Submit in Triplicate

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

DEGREASERS

Application for Plan Approval to Construct, Modify or Reactivate an Air Contamination Source and/or Air Cleaning Device

Section A - Identity and Location of Air Contamination Source

1A. Application is being made for:

- o Construction of New Source
- o Reactivation of a Source
- o Modification of Existing Source
- o Installation of Air Cleaning Device
- o Amendment to a Previous Application
  Previous Application No. ___ ___ - ___ ___ ___ - ___ ___ ___
- o Other

OFFICIAL USE ONLY

Application No. ___ ___ - ___ ___ ___ - ___ ___ ___
Plant Code _____ Unit ID_____
Date Received _____
Reviewed By _____

Potential Emissions (TPY)
PM _____ SO_2 _____ VOC _____
NO_x _____ CO _____ Other _____

Actual Emissions (TPY)
PM _____ SO_2 _____ VOC _____
NO_x _____ CO _____ Other _____

Change in Actual Emissions (+ or -)
PM _____ SO_2 _____ VOC _____
NO_x _____ CO _____ Other _____

1B. Type of source

1C. Plant in which source is located

o NEW o EXISTING

1D. If source is new, does it replace another source? o YES o NO
(describe source replaced)

1E. Expected date of completion

2A. Owner of source

2B. Employer I.D. No. (Federal IRS No.)
___ ___ - ___ ___ ___ ___ ___ ___ ___

3A. Owners designation of source and/or plant if any

3B. Location of source (Street address or Route No.) Political Subdivision (Township, etc.) County

3C. Mailing address (Street or P.O. Box, City, Zip Code)

3D. Telephone No.

4A. Person to contact regarding this Application (name and title)

4B. Mailing address (Street or P.O. Box, City, State, Zip Code)

4C. Telephone No.

5. Official signing application must be an agent of the Company having primary responsibilities for operation of the facility to which this application applies. Although he may not have participated in the design of the facility he should be responsible for approval of the design.

AFFIDAVIT

I, _____ , being duly sworn according to law depose and say that I am the official having primary responsibility for the design and operation of the facilities to which this application applies and that the information included in the foregoing application is true to the best of my knowledge, information and belief.

Sworn to and subscribed before me this _____ day

_____
Signature

of _____ , _____.

_____ _____
Notary Public Title

Section B - Degreasers

1. TYPE CAPACITY, & OPERATING SCHEDULE

Unit	A. Type Degreaser i.e., Open Top Conveyorized	B. Manufacturer of Degreaser	C. Model Number	D. Internal Dimensions WxLxD (ft)	E. Vapor-Liquid Inter facial Area (sq. ft.)	F. Type of Material Processed	G. Area Per Load (sq. ft.)	H. Average hr/day	I. Total hr/yr	% Load/Quarter 1st	2nd	3rd	4th	

2. CONTROLS

A. Cover Manual/ Powered	B. Permanent Label of Operating Requirements	C. Free Board Ratio	D. Water Jacket Inlet Temp °F	E. Primary Condenser Coil Inlet Temp °F	F. Condenser Flow-Switch & Thermostat	G. Spray Pump Safety Switch For 4 inches Vapor Drop	H. Vapor Level Thermostat Set Point °F	I. Drying Tunnel or Equivalent	J. Entrance & Exit Silhouette For 4" Clearance/< 10% Width Opening	K. Conveyor Speed/Hoist Speed (fpm)	L. Exhaust Ventilation (cfm)

3.A. List typed of solvents used as a percent of total usage & boiling point of each solvent.

3.B. Annual Amounts of each solvent used.	3.C. % Usage/Quarter	1st	2nd	3rd	4th	

4. Attach dimensioned diagram of degreaser & any additional information necessary for thorough evaluation. Include: Heat input, Sump temperature, Still, etc.

5. Describe fully the facility to monitor and record all operating conditions that may affect the emissions of air contaminants.

6. Describe Disposition of:

A. Spent solvent from degreaser

B. Sludge from still

C. Solvent from adsorber

7. A. Costs of all control equipment including installation costs.

B. Estimated annual operating costs of control equipment only.

Section C - Control Equipment

1. REFRIGERATED CHILLERS

A. Manufacturer

B. Type

Check One
- o Subzero Chiller
- o Above Zero Chiller

C. Model No.

D. Coolant Units

Refrigeration rating Hp _____

(Btu's per hour per foot of air/vapor interface perimeter) _____

Number of passes of coils _____

Duration and frequency of defrost cycle _____

E. Operating Temperature °C _____

Refrigerant Temperature °F ____

Lowest air blanket temperature at the center line of the tank °F _____

F. Attach dimensioned sketch of chiller and design specifications

G. Attach any manufacturer guarantees

Section C - Control Equipment, Continued

2. ADSORPTION EQUIPMENT

A. Manufacturer	B. Type	C. Model No.

D. Volume of gases handled ACFM	E. Inlet temperature (°F)

F. Design inlet volume (ACFM)	G. Percent concentration of solvent in exhaust gases

H. Carbon charge per adsorber vessel and number of adsorber vessels	I. Adsorbent type, density and property

J. Vapor pressure of solvents at the inlet temperature

K. Length of MTZ (supplied by the manufacturer based upon laboratory data)

L. Percent relative saturation of each solvent at the inlet temperature

M. Breakthrough capacity

$$\left[\frac{\text{lbs of solvent}}{100 \text{ lbs of adsorbent}}\right]$$

N. Working capacity of adsorbent (%)	O. Heel percent or unrecoverable solvent weight % in the absorbent after regeneration

P. Adsorber diameter (ft) and area (ft^2)

Q. Adsorption bed depth (ft)

R. Available steam in pounds to regenerate carbon adsorber

S. Adsorption time per adsorption bed

T. Inlet concentration (lbs/hr)	U. Outlet concentration (lbs/hr)	V. Overall efficiency (%)

W. Please supply any additional data to thoroughly evaluate the control equipment.

Section D - Stack and Exhaust Information

1. Exhauster Static Pressure _____ in w.g.
   Brake Horse Power _____ Motor _____ H.P.
   Speed _____ r.p.m.

2. Stack height above grade (ft)
   Grade elevation (ft)
   Distance from discharge to nearest property line (ft)

3. Stack diameter (ft) or outlet duct area (sq ft)

4. Weather Cap o YES o NO

5. Indicate on an attached sheet the location of sampling ports with respect to exhaust fans, breeching, etc. Give all necessary dimensions.

6. Can the control equipment be bypassed? o YES o NO
   If yes, explain the conditions under which the equipment will be bypassed. (Give the setpoints of affectng parameters.)

7. Outlet volume of exhaust gases:
   _____ CFM _____ °F _____ % Moisture

Section E - Miscellaneous Information

1. Attach Air Pollution Episode Strategy (if applicable)

2. If the source is subject to Section 127.3 (special permit requirements)

   a. Demonstrate the availability of emission offset (if applicable)

   b. Provide an analysis of alternate sites, sizes, production processes and environmental control techniques demonstrating that the benefits of the proposed source outweigh the environmental and social costs

3. The following requirements are applicable only to construction of a new source.

   a. Briefly describe the nature of the area in which the proposed source is located. Attach a copy of the appropriate portion of the quadrangle map (7 1/2' scale) published by the U.S. Geological Survey and identify the location of proposed source.

   b. Demonstrate that the establishment of the new source is justifiable as a result of necessary economic or social development.