

CASE STUDY

Cannacraft: A Leading Colorado Grow Facility

The state of today's medicinal cannabis industry in the United States is unstable due to the conflict between federal and local legislation. With Colorado being one of the first states to legalize cannabis, it is not surprising that one of the first Federal RICO Cases against the industry was filed in Colorado. Cannacraft, a state-legal cannabis business and its owner, Parker Walton, were the subject of a lawsuit that claimed, "noxious odors" and other nuisances (traffic, safety, and impaired views) were going to have a negative effect on nearby property values. When Parker was looking for potential solutions to the "noxious odors", he contacted experts from The University of Cannabis Technology who led him to SecureAire.

To address the odor complaint, the members of SecureAire's local sales team suggested that Parker employ SecureAire's Advanced Collector System. The Advanced Collector System or ACS utilizes ACTIVE Particle Control Technology™ to control the movement of airborne pathogens and particle contamination within a space. This innovative technology provides the ability to treat all airborne challenges including particles, viruses, bacteria, mold, TVOCs, smoke, odors and dissolved gases. ACTIVE Particle Control also provides an airborne pathogen inactivation benefit through its INACTIVATE™ Technology. INACTIVATE reduces bacteria and molds' ability to grow and provides the necessary voltage strength to kill airborne pathogens through oxidative stress.

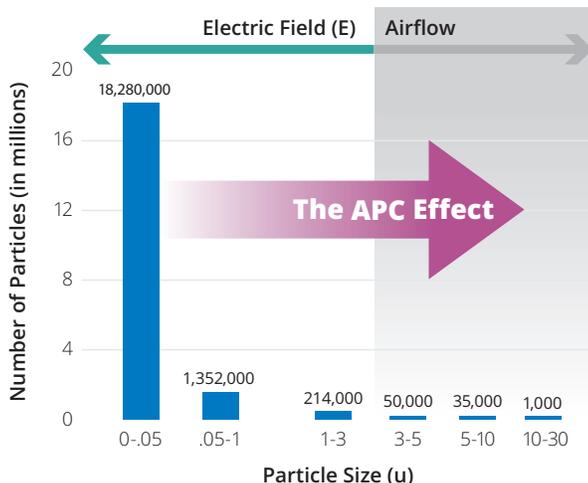
The Challenge

To test the effectiveness of the SecureAire technology, Cannacraft deployed an Air Quality Monitor that quantitatively measures airborne contaminants through the use of a laser optical particle counting sensor with the ability to measure particle sizes down to 0.35 microns. The ability to independently measure both before and after SecureAire Technology deployment was crucial to the validity of the potential air quality improvement conditions within the facility. In addition to the quantitative measurements, Cannacraft also enlisted a panel of "sniffers" to assess the effectiveness of the SecureAire technology and to make an observational determination as to whether or not the odors could be detected beyond its building and property lines.



Cannabis Characteristics

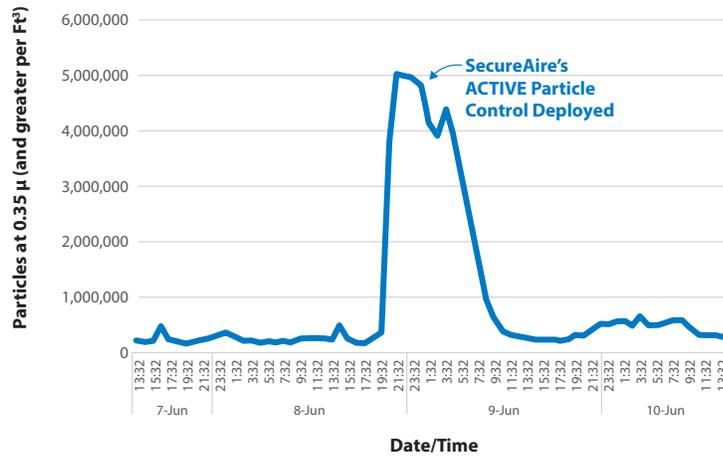
It is commonly known that Tetrahydrocannabinol (THC) is the main active ingredient of cannabis; however, very few know that it is odorless. Terpenes and/or terpenoids are the compounds that give the plant its unique smell. Terpenes are volatile organic molecules (VOCs) that evaporate easily and readily announce themselves to the nose. Just like all VOCs, they combine readily with other particles in the occupied space by absorption and adsorption, thus prolonging the perception of the offensive odors.



Grow Facility Results

SecureAire’s ACTIVE Particle Control Technology is deployed in a number of medicinal cannabis grow facilities across North America. In the case of Cannacraft’s Colorado facility, employing the SecureAire ACS system provided measurable particle count reductions and virtually eliminated the more subjective odors within the first 24 hours of deployment.

Figure 1: Cannacraft “Small and Critical” Particle Data for June 2018



SecureAire technology helped the Colorado growing facility obtain an important victory, as the jury found that Walton’s business was not responsible for the damages contained in the Federal RICO lawsuit, thus saving his business. The case set a precedent for future cases as this was the first time a jury heard a case of this nature. Lawsuits using the same strategy have been filed in California, Massachusetts, and Oregon, claiming the smell of marijuana damages neighboring owners’ ability to enjoy their land or depresses their property value.

Summary

ACTIVE Particle Control has been proven to minimize airborne contamination levels and odors within and around cannabis grow facilities. Independent quantitative particle count data taken from a number of facilities over a span of nearly two years yielded positive results supporting the mitigation of grow facility odors and airborne contamination including terpenes and mold. Within these controlled environments, any viable airborne pathogens including viruses, bacteria, mold, or spores have not only been captured but also killed by the system.

Today’s cannabis grow facilities face airborne contamination challenges similar to those of critical indoor environments such as healthcare, research laboratories, and cleanrooms. With an in-depth understanding of these contamination control issues, grow facilities can now employ the appropriate particle control solution while utilizing sufficient airflow rates for optimum results and indoor air cleanliness.

For further information, please contact your local SecureAire representative.

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