

Case Study: Powdery Mildew, Odor and Biofilm Control – Cannabis Production







Dioxide's Role **Project Description Works Undertaken**

Client Aphinity Inc - USA **Generator Manufacturer**

Chlorine dioxide gas generator for medical cannabis production

- Manufacture and supply of CDEB-2.5-SG electrochemical chlorine dioxide generator
- Assistance with commissioning and training

Site Details Cannabis producer – Greenfield, CA

Highlights and Innovations

Odor control efficacy	Destruction of powdery mildew spores in the air	Elimination of biofilm in irrigation water
Low plant phytotoxicity	Low use cost per square foot of grow space	Agency approvals for the chemical
Production of chlorine dioxide gas and solution in the one generator	Safe	One chemical precursor

Implementation:

- Chlorine dioxide gas is extracted from the generator using a vacuum pump and dosed into ducts to mix with ventilation air. Chlorine dioxide reacts with odors in the air to remove or neutralize the odor to an acceptable level.
- Chlorine dioxide solution is produced in the generator at 2,000 ppm and dosed into irrigation water by Flow Pacing (FP) at safe and effective dose to prevent biofilm in the reticulation pipework and blocking of drippers.

Results after 6 months operation: Excellent odor and biofilm control.

Summary of Why Our System Was Installed

- One system to control powdery mildew, odors and irrigation water biofilm growth.
- One simple, reliable, safe system with low operating costs.

