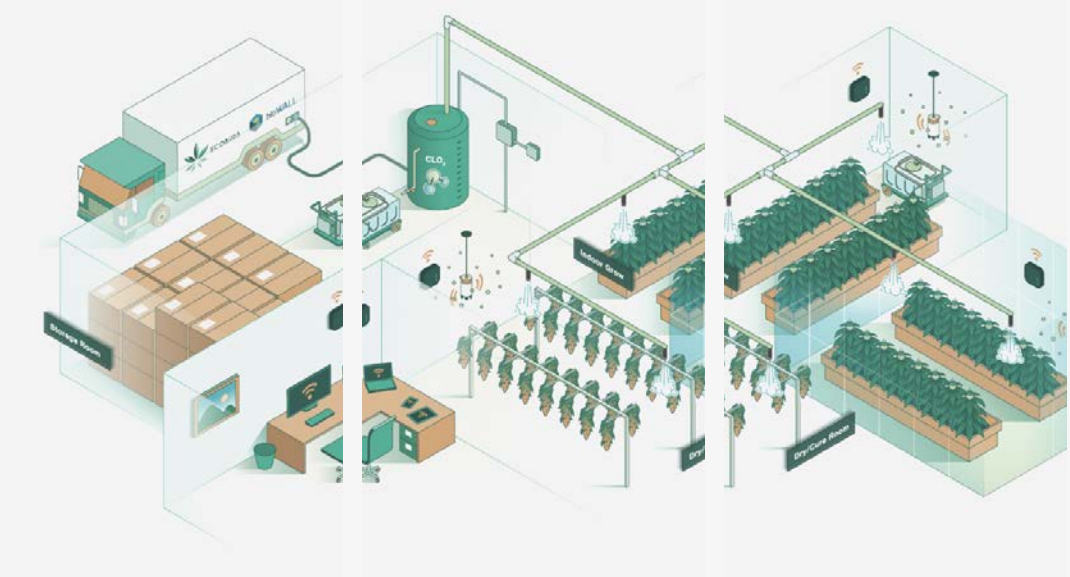
PREPARED FOR COMMUNITY GARDENS, LLC

JULY 31, 2020

Biosecurity & Odor Mitigation Plan



START CLEAN, STAY CLEAN™

PREPARED AND PRESENTED BY

KYLE BAKER/ CHRISTIAN CASTIGLIONE
ECOBUDS CORPORATE OFFICERS
in consultation with platform partners

ECOBUDS

TABLE OF CONTENTS

i EXECUTIVE NOTE

1 I. OVERVIEW - ODOR MITIGATION

3 II. DISCLOSURES AND SUPPORTING INFORMATION

4 III. FACILITY ODOR EMISSIONS

4 IV. ODOR MITIGATION

6 V. COMPONENTS OF ENGINEERING CONTROLS

6 VI. SYSTEM DESIGN

7 VII. MAINTENANCE PLAN

9 VIII. ADDITIONAL NOTES

EXECUTIVE NOTE

MAXIMIZING COMMUNITY GARDENS OPPORTUNITY

Community Gardens Team:

Several years ago when we began our journey in the cannabis industry, we knew we wanted to solve a significant problem that was plaguing cultivation- namely ***odor and disease***. This challenge not only causes frustration and disruption to manufacturing operations, it also reduces profitability while posing a real risk to employees and consumers.

To truly solve this problem, we've worked with experts in cannabis cultivation, global biosecurity, GMP standards, technology, plant research, engineering, economics, and more. The result is our development of the ***Digital Immune System™*** which improves the efficiency, safety, and efficacy of cannabis cultivation. This automated disinfection and deodorization system is designed to suppress orod and disease, eliminate failed tests, increase yields, assist underperforming genetics, reduce disinfection-related labor time and costs, protect the safety of both employees and customers, and enhance bottom-line profitability.

Today, we are excited to propose that our two companies work together via the following **Biosecurity and Odor Mitigation Plan**. We are enthusiastic about being able to bring all of the aforementioned benefits to Community Gardens and your Mansfield, MA facility.

We look forward to a long and fruitful relationship that has a lasting positive impact on both our companies as well as the Massachusetts cannabis marketplaces.

Your's truly and respectfully,

Kyle R.L Baker/ Co-Founder and CSO
618-521-6753
kyle@ecobuds.net

Christian Castiglione/ Co-Founder and CEO
201-401-2734
crcastiglione@ecobuds.net

THE PLAN

BIOSECURITY & ODOR MITIGATION

I. OVERVIEW - ODOR MITIGATION

Cannabis, a word derived from the Hebrew *kneh-bosm*, which literally means "aromatic reed," releases organic vapors originating from the plant's numerous terpenes. The release of these terpene-derived organic vapors may be further increased at various stages of manufacturing, such as during flowering, trimming, harvest, and processing. While different strains of cannabis produce different forms and amounts of terpenes, the more potent strains, which are generally more sought after as medicines and adult-use adjuncts, typically have higher concentrations of odor. Growing these strains will, without an effective odor reduction plan, increase the opportunity and likelihood of complaints from neighbors, both residential and commercial, who may be exposed to cannabis odors.

To avoid such conflicts and to maintain "good neighbor" status, while creating a work environment comfortable for employees and not running afoul of OSHA or other workplace standards, cultivators may turn to a variety of technologies used for odor mitigation. A first-line strategy employed for odor control of the facility is the design of the building itself. By operating a closed and sealed facility, in addition to sealed and self-contained pod-style cultivation units, there is very little exchange of air from inside the facility to the exterior, mitigating the vast majority of orders escaping.

After building construction, additional odor reducing strategies are used to suppress and mitigate odors. These include carbon adsorption, masking-agents, and neutralizers (including oxidants). Since the effectiveness of an odor reduction strategy is measured by the elimination of odor, the operator's goal should be to eliminate the offending odor's molecules which are responsible for the problem in the first place. Masking agents, for example, only seek to "cover" or replace a good odor for bad, and don't even attempt to achieve true elimination. Carbon filtration, while proving a certain degree of effectiveness against odor, is best utilized as a supplemental system, and not a primary driver of odor reduction. This is due to its trapping action instead of "at the source" neutralization.

The most effective solution is to combine building design with true odor elimination using neutralization agents. A custom, automated odor reduction, disinfection and humidity offset system is being recommended by EcoBuds, Inc, in conjunction with

our platform partner bioWall, LLC for Community Gardens' facility in **Mansfield, MA**. The facility will employ a rooftop mounted high plume fan for heat and air exchange. In addition to being a closed and sealed facility, optimal for odor mitigation, the site will deploy the aforementioned state-of-the-art, custom-designed odor neutralization system.

EcoBuds and its alliance partner bioWALL, a global leader in deodorization and disinfection, will install a facility-wide, patented dual-phase Chlorine Dioxide (ClO2) system for successful deodorization of cannabis' terpene-generated Volatile Organic Compounds (VOC's). The DiKlor® ClO2 is both EPA-registered and FDA-compliant. By deploying a sophisticated ClO2 system in both liquid and gas application phases, the Mansfield, MA facility can be both effectively and safely, treated for both odor and pathogens using a plan built on science and dedication to best practices. The automated nature of the system supplies consistent, predictable suppression of both odors and pathogens, while removing the time and expense of manual cleaning and reduces risks such as unnecessary employee exposure and human error.

ClO2 is always an optimal choice because it provides the dual benefit of being both an odor control agent as well as a disinfectant. This reduces costs and increases efficiencies within the operation. Chlorine dioxide also reacts more rapidly and completely than other available oxidizers, such as ozone. Unlike most oxidants, chlorine dioxide's efficacy remains consistent within a broad range of pH. This allows it to oxidize (reduce) odor causing compounds, such as organic vapors, in virtually all environmental conditions.

ClO2 is also unique in its operation. Due to its extremely small molecular size and its course of action, ClO2 neutralizes certain organic molecules on contact. Since it is also most effective in the absence of light, treatment applications may be optimized during "dark" cycles. Upon the reintroduction of light, ClO2 breaks down, taking the remnants of the destroyed odor molecule with it, while leaving no toxic residues to negatively impact regulatory testing.

The EcoBuds system has taken chlorine dioxide disinfection within the cannabis industry to a new level by helping to introduce the use of bioWall's Replenish® system - the cannabis industry's only patented dual liquid/gas automated disinfecting and odor reduction system. BioWall is a global authority on mitigating biological and chemical threats. BioWall, through its parent company Sabre, was instrumental in helping the Federal Government mitigate the Anthrax attacks in the early 2000's. They have industry expertise and on-the-ground experience for effective

decontamination and odor reduction in industries such as biohazard remediation, food agriculture, oil & gas, and water treatment.

ClO2 is a safe and effective broad-spectrum biocide used across numerous industries for decades. As a selective oxidant, ClO2 is a broad spectrum sterilant, highly effective in remediating a vast array of biological and chemical contaminants, neutralizing odor, destroying mold and mold spores, purifying drinking water and sterilizing large spaces – including indoor agriculture, large scale barns, food processing plants, sensitive equipment and commercial kitchens. These properties make ClO2 an ideal cannabis cultivation facility management tool as it fights and suppresses mold and mildew while simultaneously reducing the odor associated with production.

II. DISCLOSURES AND SUPPORTING INFORMATION

In compliance with the Massachusetts Department of Environmental Protection (MassDEP) & the MassDEP Air Compliance & Enforcement codes; Guidance for Adopting Municipal Regulations to Control Air Pollution under M.G.L. chapter 111, section 31C (hereinafter, "Guidelines"). Massachusetts General Laws Chapter 111, Section 31C (Section 31C). Additionally, Code provided by Town of Mansfield, MA / Part II: General Legislation / Zoning, Article III Principal Use Regulations will be observed.

See Attached Documents A1,A2.

Environmental conditions data have been considered and are referenced herein from the attached document, See Exhibit B1: Environmental Other environmental data, such as Wind Direction, is sourced from weather stations and extension programs such as; Weather Network, Weather Underground, The National Weather Service

Attached is Exhibit C1 the facility blueprint or likeness for reference

B. All plans are dependent and subject to state, local, and/or municipal regulations and laws pertaining to building code and other established rules related to the plan

III. FACILITY ODOR EMISSIONS INFORMATION

a. Facility Information
The proposed cannabis cultivation site, located at 500 School St., in Mansfield, Massachusetts is owned and operated by Community Gardens.

b. Specific odor---emitting activity(ies)
The specific order related activities at this site may be categorized as cannabis cultivation and drying.

The location of the odor related activities is isolated to the designated flowering rooms, processing areas, and the "drying" rooms located within the facility. The growth stage when cannabis is the most fragrant is during the flowering, harvest, processing, and trimming of the plant materials.

The main strategy employed for odor control of the facility is the design of the building and cultivation units itself. By operating a closed and sealed facility with fully contained units, there is very little exchange of air from inside the facility, mitigating the vast majority of orders from escaping the facility.

c. Phases (timing, length, etc.) of odor---emitting activities
Odor related activities may occur on an ongoing basis, for example: Every two weeks on Tuesday, during normal business hours.

IV. ODOR MITIGATION

Odor emitting activities shall be contained within the infrastructure of this site. Odor reducing/mitigating technologies using a combination of filtration and deodorizers throughout the sealed facility. These systems recirculate and neutralize odor causing compounds. Additional technologies and systems that use proven methods from food-animal production and processing will be executed to eliminate odor at the source. The main strategy employed for odor control of the facility is the design of the building itself. By operating a closed and sealed facility there is very little exchange of air from inside the facility mitigating the vast majority of orders from escaping the facility.

In addition to a closed and sealed facility, the facility will deploy a state-of-the-art odor mitigation system. An automated odor reduction, disinfection and humidity offset system developed by our partner Ecobuds, Inc and bioWall.

All technologies used shall be within the guidelines for safe manufacturing and are environmentally friendly.

a. Administrative Controls

i. Procedural activities
The ventilation of this site is exercised through a rooftop mounted high plume fan located on the roof for the purpose of temperature regulation. Based on the construction of this site, the exhaust vent is approximately forty feet(40') above ground level. Additional redundancies take the form of odor scrubbing technology and devices deployed in animal rendering facilities. These devices manage and eliminate odor at the vent level.

ii. Staff training procedures
The Director of Cultivation, Agent-in-Charge, and/or General Manager shall be responsible to day-to-day activities and management of activities. The Odor Plan is under the responsibilities and management of these person(s).

The Staff shall be trained on the use of facilities engineering controls. The controls are, but not limited to, the ventilation of the facility, temperature controls and disinfection/deodorization systems.

Staff shall be trained within 15 days of employment on the safety, recognition, and handling of procedures, processes, and technologies involved with the systems. Additional training shall be conducted to attest and record the employee's knowledge and understanding of the respective technologies, methodologies, and systems of the plan, no less than bi-annually. Training may be conducted in person or via digital learning platforms or a combination thereof.

iii. Recordkeeping systems and forms
The automated systems keep detailed records of environmental activities and use of ClO2. These records are available at any time.

b. Engineering Controls

ClO2, an oxidant, has been able to cause the rapid and complete chemical destruction of many volatile organic chemicals and pathogens. In general, the oxidants have been capable of achieving high treatment efficiencies (e.g., > 90 percent) for unsaturated

aliphatic (e.g., trichloroethylene [TCE]) and aromatic compounds (e.g., benzene), with very fast reaction rates (90 percent destruction in minutes). Field applications have clearly affirmed that matching the oxidant and in situ delivery system to the contaminants of concern (COCs) and the site conditions is the key to successful implementation and achieving performance goals for odor mitigation. Since the automated odor and disinfection system is designed and implemented within the sealed facility, odor mitigation is occurring at the source of the odor at all times.

V. COMPONENTS OF ENGINEERING CONTROLS

a. System design

The Replenish system is based on existing logistics of the Food Ag industry. A Semi-truck with specialized equipment fills and recharges a special "smart" tank. The refilling process, "Replenish" is a lossless system and has zero waste, restoring the concentration to full capacity. The smart tank uses a variety of inline and in-tank sensors to measure the PPM of the Clo2, and ultimately diverts the concentrations to the plumbed systems (inline sprayers, gas-phase emitters). The pumps that deliver the CLo2 are operated by "if this, then that" and timed programming methods, sometimes called AI.

b. Operational processes

Operational processes of the Biosecurity and Odor Mitigation Plan are automated and monitored in real-time to ensure 100% uptime and efficacy.

c. Maintenance plan

Maintenance of the systems shall be routine and scheduled in accordance with manufacture recommendation and regulation. All maintenance rendered shall be documented in detail and retained in a centralized repository.

VI. SYSTEM DESIGN

System 1: Automated Disinfection

Through a series of proportioning pumps, the stock solution of ClO2 is diluted to the appropriate concentrations to installed inline spray systems. These systems are custom to each room and have spray nozzles that are specific to spray width, distance, and gallons per minute. These nozzles are directed to floor levels to address "hard-non porous surfaces" and disinfect to a LOG 6 reduction using 100 ppm Clo2.

System 2: Gas-Phase Emitter

Like the automated disinfection system, the Gas-Phase Emitter operates from proportioning pumps and the smart tank. The difference is that the device (Gas-Phase Emitter) is specialized to execute the gas phase of the Clo2.

VII. MAINTENANCE PLAN

a. Timeline for implementation of odor mitigation practices

The timeline should begin upon receipt of approval from the Town of Mansfield; of the "Biosecurity and Odor Mitigation Plan" or "BOMP"

i. Approval of BOMP by the Department
ii. Approval of BOMP by other City agencies
iii. Purchase and installation of engineering controls
iv. Inspections and approval by City agencies

b. Complaint tracking system

An odor caused by the release of an air contaminant is considered air pollution and a violation of the local ordinance if the MassDEP or local regulatory authority determines that the odor has unreasonably interfered with the enjoyment of life or property. Many citizen complaints of air pollution involve the presence of objectionable odors. Community Gardens is committed to being a good neighbor and has made considerable efforts or avoid any instance of nuisances to the community.

All complaints received, whether by telephone, letter or through the MassDEP of Environmental Protect or local authorities will be immediately forwarded to the General Manager or his designee for review.Complaint of Odor related instances may be reported by telephone and email to:

Steve Chorney- Phone: (508)207-0938, Email: Stevecommunitygardens@gmail.com
Doug Rhodes- Phone: (508)472-6515, Email: Mmjnursedoug@gmail.com

[Page left intentionally blank]

VIII. Additional Notes

a. Basics

ClO2 is water soluble true-gas. Essentially, what that means is that it always remains a gas, but can be put in water at a wide variety of concentrations without actually mixing with the H2O molecule. They stay separate.

Being a gas, ClO2 always wants to leave the solution and enter what we call the "gas-phase". The solution of Clo2 stays in water until agitated or not contained. The molecule(Clo2) remains in the physical state of matter, gas. As such, the gas can only be held together if contained (or by gravitational force), in our instance this represents the greenhouse or indoor facility. There is a great deal of empty space between molecules, which have a lot of kinetic energy (also, oxidation potential). The particles move very fast and collide into one another, causing them to diffuse, or spread out, until they are evenly distributed throughout the volume of the facility (or container).

Gases have measurable properties: temperature (T), volume (V) and number of particles, which is expressed in a mole number (n or mol). This measurement allows us to very precisely and mathematically "dose" a given space; in-fact exactly. If it's a liquid, we measure in Parts Per Million(PPM). In our use, generally at 100PPM (These are the sprayers).

<u>Oxidation</u>

ClO2 oxidizes volatile organic compounds, size-specific mold, bacteria, and viruses (Sans your skin, or plant cells and trichomes). Oxidation is the process in which an electron is taken away from a molecule. Taking away electrons disrupts important cellular structures of microbes (like a cell wall). Oxidation can disrupt the cell wall of bacteria and/or mold: the membrane stops functioning, no transport of molecules is possible (like sugars). Also, the barrier can break or burst open and important constituents can leak out of the cell (denatures the protein structures) Oxidation can also affect all structures inside the cell such as important enzymes and DNA. Damage caused by oxidation can sometimes be repaired by cells, but when there is too much oxidation damage, the cell/microbial will die.

<u>The System</u>

The system operates on three basic principles ; 1)Detection of specific biological

activity (mold/bacteria), 2)Termination of biological activity (mold/bacteria), and 3)verification of termination of biological activity.

Specialized devices monitor the airborne environmental conditions and identify mold and bacteria.

System Operations

The Replenish system is based on existing logistics of the Food Ag industry. A Semi-truck with specialized equipment fills and recharges a special "smart" tank. The refilling process, "Replenish" is a lossless system and has zero waste, restoring the concentration to full capacity. The smart tank uses a variety of inline and in-tank sensors to measure the PPM of the ClO2, and ultimately diverts the concentrations to the plumbed systems (inline sprayers, Gas-Phase). The pumps that deliver the CLo2 are operated by "if this, then that" and timed programming methods, sometimes called AI.

System 1: Automated Disinfection

Through a series of proportioning pumps, the stock solution of ClO2 is diluted to the appropriate concentrations to installed inline spray systems. These systems are custom to each room and have spray nozzles that are specific to spray width, distance, and gallons per minute. These nozzles are directed to floor levels to address "hard-non-porous surfaces'' and disinfect to a LOG 6 reduction using 100 ppm ClO2. The amount of ClO2 in gallons is determined by the square footage of the space and based on the centipoise (in this case, 0-1=1,000 sq ft of coverage, per 1 gallon).

System 2 Gas-Phase Emitter

Like the Automated Disinfection system, The Gas-Phase Emitter operates off of proportioning pumps and the smart tank. The difference is that the device (Gas-Phase Emitter) is specialized to execute the gas phase of the ClO2. This is essentially accomplished by using a media that looks like marbles, where the Clo2 cascades across the media and excites/agitates the Clo2 out of solution and into the room (or any given space) to its gas-phase....delivering precise mols of ClO2 that are OSHA safe.