



City of Margate Police Department

ACCREDITED LAW ENFORCEMENT AGENCY



MEMORANDUM

TO: Ryan McCarthy, Lieutenant

FROM: Lori Eller, Sergeant *LE*

DATE: February 13, 2018

SUBJECT: Air Purification System

On January 31, 2018, SD Air conducted a random air sample of the property and evidence facility to include the narcotics storage area. The air sampled and evaluated contained low levels of volatile organic compounds (VOC) which contribute to the odors within the property and evidence facility.

The current ventilation system in the property and evidence facility is not adequate to eliminate and remove contaminants or odors from the air.

SD Air provided pricing and specifications for three separate systems. Based on the information provided, the Healthway 1200 SC would be the best option for the property and evidence facility. This system is designed for stand-alone installation above ceiling space and can be vented to separate areas to include the evidence office, narcotics storage area, bulk evidence storage area and the crime lab.

The Healthway 1200 SC is priced at \$6900.00 to include installation. The Healthway 1200 SC has a one year manufacturer warranty. The system is equipped with three filters; Pre Filter, Carbon Filter and a Main V-Bank Filter. The Pre-Filter and the Carbon Filter require replacement every three months. Total yearly cost for these filters is \$395.00. The Main V-Bank Filter requires replacement every 24 months. The bi-annual cost for this filter is \$795. These filters can be changed by City of Margate Public Works after proper training by SD Air.

SD Air air test results, agencies currently utilizing this system and estimates are attached.

Rec'd LT R. MCARTHUR 2/14/18

*Coral Springs Police Department and Fort Lauderdale Police Department
ARE Utilizing THE ABOVE COMPANY TO IMPROVE THE AIR QUALITY IN P.O.E.
REPRESENTATIVES FROM BOTH AGENCIES REPORTED A NOTABLE DIFFERENCE AFTER
THEIR UNITS WERE INSTALLED.*

TOT CAPTAIN PALMA

*Rec on 02/26/18 - CAPT. M. Palma 3019
I CONCUR WITH THIS REQUEST. THIS WILL BE AN EFFECTIVE
UPGRADE TO IMPROVE AIR QUALITY IN OUR PROPERTY + EVIDENCE
ROOM. TOT Chief Watson*

02/24/18



SD Air
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Indoor Air Quality (IAQ) Test & Assessment Margate Police Department

Air Sampling For Inorganic Acids, VOCs, Mold and Drugs

We evaluated Air Quality in Narcotics Room , Evidence Office and Bulk Evidence Room on 01/31/18

We sampled the air for organic and non organic particulates that could come from listed areas and evaluated occupational exposure limits.

We sampled the air for volatile organic compounds (VOCs) that are the contributing source of the odors in listed areas.

We evaluated the ventilation in the Evidence Room, Evidence Office and Bulk Evidence

It is important to note that these areas can incur a variety of different contaminants creating diverse air quality from current sample.

Narcotics Room Air Samples

Air samples found concentrations of Mold spores, these particulates can typically exist due to storage of plant-based drugs and decaying plant matter.

The concentrations we measured were relatively low

Low exposures however do not necessarily equate to safe and healthy conditions because some compounds can elicit health effects at very small doses.

Air sample results found elevated levels of various terpenes - alpha-pinene, beta-pinene, myrcene, and beta-caryophyllene . These are classified as Cannabis Terpenes and are typically the cause of marijuana odor.

THC (Tetrahydrocannabinol) VOC particulates a component of marijuana were found in concentrations of sampled air. Repeated exposure has been documented to create health issues. These compounds are common volatile constituents of marijuana and likely contributed to the marijuana odors in the Narcotics Room and Evidence office.

Narcotics Room Air Samples

Current Ventilation System

The current ventilation system in your facilities Evidence Room is not adequate to eliminate and remove contaminants or odors. ASHRAE does provide specific exhaust ventilation recommendations for drug vaults or evidence rooms, recommending six air changes per hour for an evidence room containing drugs and other chemicals [NIOSH 1999]. According to the International Association for Identification safety guidelines [IAI 2004], areas where drugs and other chemicals are maintained should have constant exhaust ventilation resulting in a minimum of seven air changes per hour.

IAQ Conclusion for Narcotics Room

The levels we measured may cause health effects. However, individuals who are particularly sensitive to strong odors, allergies, asthma and have a compromised respiratory system, will feel the effects of these contaminants more acutely. Most will find the high concentration of VOC odor difficult to process metabolically.

Implementation of the recommendations listed will help limit exposures to drug particles, chemical odors, and mold, and will improve general indoor environmental quality and reported health symptoms.



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Indoor Air Quality (IAQ) Test & Assessment Margate Police Department

Evidence Office Area Air Samples

Air samples found concentrations of VOCs. Most likely sourced from Narcotics Room
Concentrations measured relatively low.

Low exposures however do not necessarily equate to safe and healthy conditions.
Repeated exposure can create health issues.

Terpenes were found in concentrations. These are particulates of marijuana
and these compounds create marijuana odors.

THC (Tetrahydrocannabinol) VOC particulates a component of marijuana were found
in sampled air. Repeated exposure may create health issues.

Dust Mites were also found in concentrations.

Ozone was noted in low concentrations.

Current Ventilation System

No ventilation exists other than HVAC system

IAQ Conclusion for Evidence Office Area

The levels measured may cause health effects. However, individuals who are particularly sensitive to strong odors, allergies, asthma and have a compromised respiratory system, will feel the effects of these contaminants more acutely. Implementation of the recommendations will limit exposures to drug particles, chemical odors, and will improve general indoor environmental air quality.



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Indoor Air Quality (IAQ) Test & Assessment Margate Police Department

Bulk Evidence Room

Air samples found concentrations of VOCs. Most likely sourced from Narcotics Room.

Air Sample found mold particulates in concentrations.

Terpenes were found in very low concentrations. These are particulates of marijuana and these compounds create marijuana odors.

Dust Mites were found in concentrations.

Ozone was noted in low concentrations.

Current Ventilation System

No ventilation exists other than HVAC system

IAQ Conclusion for Bulk Evidence

The levels measured may cause health effects. However, individuals who are particularly sensitive to strong odors, allergies, asthma and have a compromised respiratory system, will feel the effects of these contaminants more acutely. Most will find the high concentration of VOC odor difficult to process metabolically.

Implementation of our indoor air quality recommendations will help limit exposures to drug particles, chemical odors, and mold, and will improve general indoor environmental air quality.



SDAir
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Recommendations for Improving Air Quality

We will measure air quality in two key areas: breathing zone and the ambient air in a given physical area. This approach to improving air quality is to filter and capture particulates. We recommend Healthway Air Purification Systems.

HealthWay's DFS Technology (Disinfecting Filtration System) surpasses all other types of filtration. This revolutionary technology traps microorganisms such as bacteria, mold and viruses, reduces bioburden and inhibits microorganism's growth through Microbiostatic condition, resulting in the most powerful indoor air purification in the world.

Option 1

Narcotics Room , Evidence Office , Bulk Evidence

Healthway HW-Deluxe Portable - \$1149.00
Healthway HW - 950 PE - \$3900.00

These units are portable and offer the versatility to be moved to other areas.

Healthway HW Deluxe will be located in Narcotics Room.

The HW 950 can be located in Evidence office or

Bulk Evidence supporting air changes in both areas. With DFS Technology these units will remove all VOC's and pollutants.

The HealthWay Portable DFS (Disinfection Filtration System) is an ultra-efficient air cleaning system that is designed and patented to capture and remove 99.99% of ultra fine infectious airborne particles from breathing zone areas. The high energy field within the P950 charges ultra fine particles via aggregation which is an irreversible process leading to a high efficiency arresting of harmful airborne particles and infectious viruses, spores and bacteria. Its dedicated Carbon filter will remove all VOC's

Option 2

Narcotics Room , Evidence Office , Bulk Evidence

Healthway HW-Deluxe Portable - Narcotics Room

Healthway HW-700 - Ceiling Mounted Evidence Office

The Healthway Deluxe Utilizing technology developed through a United States Military Grant focused on germ warfare, the professional line of air cleaning by HealthWay is the only system to effectively address all three pollutant categories. The system has been proven to capture 99.99% of all particles as small as .007 micron in size. The heavy duty commercial-grade gas and odor filter eliminates most gases and the patented DFS technology removes 94-100% of harmful viruses, molds, and bacteria, leaving nothing but fresh, pure, healthy air. This technology is currently used in hospitals, medical clean rooms, government buildings, and military applications.

The deluxe will be located in Narcotics Room.

The HW 700 also utilizes HealthWay's DFS Technology (Disinfecting Filtration System) surpasses all other types of filtration. This revolutionary technology breaks through the cell structure of viruses, bacteria, mold and fungi, trapping and killing them once and for all. The HW 700 will be ceiling mounted in Evidence Office and also support air changes in Bulk Evidence.

PKG Price - \$4424.00

HW Deluxe- \$1149.00

HW 700 -\$2800.00

HW700 Installed - \$475.00

Option 3

Narcotics Room , Evidence Office , Bulk Evidence and CSI

Healthway 1200 SC -

Installed and Vented to 4 Areas - \$ 6900.00

Add VOC Filter

Is designed for stand alone installation above ceiling space and will treat multiple areas on a single floor. For your Facility the 1200 will be ceiling mounted in Bulk Evidence and vented to Narcotics Room and Evidence Office. HealthWay's DFS Technology (Disinfecting Filtration System) surpasses all other types of filtration. This revolutionary technology traps microorganisms such as bacteria, mold and viruses, reduces bioburden and inhibits microorganism's growth through Microbiostatic condition, resulting in the most powerful indoor air purification in the world.

700CM Ceiling Mount Air Cleaning System

HealthWay's DFS Technology (Disinfecting Filtration System) surpasses all other types of filtration. This revolutionary technology breaks through the cell structure of viruses, bacteria, mold and fungi, trapping and killing them once and for all. Tested by independent laboratories. HealthWay has over 30 years of clean air industry experience, making them the best in the industry.



SPECIFICATIONS

- 20 gauge galvalume steel construction
- Pre-drilled standing flanges to accommodate attachment to other system components
- Single access door, swing-open type for filter service from the front of the unit
- High-memory sponge door gaskets to ensure door to filter seal

DIMENSIONS

Height –

18.375" (466.7 mm)

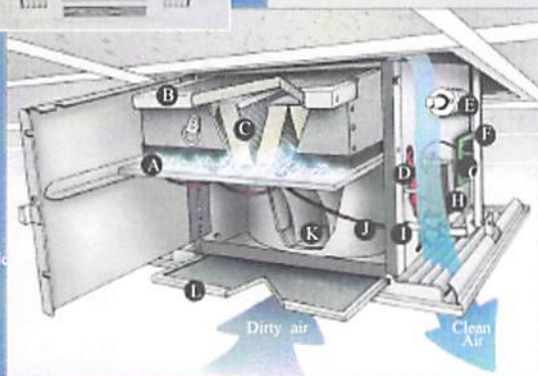
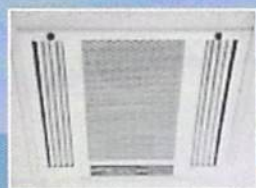
Width – 23.75" (609.6 mm)

WEIGHT

86lbs (39kg)

FEATURE

- Patented DFS (Disinfecting Filtration System) Technology
- 99.99% Filtration Efficiency – Down to a size of 0.002 microns
- Four Speed Air Flow Setting – provides flow rate for different applications
- Patented V-bank Filter – provides much larger surface area at a significantly lower pressure drop
- Patented V-bank Design – results in higher dust loading capacity and longer filter life
- Motor-driven Servo Drive – provides ease of filter replacement and servicing of components
- Convenient wireless remote control
- Optional
 - VOC Filter (Adsorbent Blend)
 - Hydrated Photo Catalytic Oxidation (HPCO) Odor-TVOC Cartridge
 - Duct Mount Kit for air distribution to different zones



DFS 700 Ceiling Mount

Four Speeds	TURBO	HIGH	MED	LOW
Power Consumption (120v)	183.5	151.8	142.2	71.9
Power Consumption (220v)	167.2	138.6	129.8	66.0
CFM (Cubic Feet Minute)	700	520	370	160
Operation noise (dB)	65	59	53	46

- A. High Energy Grid
- B. VOC Filter
- C. Patented V-Bank Filter
- D. High Voltage Service Connection
- E. PCO Bulb
- F. Power Supply
- G. Multiplier
- H. High Voltage Receptacle Panel Mount
- I. High Voltage Connection Plug
- J. Motor
- K. Pre-Filter

HW Deluxe Professional 9-Stage DFS Air Purification System

Utilizing technology developed through a United States Military Grant focused on germ warfare, the professional line of air cleaning by HealthWay is the only system to effectively address all three pollutant categories. The system has been proven to capture 99.99% of all particles as small as .007 micron in size. The heavy duty commercial-grade gas and odor filter eliminates mold, VOCs, and odors. The heavy duty commercial-grade gas and odor filter eliminates mold, VOCs, and odors. The patented DFS technology removes 94-100% of harmful viruses, molds, and bacteria, leaving nothing but fresh, pure, healthy air. This technology is currently used in hospitals, medical clean rooms, government buildings, and military applications.



FEATURE

Particle efficiency -

9-stage VOC adsorption filter for heavy removal of harmful gases and odors

This revolutionary technology reduces bioburden and inhibits microorganism growth through Microbiostasis condition

Independently tested and verified to guarantee better ultrafine particles efficiency than HEPA CE, UL, CSA and ISO listed

SPECIFICATIONS

Dimensions (inches)

15 w x 16 d x 27 h

high med low

Power Consumption (Watts) 125 75

CFM (Cubic Feet/Minute) 200 125 85

Operation noise (dB) 58 51 45

A 7-Stage Pre-Filter

Stage 1 - Poly Propylene Mesh: Large particle collector of dust, hair and lint

Stage 2 - Anti-Microbial: Inhibits bacterial growth in filter

Stage 3 - Zeolite Pellets: VOC/Gas Adsorbent.

Stage 4 - Carbon Pellets: VOC/Gas Adsorbent.

Stage 5 - Potassium Permanganate: VOC/Gas Oxidizer

Stage 6 - Anti-

Stage 7 - Poly Propylene Mesh: Large Particle collector of dust, hair and lint

B 360° Air Intake

Allows placement anywhere, assuring full room treatment

C Dual Air Intake Blower (not in view)

Drives a consistent volume of air and provides ultra-quiet operation

D Sealed Filtration Chamber (not in view)

All incoming air is treated in a 100% sealed chamber

E DFS Germicidal Technology

Stage 8 - Captures dust, mold, pollen, dust mite, dander and removes up to 100% of these captured contaminants

F Disinfecting Filtration System (Main Filter)

Stage 9 - Better than 99.99% particle reduction at 0.3 micron
4 times better loading capacity than HEPA approved rate

Traps microorganisms and inhibits growth through microbiostasis condition

G Electronic Control Panel

light Indicates when to replace main filter

Bio-monitor light shows DFS Germ Control is working efficiently

Convenient 3-speed control

Low speed ultra-

H Clean Fresh Air 365 days a year

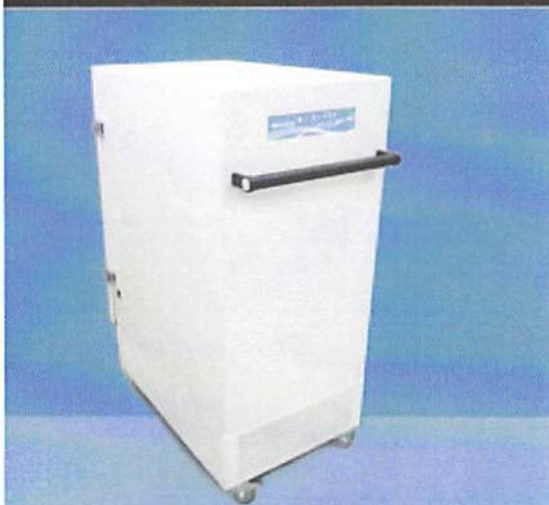


healthway.com

HealthWay

950P Portable DFS Air Cleaning System

The HealthWay Portable DFS (Disinfection Filtration System) is an ultra-efficient air cleaning system that is designed and patented to capture and remove 99.99% of ultrafine infectious airborne particles from patients and healthcare providers breathing zone areas. The high energy field within the P950 charges ultrafine particles via aggregation which is normally an irreversible process leading to a high efficiency arresting of harmful airborne particles and infectious viruses, spores and bacteria such as TB.



FEATURE

- **High Air Flow Capacity** – delivers high CFM with low energy consumption
- **Mobile Design** – built in 3.5" safety lock swivel casters, full width handle for easy movement
- **Multiple Fan Speeds** – four fan speeds for ease of control
- **99.99% DFS Filtration Efficiency** – down to a size of 0.007 microns
- **Independent Air flow/Distribution Control** – to facilitate placement anywhere in the space
- **Patented V-Bank Filter** – increases surface area and provides higher dust loading capacity
- **Three times longer filter span** – compared to conventional HEPA Filtration – Lower Maintenance Cost
- **Housing Design** – 5052 painted marine grade aluminum, provides a 100 % seal around the filter
- **Ease of Maintenance** – quick release filter access from the back side of the unit
- **Optional**
V-bank VOC Filter (70 lbs – Adsorbent Blend) Hydrated Photo Catalytic Oxidation (HPCO) Odor-TVOC Cartridge

SPECIFICATIONS

- 12 gauge aluminum construction
- Butterfly Latch back door for access
- High-memory sponge neoprene door gaskets to ensure door to filter seal
- Aluminum filter track design for 2" standard prefilter and a track for High Energy Grid Frame
- A polypropylene fin seal on the main filter track to eliminate filter air bypass
- Designed for continuous operation
- Operates at 120 V/ 220 V

DIMENSIONS

- **Height** 44" (1,118 mm)
- ***V-Bank VOC Filter** 57" (1,448 mm)
- **Width** 18" (457 mm)
- ***Optional**

950P Portable DFS Power Requirements Per System

Power Requirement			Air Flow Capacity			
V	Hz	Phase	Low	Medium	High	Turbo
120	50/60	1				
22050/60		1	334 m ³ /hr 210 CFM	660 m ³ /hr 415 CFM	1000 m ³ /hr 630 CFM	1500 m ³ /hr 950 CFM

1200 SC Self Contained DFS Air Cleaning System

HealthWay's DFS Technology (Disinfecting Filtration System) surpasses all other types of filtration. This revolutionary technology traps microorganisms such as bacteria, mold and viruses, reduces bioburden and inhibits microorganism's growth through Microbiostatic condition, resulting in the most powerful indoor air purification in the world.



SPECIFICATIONS

- 12 gauge aluminum construction
- Pre-drilled standing flanges to accommodate attachment to other system components
- Dual access door, swing-open type for filter service from either side
- High-memory sponge neoprene door gaskets to ensure door to filter seal
- Aluminum filter track design for 2" standard pre-filter and a track for High Energy Grid Frame
- A polypropylene fin seal on the main filter track to eliminate filter air bypass

UNIT DIMENSIONS

Height – 23" (584 mm)

Width – 28" (711 mm)

Depth – 32" (813mm)

WEIGHT

190lbs (86 kg)

*weight includes the electrical box

FEATURE

- **High Air Flow Capacity** – delivers high CFM with low energy consumption
- **Modular Design** – allows for stacking of modules to meet any air flow capacity. Single Module capacity is 1200 CFM – Nominal flow.
- **99.99% Filtration Efficiency** – down to a size of 0.007 microns
- **Self-Contained Design** – results in no pressure drop when installed on the Air handling unit
- **Independent Air flow/Distribution Control** – to facilitate Installation anywhere in the space
- **Patented V-Bank Filter** – increases surface area and provides higher dust loading capacity
- **Three times longer filter span** – compared to conventional HEPA Filtration – Lower Maintenance Cost
- **Housing Design** – provides a 100 % seal around the filter
- **Ease of Maintenance** – filter access from either side of the unit.
- **Electrical Panel** – electronic components are contained in a separate electrical box (not shown)
- **Variable Frequency Drive (VFD)** – modulation of airflow and connectivity to Building Management Systems (BMS) for monitoring
- **Magnehelic Pressure Gauge** – monitoring of pressure differential across the filters
- **Optional**
 - Auto-Flow Monitoring
 - V-bank VOC Filter (70 lbs – Adsorbent Blend) Hydrated Photo Catalytic Oxidation (HPCO) Odor-TVOC Cartridge



DFS 1200-SC / Power Requirements Per System

Model	Power			FLA	Power Usage
	VOLTAGE	HERTZ	PHASE	AMPS	WATTS
1200SC-120-1	120	50/60	1 5.5/5	650/590	
1200SC-220-1	220	50/60	1 2.7/2.2	585/495	
1200SC-220-3	208-240	50/60	3 1.7/1.5	400/375	
1200SC-440-3	380-460	50/60	3 1.1/0.9	485/435	



SD Air
Florida | HealthWay Distributor

DATE 2/7/18

sdair247@gmail.com

3900 East Indiantown RD
Suite 607-105
Jupiter FL 33477

PROPOSAL Annual Filter Replacement Schedule

Supply Filters - Filters to be replaced by Margate Maintenance Staff

Description	Quantity	Unit Price	Cost
HW Deluxe - Replace Pre Filter Main Filter at 12 Months	2	\$ 385.00	\$ 385.00
HW 700 - Replace Carbon Filter & Pre Filter at 6 months	4	\$ 378.00	\$ 378.00
HW 700 Replace Main Filter at 18-24 months	1	\$ 398.00	\$ 398.00
HW950 Replace Pre Filter & Carbon filter at 6 months	4	\$ 395.00	\$ 395.00
HW950 Replace Main VOC Filter at 18-24 months	1	\$785.00	\$ 785.00
HW1200 -Replace PreFilter every 3months Carbon Filter every 3 months	6	\$395.00	\$ 395.00
HW1200 - Replace Main V-Bank at 18-24 months	1	\$795.00	\$ 795.00

SD Air will instruct maintenance staff in correct replacement of filters at no charge and also monitor units at 3 month intervals for the first year to certify they are operating at manufacturer guidelines.



SD Air Technology

SD Air Proudly Serving Public Safety Agency's

Eustis Police Department

Orange County Jail

Miami FDLE

Sumter County Jail

Miami CSI

Fort Lauderdale PD

PBSO

Monroe County Jail

Broward County Sheriff

St Augustine PD

Bay County Jail

Clay County Jail

Coral Springs PD

Washington County Jail

Sumter County PD

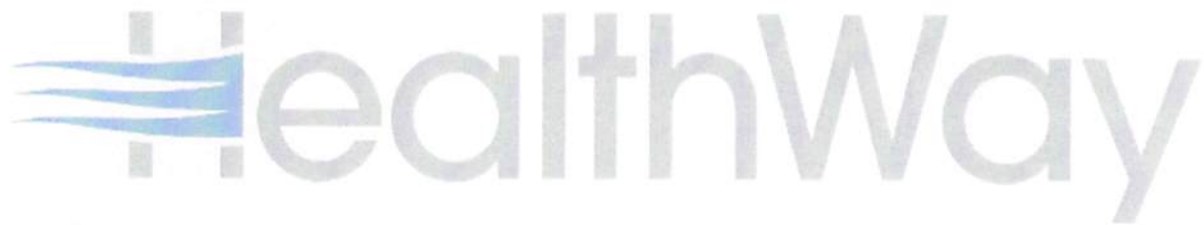
Fort Pierce PD

Flagler County Health

Port St Lucie PD

Lake City PD

Atlantic Beach PD



To whom it may concern.

SD Air Consultants-Letter of Distribution

We, the undersigned, a company whose registered office is at: 3420 Maple Ave. Pulaski, NY 13142 declare to have appointed SD Air Consultants, a company whose registered office is at 145 Oakwood Lane, Palm Beach Gardens, FL 33410 as an exclusive distributor and Service Provider , for HealthWay Home Commercial Products , BioPlus Negative Pressure Systems.

This Authorization is in effect until: **November 31, 2018**

Best Health,

Jason Francher

Business Developement Manager

1-800-843-3860

HealthWay Home Products Inc. 3420 Maple Ave., Pulaski NY 13142

Visit us at: www.healthway.com
