

Taking The Odor Out Of Medical Examinations



Application: Odor Control

Key Highlights

Problem: Control odors from cadavers

Solution: CosaTron Series 1000

Results: An odor-free and healthier medical examiners facility

A new Medical Examiner's Facility was built in Fort Myers, Florida in 1987, that was designed to handle three rapidly growing counties - Lee, Glades and Hendry. It has since grown from two autopsy areas to one of the finest Medical Examiner's facilities in the State of Florida.

The initial facility design called for installation of a filtration enhancement device called CosaTron to help control the obnoxious odors normally associated with a Medical Examiner's facility.

CosaTron was specifically requested by Dr. Wallace M. Graves, Jr., the then District Medical Examiner, for this new facility. Dr. Graves was familiar with the effectiveness of the CosaTron system through his association with Dr. Joseph Davis at the Dade County Medical Examiner's facility. However, because of County budgetary constraints, CosaTron was eliminated from the specifications for all but the "special" autopsy area.

Because of their location near the Gulf of Mexico, the Lee County Medical Examiner's facility has to perform a lot of special autopsies. This was the area of greatest concern. This special autopsy area was located near the back of the building and was designed for the numerous "floaters" and "decomps" handled every year. The accompanying odor can be extremely pungent. If not properly contained and controlled, these odors can permeate walls, clothing, hair, skin, etc.

The CosaTron excitation process reduces and controls invisible contamination which is found in 98% of filtered air. It is these contaminants - smaller than one micron in size - that cause odor perception and can also

result in bacteria and fungus growth. As anticipated by Dr. Graves, CosaTron proved very effective at controlling odors during these special autopsies. However, the problem of gurney's being moved into the facility, down the hallways, in and out of refrigeration, and in and out of the special autopsy room presented a problem in areas not utilizing CosaTron treated air.

In 1990 the Lee County Medical Examiner's facility was expanded to keep up with the growth of the counties it serves. The additions included a lab, walk-in refrigerated storage areas, conference and meeting rooms, plus office space for the doctors, technicians and administrative staff. Along with the growth came additional concerns.

One important concern was indoor air quality and its affect on employee comfort and well being. One staff member vacated her office in the rear of the building and moved to the front office whenever a special autopsy was performed. Additionally, other staff members complained to Dr. Graves about the poor indoor air quality in the building. Some employees experienced upper respiratory ailments which would be relieved when they were no longer in the building.

Dr. Graves had an additional concern about the potential problems associated with handling bodies which may have been exposed to AIDS, Hepatitis or other viruses. Because of these concerns, Dr. Graves contacted the State about his employee's welfare and the possibility of sick building syndrome. He was able to convince the State to authorize installation of CosaTron in the remainder of the Lee County facility.

CosaTron is not a filter. It does not ionize the air or create ozone. CosaTron is an air filtration enhancement device scientifically tested and proven capable of controlling the odors and other contaminants typically found in hospitals, medical examiner's facilities and funeral homes. Problems specific to this type of environment include deposition and residual odors. The patented CosaTron process uses solid state electronic components to control

the behavior of odorous gases, aerosols and fine particles suspended in the conditioned space. CosaTron causes these particles to collide and stick together to form larger particles through a natural process called coagulation. Once large enough, the particles are easily carried back to the returns where they are either exhausted or captured by the filters and removed. Independent tests published in scientific journals indicate that CosaTron accelerates the natural process of collision and coagulation thereby enhancing the effectiveness of the filters.

Since the installation of CosaTron, there has been a definite improvement in the indoor air quality of the facility. There are no lingering odors in the hallways. Odors no longer hang in the air during autopsies. There is no migration of odor from the various storage areas.

Dr. Grave and his staff handled close to 600 bodies in 1993 - 385 of which required full scale autopsies.

An important part of their job is their involvement with organ procurement agencies who recover organs and issues for transplantation. In addition, they also routinely handle bones which are found in the area to determine species. There are

no longer indoor air quality complaints from the employees at the Lee County Medical Examiner's facility. Dr.

Grave and the State responded to their concerns and needs by providing a facility in which obnoxious odors are controlled and removed not covered up and masked.

Dr. Graves feels that CosaTron was a valuable addition to the Lee County Medical Examiner's facility. He would highly recommend that CosaTron be considered when building a new medical examiner's facility or remodeling an existing one.

CosaTron has been used in installations around the world to provide a cleaner, healthier environment wherever people are concerned about indoor air quality - which is wherever people live, work, play and breathe.

