability of any relevant regulations. This is likely to simplify and thereby hasten review of the application.

2. Deviations from submitted plans and specifications are not permissible without securing formal approval from AQD via an application update request and re-approval, if already approved.

3. Please attach a copy of a recent "Certificate of Clean Hands" which can be obtained at mytax.dc.gov.

4. The complete application and applicable supporting documentation must be submitted to the following address:

   Branch Chief, Air Quality Permitting Branch
   Department of Energy and Environment
   1200 First Street NE, 5th Floor
   Washington DC 20002

VI. Applicant Certification:

I hereby certify, under penalty of D.C. Official Code § 8-101.05e, that I am authorized to submit this application on behalf of the applicant and that the statements contained herein are true and correct to best of my knowledge. I further certify that all attached information and previously submitted information referenced in this application remains true, correct, and current, to the best of my knowledge.

Authorized Signature:

_____

Owner/Responsible Official Signature Print Name and Title Date

_____

Mailing Address of Owner/Responsible Official if Different From Question I.4 above