

SAFETY AND DECOMMISSIONING

in the Cannabis Industry

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To state the obvious, the cannabis industry has grown exponentially during the last 10 years. The legal history has gone from recreational (1850s), to criminalization (1900s) and back to decriminalization (1970s- present).

The legal history has gone full circle in the regulation of cannabis. The market for medicinal cannabis products and recreational cannabis grows in response to research that suggests it is effective for relieving the symptoms of chronic illnesses. However, the industry will need to respond to safety and environmental concerns surrounding the production of cannabis extracts. The same state and federal occupational safety & health and environmental regulations that apply to other businesses apply to the cannabis industry. States that have legalized cannabis for medicinal and recreational use have experienced a rise in the number of injuries from explosion and exposures due to hazardous chemicals. As stated in the OSHA regulations; "Each employer shall furnish to each of his employees' employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." The good news is that there is an abundance of information and guidance documents available from state and federal agencies to assist the cannabis industry in complying with occupational safety regulations. Much of the information contained in these documents are specific to the cannabis industry and can be of assistance in implementing occupational and safety programs for any specific operation, large or small. Listed below are the website where these guidance documents can be obtained.

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Occupational Health and Safety

The advisory committee from Cal/OSHA has presented findings and recommendations for marijuana (cannabis) establishments and has yielded several recommendations for best practices in the industry¹. As an example, California currently enforces regulations, found in title 8, General Industry Safety Orders, group 20 (Flammable Liquids, Gases and Vapors) that include requirements to prevent fires and explosions². Cal/OSHA has participated in several workshops convened by the Bureau of Cannabis Control to help provide an overview of these requirements to new licensees. Also, at the end of June 2018, Cal/OSHA launched a cannabis industry health and safety webpage³. The webpage provides relevant information to employers and workers, including applicable regulations and links to Cal/OSHA Consultation Services and other resources. Cal/OSHA Consultation Services staff provide free consultative assistance to employers and employees.

In addition, under the emergency regulations adopted by CDPH-MCSB, employers licensed under the

Medicinal and Adult-Use Cannabis Regulation and Safety Act must comply with the following regulations in title 17 of the California Code of Regulations, which relate to fire safety (see Title 17 CCR chart below).

Environmental Impact of the Cannabis Industry

There is not much information or empirical data in the research literature regarding the environmental impacts of the cannabis industry. Stakeholders have expressed concern over the lack of awareness among employers, workers, and emergency personnel of the specific hazards associated with cannabis operations, particularly in the manufacturing of cannabis products. Manufacturing operations often use flammable solvents and pressurized equipment. Both emergency workers and cannabis facility employees may be unfamiliar with the hazards. Additionally, there are very few guidance documents that relate to the relocation or closure of a facility and decommissioning a cannabis operation. Leaving behind a contaminated facility can carry significant risk and result in environmental, legal and financial liabilities. The good news is that there is an abundance of information

and guidance documents available from state and federal agencies, as well as ANSI/AIHA Z9.11 to assist the cannabis industry in complying with environmental regulations and decommissioning of facilities/laboratories.

For additional information regarding relocation or facility closure please visit TSS' industry whitepaper: Sustainable Decommissioning Basics (<https://www.techsafety.com/resources/white-papers>). Listed below are the website where these guidance documents can be obtained.

Title 17 CCR:	
Section 40220. Permissible Extractions	Section 40256. Hazard Analysis
Section 40222. Volatile Solvent Extractions	Section 40258. Preventive Controls
Section 40223. Ethanol Extractions	Section 40260. Equipment and Machinery Qualification
Section 40225. Closed-Loop Extraction System Requirements	Section 40275. Standard Operating Procedures



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References

1. Employers licensed under the Act cultivate, distribute, transport, store, manufacture, process, and sell cannabis and cannabis products. See Business and Professions Code section 26000: http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=26000.&lawCode=BPC.
2. Department of Consumer Affairs, Bureau of Cannabis Control, <https://bcc.ca.gov/>.
3. California Department of Food & Agriculture, Cal-Cannabis Cultivation Licensing, <https://www.cdffa.ca.gov/is/mcccp/>.
4. California Department of Public Health, Manufactured Cannabis Safety Branch, <https://www.cdph.ca.gov/Programs/CEH/DFDCS/MCSB/Pages/MCSB.aspx>.
5. Regulations adopted by BCC are found in California Code of Regulations, title 16, division 42: [https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I57220DEBD2E54B1BB1EC67A6467E2F2E&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)&bhcp=1](https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I57220DEBD2E54B1BB1EC67A6467E2F2E&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default)&bhcp=1). Regulations adopted by CDFA are found in title 3, division 8: [https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I724B0315C2AA47A0B6A1DC563BFC22E7&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I724B0315C2AA47A0B6A1DC563BFC22E7&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default)). Regulations adopted by CDPH-MCSB are found in title 17, division 1, chapter 13: [https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=IF5AA7954F31F401B894186EB9CF86682&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=IF5AA7954F31F401B894186EB9CF86682&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default)).
6. Washington State, Department of Labor and Industries (L&I), Cannabis Industry Safety and Health webpage, <http://www.lni.wa.gov/Safety/Topics/Industries/Marijuana/>.
7. Washington State, Department of L&I, Marijuana and Work-Related Asthma, 2017, http://www.lni.wa.gov/safety/research/files/42_04_2017_cannabis.pdf.
8. CDC, Marijuana and Public Health webpage, <https://www.cdc.gov/marijuana/index.htm>.
9. NIOSH, HHE Report No. 2015-0111-3271, Evaluation of Potential Hazards during Harvesting and Processing Cannabis at an Outdoor Organic Farm, April 2017, <https://www.cdc.gov/niosh/hhe/reports/pdfs/2015-0111-3271.pdf>.
10. NIOSH, HHE Report No. 2016-0090-3317, Evaluation of a Medicinal Cannabis Manufacturing Facility with an Indoor and Outdoor Grow Operation, June 2018, <https://www.cdc.gov/niosh/hhe/reports/pdfs/2016-0090-3317.pdf>