

## DRY CLEANING RISK SCREENING FORM

Plant Name: \_\_\_\_\_ Phone: \_\_\_\_\_ Plant No. \_\_\_\_\_

Please complete the following form to allow the District to evaluate the risk from your facility. Indicate (circle one) if the ventilation system: a) is existing or b) is a proposed modification to reduce risk or c) is for a new facility. Co-residential facilities and most new non-residential facilities must install Vapor Barrier Rooms.

Risk from a dry cleaning facility is dependent on the amount of emissions, proximity (nearness) to receptors, local meteorology (weather conditions), and how the emissions are released (type of ventilation system used). Ventilation enhances dispersion (reduces risk) and reduces the exposure inside the building where the machine is operating. Six major types of ventilation used in dry cleaners (in descending order of effectiveness) are Vapor Barrier Rooms, Partial Vapor Rooms, Local Ventilation, general ventilation, window fans, and natural ventilation. A secondary control system or a fugitive control system also reduces fugitive emissions and associated risk. Building dimensions may also affect dispersion.

A Vapor Barrier Room (VBR) is constructed of diffusion resistant materials and completely surrounds the dry cleaning machine. VBRs are required for co-residential dry cleaning facilities and for new non-residential facilities that result in high exposures of Perc to adjacent residential or commercial/industrial receptors. A Partial Vapor Room encloses the back of a dry cleaning machine in a small room with the front panel and loading door exposed for convenient loading and unloading. Local Ventilation Systems (fume hoods and shrouds) and general ventilation depend on high rates of airflow and large fans to be effective. Existing non-residential facilities that install an additional machine or increase solvent limit may be required to install Partial Vapor Rooms (PVRs) or Local Ventilation Systems (LVSs).

Most existing facilities have general ventilation (large fans that vent the entire shop) or natural ventilation (open windows and doors -- no fans; depends upon wind and convective forces to move air). Natural ventilation is not very effective, dispersion is usually very poor, and nearby receptors may be exposed to a high risk. In addition, people within the building are not adequately protected. Natural ventilation is usually acceptable for a stand-alone facility with a large buffer zone (vacant area around the facility that separates the dry cleaner from nearby people in order to protect them). For facilities using window fans, emissions are also released near ground level and poorly dispersed. Consequently, risk is similar to facilities using natural ventilation and similar buffer zones are necessary. If a facility is located near residential receptors, uses more than 100 gallons of Perc, or is co-located with other commercial businesses, enhanced ventilation (VBR or PVR) may be necessary.

Note that for emissions we use the following formulas:

Solvent consumption = (solvent purchases) + (inventory at start of year) - (inventory at end of year)

Solvent emissions = (solvent consumption) - (waste credit)

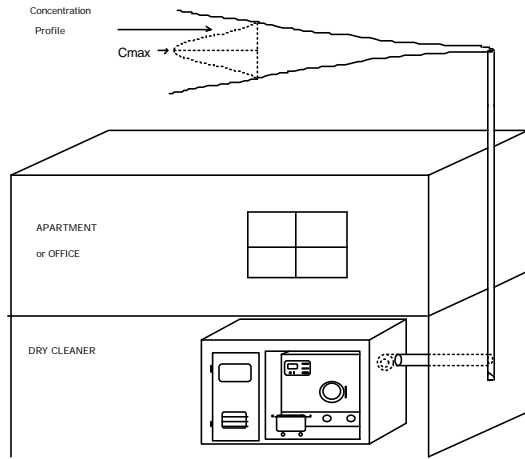
Waste credit = (still residue) (solvent content in still residue) + (number of filter cartridges) (solvent per cartridge)

**Default values are 50 vol% for still residue, 0.5 gal/cartridge (standard or split), and 1.0 gal/jumbo cartridge.**

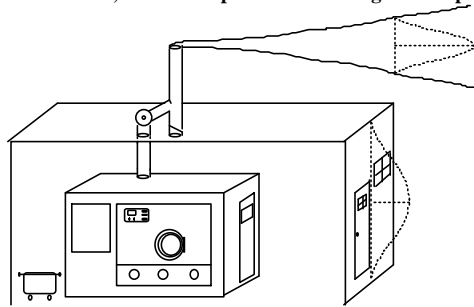
**Note that we don't allow waste credit for more than 30% of solvent consumption unless fully explained and documented by the facility. Do not include wastewater in waste credit.**

NOTE: In order to assess the risk from your facility, we need information about the location and size of your facility, your building, nearby buildings, and the location of any people that may be affected by the emissions from your facility. You must submit a facility sketch and local map that shows your facility, location of source, isolation room (if applicable), location of stack (if applicable), your building, and all nearby buildings within 150 feet. Indicate those buildings that contain residences. Indicate the closest residence and location. Show important distances and dimensions on the map (must be drawn to scale). If any building has irregular dimensions, please indicate the major dimensions on the sketch. For example, shopping malls may have several different heights and irregular shapes.

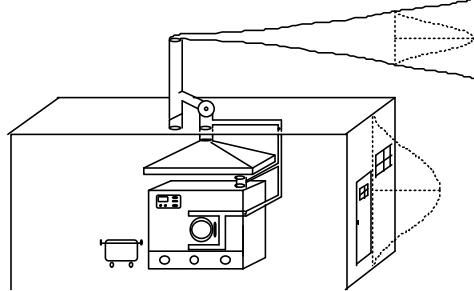
**#1: VAPOR BARRIER ROOM** (machine completely inside room)



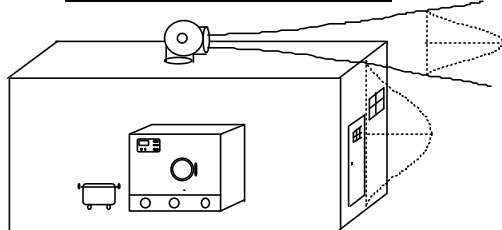
**#2: PARTIAL VAPOR ROOM** (machine partially inside isolation room, with front panel and loading door exposed)



**#3: LOCAL VENTILATION SYSTEM**

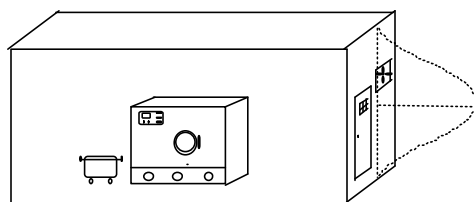


**#4: GENERAL VENTILATION** (entire shop)



**#5: NATURAL VENTILATION** (No Fan) or

**#6: WINDOW FAN** (WIN)



**DISPERSION DATA**

- (1) Indicate your type of facility (check one only):
  - Co-residential  Co-commercial  Stand-alone
- (2) Check the box for the illustration that best represents your shop's ventilation system (or your proposal):
  - #1: Vapor Barrier Room (VBR)
  - #2: Partial Vapor Room (PVR)
  - #3: Local Ventilation System (LOC)
  - #4: General Ventilation (GEN)
  - #5: Natural Ventilation (NAT)
  - #6: Window Fan (WIN)
- (3) Are emissions released vertically through a stack? (Check one)
  - YES or  NO
  - a. What is fan air flowrate?  $Q =$  \_\_\_\_\_ CFM  
( $>1000$  cubic feet / minute)
  - b. What is height of stack?  $H_S =$  \_\_\_\_\_ feet (from ground level)
  - c. What is diameter of stack?  $D_S =$  \_\_\_\_\_ inches
- (4) If you checked #1 (VBR) or #2 (PVR), answer the following:
  - d. What are dimensions of VBR or PVR?
    - Room Height,  $H_R =$  \_\_\_\_\_ feet
    - Room Width,  $W_R =$  \_\_\_\_\_ feet
    - Room Length,  $L_R =$  \_\_\_\_\_ feet
- (5) Building and Shop Dimensions (all facilities must answer):
  - a. What are dimensions of facility (shop) or cleaning room?
    - Facility Height,  $H_F =$  \_\_\_\_\_ feet
    - Facility Width,  $W_F =$  \_\_\_\_\_ feet
    - Facility Length,  $L_F =$  \_\_\_\_\_ feet
  - b. What are dimensions of the entire building?
    - Building Height,  $H_B =$  \_\_\_\_\_ feet
    - Building Width,  $W_B =$  \_\_\_\_\_ feet
    - Building Length,  $L_B =$  \_\_\_\_\_ feet
  - c. What are dimensions of nearby buildings (within 150 feet)? Note on sketch if more than one nearby building.
    - Building Height,  $H_{B2} =$  \_\_\_\_\_ feet
    - Building Width,  $W_{B2} =$  \_\_\_\_\_ feet
    - Building Length,  $L_{B2} =$  \_\_\_\_\_ feet
- (6) Record distance to receptors (all facilities must answer):
  - a. What is distance from your shop to nearest business?  
 $D_C =$  \_\_\_\_\_ feet
  - b. What is distance from your shop to nearest residence?  
 $D_R =$  \_\_\_\_\_ feet

Indicate the specific location of these receptors on the map.

**I certify the information contained on this form is accurate and true to the best of my knowledge:**

\_\_\_\_\_  
(Signature of responsible party)

\_\_\_\_\_  
(Date)

Answer all questions below that apply to your facility.