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MUNICIPALITIES AND MARY JANE

Nationwide, community development departments have been dealing with a new industry that has never before been regulated by zoning or building codes. Marijuana has been legalized for recreational use in four states and medicinal use in 19 states. While federal laws governing marijuana need to be considered and accounted for, President Obama has made it clear that the current administration will respect states' rights and not interfere with marijuana stores or users in states where it has been legalized.ⁱ Most state laws and requirements address issues of criminal justice and monitoring of use. Codes and rules governing land use and construction of facilities for this new industry have largely been left to the authority of local municipalities in the states where recreational and medicinal marijuana has been legalized. In other words, the city of Denver ordinances only apply within the City and County of Denver. Individuals should go to each city or county's website to determine specific marijuana sale and consumption laws.ⁱⁱ

Each government involved is continuously having discussions on how to regulate this industry to protect the safety of the community. These discussions range from identifying structural issues not considered in the building code, to potential impacts on land uses in zoning ordinances. SAFEbuilt has been asked to address some major issues that we have encountered in dealing with marijuana dispensaries and grow facilities. It is our goal to share some ideas through a two-part series on what communities can do to prepare and

properly regulate this new industry, as well as open a conversation among community development departments on best practices.

CONTAINMENT OR ELIMINATION OF ODOR

The odor from marijuana is very strong, distinctive and unpleasant for many people. Thus, communities can amend their building codes in an effort to reduce the impact of marijuana odor. Filters can greatly help in diminishing the odor; however, there is currently no code requirement to have filters installed in dispensaries. This increases the likelihood of nearby businesses and residents complaining of smell. Requiring carbon filters, especially in cultivation rooms, cannot only lessen the odor but also lessen the number of complaints the department receives. In the end, regardless of what measures are taken, the odor is usually never completely removed. These odors can permeate a facility and will not dissipate without deep cleaning following the closure of the operation.

Zoning regulations now have to take the odor issue into consideration. When a dispensary is located in a strip mall, or close to residential neighborhoods, there is the possibility that complaints will arise from the nearby tenants about the noxious odor. The city of Denver, at one point, considered banning marijuana use that could be smelled by a neighbor, as well as bans on backyard, front porch and balcony use.ⁱⁱⁱ The City has not taken action on this idea as it is understandably very difficult to measure odor and regulate smell. However, in

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most cities and counties, if marijuana odor is perceived to be excessive, residents can file a nuisance odor complaint with the Department of Environmental Health.^{iv}

Consideration should be given on how to best address closed facilities during the permit process and how to handle complaints regarding the acceptable amount of odor. Does your state allow for the community to hold a bond for cleaning facilities upon a closure? Regardless of the answer, it would behoove municipalities to open the floor for discussion. Such was the case in San Miguel County, CO earlier this year where:

“Staff has discussed the question of requiring a bond for cleanup of a cultivation site with the Colorado Department of Revenue — Marijuana Enforcement Division (“DOR-MED.”) The DOR-MED closely tracks all plants from seed to sale and all operators of cultivation facilities. They would be aware of any plants that are not in production and would follow up with the operator and if necessary take control of the plants. In checking with DOR-MED and various other jurisdictions we did not find where any of these entities were requiring a bond for clean-up.”^v

Conversations and resolutions like these are crucial in aiding municipalities in navigating the tumultuous and never-before-mapped waters of dealing with marijuana processes and complaints.



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VENTILATION

While containment of odor is a significant issue, ensuring proper ventilation is equally a concern. When the product is grown indoors, as it typically is, we have seen many issues with mold. The high humidity levels can create an ideal environment for rapid mold growth. This can become dangerous to the health of people living or working in the facility. Furthermore, the structural stability of the building can be compromised if the mold and humidity reaches the point of rotting and decomposing the wood.

The amount of ventilation for the facility is an item that is often overlooked in these types of operations. Growers are eager to establish grow rooms and work to contain the odor, only to fail in taking the time to ensure there is proper ventilation. In fact, in some operations depending on the size of the heating unit and amount of fuel used if the system is not electrical, the grow room may require an air quality permit.^{vi} Requiring air quality permits for these operations is something that all municipalities dealing with this issue should open dialogue to.

DISPOSAL OF WASTE AND BY PRODUCTS

The use of chemicals in the cultivation process can endanger the water supply should they come into the system improperly. These chemicals can create issues for wastewater treatment systems, raising the cost for treatment or possibly impacting downstream ecologies. To combat the waste issues, legalization states have implemented licensing rules that require marijuana stems and organic waste from growing and processing operations to be rendered unusable by mixing them with 50 percent other materials and grinding them up before disposal or composting.^{vii} If any dangerous wastes are generated, dangerous waste regulations need to be followed.^{viii} Solid waste management is regulated at the local level by the city or county health departments. In Michigan, where medicinal marijuana is legal but not recreational, the city of Ferndale passed an ordinance that requires that “a waste disposal plan shall be included with all applications for

a facility detailing plans for chemical disposal and plans for plant waste disposal.”^{ix} Many communities dealing with this issue would benefit from looking into an ordinance similar to this one. Operations should consult with their local health department to determine the amount of solid waste oversight needed as well as your local public works department to ensure both waste disposal and backflow prevention concerns are addressed.

USE OF COMMUNITY RESOURCES

The cultivation industry requires a significant amount of water and electricity. Indoor marijuana growing operations account for about 1% of all electric consumption in the U.S.^x In California, where recreational marijuana is prohibited, marijuana production accounts for an astounding 3% of the state’s electricity use.^{xi} According to a study published in 2012, a typical indoor grow room for marijuana has the same power density- about 200 watts per square foot- as a data center.^{xii} Growing marijuana indoors allows growers to have greater control over their crops- this requires heaters, carbon dioxide and ozone generators, carbon filters, dehumidifiers, fans, and of course, high intensity lights.^{xiii} Communities need to monitor the supplies and usage of both of these resources when considering new grow facilities. In Denver for example, Xcel Energy has been working with marijuana growers to develop a rebate program that aims to encourage pot growers to ditch their old lighting for more efficient models. The idea behind this rebate explained Gabriel Romero, Xcel spokesman, “is to try to get growers to use efficient lighting off the bat so we don’t take as much of a hit to our system.”^{xiv} Whether or not the legalization of marijuana improves the community energy-use scenario is still up for debate. Regardless, we have noticed that most of these cultivation efforts would benefit from identifying ways to recycle electricity to keep the costs lower and to sustain the community power supply.

RESIDENTIAL RECREATIONAL GROW OPERATIONS

Because of high purchasing prices and taxes, long lines and to avoid being seen buying



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in public, many individuals turn to growing marijuana in their own home. Colorado law, as well as Washington and Alaska, allows people 21 and older to grow up to six plants, provided it’s in an “enclosed, locked space.”^{xv} In Oregon, people 21 and older are allowed four plants. A high number of home owners and renters (landlords can prohibit marijuana in their home should they desire) are now growing their own product for personal use and often don’t have the education or technical expertise needed to do it safely and correctly. When growers do not take the necessary safety precautions or meet code requirements, it usually results in several electrical violations, building code violations with egress, ventilation issues and mold problems. Another problem we face in residential areas is the extraction of the oils for vapor pens and edibles. The process of extracting these oils is difficult and when done improperly, the danger of the toxicity and high flammability is increased. As a result, we have seen several house explosions due to improper ventilation during the cooking process to remove the oils. Regulations need to be put in place to only allow cooking processes in commercial kitchens that have the proper ventilation and safety requirements.

When it comes to permitting and following the communities' laws and regulations, many of these home growers are a considerable strain on government resources when they create numerous code violations, some with considerable life safety concerns that need to be addressed. With the use of grow lights, for example, there is a lot of new wiring, light fixtures, and electrical ballasts required. Undoubtedly, some of these growers are using individuals who are not qualified to perform electrical installations. We have actually seen electrical wires tapped right into the main power line coming into the building before the meter.

We are now observing a high number of non-permitted grow rooms in residential uses. One of the main violations we see is the blocking or covering of egress windows to make sure the rooms stay dark for proper growing conditions. In certain communities, the code enforcement department works in conjunction with the police department to try and monitor if individuals and households are abiding by the city's zoning or code restrictions with regards to home growing. But without any sort of noticeable inclination or tip, knowing the location of an illegal grow operation in a residential neighborhood is difficult. Our advice would be to have the code enforcement and police departments in marijuana-legalized communities communicate with residents on the importance of having permitted and approved grow rooms and to encourage citizens to report any suspicious activity.

WHAT NOW?

Both marijuana advocates and skeptics agree that it will be years before we get answers to all of our questions and fully understand all the implications of this new industry on local government. In the meantime, it is up to each community to work through these evolving issues and implement appropriate regulations.

These are just some of the notable issues we have come across that are stirring up discussion. SAFEbuilt is available to assist your community in answering code related questions and providing some guidance through our

experience in this emerging industry. We would like to hear from others who are involved in the regulation of this industry at the local level. What have you seen or done that has promoted compliance and addressed the potentially negative impacts of this new industry?

ⁱ Ingold, J. (2014, January 3). A Colorado marijuana guide: 64 answers to commonly asked questions. Retrieved December 15, 2014, from http://www.denverpost.com/marijuana/ci_24823785/colorado-marijuana-guide-64-answers-commonly-asked-questions

ⁱⁱ Retail marijuana use within the city of Denver. Retrieved December 18, 2014, from <https://www.colorado.gov/pacific/marijuanainfodenver/residents-visitors>.

ⁱⁱⁱ Ingold, J. (2014, January 3). A Colorado marijuana guide: 64 answers to commonly asked questions. Retrieved December 15, 2014, from http://www.denverpost.com/marijuana/ci_24823785/colorado-marijuana-guide-64-answers-commonly-asked-questions

^{iv} Retail marijuana use within the city of Denver. Retrieved December 18, 2014, from <https://www.colorado.gov/pacific/marijuanainfodenver/residents-visitors>.

^v (2014, February 28). http://www.sanmiguelcounty.org/departments/planning/documents/2014-6_000.pdf

^{vi} Department of Ecology. Marijuana Licensing and the Environment. Retrieved December 18, 2014, from <http://www.ecy.wa.gov/topics/marijuana.html>

^{vii} Department of Ecology. Marijuana Licensing and the Environment. Retrieved December 18, 2014, from <http://www.ecy.wa.gov/topics/marijuana.html>

^{viii} Department of Ecology. Marijuana Licensing and the Environment. Retrieved December 18, 2014, from <http://www.ecy.wa.gov/topics/marijuana.html>

^{ix} City of Ferndale. Oakland County, MI. http://www.mml.org/pdf/ords/medicat%20marihuana_ferndale.pdf

^x Howland, E. (2014, February 27). This is the grid. This is the grid on legalized marijuana. Any questions? http://www.utilitydive.com/news/this-is-the-grid-this-is-the-grid-on-legalized-marijuana-any-questions/233103/#.VltTesH_agA.mailto

^{xi} Howland, E. (2014, February 27). This is the grid. This is the grid on legalized marijuana. Any questions? http://www.utilitydive.com/news/this-is-the-grid-this-is-the-grid-on-legalized-marijuana-any-questions/233103/#.VltTesH_agA.mailto

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^{xv} Ingold, J. (2014, January 3). A Colorado marijuana guide: 64 answers to commonly asked questions. Retrieved December 15, 2014, from http://www.denverpost.com/marijuana/ci_24823785/colorado-marijuana-guide-64-answers-commonly-asked-questions