



# ABINGTON TOWNSHIP FIRE DEPARTMENT

OG - 700-102

## Guideline for Use of Cold Smoke Distribution System

### 1.0 PURPOSE

This guideline shall serve as an overview for utilizing the Smoke Generator and the Smoke Distribution System for “Cold Smoke” oriented operations.

There are times when the training environment calls for a limited visibility setting using cold smoke. The smoke distributor is to be used for this purpose. The Super-Vac Cloud 9 Smoke Generator is used in conjunction with the fan distribution system for producing cold smoke.

### 2.0 RESPONSIBILITY

The responsibility to ensure that the above actions are taken in an appropriate manner is defined as indicated below:

2.1 Company Members (CM)

2.2 Company Officers (CO)

### 3.0 PROCEDURE

#### 3.1 General

- 3.1.1 The smoke distributor is pre-piped throughout various areas of the Burn Building. This includes the attic space above the large burn room, the large burn room itself, as well as the burn rooms within the two story section of the Burn Building.
- 3.1.2 Sectional valves are provided within this piping to direct smoke to only certain rooms or all areas mentioned above.
- 3.1.3 The sectional valves are located within the Drill Tower and marked accordingly.

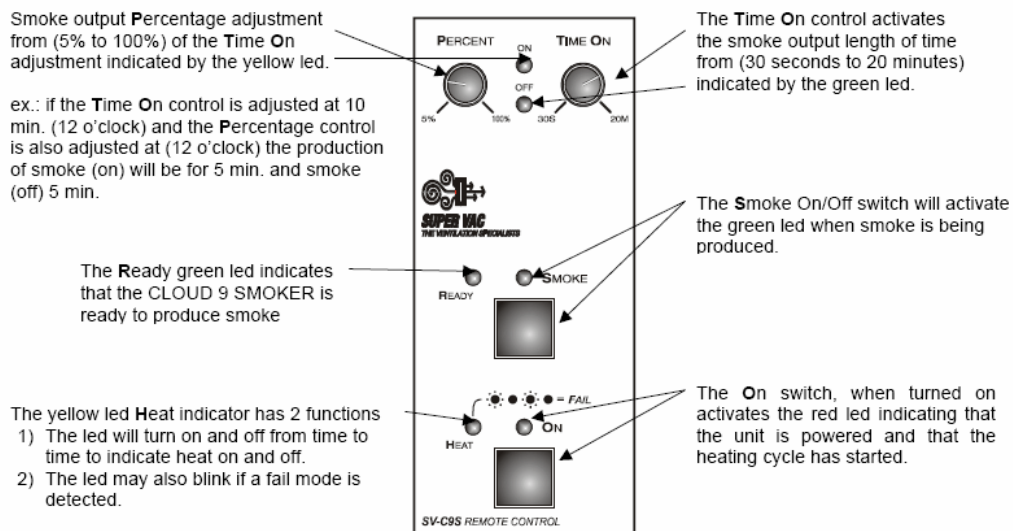
#### 3.2 Operation of Cold Smoke System

- 3.2.1 Power for operating the smoke generator may be provided by using the shore power connection and power cord to a power supply from the Accessory Storage and Training Building.
- 3.2.2 To power on the unit, the following sequence must be observed:
  - 3.2.2.1 Connect the SUPER VAC CLOUD 9 SMOKER to a 115 volt power outlet and turn on the Power switch located on the side of the unit near the power cord.
  - 3.2.2.2 Turn on the On switch on the remote control timer, the red led will come on indicating that the unit is powered, the yellow led will also come on indicating that the first heating cycle has started. This should take a maximum of 10 minutes.
  - 3.2.2.3 Now open the gas cylinder and adjust the regulator to a minimum of 10 psi, the ready condition will be indicated by the green led which will come on when the

pre-set temperature is reached; at this stage, the yellow led will go off and the initial Auto Clean Cycle (ACC) will be automatically triggered.

- 3.2.2.4** After this initial cleaning cycle, which will take approximately 30 seconds, the unit will be ready to produce smoke.
- 3.2.2.5** The smoke output is created by the pressurized CO-2 cylinder, which serves as the propellant. The cylinder holds 20 lbs of CO-2. If the tank is running low on CO-2, the machine will not operate correctly.
- 3.2.2.6** The smoke output is adjustable by increasing or decreasing the pressure on the CO2 gas regulator (10 to 40 psi).
- 3.2.2.7** As a point of reference, a full cylinder weighs 45 lbs. An empty cylinder weighs 25 lbs. A scale is provided in the storage building for checking the weight of the cylinders.
- 3.2.3** When using the smoke generator, the machine should be positioned in such a way that the discharge nozzle of the unit is aligned with the intake opening of the fan box.
- 3.2.4** With the smoke generator running and the fan box turned on, effective cold smoke (nontoxic) will be delivered throughout the appropriate areas.
- 3.2.5** Spare containers of “smoke fluid” are kept on the shelf within the storage building. This is a clear fluid within a clear container with the container marked accordingly.

### Functions



## 4.0 RECORDS

### 4.1 Activity Usage Form

Located on the desk within the Accessory Building is an Activity Usage Form. This form is to be completed each time the Cold Smoke Distribution System is used. This will aid in maintaining the system as well as recognizing when supplies are running low.