

# HARP/CEIDARS DRY CLEANERS EMISSION YEAR 2010-15 FORM INSTRUCTIONS

THE OWNER/OPERATOR SHALL SUBMIT TO THE MDAQMD THE REQUIRED INFORMATION FOR THE PRECEDING CALENDAR YEAR (JANUARY 1 THROUGH DECEMBER 31) ON OR BEFORE APRIL 30 OF EACH REPORTING YEAR IN A MANNER PRESCRIBED BY THE DISTRICT. THANK YOU FOR COMPLETING THIS FORM. THE DISTRICT WILL USE THIS INFORMATION TO EVALUATE THE RISK FROM YOUR DRY CLEANING FACILITY.

Comprehensive Emission Inventory Guidelines are available at Antelope Valley AQMD <http://www.avaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=1136> or for Mojave Desert AQMD <http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=3785>. With each submission of HARP (Hotspots Analysis and Reporting Program)/CEIDARS (California Emission Inventory Development and Reporting System) form the following instructions apply.

1. Refer to DISTRICT approved records for each reporting year values for pounds of cloths cleaned and amounts of cleaning agent used and disposed of.
2. Risk from a dry cleaning facility is dependent on the amount of emissions, proximity (nearness) to receptors (residential, sensitive or workplace) (sensitive receptors include schools, nursing homes, medical facilities, etc.), 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 systems 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.

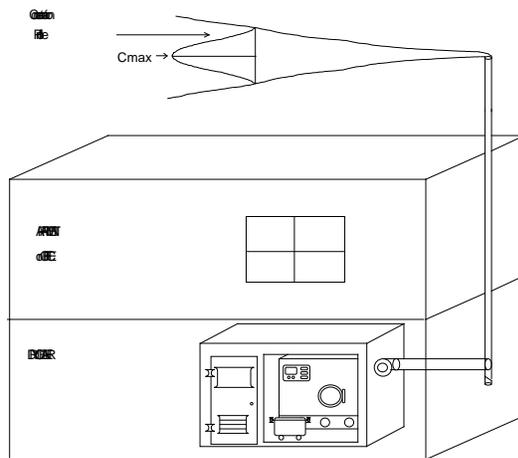
A Vapor Barrier Room (VBR) is constructed of diffusion resistant materials and completely surrounds the dry cleaning machine. VBRs may be required for co-residential dry cleaning facilities and recommended for non-residential facilities that result in high exposures of Perc to adjacent residential, sensitive, or commercial/industrial receptors (particularly in co-located situations such as multistory buildings and shopping malls that do not have good separation between units). A Partial Vapor Room (PVR) 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. PVRs may be necessary for some non-residential facilities in order to achieve acceptable risks. Some existing facilities have General Ventilation (GEN) (large fans that vent the entire shop) or Natural Ventilation (NAT) (no fans). Local Ventilation (LOC) (fume hoods and shrouds) and GEN depend on high rates of airflow and large fans to be effective. VBR and

PVR are more effective and may be less costly to operate considering the smaller fans needed to achieve good capture. Most new facilities may need VBRs, PVRs, LOC, or GENs.

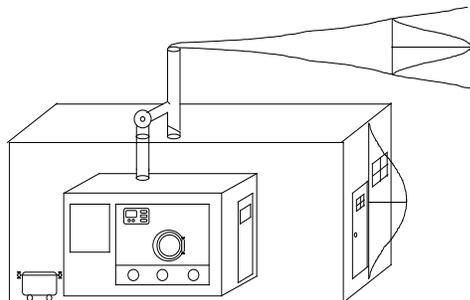
Natural Ventilation (NAT) (open windows and doors -- no fans) depends upon wind and convective forces to move air. This is not very effective, dispersion is usually very poor, and nearby receptors may be exposed to a high risk. In addition, people within the building are not adequately protected. Natural ventilation is usually acceptable for a stand-alone facility with a reasonable buffer zone (vacant area around the facility that separates the dry cleaner from nearby people in order to protect them). A buffer zone of 200-300 feet is usually adequate for an existing facility that uses less than 100 gallons of Perc per year and uses natural ventilation. For facilities using Window Fans (WIN) 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.

Refer to the diagrams below for Section C: Type of Ventilation for Facility.

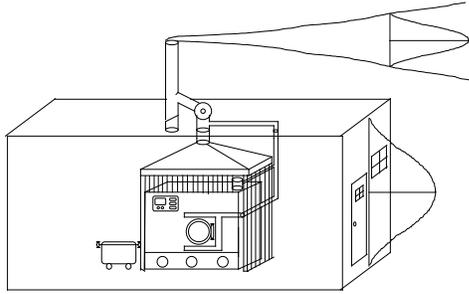
- a: VAPOR BARRIER ROOM (machine completely inside room)



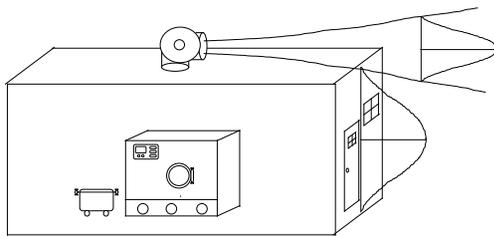
- b: PARTIAL VAPOR ROOM (machine partially inside isolation room, with front panel and loading door exposed)



c: LOCAL VENTILATION SYSTEM



d: GENERAL VENTILATION (entire shop)



e: NATURAL VENTILATION (No Fan) or;

f: WINDOW FAN

