# 13000 1112.

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4/5/2018

Dear Sir,

We have reviewed the attached odor mitigation plan for the Justice Grown Dispensary.

It is our understanding that the attached plan meets, or exceeds, the requirements of the city of Santa Rosa for cannabis odor mitigation.

M 3869.8 Exp 530T B

Sincerely, Matthew Torre, Registered Professional Engineer 15000 Inc

### **FACILITY INFORMATION**

Date: April 5, 2018

Name of Facility: Justice Grown

Facility address: Petaluma, CA

Facility type: Dispensary

### **ODOR MITIGATION PLAN**

We understand that cannabis odor could be a major concern for the residents of Santa Rosa. Justice Grown is prepared to take preventative measures to ensure that the dispensary does not disturb the environment or culture in the neighborhood. We will do our best to comply with Santa Rosa ordinance ORD Chapter 20-46.050 (H)(1-3). This plan will outline the steps that will be taken to mitigate cannabis odors and establish a responsible plan of action if cannabis odors are detected outside our dispensary.

It is important to our management that our various community plans remain transparent so all community members understand the importance of mitigated cannabis odors. Thus, our mitigation plan and records will be made available to the public and documents can be requested at our dispensary.

We plan on presenting our findings and methods of prevention at regular community meetings. Communicating this plan to the neighbors and local community members is a key component to our neighborhood impact plan.

Establishing an Odor Observer Committee (OOC) will be tasked at the first community meeting. Volunteers from the community will be asked to participate in the detection and relay of odor observations. The OOC will volunteer and designate one of the local business / home owners, within 600 feet of our building, to be the individual that files formal complaints or comments to our facility and to the council. Please see exhibit A for an example of our Odor Detection Form.

Occasionally cannabis flowers will produce an odor, but under the new ordinance and state regulations all cannabis products we sell to patients will be prepackaged at the cultivation / processing site and we will not package cannabis products on site. State regulations *CCR Code 5412. Packaging and Labeling* are explained below:

(a) A retailer shall not accept, possess, or sell cannabis goods that are not packaged as they will be sold at final sale, in compliance with this division.

(b) A retailer shall not package or label cannabis goods.

If products are pre-package and sealed during our possession, strong orders will be mitigated during bulk storage. To be on the safe side, Justice Grown will take extra measures to prevent undesirable odors by utilizing various bio-filtration systems to reduce the odor, air-sealed storage techniques and monitoring tools.

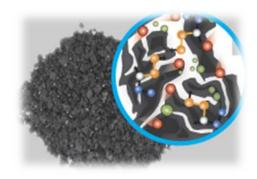
### Prevention

Justice Grown is an experienced cannabis dispensary operator, having designed, built and operated cannabis dispensaries across many regulated markets. In all cases we have designed our facility and put procedures in place to prevent the smell of cannabis odors from escaping our premises. We will take the following steps to prevent and mitigate cannabis odors in our dispensary, therefore preventing odors in the public.

<u>Controlled Storage</u>: All cannabis products will be securely stored in our vault room. The vault room will be comprised of floor to ceiling, double layer cement powder, stone and metal shavings to resist penetration of walls and complete with steel framing. The vault room will be temperature controlled between 55%-65% degrees. All cannabis flower products will be vacuum sealed, per 25 counts, and placed on shelves for final inventory. We believe in vacuum sealing our inventory to prevent cannabis odors, meanwhile keeping the product fresh from oxidation and easier to keep track of large inventory batches.

<u>Charcoal Air Filters and HVAC</u>: We will design our facility with a new HVAC system. The system will include charcoal air filters and monitoring tools that will be utilized to clean and reduce smells as well as alert our employees when odor ratios increase beyond normal range.

A charcoal air purifier or charcoal filter, also commonly known as an activated carbon air filter, works by absorbing the gases and odors in the air. The charcoal pellets are activated carbon that has been treated with oxygen to open up millions of pores in between the carbon atoms. This works so well because the millions of tiny cells that are in the charcoal in addition to being very porous also attract and capture odors and



gases. Charcoal filters help clean air of particles as to reduce airborne odors, all the while our HVAC will consist of a carbon filtration system to circulate and remove odors and toxic chemicals.

Per ORD Chapter 20-46.050(H)(1)(2), we will ensure our odor mitigation system is in good working order with monthly inspections of odor filters.

<u>Building Pressure Control</u>: The HVAC system will be designed and balanced to maintain a negative pressure inside the building. This will help ensure any odors in the dispensary will not leak out.

<u>Best Available Technology</u>: The combination of charcoal air filtration and building pressure control represent the current best available technology.

<u>Packaging</u>: All cannabis products we purchase will be pre-packaged and sold in pre-packaged form per states rules and regulations *CCR Code 5412 (a)*. We will not sell "loose flower" in jars and all cannabis display containers will enclosed.

<u>Design</u>: Our dispensary will have non-operable windows, meaning they cannot be opened. All our doors will be sealed with proper weather stripping, keeping air circulating and filtered inside our facility. We will not have onsite usage of cannabis products, which we believe helps mitigate cannabis odors to our surrounding neighbors.

### Monitor, Detection and Remediate: Method for Assessing Odor Impacts

We fully understand the importance of cannabis odor mitigation and will do our best to prevent the issue, but if odors were to be detected outside our facility we have a plan to monitor, detect and remediate.

Monitor: Each day the manager or supervisor on duty will assess the on-site and off-site odors for potential release of objectionable odors. While driving in the facility each day we will be able to physically monitor odors from outside the dispensary. The manager on duty will be responsible for assessing and documenting odor impacts daily. To enhance our odor detection, we will purchase the Nasal Ranger. The Nasal Ranger is a device, based on a scientific method, which can quantify odor strength in terms of Dilution to Threshold (D/T) ratios.

<u>Detect</u>: Studies have determined that a 7:1 D/T ratio was a detectable level of cannabis odor. Justice Grown will use a 6:1 D/T ratio for a measurable maximum threshold. The Nasal Ranger also has a subscription web-based application that provides electronic repository for all odor data.

For example the Odor Track'r™ permanently stores odor inspection data, such as date/time; location code numbers, descriptions, and GPS data; odor strength as D/T from the Nasal Ranger, butanol intensity or word scale intensity; odor character descriptors; and meteorological data (temperature, humidity, barometric pressure, wind direction, wind speed, precipitation and sky cover). If we decide to use the subscription web-based application, the City Council and the Bureau can visually track and monitor cannabis odor outside our facility.

The most effective way to detect the smell of cannabis outside our facility will be: customers, patients, outside personnel, delivery drivers, the public and other neighboring businesses.

The closest neighboring businesses include; Cash and Carry, Cheap Smog Test, The Zoo, Appliance Parts Equipment, Asian Market, Sam's Donuts, Boost Mobile Premier Store, Carquest Auto Parts, Rosenbaum's Restaurant Equipment, Vaugh's Transmission, Demigods & Dames Tattoo & Piercing and The Garden Spout, all within a 600 feet radius.

<u>Remediate</u>: If highly questionable or objectionable off-site cannabis odors are detected by the public, the following protocols will take place:

- 1. Investigate the likely source of the odor.
- 2. Utilize on site management practices to resolve the odor event including monitoring tools to document D/T.
- 3. Take steps to reduce the odor-generating source.
- 4. Determine if the odor traveled off-site by surveying the perimeter and making observations of existing wind patterns.
- 5. Document the event for further operational review.

If employees are not able to take steps to reduce the odor-generating source, they are to immediately notify the Dispensary Manager, who will then notify the COO. All communication will be documented and our team will come up with a proper solution, if applicable. If necessary we will engage our certified engineer to review the problem and make recommendations for corrective action.

<u>Staff Training</u>: All employees will be trained on how to detect, prevent and remediate odors outside our dispensary and the proper steps outlined.

### **Community Involvement**

We believe the detection of cannabis odors from outside our dispensary will be a team effort with our neighbors. As experienced cannabis operators, many times we become "nose-blind" to the odor of cannabis. By forming the OOC, we will be able to record if our neighbors detect cannabis odors from outside our dispensary.

Proactive communication through the OOC is an excellent way to promote the emergence of communication between the employees of the dispensary and nearby businesses and residents. In the process of setting up the OOC, a group of volunteers from the community are trained to recognize and quantify odors and how to report odors in a consistent manner. The OOC provides an effective communication channel between members of the community and the dispensary employees.

This helps to convey the odor mitigation plans objectives and odor observations relevant for environmental monitoring and management operations. On a regular basis, members of the OOC are invited to review the results of their participatory monitoring and actions implemented by Justice Grown

The Odor Detection Form will be provided to undesirable odor observers. The form can be submitted by email or in person at the office or by mail to our California headquarters located at 3541 Regional Parkway, Santa Rosa CA 95403.

## [Exhibit A] Odor Detection Form

Name of I	Reporting P	arty			
Phone Nu Email Ado	ımber ( ) dress	-			
Date		_			
Location of odor observation					
Date and	Time of odo	or observatio	on		
		wind direct	ion, speed)		
Date/Tim	ne in which	company wa	as notified		
Company	personnel	were notifie	d via (circle one)		
Phone	Email	Weh	Social Media	In Person	

## For Administrative Use Only

### Response



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### **CANNABIS FACILITY MECHANICAL ENGINEERING**

15000 Inc. are specialists in Cannabis Facility Engineering. We have worked on a wide variety of cannabis building and facility operations projects including grow rooms, extraction facilities, cannabis processing facilities and dispensaries. We are well known for designing sustainable, innovative, and cost effective projects for a multitude of cannabis facilities here in the Bay Area and beyond.

At 15000 Inc. cannabis is not a new industry. We have been advising the industry on building systems for over 10 years. We are one of the very few licensed Consulting Engineering firms in the State of California with specific knowledge and experience in the cannabis industry and have been a leader in the medical marijuana system design through-out California.

We have help growers make the key decisions for the cooling and humidification needs using the latest technology advancements in grow design. Through our years in the industry we have learned the various approaches that growers use to cultivate their plants. We advise on PG&E agriculture utility rates, CO2 injection, lighting, dehumidification and grow room operating strategies. We design HVAC and Plumbing systems that will increase grow room yields while still conserving energy.

15000 Inc. has helped cannabis testing labs develop their building design criteria to address the unique cleanliness and safety challenges. Currently there are no local, State or Federal codes that address cannabis testing labs. This is of great concern as these facilities have very serious health and safety issues as a result of the various extraction methods currently employed. In addition, the control of outside contaminants, insects, mold, humidity, pressure and temperature present challenges found in no other facility.

Our mechanical engineering provides full design for all types of heating, ventilating and air conditioning systems. In addition, we provide a full suite of services including; plumbing design, fire protection design and advanced energy analysis.

We have experience in each delivery method type throughout multiple agencies from "plan and spec" to "design-build". We also bring the same attention to detail and coordination to each project regardless of delivery method to guarantee efficient delivery and high quality design. This, along with a one-stop shop for design services provides a truly sustainable project for the owner.

15000 Inc is a full service mechanical engineering firm which was founded with very specific goals in mind: Provide superior coordination and design services to Architects and Owners. To achieve this, 15000 Inc. focuses on a combination of traditional and proven engineering technologies along with a clear eye towards the future of sustainability and green construction.

In addition to our pride in craftsmanship, we feel honored to work with a talented client base and colleagues. We work with some of the most prominent and successful firms in California and take a great deal of pride in our clientele, performance and communication. The vast majority of our projects stem from past performance that has developed into long term relationships.

Services provided by 15000 Inc. run the gamut of engineering tasks from heating, ventilating and air conditioning design all the way through, domestic piping, process plumbing and energy analysis.

15000 Inc. was founded in 2004 and we are licensed in multiple States including California and Nevada. We maintain active participation in numerous industry organizations requiring continuing education which keep us on the cutting edge of technology and engineering. Among them are; American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), The United States Green Building Council (USGBC), American Society of Plumbing Engineers (ASPE), The American Institute of Architects (AIA) and The Construction Specifications Institute (CSI).

#### **CANNABIS FACILITY PROJECTS**

- Norstar Farmaceuticals, Santa Rosa, Odor Control Plan
- Santa Rosa Dispensary, Santa Rosa CA
- RK Labs Extraction
- Purvine Cannabis Cultivation Greenhouse
- Flow Kana Building 1, Redwood Valley
- Sublime Extracts
- Philo Production Barn
- The Werc Shop Extraction Facility, Coalinga
- O'Hair Court Cultivation
- 3401 Industrial Ct. Santa Rosa Grow Facility
- 229 Encinal Road Extraction Facility

- JT Supply Grow Facility, Oakland Retro-permit
- ◆ JO Supply Grow Facility, Oakland Retro-permit
- Mercy Wellness Dispensary
- CGC Collective Sonoma Cultivation Grow Facility, Sonoma CA
- Copperhill Lane Grow Facility, Santa Rosa
- Willits Extraction Facility, Willits CA
- Newtropics Cannabis Extraction
- ◆ JVSD Holdings 8600 Unsworth Retro-permitting, Oakland
- JVSD Holdings 8614 Unsworth Retro-permitting, Oakland
- Santa Rosa Dispensary, 6575 Oakmont Drive, Santa Rosa
- Vprov LLC, Vprov Extraction

odor control plans
heating
ventilation
air conditioning
plumbing
process waste
energy analysis
sustainability
modernization
new construction
master planning
central plants
site investigation
digital controls
commissioning

design build

cannabis engineering









