

# Memorandum

To: Marley Hart, Executive Officer  
Occupational Safety and Health Standards Board  
2520 Venture Oaks Way, Suite 350  
Sacramento, CA 95833

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Subject: Cal/OSHA Findings and Recommendations on the Need to Develop Industry-Specific Regulations for Medical Cannabis Facilities

California Labor Code section 147.5 (Assembly Bill 266) requires Cal/OSHA to convene an advisory committee to evaluate whether there is a need to develop industry-specific regulations for medical cannabis facilities and requires the advisory committee to present its findings and recommendations to the Occupational Safety and Health Standards Board by July 1, 2017. Cal/OSHA staff convened and chaired the advisory committee on October 25, 2016. This report sets forth findings and recommendations that are consistent with input received from the advisory committee.

## A. Coordination with Other California State Agencies

Prior to the advisory meeting, Cal/OSHA staff met with representatives from the Bureau of Medical Cannabis Regulation (BMCR), the Department Public Health (CDPH), and the Department of Food and Agriculture (CDFA). Under Assembly Bill 243, Assembly Bill 266, and Senate Bill 643 from the 2015-2016 legislative session, these agencies must develop and administer licensing programs and adopt and enforce regulations governing medical cannabis cultivation, production and use in California. Cal/OSHA attended several of the pre-regulatory meetings held by BMCR,<sup>1</sup> CDPH,<sup>2</sup> and CDFA<sup>3</sup> to meet stakeholders and listen to the concerns and issues faced by the medical marijuana industry. Cal/OSHA reviewed licensing regulations drafted by these agencies and found no conflicts with existing Title 8 regulations. Cal/OSHA staff will continue to track and monitor these agencies'

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<sup>1</sup> BMCR website: <http://bmcr.ca.gov/>.

<sup>2</sup> CDPH cannabis safety website: <https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/OMCS.aspx>

<sup>3</sup> CDFA-Cal cannabis website: [calcannabis.cdfa.ca.gov](http://calcannabis.cdfa.ca.gov)

rulemaking activities to ensure that regulations are not developed that conflict with Title 8 regulations.

## B. Research on Activities by Other Governmental Agencies

Cal/OSHA staff participated in phone conferences with the Washington State Department of Labor and Industries, the Colorado Department of Public Health and Environment, and the National Institute for Occupational Safety and Health (NIOSH) to gather information about activities these agencies are undertaking to assist this medical marijuana industry. Their activities are summarized below:

1. The State of Washington has created a website<sup>4</sup> to introduce the cannabis industry to hazard identification, injury prevention, and existing occupational safety and health regulations. Their website lists the most common health and safety hazards faced by growers, processors and retailers.
2. The State of Colorado has published a report called, *Guide to Worker Safety and Health in the Marijuana Industry*,<sup>5</sup> which identifies the most common biological, chemical and physical hazards faced by workers and assists employers with establishing occupational safety and health programs.
3. NIOSH has conducted an evaluation of potential hazards associated with harvesting and processing cannabis at an organic cannabis farm in the State of Washington. This is the first onsite evaluation by NIOSH at a cannabis cultivation farm.<sup>6</sup> NIOSH recently released the final Washington State<sup>7</sup> cannabis cultivation farm Health Hazard Evaluations (HHEs) report and is in the process of drafting a separate cannabis HHE report from an evaluation conducted in the State of Minnesota. Additionally, NIOSH is working on developing a fact sheet and website specific to the hazards associated with the marijuana industry.

The NIOSH HHEs report found that none of the employees in the Washington state farm reported any symptoms or health effects, such as skin rashes, allergic reactions or hand, wrist, shoulder, or other musculoskeletal problems. Nevertheless, high frequency motion in hand trimming could increase the risk for hand, wrist, and finger musculoskeletal disorders; and microbiological exposures to pathogens including endotoxin, bacterial, and fungal species may place workers at risk of allergic sensitization and respiratory issues. To address ergonomic

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<sup>4</sup> Washington State Department of Labor and Industries. Cannabis Industry Safety and Health (Marijuana). <http://www.lni.wa.gov/Safety/Topics/Industries/Marijuana/>

<sup>5</sup> Colorado Guide to Worker Safety and Health in the Marijuana Industry. <https://www.colorado.gov/pacific/cdphe/marijuana-occupational-safety-and-health>

<sup>6</sup> Feds Visit WA Cannabis Farm to Assess Worker Risks, Not Raid. November 10, 2015. <https://cannabiswire.com/feds-visit-wa-cannabis-farm-to-assess-worker-risks-not-raid>

<sup>7</sup> Evaluation of Potential Hazards during Harvesting and Processing Cannabis at an Outdoor Organic Farm. NIOSH HHE Report No. 2015-0111-3271. April 2017. <https://www.cdc.gov/niosh/hhe/reports/pdfs/2015-0111-3271.pdf>

concerns, NIOSH has recommended that employers provide frequent breaks for employees, develop a plan to rotate employees among jobs that use different muscle groups, and train employees on tool cleaning, lubrication, sharpening, and maintenance. To address exposures to potentially harmful substances, NIOSH has recommended that employers improve ventilation, develop a cleaning schedule to remove tetrahydrocannabinol<sup>8</sup> from work and tool surfaces, and encourage employees to report any work-related symptoms to their supervisor and to their health care provider.

### **C. Medical Marijuana Advisory Meeting**

On October 25, 2016, Cal/OSHA staff convened and chaired a Medical Marijuana advisory meeting to seek input on the unique health and safety issues associated with working in the cultivation, manufacturing, distribution, and sale of medical marijuana.

#### **1. Preparation for the Meeting**

The public was notified about the advisory meeting via an email announcement. This announcement was further publicized with assistance from the BMCR and the CDFA.

#### **2. Attendance and Facilitation**

The advisory meeting was well attended by employers, legal representatives, labor, consultants and occupational health and safety experts including NIOSH and CDPH, and other state agency representatives. More than 120 people attended. At this meeting, Cal/OSHA reviewed existing occupational safety and health regulations, provided information on the Cal/OSHA Pressure Vessel Unit and Consultation Services, and explained the rulemaking and advisory committee processes. Several educational materials and other publications were distributed.

#### **3. Comments and Cal/OSHA Responses**

Attendees were encouraged to provide oral comments during the meeting. Stakeholders were given until November 30, 2016, to submit written comments. The written comments, additional meeting information, including a copy of the agenda and meeting minutes, are posted on the Cal/OSHA marijuana advisory committee website: <http://www.dir.ca.gov/dosh/doshreg/Medical-Marijuana/>

Cal/OSHA heard from many stakeholders and received seven written submittals after the advisory meeting. The comments received during and after the meeting were varied and included a wide range of issues. The most frequent comments received are summarized as follows:

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<sup>8</sup> Tetrahydrocannabinol is the psychoactive component in cannabis was detected on all surface wipe samples taken by NIOSH from tools and equipment during the HHE.

**Comment #1:** Stakeholders repeatedly attested to this new industry's lack of awareness of the Cal/OSHA program, employer responsibilities, and workers' rights. Throughout the meeting, attendees noted that they were unfamiliar with Cal/OSHA and did not understand the differences between the state agencies tasked with regulating the activities of medical cannabis facilities.

**Response:** During the meeting, Cal/OSHA staff explained the roles and responsibilities of the Cal/OSHA Enforcement Branch, the Occupational Safety and Health Standards Board, and the Occupational Safety and Health Appeals Board. The meeting attendees were also informed of Cal/OSHA Consultation Services, which provides free workplace safety and health assistance to employers. Additionally, Cal/OSHA staff distributed information, including the Guide to Cal/OSHA and a trifold on Cal/OSHA Consultation Services, to familiarize attendees with the programs and further encourage the industry to seek free consultation services.

**Comment #2:** Numerous attendees were not aware of the existence of Title 8 occupational safety and health regulations that apply to this specific industry. During the advisory meeting, several stakeholders repeatedly inquired as to when "the new health and safety regulations" would be ready and asked about how they will know when and how to comply. Some stakeholders also did not appear knowledgeable of the basic safety and health programs required by Cal/OSHA regulations. Attendees recommended that Cal/OSHA set up a webpage with the Title 8 regulations applicable to the marijuana industry along with a list of industry related safety training topics. Stakeholders also requested that Cal/OSHA post a frequently asked questions (FAQ) document.

**Response:** During the advisory meeting, Cal/OSHA staff listed and briefly explained the various Title 8 regulations that apply to this industry and the basic required safety and health programs, such as the Injury and Illness Prevention Program (IIPP) and Hazard Communication Standard, and explained that Cal/OSHA Consultation provides free compliance assistance and frequently assists businesses that are seeking information about existing Title 8 regulations. Employers were encouraged to avail themselves of these consultation services. The recommendation for a web page specifically focused on the marijuana industry will be considered separately from the focus of this meeting, which is to consider the need for new standards. Employers were informed that a lack of knowledge of an existing regulation is not a defense against a Cal/OSHA citation.

**Comment #3:** Attendees requested that Cal/OSHA conduct outreach and education to close the educational gap and raise awareness about employers' responsibilities, existing Title 8 regulations, and workers' rights. As one commenter noted, this industry needs "education about the responsibilities of the employer and hazard awareness training for all workers in the industry." During the advisory meeting, third party consultants, such as CHASM Inc. and Oaksterdam University, offered to form partnerships with Cal/OSHA and took the opportunity to advertise their training and educational services.

**Response:** Although the importance of education and outreach cannot be overstated, this need is not exclusive to the marijuana industry as many other industries also request assistance from

Cal/OSHA. However, Cal/OSHA is committed to helping the marijuana industry comply with Title 8 requirements. Cal/OSHA Consultation Services staff participated in a conference in Sacramento alongside the California Cannabis Industry Association to speak about workplace safety and regulatory compliance with the marijuana industry.<sup>9</sup> At this conference, Consultation Services staff distributed information about Cal/OSHA, copies of Cal/OSHA publications, and model health and safety programs, and further promoted free services available from Consultation Services. Cal/OSHA is also aware of outreach and educational efforts being conducted by other state agencies, such as CDFA, who will be publishing a handbook for Marijuana Cultivators meant to assist businesses with regulatory compliance, and will provide information about Cal/OSHA, existing Title 8 regulations, and free consultation services.

**Comment #4:** During the advisory meeting, attendees enumerated a variety of biological, chemical and physical hazards associated with their industry. These health and safety hazards primarily depend on the specific operation performed by the workers. For example, hazards connected with cultivation depend on whether the growth facilities are outdoors or indoors. Hazards faced by workers from outdoor cultivation facilities include heat illness, exposure to pesticides, and field sanitation problems. Indoor cultivation employees risk exposure to carbon dioxide from air-enrichment procedures using dry ice or tanks of compressed carbon dioxide frequently to accelerate and improve plant-growth; carbon monoxide from the use of fuel-burning equipment; improperly wired equipment; damaged electrical plug cords, or outlets; and exposure to equipment with exposed rotating, cutting or pinching hazards used to process and destroy waste plant products. Both outdoor and indoor cultivation workers risk injuries related to repetitive motion and other ergonomic issues while trimming. Manufacturing workers risk exposure to flammable and chemical hazards while performing extractions. There are also risks associated with job operations related to analytical or mobile labs. Other potential hazards listed included burns and scalding, slips, trips and falls, lack of personal protective equipment, use of portable ladders and use of machinery.

**Response:** Cal/OSHA staff reminded stakeholders during the meeting that all marijuana businesses must take steps to protect workers from all health and safety hazards associated with the marijuana industry. Throughout the advisory meeting, attendees were told of the need to comply with existing Title 8 regulations and were provided examples of basic health and safety programs that every employer must implement such as the Injury and Illness Prevention Program (IIPP) and the Hazard Communication Program. Stakeholders were also reminded about workers' rights. Title 8 regulations currently exist for the hazardous conditions discussed during the advisory committee meeting and identified during research of the industry. Cal/OSHA does not see a need to develop new regulations at this time. This view is shared by NIOSH, the State of Washington, and the Colorado Department of Public Health, which have not identified a need for new regulations but rather has published guidance documents that concur with the Cal/OSHA's

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<sup>9</sup> March 7, 2017 2<sup>nd</sup> Annual CA Cannabis Industry Association Policy Conference in Sacramento.

[http://www.cacannabisindustry.org/index.php?option=com\\_mc&view=mc&mcid=72&eventId=519922&orgId=cacia&recurrenceId=0](http://www.cacannabisindustry.org/index.php?option=com_mc&view=mc&mcid=72&eventId=519922&orgId=cacia&recurrenceId=0)



findings that new regulations are not needed, but marijuana businesses must implement the existing regulations that apply to them.

**Comment #5:** A particular safety concern raised by attendees was the risk of workplace violence primarily due to the frequency of cash transactions common within the industry. Requests were also made for Cal/OSHA to clarify existing regulatory requirements related to security, alarms, and the presence of surveillance cameras.

**Response:** Cal/OSHA is currently in the process of holding advisory committee meetings to assist in developing a workplace violence prevention standard for general industry. Advisory committee support documentation, meeting minutes, and dates for future meetings are available at: <http://www.dir.ca.gov/dosh/doshreg/Workplace-Violence-in-General-Industry/>. Currently, employers are required to address workplace violence hazards to employees through the implementation of security measures, work practices, and employee training as part of their Injury and Illness Prevention Program.<sup>10</sup> A model IIPP that includes workplace security is available at: [https://www.dir.ca.gov/dosh/dosh\\_publications/iipsecurity.html](https://www.dir.ca.gov/dosh/dosh_publications/iipsecurity.html)

**Comment #6:** Recommendations were made for Cal/OSHA to mandate that employers conduct as much training as possible, that a licensed or designated Cal/OSHA expert be required at every cannabis worksite, and that certifications be established for those working in dangerous situations. United Food and Commercial Workers (UFCW) representatives stated that they have identified unique issues characteristic of this industry, like the risk of explosion, the lack of safety knowledge, and unsafe work practices. Others stated that due to the use of carbon dioxide extraction, it would be helpful to have a certification program for the people that handle gases that are highly volatile or under high pressure.

**Response:** Cal/OSHA agrees that employee training plays a critical role in accident prevention. However, explosions, use of carbon dioxide, and other hazards discussed are not unique to the marijuana industry and existing Title 8 regulations cover these hazards. Additionally, the employer is the best resource when it comes to the job operations and procedures performed at a particular worksite. It has been Cal/OSHA's experience that performance-oriented training requirements under current Title 8 standards are preferable to mandating one certification or specific training requirement for all marijuana establishments, without taking into consideration the details of a particular operation or extraction process. For training to be effective, it needs to be applicable and specific to a particular worksite. All marijuana businesses must take steps to protect workers from all health and safety hazards associated with their operations.

The Division of Apprenticeship Standards (DAS), in conjunction with the UFCW and the Cannabis Employers JATC (Joint Apprenticeship Training Committee) signed an agreement to create a Pharmacy Technician (Cannabis) program. This program was approved on March 30, 2015, and involves approximately 2,000 hours of classroom and on-the-job training in all aspects of the pharmaceutical sale of cannabis. Included in the program is a requirement to provide training on worker safety and hazard recognition specific to the industry. The program has 34 active

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<sup>10</sup> Cal/OSHA Guidelines for Workplace Security: [https://www.dir.ca.gov/dosh/dosh\\_publications/worksecurity.html](https://www.dir.ca.gov/dosh/dosh_publications/worksecurity.html)

apprentices at this time with one recent graduate and the remaining 33 scheduled to complete the program shortly.<sup>11</sup>

**Comment # 7:** Stakeholders recommended that rather than create new regulations, Cal/OSHA strengthen existing ones and focus on raising employer awareness on what they can and cannot do.

**Response:** Cal/OSHA agrees that the health and safety hazards brought to Cal/OSHA's attention can be addressed through existing Title 8 regulations and that there is no need to develop new regulations at this time. Please see the response to comment #3 about outreach and education.

#### **D. Recommendations on the Need to Develop Industry-Specific Regulations**

Medical marijuana facilities are required to establish, implement and maintain health and safety programs required by existing Title 8 regulations, such as the IIPP, Hazard Communication, and Heat Illness Prevention standards. The medical marijuana industry could benefit from outreach and educational efforts to raise awareness about employers' responsibilities, existing Title 8 regulations, and workers' rights. However, there is no need to develop industry-specific regulations related to the activities of medical cannabis facilities at this time.

cc: Amalia Neidhardt  
Steve Smith

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<sup>11</sup> Email communication from the Division of Apprenticeship Standards to Cal/OSHA. May 11, 2017.