Internal Use Only
App# APCD2015-APP-

Vapor Degreasers

AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO

☐ **Attach a current Material Safety Data Sheet (MSDS) for each solvent to be used in this operation. Include a drawing of any equipment used to vent or collect vapors from the degreaser. If VOC content is not indicated on MSDS, please contact the manufacturer to obtain another supporting document**

☐ **Mark box only if the Vapor-Air Interface is greater than 5 ft^2**

A. EQUIPMENT DESCRIPTION

Mfr.: _____ Model: _____ S/N: _____

Internal Size of Tank: _____(inches) Length; _____(inches) Width; _____(inches) Height

Vapor-Air Interface: _____(ft^2) *Vapor-Air Interface is the area of contact between the solvent vapors and air that is contiguous with the air outside the degreaser. The area of vapor-air interface shall be calculated as the product of the lengths between internal solvent cleaner walls behind the condensing coils.*

Freeboard Height: _____(inches) *Freeboard height is the distance from the solvent vapor-air interface to the top of the degreaser tank based on inside tank dimensions. Freeboard height shall be measured with parts in the tank.*

Freeboard Ratio: _____*Freeboard ratio is the freeboard height divided by the smaller of the interior length or width of the degreaser tank.*

If equipped with ventilation, indicate vented flow rate: _____ (ft^3/min)

B. PROCESS DESCRIPTION

Type of articles degreased _____

Degreasing Cycle Time: _____ (Minutes). Operating Temp: _____ (°F/°C)

C. EQUIPMENT OPERATING SCHEDULE

Average: _____ Hrs/Day; _____ Days/Wk; _____ Wks/Year

Maximum: _____ Hrs/Day; _____ Days/Wk; _____ Wks/Year

D. SOLVENT INFORMATION

Solvent used: _____

Vapor pressure: _____mm Hg at _____°F/°C

Solvent Usage: Average: _____ gal/day or _____ gal/month

Maximum: _____ gal/day or _____ gal/month

Is Solvent Diluted with Water? ☐ Yes ☐ No

If yes, indicate the mixing ratio (by Volume): _____parts Solvent to _____parts Water

Solvent VOC content: _____(g/L)

Storage Method for Solvent, Still Residues and Waste Solvent: _____

_____

E. RULE 67.6.2 STANDARDS AND REQUIREMENTS

Note: Current material list or recordkeeping method will be required pursuant to Rule 67.6.1 prior to issuance of a Permit to Operate.

Please check the appropriate box to verify compliance with Rule 67.6.2.

The vapor degreaser will be equipped with:

☐ Yes ☐ No A cover that can be easily operated without disturbing the vapor layer and that completely covers the solvent tank when work is not performed in the degreaser.

☐ Yes ☐ No A primary condenser situated above the boiling solvent.

☐ Yes ☐ No A water separator that does not operate by means of evaporation or distillation.

☐ Yes ☐ No A perimeter trough. *Perimeter trough is a receptacle within the vapor degreaser located below the primary condenser that conveys condensed solvent and atmospheric moisture to a water separator.*

☐ Yes ☐ No A device that shuts off the sump heat if the condenser's coolant or refrigerant temperature becomes higher than the designed operating temperature.

☐ Yes ☐ No A device that is only manually resettable and which shuts off the sump heat if the vapor level rises above the designed operating level.

☐ Yes ☐ No ☐ N/A A device that shuts off the sump heat if the condenser's coolant stops circulating (*this requirement does not apply to vapor degreasers equipped with refrigerated condensers*).

☐ Yes ☐ No Sprays nozzles.

☐ Yes ☐ No ☐ N/A A device that prevents spray pump operation if the solvent vapor-air interface temperature falls below the designed operating level.

Vapor degreasers employing sprays shall comply with **one** of the following (please check which one):

☐ Yes ☐ No The pressure of spray nozzles is low enough to prevent liquid splashing outside of the tank, and the spray nozzles produce continuous liquid flow, rather than fine atomized or shower type sprays; or

☐ Yes ☐ No Spray nozzles are located below the vapor-air interface.

Vapor degreasers shall comply with **one** of the following (please check which one):

☐ Yes ☐ No A freeboard ratio of at least 1.0; or

☐ Yes ☐ No A refrigerated freeboard chiller, where the chilled air blanket temperature measured in degrees Fahrenheit at the center of the air blanket is not greater than 40% of the initial boiling point of the solvent; or

☐ Yes ☐ No Designed in such a manner that its cover or door opens only when the dry part is entering or exiting the degreaser.

The following operating requirements will be met:

☐ Yes ☐ No A permanent, conspicuous, legible label listing the applicable operating requirements will be posted on or near the degreaser.

☐ Yes ☐ No The degreaser will be installed and maintained in proper working order.

☐ Yes ☐ No The cover will not be removed except to process workload or to perform maintenance.

☐ Yes ☐ No There will be no liquid leaks from any portion of the degreaser. Upon detection of a liquid leak, the leak shall be repaired immediately, or the degreaser shall be shut down and drained in a manner that minimizes emissions.

☐ Yes ☐ No Ventilation fans will not be positioned near the degreaser openings in such a way as to disturb the vapor zone.

☐ Yes ☐ No At startup, the primary condenser and the refrigerated freeboard chiller, if required, will be turned on before the sump heater is turned on. At shutdown, the sump heater will be turned off before the primary condenser and refrigerated freeboard chiller are turned off;

☐ Yes ☐ No No porous or absorbent materials, such as cloth, leather, wood, or rope will be cleaned in the proposed vapor degreaser.

☐ Yes ☐ No Solvent will not be sprayed above the vapor-air interface.

☐ Yes ☐ No Exhaust ventilation rate does not exceed 65 cubic feet per minute per square foot of the degreaser vapor-air interface area, unless necessary to meet OSHA requirements.

☐ Yes ☐ No Workloads placed in the degreaser will occupy a horizontal cross-sectional area that is less than one half of the vapor-air interface area.

☐ Yes ☐ No The water separator will be maintained to prevent water from returning to the surface of the boiling solvent sump or from becoming visibly detectable in the solvent exiting the water separator; and

☐ Yes ☐ No Solvent carry-out is minimized by **all** of the following methods:

(A) racking parts for full drainage;

(B) moving parts in and out of the degreaser at a speed of less than 11 feet per minute;

(C) cleaning the workload in the vapor zone until condensation ceases;

(D) tipping out any pools of solvent on the cleaned parts before removal; and

(E) not removing parts from the degreaser until they are visually dry.

☐ Yes ☐ No Waste solvent and contaminated residue, if any, will be recycled, or disposed of according to requirements based on the California Health and Safety Code, Division 20, Chapter 6.3 (beginning at section 25100) concerning hazardous waste disposal.

F. ALTERNATIVE EQUIPMENT:

In lieu of complying with the equipment requirements in Subsections (d)(1), (d)(2), and (d)(3) of Rule 67.6.2, an owner/operator may use an airtight/airless vapor degreaser or an air pollution control system.

Is an airtight/airless vapor degreaser being proposed? ☐ Yes ☐ No

"Airless/Air-Tight Vapor Degreaser" means a system that consists of a sealed vapor degreaser and the devices to condense and recover solvent and emission control devices to remove solvent from all gas streams that vent to the atmosphere. The system must have no open vapor-air interface, and be designed and operated in such a manner as prevent the discharge or leakage of solvent emissions to the atmosphere during all cleaning and drying operations

If an airtight/airless vapor degreaser is being proposed, please attach all supporting documentation to demonstrate compliance with Rule 67.6.2(e)(1).

Is an air pollution control system being proposed? ☐ Yes ☐ No

If an air pollution control system is being proposed for the vapor degreaser, it must have a combined emissions capture and control efficiency of at least 85% by weight. Please attach all supporting documentation to demonstrate compliance with Rule 67.6.2(e)(2) and (3).

G. RULE 1200 TOXICS EVALUATION:

☐ Yes ☐ No The proposed solvent is found on District *Attachment BB*.

☐ Yes ☐ No The proposed solvent contains Toxic Air Contaminants (TAC) as defined by District Rule 1200.

If the solvent used is not found on District Attachment BB AND contains toxic air contaminants (TAC) as defined by District Rule 1200:

List all TACs found in the solvent: _____

_____

☐ Complete and submit the 'Rule 1200 Toxics Evaluation Supplemental Application' form, including all applicable documentation the form requires.

Name of Preparer: _____ **Title:** _____

E-mail: _____ **Phone No.:** (_____) _____

Signature: _____ **Date:** _____

IMPORTANT NOTE TO APPLICANT:

This form must be signed. Before acting on an application for Authority to Construct or Permit to Operate, the District may require further information, plans, or specifications. Forms with insufficient information may be returned to the applicant for completion, which will cause a delay in application processing and may increase processing fees. The applicant should correspond with equipment and material manufacturers to obtain the information requested on this supplemental form.