

Commercial Cannabis Business Licensing Program Regulations

Initial Study/Negative Declaration

Bureau of Cannabis Control

1625 North Market Boulevard, Suite S-202
Sacramento, CA 95834

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Bureau of Cannabis Control

**Commercial Cannabis
Business Licensing Program Regulations
Initial Study/Negative Declaration**

Prepared for: **Bureau of Cannabis Control**
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Sacramento, CA 95834

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CEQA Appendix G: Environmental Checklist form

1. Project title:

Commercial Cannabis Business Licensing Program

2. Lead agency name and address:

Bureau of Cannabis Control
1625 North Market Boulevard, Suite S-202, Sacramento, CA 95834

3. Contact person and phone number:

Sara Gardner, Attorney III
Bureau of Cannabis Control
1625 North Market Blvd., Suite S-202
Sacramento, CA 95834

4. Project location: various locations throughout California

5. Project sponsor's name and address:

Bureau of Cannabis Control
1625 North Market Boulevard, Suite S-202, Sacramento, CA 95834

6. General plan designation: various

7. Zoning: various

8. Description of project:

The Bureau of Cannabis Control (Bureau) is responsible for developing regulations for the licensing of various types of commercial cannabis businesses in California, including distributors, retailers, testing laboratories, and microbusinesses. The Bureau will develop regulations and issue licenses to commercial cannabis businesses for both medicinal and adult-use cannabis, under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA).

The Bureau will publish emergency regulations for the licensing of medicinal cannabis distributors, retailers, testing laboratories, and microbusinesses under California Code of Regulations title 16, division 42, pursuant to MAUCRSA. All applicants will be required to adhere to these regulations to receive a license to distribute, sell or test cannabis goods, or to operate a cannabis microbusiness.

For more information, refer to IS/ND Chapter 2, *Proposed Program Description*

9. Surrounding land uses and setting: various

10. Other public agencies whose approval is required:

Cities and Counties, California Department of Food and Agriculture, California Department of Public Health, California Department of Pesticide Regulation, California State Water Resources Control Board, California Department of Fish and Wildlife, Regional Water Quality Control Board (all regions), California State Office of Historic Preservation, California Air Resources Board, California Department of Forestry and Fire Protection, California Department of Industrial Relations Division of Occupational Safety and Health, California State Lands Commission, California Coastal Commission, Bay Conservation and Development Commission, and California Environmental Protection Agency

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

Consultation has been initiated. To date, 14 tribes have responded under Public Resources Code section 21080.3.1 and the Bureau has entered into consultation with 10 tribes.

Environmental Factors Potentially Affected

The following section provides: (1) a summary of the potentially significant environmental impacts of the proposed project, along with proposed mitigation measures; (2) a completed Environmental Checklist for the proposed project; and (3) a description of the affected environment and the potential environmental consequences of the proposed project. The description of the affected environment and potential environmental consequences of the proposed project covers 19 separate environmental issues that the lead agency (SRWA) anticipated could have potential effects on the environment. These include the following:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Agricultural and Forestry Resources | <input checked="" type="checkbox"/> Noise |
| <input checked="" type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Population/Housing |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Geology/Soils | <input checked="" type="checkbox"/> Transportation/Traffic |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Utilities/Service Systems |
| <input checked="" type="checkbox"/> Hydrology/Water Quality | <input checked="" type="checkbox"/> Mandatory Findings of Significance |
| <input checked="" type="checkbox"/> Land Use/Planning | |

Determination

The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of sources of information cited in this document, and the comments received, conversations with knowledgeable individuals; the preparer's personal knowledge of the area; and, where necessary, a visit to the site.

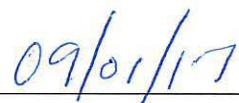
On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a proposed NEGATIVE DECLARATION has been prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

Lori Ajax, Chief



Date

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EXECUTIVE SUMMARY

The Medical Cannabis Regulation and Safety Act (MCRSA) was established through a series of bills passed by the California State Legislature in 2015 and 2016. MCRSA established the Bureau of Medical Cannabis Regulation, now the Bureau of Cannabis Control (Bureau) under the California Department of Consumer Affairs and created California's first framework for the licensing, regulation, and enforcement of commercial medicinal cannabis activity.

The Control, Regulate and Tax Adult Use of Marijuana Act (AUMA) was established with the passage of Proposition 64, a voter initiative, in November 2016. AUMA legalized the nonmedicinal adult use of cannabis and established California's framework for the licensing, regulation, and enforcement of commercial nonmedicinal cannabis activity.

In June 2017, the California State Legislature passed a budget trailer bill, Senate Bill 94, that integrated MCRSA with AUMA to create the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA) contained in division 10 of the Business and Professions Code (\$26000 et seq.). Under MAUCRSA, a single regulatory system will govern the cannabis industry in California. The Bureau is charged with the licensing, regulation, and enforcement of various commercial cannabis businesses, including distributors, retailers, testing laboratories, and microbusinesses and will begin issuing licenses on January 1, 2018.

Under MAUCRSA, the California Department of Food and Agriculture (CDFA) is responsible for issuing licenses for commercial cannabis cultivation and the California Department of Public Health (CDPH) has licensing authority for commercial cannabis manufacturers.

The Bureau published proposed regulations for the licensing of medicinal cannabis distributors, transporters, dispensaries, and testing laboratories under California Code of Regulations title 16, division 42, pursuant to MCRSA in April and May, 2017. The passage of MAUCRSA in June 2017 repealed MCRSA, and Bureau has decided not to move forward with its proposed MCRSA regulations. The Bureau intends to adopt emergency regulations under the Administrative Procedure Act (APA) for medicinal and adult-use commercial cannabis business licensing under MAUCRSA. Emergency regulations have not yet been published. However, a summary of the anticipated regulations is provided in Chapter 2, *Proposed Program Description*. The full text of MAUCRSA is provided as **Appendix A**.

The Bureau has prepared this Initial Study/Negative Declaration (IS/ND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of licensing various types of commercial cannabis businesses in California, including distributors, retailers, testing laboratories, and microbusinesses. The Bureau's adoption and implementation of regulations for these licenses, referred to herein as the commercial cannabis business licensing program, is the Proposed Program that is evaluated in this IS/ND.

The Proposed Program must comply with MAUCRSA. The purpose of the Proposed Program is to ensure that the distribution, retail sale, laboratory testing, and microbusiness activities of commercial cannabis businesses would be performed in a manner that avoids significant

adverse impacts on the environment, cannabis cultivation workers, and the general public from individual and cumulative adverse effects of these operations and complies with all applicable State and local laws.

This IS/ND has been prepared in compliance with the California Environmental Quality Act, (CEQA), contained in division 13 of the Public Resources Code (§21000 et seq.) and the *Guidelines for the Implementation of CEQA* (Cal. Code Regs., tit. 14, §15000 et seq.; hereafter Guidelines). The primary purposes of this IS/ND are to provide a comprehensive and transparent CEQA analysis for the adoption of regulations and implementation of licensing activities conducted pursuant to the regulations.

ES.1 Overview of the Proposed Program

Goals and Objectives

The overall goal of the Proposed Program is to establish a regulatory licensing and enforcement program for commercial cannabis activities. The Proposed Program will ensure that medicinal and adult-use commercial cannabis activities are performed in a manner that avoids significant adverse impacts on the environment, cannabis industry workers, and the general public from the individual and cumulative effects of these commercial cannabis activities, and fully complies with all applicable laws, including MAUCRSA.

In meeting these goals, the Proposed Program has the following objectives:

- Create a comprehensive and coherent regulatory framework for an established industry that has not been regulated by the state;
- Establish minimum licensing requirements for commercial cannabis distributors, retailers, testing laboratories, and microbusinesses;
- Ensure that medicinal and adult-use cannabis is tested for quality, including the presence and amounts of mold, contaminants, and pesticides, prior to retail sale;
- Prescribe standards for the reporting of the movement of cannabis and cannabis products throughout the distribution chain (a “track and trace” system) and information related to the movement of cannabis and cannabis products for the different stages of commercial cannabis activity, including, but not limited to distribution, retail sale, laboratory testing, and microbusinesses; and
- Ensure a regulatory structure that prevents access to cannabis by persons without a physician’s recommendation or who are under 21 years of age; protects public safety, public health, and the environment; and maintains local control.

Program Area and License Eligibility

The Proposed Program would occur in various locations within the state of California at licensed commercial cannabis distributors, retailers, testing laboratories, and microbusinesses. The Proposed Program outlines specific requirements for each applicant or owner for license eligibility, including, but not limited to, the following:

- Provide a description of operating procedures applicable to the applicant's operations, including cultivation, extractions and infusion methods, transportation process, inventory procedures, quality control procedures, and security protocols;
- Provide evidence that the proposed premises where the commercial cannabis activity will occur is located beyond a specified radius from a school, day care center, or youth center;
- For microbusiness license applicants that intend to cultivate cannabis, provide a copy of a valid Fish and Game Code section 1602 Lake or Streambed Alteration Agreement or written verification from the California Department of Fish and Wildlife that an agreement is not required; information regarding the water source for the operation; and, if applicable, approval of water diversion and water rights.
- For applicants with 20 or more employees, provide a statement that the applicant will enter into, or demonstrate that it has already entered into, and abide(s) by the terms of a labor peace agreement;
- Provide evidence of the legal right to occupy and use the proposed location and provide a statement from the landowner (or that landowner's agent) of real property where the commercial cannabis activity will occur, as proof that the landowner has acknowledged and consented to permit commercial cannabis activities to be conducted on the property;
- Provide a complete, detailed diagram of the proposed premises;
- Provide documentation regarding any applicable environmental review pursuant to CEQA;
- Provide a list of all persons with a financial interest in the applicant business;
- For each owner, provide a list of convictions and evidence of rehabilitation for each substantially related criminal conviction; Electronically submit to the California Department of Justice fingerprint images and related information for the purpose of obtaining information as to the existence and content of a record of State or federal convictions and arrests;
- Provide the applicant's valid seller's permit number issued by the California Department of Tax and Fee Administration;
- Provide proof of a bond in the amount to be determined by the Bureau to cover the costs of destruction of cannabis or cannabis products if necessitated by a violation of licensing requirements;

Additionally, as part of the Proposed Program, the Bureau would require applicants to attest, under penalty of perjury, that the information in the application is complete, true, and accurate.

Summary of the Proposed Program

The Bureau is responsible for developing regulations for the licensing of various types of commercial cannabis businesses in California, including distributors, retailers, testing laboratories, and microbusinesses. The Bureau will develop regulations and issue licenses to commercial medicinal and adult-use cannabis businesses.

The Bureau's regulations will detail a range of licensee requirements and other related information pertinent to the program. The anticipated contents of the regulations are summarized in Chapter 2. All applicants will be required to adhere to these regulations to receive a license to distribute, sell, or test cannabis goods or operate a commercial cannabis microbusiness. Commercial cannabis microbusiness applicants that intend to manufacture cannabis products or cultivate cannabis as part of their microbusiness activities must be able to demonstrate compliance with all requirements for manufacturing and/or cultivation license types, including all applicable regulations.

The Bureau's adoption and implementation of the aforementioned regulations is the Proposed Program that is considered in this IS/ND.

Nature of the Discretionary Action Considered in the IS/ND

The Bureau's anticipated Proposed Program regulations are described in this IS/ND in Chapter 2, *Proposed Program Description*. The related activities as they would be implemented in the future if the Bureau adopts the regulations following completion of this CEQA process, are identified in this IS/ND in Chapter 3, *Proposed Program Activities*.

Adoption of regulations constitutes a discretionary project subject to CEQA. (Guidelines §15378.) The Bureau will use the analyses presented in this IS/ND, public and regulatory agency comments received on the IS/ND, and the entire administrative record to evaluate the Proposed Program's environmental impacts as well as to inform and support the Bureau's further modifications to, approval of, or denial of the Proposed Program.

One of the Bureau's intentions in preparing this IS/ND is to minimize the amount of duplicate information and evaluation that may be required in the future by dealing with the impacts of the Proposed Program as comprehensively as possible in this IS/ND, including cumulative impacts, considering regional issues and similar overarching issues. Substantial efforts have been made to provide as specific an analysis as possible. If the level of detail provided in this IS/ND does not allow for the sufficient evaluation of specific environmental issues without being unduly speculative, additional analysis may be required during future discretionary approvals by the Bureau, or as part of the approval process for other State or local government agencies with discretion over the activity. However, if, for purposes of future discretionary approvals, this IS/ND adequately captures the specific environmental issues associated with the Proposed Program, no additional CEQA environmental review is necessary.

It is the Bureau's intent to follow the guidance provided in Guidelines section 15162 determining whether additional CEQA compliance may be needed and, if so, what type of additional CEQA compliance is needed.

In addition, if another lead agency has prepared a CEQA document that addresses any significant impacts that were not disclosed in this IS/ND, the Bureau may choose to act as a responsible agency following the process outlined in Guidelines section 15096.

ES.2 Public Involvement Process

CEQA mandates one period during the IS/ND process when public and agency comments on the environmental analysis of the Proposed Program are to be solicited: during the public review period for the IS/ND. In addition, CEQA and the Guidelines also allow lead agencies to hold public meetings or hearings to obtain comments and review both the draft and final versions of an IS/ND. Brief descriptions of these milestones are provided below, as they apply to this document.

Public Review of the IS/ND

The Bureau will issue a Notice of Intent (NOI) to adopt a negative declaration to provide agencies and the public with formal notification that this IS/ND is available for review. The NOI will be sent to all responsible and trustee agencies, any person or organization requesting a copy, and all 58 county clerks' offices for posting. A legal notice will also be published in a number of general-circulation newspapers. The Bureau also will submit the NOI and a Notice of Completion (NOC) to the State Clearinghouse.

Publication of the NOI will initiate a 30-day public review period, during which the Bureau will receive and collate public and agency comments on the Proposed Program and the IS/ND. The Bureau will host public meetings after release of the IS/ND. The purpose of public circulation and the public meetings is to provide public agencies, other stakeholders, and interested individuals with opportunities to comment on the contents of the IS/ND.

Consideration and Adoption of this IS/ND

The Bureau, as the CEQA Lead Agency, will consider substantive comments on the IS/ND before approving the Proposed Program. If the Proposed Program is approved, the Notice of Determination will be filed with the California Governor's Office of Planning and Research (OPR) and at the offices of the relevant county clerks. (Guidelines §15093[c].)

ES.4 Overview of Environmental Topics Evaluated in the IS/ND

Table ES-1, at the end of this Executive Summary, presents an overview of key impacts and conclusions from the resource topics evaluated in the IS/ND. The following environmental areas potentially would be affected by the Proposed Program:

- Aesthetics
- Air Quality
- Biological Resources
- Energy Use and Greenhouse Gas (GHG) Emissions
- Hazards, Hazardous Materials, and Human Health
- Noise
- Public Services
- Transportation and Traffic

The analysis of these environmental topics includes a consideration of the impacts of cultivation and manufacturing as a component of microbusiness activities. While the Bureau is responsible for issuing licenses for microbusinesses, applicants will need to demonstrate compliance with CDFA's cultivation regulations and CDPH's manufacturing regulations. CDFA has published the *CalCannabis Cultivation Licensing Program Draft Program Environmental Impact Report* (CDFA Draft PEIR) to examine the impacts of its cultivation licensing program. As a result, this IS/ND refers to and summarizes throughout the document to the findings of the CDFA Draft PEIR in its examination of the impacts of cultivation as a component of microbusinesses.

The following environmental topics (described in Section 4.0.11) were considered and dismissed from further analysis in this IS/ND, either because there was no potential for the Proposed Program to have a significant impact or because the CDFA Draft PEIR analysis adequately covered the issue:

- Agriculture and Forestry Resources
- Cultural and Paleontological Resources
- Geology, Soils, and Seismicity
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Recreation
- Tribal Cultural Resources
- Utilities and Service Systems

ES.5 Intended Uses of this IS/ND

The Bureau will use the IS/ND to inform its decision whether to adopt and implement the Proposed Program, including the issuance of individual licenses for activities in compliance with the regulations.

In addition, this IS/ND may be used by other agencies to support their issuance of permits or approvals in relation to cannabis business activities or other aspects of cannabis licensing. These agencies may include, but are not limited to, the following:

- Cities and counties
- California Department of Food and Agriculture
- California Department of Public Health
- California Department of Pesticide Regulation
- California State Water Resources Control Board
- California Department of Fish and Wildlife
- Regional Water Quality Control Boards (all regions)
- California State Office of Historic Preservation
- California Air Resources Board

- California Department of Forestry and Fire Protection
- California Department of Industrial Relations, Division of Occupational Safety and Health
- California State Lands Commission
- California Coastal Commission
- Bay Conservation and Development Commission
- California Environmental Protection Agency

The purpose of this IS/ND is to address environmental impacts of the Proposed Program, not to make determinations regarding legal issues that may or may not be within the jurisdiction of the Bureau. As such, the IS/ND does not attempt to define the jurisdictions and related permitting or regulatory authority of other agencies that may have oversight over commercial cannabis activities.

ES.6 Submittal of Comments

The purpose of circulating the IS/ND is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding its contents and analysis. During the public review period, the Bureau will be holding public meetings, which will have the same purpose. Specific dates, times, and locations for these meetings will be provided in the NOI, on the Bureau's website (www.bcc.ca.gov), via the Bureau's electronic mailing list (you may add yourself to the electronic mailing list at www.bcc.ca.gov), and in newspaper notices.

For those interested, written comments or questions concerning this IS/ND should be submitted, preferably via email in Microsoft Word format, prior to the close of the public review period and directed to the following:

Attention: Sara Gardner
Attorney III
Bureau of Cannabis Control
1625 North Market Boulevard, Suite S-202
Fax: (916) 574-8676
Email: BCC.CEQComments@dca.ca.gov

This IS/ND is available for review at the Bureau's website: www.bcc.ca.gov. In addition, hard copies can be reviewed at the Bureau's office in Sacramento, California. To arrange to view documents during business hours, call (916) 574-7595. This IS/ND also can be reviewed electronically at libraries throughout the state that are serving as document repositories; a full list of locations is provided on the Bureau's website.

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1 **Table ES-1.** Summary of Impacts and Mitigation

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Aesthetics			
AES-1: Result in a substantial adverse effect on a scenic vista, scenic resource, or State-designated scenic highway, and/or the existing visual character or quality of a site and its surroundings.	LTS	None required	LTS
AES-2: Create a new source of substantial light or glare that would adversely affect daytime or nighttime views.	LTS	None required	LTS
Air Quality			
AQ-1: Conflict with or obstruct implementation of an applicable air quality plan, and/or violate any air quality standard or contribute substantially to an existing or projected air quality violation.	LTS	None required	LTS
AQ-2: Expose sensitive receptors to substantial pollutant concentrations as a result of the proposed program.	LTS	None required	LTS
AQ-3: Create objectionable odors affecting a substantial number of people as a result of the proposed program.	LTS	None required	LTS
AQ-4: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard.	LTS	None required	LTS
Biological Resources			
BIO-1: Cause adverse effects on aquatic and semi-aquatic special-status species.	LTS	None required	LTS
BIO-2: Cause substantial adverse effects on special-status plant species.	LTS	None required	LTS
BIO-3: Cause substantial adverse effects on wildlife due to increased light, including special-status terrestrial wildlife species.	LTS	None required	LTS

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
BIO-4: Cause substantial adverse effects on special-status terrestrial wildlife species due to increased noise and human presence.	LTS	None required	LTS
BIO-5: Cause substantial adverse effects on riparian habitat, other sensitive natural communities, or federally protected wetlands.	LTS	None required	LTS
BIO-6: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or wildlife corridor, or impede the use of native wildlife nursery sites.	LTS	None required	LTS
BIO-7: Conflict with local policies or ordinances protecting biological resources.	NI	None required	NI
BIO-8: Conflict with applicable habitat conservation plans or natural community conservation plans.	LTS	None required	LTS
<i>Energy Use and Greenhouse Gas Emissions</i>			
GHG-1: Potential for cannabis business operations to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment conflict with an applicable plan, policy, or regulation adopted to reduce the emissions of GHGs, result in wasteful, inefficient, and unnecessary consumption of energy, or cause a substantial increase in energy demand and the need for additional energy resources.	LTS	None required	LTS
<i>Hazards, Hazardous Materials, and Human Health</i>			
HAZ-1: Release hazardous materials from routine transport, use, and disposal.	LTS	None required	LTS
HAZ-2: Create a significant hazard through release of hazardous materials from upset or accident conditions.	LTS	None required	LTS
HAZ-3: Emit hazardous emissions or materials within 0.25 mile of a school.	LTS	None required	LTS
HAZ-4: Locate project activities on a hazardous materials site.	LTS	None required	LTS

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
HAZ-5: Locate project activities near an airport or private airstrip such as to increase hazards.	NI	None required	NI
HAZ-6: Expose people or structures to substantial risk of loss from wildfire.	LTS	None required	LTS
Noise			
NOI-1: Expose persons to or generate noise levels in excess of applicable noise thresholds or standards and/or cause a substantial temporary or permanent increase in ambient noise levels in the vicinity of a Proposed Program activity above levels existing without the Proposed Program.	LTS	None required	LTS
NOI-2: Expose persons to or generate excessive groundborne vibration or groundborne noise levels.	LTS	None required	LTS
NOI-3: Expose people or residences to excessive noise levels in the vicinity of a private airstrip, within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport.	LTS	None required	LTS
Public Services			
PS-1: Cause a substantial adverse impact related to police protection services.	LTS	None required	LTS
PS-2: Cause a substantial adverse impact related to fire protection services.	LTS	None required	LTS
PS-3: Cause a substantial adverse impact related to schools.	LTS	None required	LTS
PS-4: Cause a substantial adverse impact related to parks or other public services.	LTS	None required	LTS
Transportation and Traffic			
TRA-1: Conflict with circulation plans, ordinances, or policies.	LTS	None required	LTS
TRA-2: Conflict with congestion management programs.	LTS	None required	LTS

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
TRA-3: Result in a change to air traffic patterns.	NI	None required	NI
TRA-4: Increase hazards due to a design feature or incompatible uses.	LTS	None required	LTS
TRA-5: Result in effects on emergency access.	LTS	None required	LTS
TRA-6: Result in effects related to public transit, bicycle, or pedestrian facilities.	LTS	None required	LTS

1 **Notes:** LTS = less than significant; NI = no impact

Chapter 1

INTRODUCTION

The Bureau of Cannabis Control (Bureau) has prepared this Initial Study/Negative Declaration (IS/ND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of licensing various types of commercial cannabis businesses in California, including distributors, retailers, testing laboratories, and microbusinesses. The Bureau's adoption and implementation of regulations for these licenses, referred to herein as the commercial cannabis business licensing program, is the Proposed Program that is evaluated in this IS/ND.

The Proposed Program is being developed to comply with the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA). The purpose of the Proposed Program is to ensure that the distribution, retail sale, laboratory testing, and microbusiness activities of commercial medicinal and adult-use cannabis would be performed in a manner that avoids significant adverse impacts on the environment, cannabis cultivation workers, and the general public from individual and cumulative adverse effects of these operations and complies with all applicable State and local laws.

This IS/ND has been prepared in compliance with the California Environmental Quality Act (CEQA), contained in division 13 of the Public Resources Code (§21000 et seq.) and the *Guidelines for the Implementation of CEQA* (Cal. Code Regs., tit. 14, §15000 et seq.; hereafter Guidelines). The primary purpose of this IS/ND is to provide a comprehensive and transparent CEQA analysis for the adoption of regulations and implementation of licensing activities conducted pursuant to the regulations.

1.1 General Overview

The Medical Cannabis Regulation and Safety Act (MCRSA) was established through a series of bills passed by the California State Legislature in 2015 and 2016. (Bus. & Prof. Code §19300 et seq.) MCRSA established the Bureau (known in that legislation as the Bureau of Medical Cannabis Regulation) under the California Department of Consumer Affairs and created California's first framework for the licensing, regulation, and enforcement of commercial medicinal cannabis activity.

The Control, Regulate and Tax Adult Use of Marijuana Act (AUMA) was established with the passage of Proposition 64, a voter initiative, in November 2016. AUMA legalized the nonmedicinal adult use of cannabis; established California's framework for the licensing, regulation, and enforcement of commercial nonmedicinal cannabis activity; and set a date of January 1, 2018, for the Bureau to start issuing licenses.

In June 2017, the California State Legislature passed a budget trailer bill, Senate Bill 94, that integrated MCRSA with AUMA and created the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA). (Bus. & Prof. Code §26000 et seq.) Under MAUCRSA, a single regulatory system will govern the cannabis industry (both medicinal and adult-use) in

California. Under MAUCRSA, the Bureau is charged with the licensing, regulation, and enforcement of the following types of commercial cannabis businesses: distributors, retailers, testing laboratories, and microbusinesses and must begin issuing licenses on January 1, 2018.¹

The California Department of Food and Agriculture (CDFA) is responsible for issuing licenses for commercial cannabis cultivation under MAUCRSA, and the California Department of Public Health (CDPH) has licensing authority for manufacturers of cannabis products.

The Bureau expects to issue emergency regulations to implement its obligations under MAUCRSA. The anticipated regulations are summarized in Chapter 2, *Proposed Program Description*. MAUCRSA is included in its entirety as **Appendix A** of this IS/ND.

1.2 Overview of Activities Conducted under the Proposed Program

To meet the Bureau's obligations under MAUCRSA, the Bureau will develop proposed regulations that:

- Define terms related to commercial cannabis distribution, retail sale, laboratory testing, and microbusiness activities;
- Specify the license application requirements and processes under the Proposed Program;
- Identify the processes for license renewal, denial, revocation, and fine;
- Establish standards to ensure the safe and secure transport of commercial cannabis goods;
- Detail the requirements of the various commercial cannabis business licenses for which the Bureau is responsible;
- Establish standards that ensure that cannabis and cannabis products are tested by a testing laboratory prior to distribution;
- Establish standards and requirements for the testing of cannabis and cannabis products that ensure that the goods are fit for retail sale;
- Establish standards that ensure that cannabis and cannabis products undergo quality assurance review to verify that all packaging and labeling of the cannabis goods comply with applicable laws and regulations prior to distribution for retail sale; and

¹ Under MAUCRSA, the Bureau must investigate the feasibility of creating one or more classifications of nonprofit licenses by January 1, 2020. (Bus. & Prof. Code §26070.5.) If the Bureau does create one or more classifications of nonprofit licenses, the nonprofit licensees would be conducting activities substantially similar to those of other licensees and would be required to comply, at a minimum, with the regulations related to public health and safety, such as security, track-and-trace, and testing. Additionally, as with other licensees, nonprofit licensees would have to comply with all applicable State laws and local ordinances and regulations.

- Establish standards that ensure that the retail sale of cannabis and cannabis products is done in a manner that promotes the protection of the public.

1.3 Overview of CEQA Requirements

CEQA's basic purposes are to:

- Inform governmental decision-makers and the public about the potential significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or substantially reduced;
- Prevent significant, avoidable damage to the environment by requiring the implementation of feasible mitigation measures or alternatives that would substantially lessen any significant effects that a project would have on the environment; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

An IS/ND is an informational document that assesses potential environmental effects of a proposed project (or program) and concludes as a result of the assessment that there is no

environment. Other key CEQA requirements include developing a plan for implementing and monitoring the success of the identified mitigation measures and carrying out specific public notice and distribution steps to facilitate public involvement in the environmental review process. As an informational document, an IS/ND is not intended to recommend either approval or denial of a project. An IS/ND does not expand or otherwise provide independent authority for the CEQA Lead Agency to impose mitigation measures or avoid project-related significant environmental impacts beyond the authority already within the CEQA Lead Agency's jurisdiction.

The Bureau is the CEQA Lead Agency for this IS/ND.

1.4 Scope and Intent of this Document

An overview of the Bureau's anticipated regulations is described in this IS/ND in Chapter 2, *Proposed Program Description*. The related activities as they would be implemented in the future, if the Bureau approves the regulations following completion of this CEQA process, are identified in this IS/ND in Chapter 3, *Proposed Program Activities*.

Adoption of regulations constitutes a discretionary project subject to CEQA. (Guidelines §15378.) The Bureau will use the analyses presented in this IS/ND, public and regulatory agency comments received on the IS/ND, and the entire administrative record to evaluate the Proposed Program's environmental impacts as well as to inform and support the Bureau's further modifications to, approval of, or denial of the Proposed Program.

One of the Bureau's intentions in preparing this IS/ND is to minimize the amount of duplicate information and evaluation that may be required in the future by dealing with the impacts of the Proposed Program as comprehensively as possible in this IS/ND, including cumulative impacts, considering regional issues and similar overarching issues. Substantial efforts have been made to provide as specific an analysis as possible. If the level of detail provided in this IS/ND does not allow for the sufficient evaluation of specific environmental issues without being unduly speculative, additional analysis may be required during future discretionary approvals by the Bureau, or as part of the approval process for other State or local government agencies with discretion over the activity. However, if, for purposes of future discretionary approvals, this IS/ND adequately captures the specific environmental issues associated with the Proposed Program, no additional CEQA environmental review is necessary. With respect to the need for additional CEQA environmental review, it is the Bureau's intent to follow Guidelines section 15162 in determining whether and what type of additional CEQA compliance may be needed.

In addition, if another lead agency has prepared a CEQA document that addresses any significant impacts that were not disclosed in this IS/ND, the Bureau may choose to act as a responsible agency following the process outlined in Guidelines section 15096.

1.5 Public Involvement Process

CEQA mandates one public review period during the IS/ND process, during which public and agency comments on the environmental analysis of the Proposed Program are solicited. In addition, CEQA and the Guidelines also allow lead agencies to hold public meetings or hearings to obtain comments and review both the draft and final versions of an IS/ND. Brief descriptions of these milestones are provided below, as they apply to this document. In addition to CEQA public review, the Bureau held nine informational sessions throughout the state to provide information to the public about the Bureau and the regulatory development process; these sessions took place from April to July 2016. The Bureau also held seven public

regulatory concepts in September and October 2016, and eight public hearings throughout the state during June 2017 to receive comments regarding its proposed regulations. Following the repeal of MCRSA and passage of MAUCRSA, the Bureau determined that it will not proceed with the proposed MCRSA regulations.

1.5.1 Public Review of the IS/ND

Along with the IS/ND, the Bureau has prepared a Notice of Intent (NOI) to adopt a negative declaration to provide agencies and the public with formal notification that this IS/ND is available for review. The NOI has been sent to all responsible and trustee agencies, any person or organization requesting a copy, and all 58 county clerks' offices for posting. A legal notice has also been published in a number of general-circulation newspapers. The Bureau also submitted the NOI and a Notice of Completion (NOC) to the State Clearinghouse.

Publication of the NOI initiates a 30-day public review period, during which the Bureau will receive and collate public and agency comments on the Proposed Program and the IS/ND.

1.5.2 Submittal of Comments

The purpose of circulating the IS/ND is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding its contents and analysis. During the public review period, the Bureau will also hold several public meetings, which will have the same purpose. Specific dates, times, and locations for these meetings are provided in the NOI, on the Bureau's website (www.bcc.ca.gov), via the Bureau's electronic mailing list (you may add yourself to the electronic mailing list at www.bcc.ca.gov), and in newspaper notices.

Written comments or questions concerning this IS/ND should be submitted (preferably via email in Microsoft Word or PDF format) prior to the close of the public review period and directed to the following:

Attention: Sara Gardner
 Attorney III
 Bureau of Cannabis Control
 1625 North Market Boulevard, Suite S-202
 Sacramento, CA 95834
 Fax: (916) 574-8676
 Email: BCC.CEQAcomments@dca.ca.gov

This CEQA document is available for review on the Bureau's website: www.bcc.ca.gov. In addition, hard copies can be reviewed at the Bureau's office in Sacramento, California. To arrange to view documents during business hours, call (916) 574-7595. This IS/ND also can be reviewed electronically at libraries throughout the state that are serving as document repositories; a full list of these locations is provided on the Bureau's website.

1.5.3 Consideration and Adoption of the IS/ND

The Bureau, as the CEQA Lead Agency, will consider substantive comments on the IS/ND before approving the Proposed Program. If the Proposed Program is approved, the Notice of Determination will be filed with the California Governor's Office of Planning and Research and will be posted at the offices of the relevant county clerks. (Guidelines §15094[c].)

1.6 Organization of this IS/ND

Executive Summary. A summary of the Bureau's commercial cannabis business licensing program and a summary of environmental impacts are provided in this chapter.

Chapter 1, Introduction. This chapter provides an introduction to the Proposed Program, as well as discussing the purpose and organization of the IS/ND and its preparation, review, and adoption process.

Chapter 2, Proposed Program Description. This chapter discusses the Proposed Program, including a description of the Proposed Program's location, purpose, and objectives; a summary of the anticipated licensing regulations required under MAUCRSA; activities outside the scope of the Proposed Program; and the intended uses of the IS/ND.

Chapter 3, Proposed Program Activities. This chapter provides an in-depth description of the activities and techniques that are likely to be undertaken by licensees under the Proposed Program.

Chapter 4, Environmental Analysis. This chapter begins with an *Introduction to the Environmental Analysis* (Section 4.0), an introductory section containing an overview of the methodology used to assess the environmental impacts of the Proposed Program. The introductory section also includes a description of the resource topics for which the Proposed Program would not have the potential for significant impacts, and which are therefore dismissed from detailed analysis in the IS/ND. The chapter then presents separate sections for each resource topic carried forward for analysis, as follows:

Section 4.1, Aesthetics

Section 4.2, Air Quality

Section 4.3, Biological Resources

Section 4.4, Energy Use and Greenhouse Gas Emissions

Section 4.5, Hazards, Hazardous Materials, and Human Health

Section 4.6, Noise

Section 4.7, Public Services

Section 4.8, Transportation and Traffic

Chapter 5, Mandatory Findings of Significance. This chapter first describes the potential for the Proposed Program to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. It then goes on to describe any impacts of the Proposed Program that could combine with those of other past, present, and probable future projects to create significant cumulative impacts, and evaluates whether the Proposed Program's contribution to those cumulative impacts would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects would be considerable when viewed in connection with the effects of the past, present, and probable future projects. The chapter finishes with a discussion of whether the Proposed Program has environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

Chapter 6, Glossary and Acronyms. This chapter provides a glossary of key terms and a list of acronyms used in the IS/ND.

Chapter 7, Report Preparation. This chapter lists the individuals involved in preparing the IS/ND.

Chapter 8, References. This chapter provides a bibliography of printed references, websites, and personal communications used in preparing the IS/ND.

1.7 Requirements of MAUCRSA Being Implemented by Other Agencies

This IS/ND focuses on commercial cannabis business activities under the licensing authority of the Bureau. With the exception of cannabis cultivation conducted pursuant to a microbusiness license, it does not address cannabis cultivation, nor does it address other State agency responsibilities identified in MAUCRSA related to cannabis. Other licensing authorities are as follows:

- CDFA will issue licenses for commercial medicinal and adult-use cannabis cultivation (with the exception of microbusinesses) and will establish and implement a track-and-trace system to monitor the movement of cannabis and cannabis products from seed to sale.
- CDPH will issue licenses for commercial medicinal and adult-use cannabis manufacturing (with the exception of microbusinesses).

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Chapter 2

PROPOSED PROGRAM DESCRIPTION

2.1 Introduction

The Bureau of Cannabis Control (Bureau) is responsible for developing regulations for the licensing of various types of commercial cannabis businesses in California, including distributors, retailers, testing laboratories, and microbusinesses. The Bureau will develop regulations and issue licenses to commercial cannabis businesses for both medicinal and adult-use cannabis under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA). The Bureau considers the issuance of a license to be a ministerial action as it pertains to further review under CEQA, unless the circumstances of an individual license require that the Bureau treat it as a discretionary action warranting additional review under CEQA.

The Bureau initially published proposed regulations for the licensing of medicinal cannabis distributors, transporters, dispensaries, and testing laboratories under California Code of Regulations title 16, division 42, pursuant to the Medical Cannabis Regulation and Safety Act (MCRSA). The passage of MAUCRSA in June 2017 repealed MCRSA and the Bureau has decided that it will not proceed with its proposed MCRSA regulations.

The Bureau intends to adopt emergency regulations under the Administrative Procedures Act (APA) for medicinal and adult-use cannabis business licensing. Emergency regulations have not yet been published. However, a summary of the anticipated regulations is provided in Section 2.2 of this chapter.

The Bureau's adoption and implementation of the aforementioned regulations is the Proposed Program that is considered in this Initial Study/Negative Declaration (IS/ND).

The following subsections describe the Proposed Program location, purpose, and objectives:

- Section 2.2, Summary of Expected Emergency MAUCRSA Regulations, presents a summary of the Bureau's anticipated cannabis business regulations.
- Section 2.3, Activities Outside the Scope of the Proposed Program, lists activities and operations that are not included in the Proposed Program and are therefore not considered in this IS/ND except in Chapter 5, Mandatory Findings of Significance.
- Section 2.4, Intended Uses of this IS/ND, describes the purposes of this IS/ND and its anticipated uses.

2.1.1 Program Location

The Proposed Program would occur in various locations within the state of California at licensed commercial cannabis distributors, retailers, testing laboratories, and microbusinesses.¹

2.1.2 Program Purpose

The overall purpose of the Proposed Program is to establish a regulatory licensing and enforcement program for commercial cannabis activities. The Proposed Program will ensure that medicinal and adult-use commercial cannabis activities are performed in a manner that avoids significant adverse impacts on the environment, cannabis industry workers, and the general public from the individual and cumulative effects of these commercial cannabis activities, and fully complies with all applicable laws, including MAUCRSA.

2.1.3 Program Objectives

The Proposed Program regulations will be developed to achieve the following objectives:

- Create a comprehensive and coherent regulatory framework for an established industry that has not been regulated by the State;
- Establish minimum licensing requirements for commercial cannabis distributors, retailers, testing laboratories, and microbusinesses;
- Ensure that commercial cannabis is tested for quality, including the presence and amounts of mold, contaminants, and pesticides, prior to retail sale;
- Prescribe standards for the reporting of the movement of cannabis and cannabis products throughout the distribution chain (a “track and trace” system) and information related to the movement of cannabis and cannabis products for the different stages of commercial cannabis activity, including, but not limited to distribution, retail sale, laboratory testing, and microbusiness operations; and
- Ensure a regulatory structure that prevents access to cannabis by persons without a physician’s recommendation or who are under 21 years of age; protects public safety, public health, and the environment; and maintains local control.

¹ A “microbusiness,” under MAUCRSA, is a single license that allows the licensee to cultivate cannabis in an area less than 10,000 square feet and act as a licensed distributor, Level 1 (nonvolatile solvent) manufacturer, and retailer of commercial cannabis. (Bus. & Prof. Code §26069.)

2.2 Summary of Expected Emergency MAUCRSA Regulations

2.2.1 Introduction

The Bureau's expected regulations will be divided into several sections. To assist the reader, this document summarizes each section in the following order: Section 2.2.2 summarizes general provisions that will be applicable to all Bureau licensees. The second, Section 2.2.3, contains a summary of regulations applicable only to the activities of distributors. Regulations that will apply to the activities of retailers are summarized in Section 2.2.4. Section 2.2.5 details regulations applicable to testing laboratories. Section 2.2.6 summarizes regulations that will apply to microbusinesses. These summaries are intended to provide the reader with an overview of the anticipated regulations.

2.2.2 General Provisions Applicable to All Bureau Licensees

The first part of the Bureau's MAUCRSA regulations will address requirements that apply to all licensees under its jurisdiction. This will include areas such as definitions, application requirements, security measures, and handling of cannabis waste.

General Provisions

The Bureau's regulations will define terms that will be used throughout the regulations. For example, terms such as "cannabis goods" and "cannabis waste" will be defined to clarify for the public how the Bureau classifies cannabis and cannabis products at different stages of the supply chain.

Applications

The Bureau's regulations will outline application requirements, including the documents and information that must be submitted in license applications.

Applicants will be required to submit identifying information for every owner. Applicants will also be required to provide information regarding their funding sources and owners' criminal conviction histories.

Applicants will be required to submit descriptions of their operating procedures, including security, inventory, and quality assurance. Applicants will submit a diagram of the premises to be licensed, and proof of a surety bond in an amount to be determined by the Bureau. Applicants will provide evidence that the proposed premises is beyond a specified radius from a school. Applicants will be required to submit a seller's permit number or attest that the applicant is currently applying for a seller's permit from the California Department of Tax and Fee Administration, if the cannabis activity that will be conducted requires such permit.

Applicants will be required to submit certain legal compliance documentation when applying for a license. Applicants must also provide proof of their right to occupy and use the premises for commercial cannabis activity. They also may voluntarily provide documentation from their local jurisdiction that the applicant is or will be in compliance with all local ordinances and regulations.

General Licensing

The regulations will include several sections regarding varied aspects of the licensing process.

The Bureau's regulations will require licensees to obtain written approval from the Bureau prior to making material or substantial physical modifications to the licensed premises. The regulations will outline examples of what constitutes a material or substantial modification, as well as a process for requesting Bureau approval.

Track-and-trace requirements applicable to all licensees will be identified. Licensees will be required to create and maintain active accounts within the track-and-trace system and ensure good recordkeeping practices.

Enforcement

In addition to the provisions of Business and Professions Code section 26030,² the Bureau may take disciplinary action against a licensee for multiple reasons, such as denying access to the licensed premises for inspection by the Bureau and violations of applicable laws and regulations, including requirements related to cannabis waste. Licensees are responsible for the acts and omissions of their agents, officers, and employees. The regulations will address proposed penalties for violations of laws and regulations, as well as guidance for administrative law judges hearing enforcement cases.

Records and Reporting

In the regulations, the Bureau will specify the types of records that licensees must keep, including financial, personnel, and security records; training records; contracts; and permits, licenses, and local business authorizations. The regulations will require that these records can be produced when requested by the Bureau.

Licensees will be required to notify the Bureau of a criminal conviction or civil penalty against the licensee, revocation of a local license, and theft or loss of cannabis goods.

Security

The security regulations will outline security procedures and requirements. Licensees and persons acting for or employed by a licensee must display photo identification badges while engaging in any commercial cannabis activity. Visitors to any licensed premises will be required to be escorted by an employee when visiting limited-access areas of the premises. All licensees will be required to install and maintain a video surveillance system to record all

² Business and Professions Code section 26030 specifies that licensing agencies may take disciplinary action for failure to comply with MAUCRSA or any rules or regulations adopted pursuant to MAUCRSA; conduct that constitutes grounds for denial of licensure; any other grounds contained in regulations adopted pursuant to MAUCRSA; failure to comply with any state or local law, ordinance or regulation; intentional sale of cannabis or cannabis products to person under 21 years of age (A-licensees) or without a physician's recommendation (M-licensees); failure to maintain safe conditions for inspection; or failure to comply with any operating procedure submitted to the licensing authority.

entries and exits, as well as all areas where cannabis is received, processed, and stored, as well as security rooms. Retailers will also be required to record all point-of-sale areas and areas where cannabis is displayed for sale. Cameras must record 24 hours per day, and recordings must be kept for a specified period of time.

The regulations will require that licensees install and use commercial-grade nonresidential locks on all points of entry and exit to the premises and limited-access areas. Licensed premises will have an alarm system that is monitored and maintained by a licensed alarm company. The Bureau also requires retailers to hire or contract with security personnel to provide security services at the licensed premises.

Destruction of Product

The Bureau's regulations will specify the procedures and limitations for destruction of cannabis and cannabis products.

Cannabis and associated waste will need to be stored, secured, locked, and managed in accordance with all applicable laws.

Licensees will be required to keep accurate and comprehensive records documenting cannabis destruction activities. In addition, certain relevant information regarding cannabis destruction activities must be entered into the State's track-and-trace system.

2.2.3 Distributors

The Bureau's MAUCRSA regulations will outline the restrictions on and responsibilities of licensed distributors. Topics addressed include allowable activities, testing and quality assurance, and other requirements.

Activities

The regulations will set out requirements for licensed activities of distributors. Distributors are responsible for ensuring that all cannabis goods receive a thorough quality assurance inspection, which includes laboratory testing, prior to distribution to a retailer. Distributors are also the only license type that can transport commercial cannabis goods. Distributors may act as wholesalers or may charge other licensees a fee for conducting distribution on their behalf.

The regulations will set out cannabis storage requirements for distributor licensees. Bureau regulations will require that licensed distributors store batches of cannabis goods separately and distinctly from other batches of cannabis goods and label each batch with specific identifying information.

The regulations will provide that distributors may package and label—or repackage and relabel—cannabis in the form of dried flower on behalf of a cultivator or another distributor. Distributors may not package, repackage, label, or relabel manufactured cannabis goods.

Transportation

The Bureau's regulations will detail safety and security provisions that distributors must comply with when transporting cannabis or cannabis products. Cannabis goods will be required to be transported inside commercial vehicles or trailers. Transportation may not be done by aircraft, watercraft, rail, drones, human powered vehicles, or unmanned vehicles. Distributor licensees will be required to submit proof of ownership or a valid lease, proof of insurance, and identifying information for any vehicles that will be used for transporting cannabis goods. Additionally, license applicants must submit proof of insurance in an amount specified by the Bureau for any and all commercial vehicles that will be used for transport activities.

Vehicles used for transporting cannabis goods must contain a box that can be locked and that is secured to the inside of the vehicle or trailer. Cannabis goods must be locked in the box during transport. The vehicle and/or trailer must be locked and secured when left unattended. The vehicle may not be left unattended or parked overnight in a residential area if it contains cannabis goods.

Only licensed distributors and their employees may be in a commercial vehicle while transporting cannabis. Only persons aged 21 years or older may be in the transport vehicle.

Distributors will be required to complete and transmit shipping manifests to the Bureau and the licensee receiving the shipment for every shipment prior to transport. Bureau regulations will detail the information required in shipping manifests. The regulations also specify distribution-specific records that must be kept by distributors. Distributors also will be required to enter required information regarding transport shipments into the State's track-and-trace database.

Testing and Quality Assurance

The regulations will describe the responsibilities of licensed distributors with respect to the testing and quality assurance of cannabis goods.

After taking physical possession of a cannabis batch, a distributor will contact a licensed testing laboratory to arrange for testing, unless the distributor plans to sell the batch to another distributor. At that point, a laboratory agent will come to the distributor's licensed premises to take a sample. The sample selection will be recorded on video, and both the distributor and the laboratory agent must witness and attest to the sample selection.

After the sample has been tested, the testing laboratory will provide the distributor with a certificate of analysis. If a sample passes testing, the distributor may transport the cannabis goods to one or more retailers for sale. If a harvest batch fails testing, it can be remediated for use in a manufactured product, if doing so would not result in harm to consumers.

The distributor will complete several quality assurance steps before distributing the batch for sale. The distributor must check that the certificate of analysis corresponds to the batch tested; the label is accurate; the packaging meets required standards; and the proper information is in the State's track-and-trace database.

Other Requirements

The Bureau's regulations will specify other requirements that apply to distributors, including insurance requirements, inventory log specifications, and track-and-trace requirements.

2.2.4 Retailers

The Bureau's regulations applying to retailers will address activities of, and requirements for, licensed retailers of cannabis goods.

Premises

The regulations will include provisions pertaining to use of and access to retailer premises. Medicinal cannabis customers must be over the age of 18 and have a valid physician's recommendation to enter the premises. Adult-use cannabis customers must be over the age of 21 to enter the premises.

The regulations will place additional restrictions on limited-access areas. Individuals entering the limited-access areas who are not retailer employees must be at least 21 years old and must be accompanied by an employee at all times. The retailer must also keep a log of these individuals, to be made available to the Bureau upon request. Retailers may not receive consideration or compensation for allowing individuals to enter a limited-access area.

Retailers will be prohibited from subletting any portion of the licensed premises of the retailer's premises.

Retail Sale

The regulations will address aspects of the retail sale functions of retailer licensees. Only customers with a valid physician's recommendation or their primary caregivers may purchase from M-license retailers, after the licensee has verified that the person possesses a valid physician recommendation and valid identification. Primary caregivers must also have valid written documentation of their primary caregiver relationship. Only customers over the age of 21 may purchase from A-license retailers. A-license retailers must verify that such customers possess valid identification.

Bureau regulations will allow retailers to sell cannabis goods only between certain hours, to be set by the Bureau. The regulations will establish security measures for the hours when the retail premises is not open for retail sales, such as use of commercial-grade locks and an alarm system. During nonbusiness hours, only authorized employees and contractors may be on the premises.

Cannabis goods may be displayed only in the retail area, and only during business operating hours. Cannabis goods may not be displayed where visible from outside the premises. Cannabis goods also may not be displayed in such a manner that they are readily accessible to customers. Retailers may display only a limited amount of cannabis goods in the retail area. Cannabis goods may be removed from their packaging and placed in containers for customer inspection. Any cannabis goods removed from their packaging for display may not be sold or

consumed; rather, they will be destroyed in accordance with regulations when no longer being used for display.

Retailers may not provide free samples to anyone or allow representatives of other companies or organizations to provide free samples on the licensed premises.

Retailers must receive cannabis goods only from licensed distributors. Cannabis goods must be packaged and labeled for final sale at the time the retailer receives them.

Following a sale, the retailer must place cannabis goods in an opaque exit package before the customer leaves the retailer premises.

Delivery

A retailer may deliver cannabis to qualified patients and primary caregivers aged 18 years or older or to adults aged 21 years and older. Deliveries may be made only by employees of licensed retailers who are aged 21 years and older. Delivery employees may not consume cannabis during delivery.

Deliveries must be made to physical addresses within the state of California and may not be made on public lands or buildings leased by public agencies. Deliveries may be made only in person by enclosed motor vehicle. Cannabis goods may not be visible to the public during deliveries. Cannabis goods may not be left in an unattended motor vehicle unless the vehicle has an active alarm system. Vehicles used for delivery must have a dedicated, active GPS device that enables the dispensary to identify the geographic location of the vehicle during delivery. While making deliveries, a delivery employee may not carry more than a specified amount of cannabis goods at any time.

Retailers that deliver cannabis goods must keep records related to the cannabis goods delivered and the vehicles used for delivery services.

Inventory and Records

The Bureau's regulations will regulate the storage, receipt, documentation, and reconciliation of inventory, and the sales records that retailers must keep under MAUCRSA.

Retailers may receive shipments of inventory only from licensed distributors. Retailers may not receive cannabis goods through public entrances or exits.

Retailers must keep accurate records of inventory, including information identifying the products, their quantity, and their sell-by or expiration date. Retailers must also keep records of when the product was received and the distributor from which the retailer acquired the products. Retailers must reconcile inventory at specific intervals and report discrepancies to the Bureau and law enforcement.

Retailers must keep records of all sales transactions, including the names of the sales employee and the customer, the list and quantity of products sold and their price, and the date and time of the transaction.

Other Requirements

The Bureau will detail additional requirements for retailers. Retailers must enter required information concerning receipt, sales, and returns of cannabis goods into the State's track-and-trace database. In addition, retailers are required to notify law enforcement within 24 hours if they identify a discrepancy in their inventory or if they have reason to suspect diversion, theft, or other criminal activity.

The Bureau's regulations will include a grace period for compliance with packaging and testing requirements. During the grace period, retailers may package and sell cannabis goods that have not been packaged by a cultivator or distributor. In addition, during the same time frame, retailers may sell untested cannabis if they place a label on the package with the date of purchase and the statement, "This product has not been tested under the Medicinal and Adult-Use Cannabis Regulation and Safety Act."

2.2.5 Testing Laboratories

The Bureau's regulations will require that in addition to the regulations that apply to all Bureau licensees, summarized above in Section 2.2.2, cannabis testing laboratories must comply with the additional requirements set forth in its laboratory regulations.

Chapter Definitions

The regulations will define key terms used throughout the laboratory testing regulations. For example, terms such as "primary sample," "quality-control sample," and "proficiency test sample" will be clearly defined to clarify for the reader how the Bureau regulates sampling and testing procedures. Various cannabis-specific terms, such as "cannabinoid," "CBD," "CBDA," and "hashish," will be defined to assist the reader in understanding usage of cannabis terminology in the context of the regulations. In addition, technical testing terms such as "matrix spike sample," "method blank," and "action level" will be defined for the reader.

License Application

The regulations will contain provisions regarding testing laboratory license applications. In addition to the standard licensing requirements described above in Section 2.2.2, laboratories will be required to submit additional information, including proof of International Organization for Standardization (ISO) 17025 accreditation or proof that the applicant is in the process of applying for accreditation, laboratory employee qualifications, standard operating procedures, and a premises diagram containing a description of the activities that take place in each space.

Sampling of Cannabis Goods

The regulations governing sampling of cannabis goods will describe the processes and standards for selecting, gathering, storing, preparing, and analyzing samples of cannabis goods. The regulations will require licensed laboratories to develop and implement sampling plans that must be approved by the laboratory director and made available to all laboratory personnel.

Laboratory personnel will be required to keep a detailed field log for recording information during sampling events. The log must contain information regarding the sampling laboratory, distributor, sample taken, and conditions under which the sample was taken. In addition, laboratories will be required to develop and implement a chain-of-custody protocol to ensure accurate documentation of the transport, handling, storage, and destruction of cannabis samples.

The regulations will detail requirements for sampling procedures for unpackaged harvest batches and for packaged cannabis goods. For each of these categories, the regulations will specify the requirements for collecting samples, the sample size, and the number of sample increments.. The regulations also will require that laboratory personnel collect a duplicate field sample in addition to the primary sample.

Finally, the regulations will detail various factors that may cause a sample to be rejected. Some of the factors that may cause a laboratory to deem a sample “compromised” and therefore reject it, include a broken shipping container; evidence that the sample has been tampered with, adulterated, or contaminated; a missing or incomplete chain-of-custody form or field log; or indications that the temperature of the sample is out of the required range.

Standard Operating Procedures

The regulations will require testing laboratories to develop, implement, and maintain standard operating procedures for distinct aspects of their operations, including laboratory processes, analytical methods, and testing methodologies. For laboratory processes, the standard operating procedure will include items such as calibration and maintenance of equipment and instruments; chain-of-custody protocols; employee training; security; recordkeeping; and sample preparation, storage, and disposal. The standard operating procedures for analytical methods will describe how the laboratory performs each testing method. The procedures will include elements such as lists of analytes; applicable matrices; method sensitivity; potential interferences; analytical instruments; consumable supplies, reagents, and standards; sample preservation and hold time; types, frequency, and acceptance criteria for quality control samples and calibration standards; and calculation of results. For testing methodologies, the standard operating procedures must conform to a valid testing methodology guideline such as the U.S. Food and Drug Administration’s *Bacterial Analytical Manual* (2016) or AOAC International’s *Official Methods of Analysis for Contaminant Testing* of AOAC International (2016). Laboratories may use nonstandard methods if they are validated in accordance with the processes set out in these regulations.

Laboratory Analyses and Reporting

The regulations will define the types of analyses that testing laboratories must perform for samples. These include analyses for cannabinoids, contaminants such as filth, and foreign material, and water activity.

Laboratories will be required to test samples for cannabinoid content. The cannabinoids that are required to be tested for are tetrahydrocannabinol (THC), tetrahydrocannabinolic acid (THCA), cannabidiol (CBD), cannabidiolic acid (CBDA), cannabigerol (CBG), and cannabinol (CBN). For each of these cannabinoids, laboratories must report the concentration. They may also test for other cannabinoids at the election of the test requester.

Laboratories will be required to analyze samples of manufactured cannabis goods for residual solvents and processing chemicals. Dried flower, kief, and hashish need not be analyzed for residual solvents. The regulations will provide a table of residual solvents and “action levels” for cannabis goods. In the table, action levels will be specified for products intended for inhalation, as well as for cannabis-infused goods. Laboratories must report the solvents and processing chemicals listed in this table in parts per million. Detection of solvents or processing chemicals above the action levels will result in failure for testing purposes.

Testing laboratories will be required to test samples for residual pesticides. The regulations will provide a list of pesticides that must be tested for, as well as maximum amounts of pesticide residues that may be found in edible cannabis products, dried cannabis flowers, and all other processed cannabis, in parts per million. If a testing laboratory detects pesticide levels higher than the regulations allow, the sample fails testing.

Laboratories will be required to test samples of cannabis and cannabis products for microbiological impurities, which will include Shiga toxin-producing *Escherichia coli* and *Salmonella* spp. Laboratories must also test for the pathogenic species *Aspergillus funigatus*, *A. flavus*, *A. niger*, and *A. terreus* in all cannabis goods intended for consumption by inhalation, including dried flower, kief, hashish, oil, and waxes. Samples containing these microbiological impurities above the detection limit will be deemed to fail microbiological impurity testing.

Testing laboratories will be required to analyze samples for mycotoxins. The regulations will specify maximum levels for mycotoxins. The laboratory may test for additional microorganisms if a customer so requests. Samples that exceed the levels specified in the regulations fail mycotoxin testing.

Testing laboratories will analyze dried flower harvest batch samples for water activity and moisture content. Samples that do not meet the regulatory standard and fail water activity and/or moisture content testing may be returned to the cultivator for further drying and curing. All required testing of the harvest batch would then need to be repeated.

Testing laboratories will be required to test samples for filth and foreign material. This includes, but is not limited to, mold, hair, insects, feces, packaging contaminants, and manufacturing waste and byproducts. Samples that contain these contaminants above the specified action levels will fail laboratory testing.

Laboratories may be required to analyze samples for concentrations of heavy metals. Samples tested for heavy metals will pass testing if the concentrations of these heavy metals are below the action levels specified for the particular product.

If a cultivator's, manufacturer's, or distributor's product labeling says that the sample contains discrete terpenes, the laboratory will be required to test for those terpenes and report their concentration. The requester of the laboratory test may also request measurement of specific terpenes.

After completion of testing, the testing laboratory will issue a certificate of analysis that details the results of each test. The certificate of analysis will also report whether the laboratory detected any unknown or unidentified substances or materials during analysis of a sample. If the laboratory finds a contaminant that is not listed in these regulations that could

be injurious to human health at the levels detected, the laboratory must notify the Bureau within 24 hours. Samples found to contain synthetic cannabinoids will fail testing. The certificate of analysis will also state whether the sample passed or failed testing. If the sample passes testing, the laboratory will enter that information into the track-and-trace database, and the batch from which the sample was taken may be released for retail sale. If the sample fails testing, the laboratory will upload a copy of the certificate of analysis into the track-and-trace database.

Post-Testing Procedures

The regulations will specify post-testing procedures for instances where a batch fails testing. A batch may not be retested unless it has undergone a remediation process. Before a batch can be retested, the distributor must provide a document to the laboratory specifying how the product was remediated.

Testing laboratories will be required to destroy nonhazardous waste from cannabis samples according to specific destruction provisions. Additionally, as with all licensees, testing laboratories must dispose of hazardous waste containing cannabis in accordance with applicable federal and State hazardous waste laws.

Quality Assurance and Quality Control

Testing laboratories will be required to develop and implement a laboratory quality assurance program that includes the following items: quality control procedures; laboratory organization and personnel; quality assurance objectives for measurement data; traceability of data and analytical results; equipment preventive maintenance; equipment calibration; performance and system audits and corrective action; quality assurance recordkeeping; standardization of testing procedures; and method validation.

Laboratories will also be required to run quality control samples as specified by the Bureau. The regulations will detail parameters for using method blank samples, field duplicate samples, matrix spike samples, and reference material.

Testing laboratories will be required to calculate the limits of detection and the limits of quantitation for quantitative analytical methods. Laboratories can use signal-to-noise ratio, the standard deviation of the response and the slope of the calibration curve, or another method published by the U.S. Food and Drug Administration or the U.S. Environmental Protection Agency.

The regulations will require the testing laboratory to prepare a data package for each batch of samples it analyzes. The data package will contain identifying information about the laboratory and the personnel that performed the analysis, sample and quality control sample results, raw data for each sample, instrument test method with parameters, instrument tune report, calibration data, test method worksheets, quality control report, analytical batch sample sequence, field sample log and chain-of-custody forms, and certificate of analysis. The laboratory director will review and verify the analyses in the data package and approve the results.

The regulations will specify a series of requirements for laboratories to perform proficiency testing. Laboratories that cannot demonstrate successful performance in the required

proficiency testing must take and document corrective actions. Failure to participate in a proficiency test may result in disciplinary action.

Testing laboratories will conduct an internal audit at least annually, or as required by the ISO accrediting body. Audit results must be submitted to the Bureau.

Laboratories are required to maintain records relating to the following categories for a minimum of seven years: personnel qualifications; method verification and validation; quality control and quality assurance; chain of custody; purchasing and supply; installation, maintenance, and calibration of laboratory equipment; customer service; nonconforming work and corrective action; internal and external audits; management review; laboratory data reports, data review, and data approval; proficiency testing; electronic data and security; data on traceability, raw data, calibration, and log books; and laboratory contamination and cleaning.

Employee Education and Experience Requirements

The regulations will outline the minimum qualifications and training required for specific employment positions at testing laboratories. The regulations will require that laboratories verify and maintain documentation of employees' qualifications.

Premises Security

Certain security requirements will be imposed on testing laboratories. Security provisions applying to all licensed commercial cannabis business premises are described above in Section 2.2.2; the regulations will detail additional security provisions that apply specifically to testing laboratories. In addition to the security provisions applicable to all licensed cannabis businesses, the regulations will provide that laboratories must implement an access control card system through all access control points that records the transaction history of entrants. Laboratories must also maintain a log of visitors. Laboratories must have secured storage for test samples; cannabis waste; reference standards for analysis of cannabinoids; controlled substances related to cannabinoids; and records of analytical tests, including certificates of analysis and data packages. Additionally, laboratories must implement password protection for electronically stored data. Laboratories must notify the Bureau in the event of unexplained losses of cannabis or cannabis product samples.

2.2.6 Microbusiness

A microbusiness license allows the licensee to cultivate cannabis in an area of less than 10,000 square feet and to act as a licensed distributor, Level 1 (nonvolatile solvent) manufacturer, and retailer. (Bus. & Prof. Code §26070.) For both medicinal and adult-use cannabis operations, CDFA is the licensing authority for stand-alone cannabis cultivation activities and CDPH is the licensing authority for stand-alone cannabis manufacturing activities.

With regard to distribution and retail sale, the regulations applicable to those activities are anticipated to be the same for a microbusiness as for a standalone business. For cultivation activities, it is expected that applicants will be required to follow applicable provisions of the cultivation regulations that will be adopted by CDFA for cannabis cultivation, and CDFA is

anticipated to provide assistance to the Bureau related to cultivation by a microbusiness. Similarly, it is expected that microbusiness applicants conducting manufacturing activities will be required to follow CDPH manufacturing regulations, and CDPH is anticipated to provide assistance to the Bureau related to manufacturing by a microbusiness.

2.3 Activities Outside the Scope of the Proposed Program

The Proposed Program, as analyzed in this IS/ND, is limited to activities conducted in accordance with a Bureau license. As such, activities regulated under the Proposed Program do not include the following:

- Site development activities for the purposes of conducting a cannabis business licensed by the Bureau, including new construction or modifications to existing structures;
- Unlicensed cannabis business activities, such as activities not in compliance with MAUCRSA, the Bureau's regulations, or other laws and regulations;
- Noncommercial cannabis activities meeting the applicable requirements of MAUCRSA such that they are exempt from licensure;
- Activities related to cannabis that are under the licensing authority of another state agency (e.g., standalone cultivators or manufacturers) or under the jurisdiction of a local agency (e.g., county zoning plans); and
- Consumer use of cannabis or cannabis products.

These other activities are considered, as appropriate, as part of the cumulative impact analysis in Chapter 5, *Mandatory Findings of Significance*.

2.4 Intended Uses of this IS/ND

The Bureau will use the IS/ND to inform its decision whether to adopt and implement the Proposed Program, including the issuance of individual licenses for activities in compliance with the regulations.

In addition, this IS/ND may be used by other agencies to support their issuance of permits or approvals in relation to cannabis business activities or other aspects of cannabis licensing. These agencies may include, but are not limited to, the following:

- Cities and counties
- California Department of Food and Agriculture
- California Department of Public Health
- California Department of Pesticide Regulation
- State Water Resources Control Board
- California Department of Fish and Wildlife
- Regional Water Quality Control Boards (all regions)
- State Office of Historic Preservation
- California Air Resources Board
- California Department of Forestry and Fire Protection

- California Department of Industrial Relations, Division of Occupational Safety and Health
- California State Lands Commission
- California Coastal Commission
- Bay Conservation and Development Commission
- California Environmental Protection Agency

Note that the purpose of this IS/ND is to address environmental impacts of the Proposed Program, not to make determinations regarding legal issues that may or may not be within the jurisdiction of the Bureau. As such, the IS/ND does not attempt to define the jurisdictions and related permitting or regulatory authority of other agencies that may have oversight over commercial cannabis activities.

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Chapter 3

PROPOSED PROGRAM ACTIVITIES

This chapter of the Initial Study/Negative Declaration (IS/ND) describes the reasonably foreseeable commercial cannabis business activities that would be conducted by licensees for each of the license types authorized under the Bureau's Proposed Program. It describes the operational activities that are part of commercial cannabis business operations and specifies the differences between various license types.

This IS/ND assumes that existing medicinal cannabis businesses would continue to conduct business operations in the same general manner following adoption of the Proposed Program as they have done previously, with the exception of the need to adhere to Proposed Program requirements. In addition to describing the range of activities that would be conducted under the Proposed Program, this chapter also captures, in general, the baseline conditions for existing commercial cannabis business operations.

3.1 Overview of Licensed Cannabis Business Operations

In June 2017, the California State Legislature enacted MAUCRSA, establishing a comprehensive system to control and regulate the cultivation, distribution, transport, storage, manufacturing, processing, and sale of medicinal and adult-use cannabis and cannabis products. MAUCRSA requires the Bureau to begin issuing licenses for medicinal and adult-use commercial cannabis business licenses by January 1, 2018. Because of the compressed time frame for the development and publication of proposed regulations for MAUCRSA, the Bureau expects to issue emergency regulations. This chapter describes the existing operational framework for each license type and discusses how businesses would operate under the MAUCRSA regulatory framework.

This chapter is limited to activities anticipated to be conducted under the auspices of the Bureau's licensing program, specifically the distribution, retail sale, laboratory testing, and microbusiness operations of commercial medicinal and adult-use cannabis businesses. Other activities, such as building improvements or new construction to allow the businesses to operate, are outside the Bureau's licensing authority and therefore are not described here. Specifically, this chapter does not consider the following types of activities:

- Site development activities, including new construction or modifications to existing structures;
- Unlicensed or illegal distribution, sale, testing, cultivation, or manufacture of cannabis, including activities not in compliance with other laws and regulations;

- Activities related to cannabis businesses that are solely under the licensing authority of another State agency¹ (e.g., cultivation or manufacturing as stand-alone license types); and
- Consumer or patient use of cannabis or cannabis products.

As discussed in Chapter 2, Section 2.3, “Activities Outside the Scope of the Proposed Program,” such other activities are addressed in the cumulative impact analysis in Chapter 5, *Mandatory Findings of Significance*.

3.2 Summary of License Types to Be Issued by the Bureau

Under MAUCRSA, the Bureau is tasked with issuing four general types of licenses, for the following types of cannabis business operations: (i) distributors, (ii) retailers, (iii) testing laboratories, and (iv) microbusinesses. The primary activities permitted under each license type are listed below. In general, licensees may hold multiple licenses and license types. The exception² to this is testing laboratories. A licensee who holds a testing laboratory license may not hold any other type of license issued pursuant to MAUCRSA.

Licenses to conduct commercial cannabis activities will be designated with an (M) for licenses allowing medicinal cannabis business activities and with an (A) for licenses allowing adult-use cannabis business activities. Licensees may concurrently hold licenses for both medicinal and adult-use cannabis business activities. Licenses for testing laboratories will not have an (M) or (A) designation, and testing laboratories will be permitted to test both medicinal and adult-use cannabis under one testing laboratory license.

3.2.1 License Types Administered by the Bureau under MAUCRSA

Distributors

It is the responsibility of the distributor licensee to ensure that all cannabis and cannabis products are tested by a licensed testing laboratory prior to distribution to a retailer. Distributors must store cannabis and cannabis products during the testing process. Distributors may also package and label cannabis. Distributors may also store cannabis and cannabis products and act as wholesalers. Distributor license holders may also transport cannabis. The activities of distributor licensees are detailed further in Section 3.3, “Cannabis Distribution Operations,” below.

¹ Some activities related to cannabis businesses may also be fully or partially regulated under the jurisdiction of local agencies or governing bodies (e.g., consumption of cannabis on premises). Because the Bureau has overall authority for the licensing of businesses that may include such activities, these activities are addressed below, with a discussion about the limits of the Bureau’s authority over such activities.

² MAUCRSA also restricts large cultivation licensees from holding either distributor or microbusiness licenses. However, large cultivation licenses will not be available until January 1, 2023.

Retailers

A licensed retailer offers cannabis and cannabis products for retail sale. Retailers licensed for medicinal cannabis business activities may sell medicinal cannabis and medicinal cannabis products to customers with a physician's recommendation. Retailers licensed for adult-use cannabis business activities may sell cannabis and cannabis products to adults aged 21 years and over. Retailers may also offer delivery services. MAUCRSA provides that a local jurisdiction may allow for the smoking, vaporizing (vaping), and ingesting of cannabis or cannabis products on the premises of a licensed retailer if certain conditions are met. See Section 3.4, "Cannabis Retail Sale Operations," below, for more information.

Testing Laboratories

Testing laboratories are the facilities where cannabis is tested to ensure that it meets quality and safety regulations. MAUCRSA specifies that, with the exception of live plants and seeds, all cannabis and cannabis products must be tested by a licensed testing laboratory in their final form (i.e., following processing or manufacturing) before being sold to consumers. Testing laboratories will be required to test cannabis and cannabis products for various specific compounds and contaminants, at specified levels and using specific procedures, as described in Section 3.5, "Cannabis Testing Laboratory Operations," below. Testing laboratory licensees may not hold any other type of cannabis business license under MAUCRSA.

Microbusinesses

Under MAUCRSA, a microbusiness license allows the licensee to cultivate cannabis on an area of less than 10,000 square feet and to act as a licensed distributor, Level 1 (nonvolatile) manufacturer, and retailer (Bus. & Prof. Code §26070). Like licensed retailers, licensed microbusinesses may deliver cannabis, and a local jurisdiction may allow for the smoking, vaping, and ingesting of cannabis or cannabis products on the premises of a licensed microbusiness if the conditions established for a retailer are met. The activities of microbusiness licensees are described in more detail in Section 3.6, "Cannabis Microbusiness Operations," below.

3.3 Cannabis Distribution Operations

Under MAUCRSA, licensed cannabis cultivators and manufacturers are required to send cannabis and cannabis products to a distributor prior to retail sale. The distributor is responsible for ensuring testing of the products (see Section 3.5, "Cannabis Testing Laboratory Operations," for details pertaining to testing laboratory activities). Distributors must store batches of cannabis or cannabis products while samples from those batches are being tested. Distributors may also store, destroy, and label or relabel cannabis and cannabis products at their licensed facilities, act as product wholesalers, and transport cannabis and cannabis products to or from other licensed cannabis businesses.

The following sections describe the activities that distributors would be anticipated to undertake under MAUCRSA and the Bureau's anticipated regulatory framework.

3.3.1 General Operational Activities

Distributor licensees perform four primary functions: arranging for testing, storage, packaging and labeling, and transport. Each of these functions is described below.

Arrangements for Testing

Distributors would ensure that all cannabis and cannabis products are tested for conformance to regulatory standards prior to sale. Each cannabis product that is intended to be sold to consumers must be evaluated by a testing laboratory as described in Section 3.5, "Cannabis Testing Laboratory Operations." Under MAUCRSA, this testing process must be arranged and managed by a distributor. Distributors also must store cannabis batches while samples from such batches are being tested by a testing laboratory.

Storage

Distributor licensees may store cannabis and cannabis products. Storage activities may or may not involve testing or transportation of cannabis products. There may be individual business situations where a distributor would not transport or arrange for the testing of cannabis or cannabis products, but instead would enter an agreement only to store cannabis or cannabis products. This would most likely occur in a situation where one distributor sells cannabis products to another distributor. In any case, a distributor must have the cannabis or cannabis products tested prior to their distribution to a retailer.

Distributors would be required to comply with MAUCRSA and Bureau regulations regarding storage of cannabis. Distributors would be required to store each batch separately and distinctly from others on the premises, and would be responsible for ensuring that each batch is properly labeled.

Labeling Activities

Distributors may package and label (or repackage and relabel) cannabis on behalf of a cultivator.

Under current law, there are no specific restrictions or regulations regarding labeling of cannabis. Currently, medicinal cannabis products that are sold in dispensaries are labeled; however, because no prescribed standards have been established, the content of the labels may vary considerably between products and producers. Cannabis product labels typically list tetrahydrocannabinol (THC) and cannabidiol (CBD) content. For cannabis flowers, labels typically list the strain of plant contained in the package. The label may also indicate whether the plant was grown indoors or outdoors (Freston, pers. comm., 2017).

MAUCRSA imposes certain labeling requirements for cannabis and cannabis products. For both medicinal and adult-use products, the label must contain the cultivation and/or manufacture date and source; the appellation of origin, if any; a list of ingredients and pharmacologically active ingredients, including but not limited to THC, CBD, and other cannabinoid content; the THC, CBD, and other cannabinoid amount in milligrams per serving; servings per package; and the THC, CBD, and other cannabinoid amount in milligrams for the package total. In addition, for packages containing only dried flower, the label must specify

the net weight of cannabis in the package. In the case of edible products, the label must include a warning if nuts or other known allergens are used in the manufacturing of the cannabis products. All cannabis and cannabis products must be labeled with information associated with the unique identifier issued by CDFA.

MAUCRSA requires that labels for cannabis must contain the following statement in bold print:

GOVERNMENT WARNING: THIS PACKAGE CONTAINS CANNABIS, A SCHEDULE I CONTROLLED SUBSTANCE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS. CANNABIS MAY ONLY BE POSSESSED OR CONSUMED BY PERSONS 21 YEARS OF AGE OR OLDER UNLESS THE PERSON IS A QUALIFIED PATIENT. CANNABIS USE WHILE PREGNANT OR BREASTFEEDING MAY BE HARMFUL. CONSUMPTION OF CANNABIS IMPAIRS YOUR ABILITY TO DRIVE AND OPERATE MACHINERY. PLEASE USE EXTREME CAUTION.

Labels for manufactured cannabis products must contain the following statement in bold print:

GOVERNMENT WARNING: THIS PRODUCT CONTAINS CANNABIS, A SCHEDULE I CONTROLLED SUBSTANCE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS. CANNABIS PRODUCTS MAY ONLY BE POSSESSED OR CONSUMED BY PERSONS 21 YEARS OF AGE OR OLDER UNLESS THE PERSON IS A QUALIFIED PATIENT. THE INTOXICATING EFFECTS OF CANNABIS PRODUCTS MAY BE DELAYED UP TO TWO HOURS. CANNABIS USE WHILE PREGNANT OR BREASTFEEDING MAY BE HARMFUL. CONSUMPTION OF CANNABIS PRODUCTS IMPAIRS YOUR ABILITY TO DRIVE AND OPERATE MACHINERY. PLEASE USE EXTREME CAUTION.

For medicinal cannabis and cannabis products, the package must also include the statement, "FOR MEDICAL USE ONLY."

Transportation

Distributors are the only commercial cannabis license type that may transport cannabis and cannabis products between licensees, except for testing samples, which will be transported by a testing laboratory employee. The Bureau will establish minimum security and safety requirements for transportation of cannabis.

3.3.2 Typical Equipment Used

Historically, cultivators and manufacturers self-distributed their cannabis and cannabis products. The equipment types and details provided below are intended to provide a general idea of the equipment anticipated to support licensed distribution activities described:

Refrigerators or refrigeration units. Distributors may need to store harvest batches of cannabis and cannabis products requiring refrigeration. This means that distributors will need to have refrigeration units on site to maintain products at the required temperatures.

Temperature, humidity, and/or air flow control equipment. Distributors may use equipment for temperature, humidity, and/or air flow control, including ventilation fans, heating/air conditioning units, thermostats or thermometers, oscillating circulation fans, hygrometers, and/or dehumidifiers. A thermostat or thermometer would be used to verify temperatures, and a thermostat would control use of the heating/air conditioning unit. Ventilation fans expel air from an indoor operation to the outside and/or pull outside air into an indoor facility. A hygrometer can be used to verify water content in the air (i.e., determine humidity). A dehumidifier would be used to decrease the water content in the air.

Odor control equipment. To counteract the distinguishable odor of the cannabis plant, distribution operations may use odor control equipment such as carbon filters (also known as carbon scrubbers), which contain activated carbon. The activated carbon in the filters reduces odors by physically binding the odor-causing chemicals. This occurs as air is pulled through the ventilation system to outside air. Odor neutralizer products may also be used.

Lights. The types of lighting equipment that may be required for storage and maintenance of live plants may depend on the length of time a distributor expects to store the live plants. For example, if a distributor expects to store live plants no longer than a few days, the lighting equipment needs may be different than if a distributor expects to store live plants for a week or more. In addition, the lighting needs may be different depending on the growth stage of the plants being stored. Immature plants have different lighting needs than mature flowering plants. Because retailers will only be permitted to sell immature plants, low-intensity lighting, such as fluorescent lighting, will be needed to keep the plants in an immature, non-flowering state (Grace, pers. comm., 2016).

Vehicles. Licensed distributors will be required to transport cannabis and cannabis products in an enclosed commercial vehicle or trailer. Vehicles and trailers must contain a box that is secured to the vehicle or trailer, and is lockable, for the purposes of storing the cannabis and/or cannabis products. Some existing companies offer transport of cannabis products and cash via armored vehicle (MPS International 2017; Core Security Solutions 2017). Other companies offer transport using unmarked sport utility vehicles, trailers, and refrigerated vans (OMNI 2017a, 2017b).

3.4 Cannabis Retail Sale Operations

Under MAUCRSA, cannabis retailers are storefront and/or delivery operations, with the primary activity of selling cannabis and cannabis products. Retailers licensed for commercial medicinal cannabis activities may sell medicinal cannabis and cannabis products to customers who have a physician's recommendation. Retailers licensed for commercial adult-use cannabis activities may sell adult-use cannabis and cannabis products to anyone 21 years of age or older.

Retailers may offer delivery services to customers. In order to offer delivery services, retailers must have a physical licensed premises. To offer delivery services, the licensed premises may either be a storefront operation offering products at the premises, or may be closed to the public.

Some retailers may allow on-site consumption of cannabis or cannabis products by offering smoking lounges or vaping lounges if the local jurisdiction allows for this activity.

3.4.1 General Operational Activities

Under MAUCRSA, cannabis retailers would typically be brick-and-mortar retail stores selling cannabis; cannabis products; smoking or vaping paraphernalia; and branded merchandise such as stickers, water bottles, and t-shirts. Retailer employees may have a variety of different responsibilities, including but not necessarily limited to stocking and shelving products, providing security services, managing customer and business transactions, maintaining financial records, and/or selling products to customers. Retailers whose business activities offer delivery, or are solely to provide delivery services, are described below in the “Delivery” subsection.

Medicinal Cannabis Retailer-specific Operations

When a patient enters a medicinal cannabis retailer, employees must verify that the customer meets the requirements to purchase medicinal cannabis under MAUCRSA. The customer may purchase different types of cannabis flowers and manufactured cannabis products (e.g., edible cannabis products).

Because there is no standard dosage for medicinal cannabis, customers regulate their own intake of medication (Becker 2016; Freston, pers. comm., 2017). Most cannabis products do not identify a specific dose for customers to use for treatment of a medical condition. For smoking or vaping cannabis flowers or raw plant matter, customers typically must decide their own dose, which could vary considerably among types or strains of cannabis. At least one company has produced a vape pen that attempts to provide metered doses of vaporized cannabis; however, customers must decide for themselves how many doses to take (Freston, pers. comm., 2017). There are no requirements for retailers to explain dosage to customers.

For edible cannabis products, customers can observe the cannabinoid content of the product on the label and eat the percentage of that product that will provide an appropriate dose of cannabinoids. As an example, if a chocolate bar containing 100 milligrams (mg) of THC breaks into 10 pieces, users can generally expect that one piece will contain 10 mg of THC (Baca 2014).

Dispensaries may not sell more than eight ounces of medicinal cannabis in a single day per customer's needs and provides a different recommended amount.

Adult-Use Retailer-Specific Operations

Adults aged 21 years and over may purchase cannabis or cannabis products for their personal use at a retailer licensed to sell adult-use cannabis. The implementing regulations will require retailers to verify the age of any person entering the retail space.

The purchasing limits for adult use differ from those established for medicinal use. Adults grams of concentrate, and no more than six live plants.

Smoking and Vaping Lounges

Some cities and counties permit retailers to allow patients or customers to consume cannabis or cannabis products on site in smoking lounges or vaping lounges. Smoking involves inhaling combusted cannabis in the form of a cannabis cigarette or a pipe. Vaporizing (or vaping) cannabis involves placing cannabis flowers or oils in an electric appliance designed to heat the cannabis to a high heat but remain below the point of combustion, and inhaling the resulting vapor. Vaping appliances may range from equipment as small as a standard cigarette, such as a vape pen, to a larger tabletop device about as large as a cantaloupe. Smoking of cannabis produces a distinctive odor and creates secondhand smoke, while vaping produces less odor and smoke.

Retailers that allow on-premises consumption must comply with local ordinances and permitting processes. As an example, in San Francisco, retailers that intend to allow smoking or vaping on premises must apply for and receive a conditional use permit from the San Francisco Department of Public Health allowing such activity. This permit is separate from the Medical Marijuana Dispensary Permit that the City of San Francisco requires dispensaries to procure for operation within city limits. To qualify for a conditional use permit allowing smoking or vaping, San Francisco dispensaries must submit information to local municipalities about the building's heating, ventilation, and air conditioning (HVAC) system and any existing carbon filtration systems (Freston, pers. comm., 2017; San Francisco Department of Public Health 2017a, 2017b, 2017c).

While some permitted retailers may allow both smoking and vaping on site, others may limit customers to vaping only. Some lounges offer vaping equipment to consumers, including sterilized mouthpieces and alcohol wipes. Some retailers allow vaping in the main retail area where customers and employees are located.

MAUCRSA provides that on-site consumption of cannabis, including smoking and vaping, may be permitted if the local jurisdiction allows it, but such on-site consumption is outside the scope of the Bureau's discretion and licensing program.

Delivery

Some existing medicinal cannabis dispensaries offer delivery of cannabis and cannabis products to qualified patients. Deliveries are typically made by automobile, although some delivery personnel may use bicycles or make deliveries on foot, particularly in urban areas. Some storefront dispensaries offer delivery services as a service to patients. Other existing cannabis dispensaries in California are delivery-only businesses, without a brick-and-mortar storefront property. These are often referred to as "mobile" dispensaries.

Under MAUCRSA, retailers, microbusinesses, and nonprofit licensees may offer delivery services to qualified customers. While retailers may operate delivery-only businesses (i.e. no storefront retail operations), those retailers must have a licensed physical premises. The licensed premises is not required to be open to the public. Deliveries must be made by

equipped with an operational global positioning system (GPS) device. Deliveries may be made only to physical addresses within California and may not be made to addresses on publicly owned land. Delivery employees may not, at any given time, carry cannabis or

cannabis goods valued at a certain amount to be determined by the Bureau. Delivery of cannabis will be subject to other record-keeping and security regulations.

3.4.2 Typical Cannabis Products

Existing medicinal cannabis dispensaries sell a range of cannabis products, and retail stores under MAUCRSA are expected to sell similar products. Dispensary employees will typically be trained to discuss the various products offered with patients or caregivers to achieve the patient's desired result. No specific requirements or regulations exist regarding training standards for dispensary employees. Some of the products commonly offered at dispensaries are described below. As the licensing authority for manufactured products, the California Department of Public Health (CDPH) included detailed information on manufactured products in its *Standardized Regulatory Impact Assessment (SRIA) – Proposed Regulations for Manufacturers of Medical Cannabis*, prepared for CDPH by Humboldt Institute for Interdisciplinary Marijuana Research (HIIMR) in 2017. Much of the information below was taken from that document.

Cannabis Flowers

Dried cannabis flowers of many different strains are typically on display and offered for sale at dispensaries. Different strains of cannabis may have different chemical compositions and therefore different effects on users. Two species of cannabis are most commonly used for medicinal purposes and sold at cannabis dispensaries for their different chemical properties: *Cannabis sativa* and *Cannabis indica*. Many species hybrids are also available, with each hybrid containing different chemical properties. Within each basic type of cannabis (*C. sativa*, *C. indica*, or hybrid), many different strains exist. Retailers will typically have a written or posted menu of strains offered and/or a display of different strains for sale. Patients seek to match the properties of cannabinoids to the desired outcome for their symptoms or ailments (Freston, pers. comm., 2017).

Kief and Hash

Kief is a powdery substance consisting of the trichomes³ that cover the cannabis flower. Kief is typically made by tumbling or sifting. In the tumbling method, cannabis flower or trim is placed in a perforated chamber that spins, allowing THC-rich trichomes to fall onto a collection tray. Sifting involves using a series of mesh silk screens or sieves to separate trichomes from the cannabis flower or leaf (HIIMR 2017).

Hash, or hashish, is a more concentrated form of kief. To make hash, kief is pressed into solid blocks to form a waxy substance. Hash can also be made by using water and ice. A bucket of iced water is stirred vigorously while cannabis is added to it. The stirring motion causes the mesh filter, collecting the resin, which is then dried.

³ Trichomes are small resin glands protruding from buds, leaves, and other areas on the plant. This is the only part of the plant that produces the cannabinoids (i.e., the chemical compounds in cannabis that affect neurotransmitters in the brain). There are multiple types of trichomes on a cannabis plant.

Vape Pens

Vaporizer pens, or vape pens, are similar to electronic cigarettes. These devices contain a battery-powered heating element that vaporizes a liquid form of concentrated cannabis oil (Bryan 2017). Concentrated oils are commonly manufactured using a carbon dioxide (CO₂) extraction process. Liquid CO₂ is heated and pressurized to a supercritical state that hovers between liquid and gas, which is forced through a vessel containing cannabis. Finely ground cannabis trim is most often used, but flowers, leaf, and kief are also popular. CO₂ extraction allows manufacturers to separate terpenes from cannabinoids. The oil is sold raw or decarboxylated (heated to 110 degrees Celsius (°C) for approximately two hours) in gel caps, syringes, and vaporizer cartridges. Most large-scale manufacturers add glycol (propylene and ethylene) to CO₂ oil to maintain a level of viscosity amenable for use in vaporizer cartridges. oil is the most common medium for low-THC, CBD-rich oils that are used primarily for medicinal purposes (HIIMR 2017).

Concentrates

Many different types of cannabis concentrates exist, in which THC and other cannabinoids are extracted into a viscous or solid form to produce a concentrate. These concentrates are typically named for their consistency and/or extraction method. Rosin is a cannabis concentrate that is formed by placing cannabis flowers and/or kief into a heated press. The oils, cannabinoids, and terpenes leave the plant and harden to a gum-like consistency (HIIMR 2017). Butane hash oil (BHO), also known as butane honey oil, shatter, wax, or crumble, is made by forcing pressurized butane through a vessel containing cannabis flowers, trim, or kief. These concentrates are typically vaporized and inhaled using an apparatus known as a dab rig.

Edible Products

Cannabis can be used in a wide variety of food products or edibles, such as candies, cookies, pretzels, pasta, butter, soda, infused juices, salad dressing, barbecue sauce, and corn chips. Large-scale manufacturers often use steam distillers and/or supercritical CO₂ extractors to produce oil for edibles. Small- and medium-scale producers of edibles, especially bakers, often infuse butter, coconut oil, olive oil, or other common cooking fats with cannabis (HIIMR 2017).

Tinctures

Tinctures are made from cannabis trim, leaf, and/or flowers that are soaked in alcohol and/or glycol or vegetable glycerin. Carbon filters are often used to remove chlorophyll from the finished product. Home and commercial-grade distillation units use water or alcohol to remove cannabinoids, producing concentrated cannabis oil. Many tinctures are infused with common herbs (e.g., lavender, basil, rose petals, and mint) and are sold in small bottles (HIIMR 2017).

Topical Products

Topical products or topicals are cannabis-infused lotions, salves, sprays, balms, and oils that are applied to the skin. Topicals can be made similarly to edibles. Manufacturers infuse

cannabis into olive, canola, grapeseed, or coconut oil, which is then blended with other ingredients, such as botanical extracts and essential oils, to create the final product (Rahn 2017).

Live Plants and Seeds

Retailers may sell live, immature cannabis plants and/or cannabis seeds to customers. An immature plant is a plant that is not flowering. Customers would purchase seeds or immature plants in order to grow cannabis plants for personal, non-commercial uses. Retailers would not be permitted to apply pesticides to live plants.

3.4.3 Storage of Cannabis

Under MAUCRSA, retailers will have specific storage requirements. A licensed retailer will be required to store product inventory in a secured and locked room, safe, or vault to protect from diversion and loss. During the retailer's business hours, some of the products in inventory may be removed from storage for display and sale. The amount of such products will be limited to the amount of cannabis or cannabis products that the retailer sells during an average one-day period. Products may be displayed only in the retail area of the retailer's premises.

3.4.4 Security

In addition to security regulations that will be required of all cannabis business licensees, MAUCRSA retailer licensees must use a video surveillance system in point-of-sale areas in a manner that records the facial features of all buyers and sellers of cannabis and cannabis products.

3.4.5 Typical Equipment Used

Retailers may use various types of equipment, as described below. Note that the following descriptions are intended to provide the reader with a general understanding of typical equipment that may be used at cannabis retailers.

Refrigerators. Retailers may store dried cannabis flowers and many cannabis products in refrigerators or chilled storage spaces.

HVAC System. Local ordinances, permitting requirements, and/or business operation preferences may require certain specifications regarding a retailer's HVAC system to minimize odor from live plants or from smoking or vaping of cannabis on site. See the discussion of typical odor control equipment used in distribution operations (Section 3.3.2).

Lights. See discussion regarding lighting equipment used in distribution operations (Section 3.3.2).

Delivery Vehicles. Under MAUCRSA, retailers may use enclosed vehicles to make deliveries.

3.5 Cannabis Testing Laboratory Operations

The Bureau has licensing authority for cannabis testing laboratories under MAUCRSA. Laboratories licensed by the Bureau will conduct quality assurance testing on both medicinal and adult-use cannabis. This discussion provides information regarding the operational activities and regulatory requirements set out in MAUCRSA for cannabis testing laboratories. Before the enactment of MAUCRSA, State law contained no requirement for cannabis and cannabis products to be tested at any stage of the production process. Voluntary testing has been conducted in some instances, however, and various laboratories around the state currently offer cannabis testing. Some existing medicinal cannabis dispensaries provide consumers with laboratory analysis information regarding their cannabis products. As an example, cannabis products sold at dispensaries are typically labeled with cannabinoid and THC content because different cannabinoid and THC content can have different effects on patients and their symptoms. In addition, some local jurisdictions, such as the City of Berkeley and others, have adopted local testing requirements or rely on testing standards from other states (e.g., Oregon) as testing benchmarks. Because no specific testing standard has been adopted statewide or is otherwise widely accepted, results can vary greatly between laboratories depending on the procedures and equipment used. Additionally, the substances or contaminants for which laboratories are testing can vary widely.

MAUCRSA requires that, following the harvest of cannabis flower by a licensed commercial cultivator or the manufacture of cannabis products by a licensed manufacturer, a representative sample of each batch of cannabis and cannabis products must be tested by a licensed testing laboratory for compliance with regulatory standards before those items can be distributed to a retailer for sale to consumers. Live plants and seeds are excluded from this testing requirement. The testing laboratory must test samples for specific components required by the Bureau, as well as for the presence of prohibited levels of pesticides, solvent residues, and other adulterants (e.g., mold). Specific testing requirements are described in more detail below.

3.5.1 General Operational Activities

Laboratories analyze raw cannabis flower, concentrates, infused products (such as edibles defined and described further in Section 3.5.2, “Typical Cannabis Products.”

Some laboratories also offer services such as genetic testing and consulting on other issues, including labeling, marketing, packaging, processing, and compliance with State and local laws, regulations, and ordinances. Web-based tools for viewing testing results and reports summarizing the results may be offered to customers. Laboratories offering these services may test cannabis and cannabis products exclusively, or they may test other products, including food.

Currently, samples are transported and delivered to testing laboratories in an inconsistent and unregulated manner. Under the Bureau’s Proposed Program, the testing process would begin when personnel from a licensed testing laboratory arrive at a distributor’s licensed facility to take product samples. Samples must be placed in sample containers meeting

specific requirements and sealed with a tamper-evident seal. The laboratory personnel must also complete a field log for each sampling event to help ensure accurate recordkeeping and chain-of-custody. Samples are then placed into a tamper-evident portable storage unit for transport. The portable storage unit for cannabis flowers must be kept at an appropriate temperature.

At the laboratory, employees must ensure that the sample is handled according to the identification number and logging information regarding each sample increment into a database. Laboratory technicians process the sample to prepare it for testing. For flowers, subsequent analyses, the sample is typically extracted with solvents to concentrate particular analytes (e.g., CBD, terpenes, pesticides, solvents) (see Section 3.5.4, "Methods for Analysis"). For bacterial, mold, and fungal testing, the sample is plated directly into a Petri dish. The Bureau would require that, following the completion of testing, samples must be destroyed in accordance with required disposal procedures.

After all required and requested testing is completed, the distributor or other entity requesting testing would receive a certificate of analysis from the laboratory. The certificate of analysis would contain all results from testing, including cannabinoid and terpene content and contaminants, as required by regulation. In addition, the certificate of analysis would indicate whether the sample "passes" or "fails" testing. Passing means that the analysis of the sample did not report any analyte above its allowable maximum action level. Failing means that the analysis of a sample reported one or more analytes above their respective allowable maximum action levels. If a sample passes testing, the batch may be sold to consumers at a retailer. If a sample fails testing, it may not be sold to consumers. If a failed batch can be manufactured into a product that is safe for consumers, the distributor may arrange for such manufacture. If not, the batch must be destroyed in accordance with all disposal procedures.

To procure a testing license from the Bureau, a laboratory must meet certain general criteria. MAUCRSA requires that testing laboratories use standard operating procedures, including methods consistent with the International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC) 17025 standards⁴ (Bus. & Prof. Code §26100[g]). In addition, the laboratory must be accredited by an independent accrediting body (Bus. & Prof. Code §26001[as][1]).

Laboratories must also meet additional requirements to receive a testing license. Laboratories must develop and implement protocols for taking and handling of samples, testing procedures, quality assurance measures, recordkeeping, proficiency testing, and internal audit. In addition, the regulations specify personnel qualifications and explicit training requirements for laboratory employees.

⁴ ISO is an independent, non-governmental organization that creates international standards for products, services, and systems. ISO/IEC 17025:2005 specifies the general requirements for the competence to carry out tests and/or calibrations, including sampling. The standard covers testing and calibration performed using standard methods, nonstandard methods, and laboratory-developed methods. It is applicable to all organizations performing tests and/or calibrations, including laboratories where testing and calibration are part of inspection and product certification.

3.5.2 Substances Requiring Analysis

MAUCRSA requires that laboratories test for several types of substances. Specifically, MAUCRSA requires that laboratories confirm that the chemical profile of a sample matches the lot specifications with regard to levels of the following compounds and contaminants (Bus. & Prof. Code §26100[d]):

- cannabinoids;
- terpenes and terpenoids;
- solvents or processing chemicals;
- residual pesticides;
- microbiological impurities, as identified by the Bureau in regulation;
- foreign materials, including (but not limited to) hair, insects, and similar or related adulterants; and
- various other compounds or contaminants (mycotoxins, moisture content, and heavy metals).

Each category is described in more detail below.

Cannabinoids

Cannabinoids are a group of chemical compounds that occur naturally in cannabis plants.⁵ Although more than 60 cannabinoids have been identified, two have been well characterized for the discussion of medicinal and adult-use cannabis usage: tetrahydrocannabinol (THC), a major psychoactive component of cannabis, and cannabidiol (CBD) cannabinoids, found naturally in cannabis plants but known to have limited or no psychotropic effects. In addition to other plant breeding considerations, cannabis plant strains have been bred to contain “high” or elevated amounts of either of these cannabinoids for greater potency. The presence of THC and CBD is expressed as a percentage of the total cannabinoids in a cannabis sample; as an example, high-THC strains generally contain THC levels greater than 20 percent (Leafly 2016). Because many popular cannabis strains have little to no CBD, strains are considered to have high CBD if the levels are greater than 4 percent (Leafly 2016). CBD is believed to have a range of medicinal effects, including anti-inflammatory and analgesic effects. CBD levels may be much higher (approximately 15 percent or more) in specially bred cannabis strains intended for medicinal use (GrowWeedEasy 2016a). The final amounts of THC and CBD in processed cannabis buds is largely determined by genetics (GrowWeedEasy 2016a).

In addition to testing for THC and CBD, MAUCRSA requires laboratories to test for the following cannabinoids (Bus. & Prof. Code §26100[d]).

⁵ Cannabinoids have also been found to occur naturally in humans as endocannabinoids and can also be created synthetically (GWPharmaceuticals 2016).

Tetrahydrocannabinolic acid (THCA) is the acid form of THC. THCA occurs naturally in the cannabis plant. When heated, it decarboxylates to create THC.

Cannabidiolic acid (CBDA) is the main form in which CBD exists in the cannabis plant. CBD is obtained through non-enzymatic decarboxylation from the acidic form of the cannabinoid, which takes place when the compounds are heated. Heating or catalyzing CBDA transforms it into CBD, thereby increasing the total CBD level.

Cannabigerol (CBG) is a non-psychoactive cannabinoid commonly found in cannabis. CBG acid is the precursor to both THCA and CBDA in the plant, usually found at low levels (less than 1 percent) when present.

Cannabinol (CBN) is a mildly psychoactive cannabinoid that is produced from the degradation of THC. There is usually very little to no CBN in a fresh plant.

Terpenes and Terpenoids

Terpenes are volatile aromatic molecules, or oils, that are produced in the cannabis plant's resin⁶ glands, evaporate easily, and are responsible for most of the scents and smells associated with cannabis plants (Alchimia Blog 2014). Terpenes were developed in the plants to lure pollinators, repel fungus, and serve as a defense mechanism against predators (Alchimia Blog 2014, Rahn 2014, ProjectCBD 2016). Factors that may affect a cannabis plant's terpene development include climate, weather, age and maturation, fertilizers, and soil type (Rahn 2014).

More than 100 types of terpenes exist, and each cannabis strain has a unique terpene profile (Alchimia Blog 2014). The primary terpenes found in cannabis are A-pinene, Linalool, BetaCaryophyllene, Myrcene, and Limonene. Terpenes, or terpenoids, can be found in a variety of other plants. For example, these primary five terpenes are also found in pine needles, lavender, black pepper, hops, and citrus, respectively (Alchimia Blog 2014).

The Bureau does not require laboratories to test for any specific terpenes or to test generally for terpenes unless the client requests such testing or the product label indicates that the cannabis or cannabis product contains discrete terpenes.

Solvents or Processing Chemicals

To manufacture cannabis products such as oils and concentrates, manufacturers may use solvents such as butane or other processing chemicals to extract cannabinoids and other chemical compounds from cannabis plant material. Some of the resulting products contain various concentrations of these solvents or processing materials.

⁶ Resin is a natural organic substance formed in plants that can be used to make various products. In the case of cannabis, resin glands (trichomes) are the plant structures that primarily contain the cannabinoids and terpenes (Green 2016).

One commonly sold class of cannabis products created using solvents is BHO. To make BHO, pressurized butane is forced through a vessel containing cannabis flowers, trim, and/or kief.⁷ Cannabinoids, terpenes, and flavonoids are preferentially removed by the butane and result in an oil. The butane-rich oil is then left exposed or is placed in a vacuum oven to evaporate the butane. The consistency of BHO products varies depending on cannabis quality, strain, and post-extraction processes. BHO is often mixed with glycol to enhance viscosity for use in vaporizer cartridges.

HIIMR 2017). Some butane may remain in the product following the manufacturing process.

Laboratories may find other types of industrial solvents in cannabis products, which may be byproducts of manufacturing or unintentionally present – such as processing solvents, contaminants in the processing solvents, or residue from an industrial cleaner used to clean equipment. The Bureau's implementing regulations will require testing laboratories to test for solvents or processing chemicals, which are expected to include the following (the final list may include some different chemicals):

1,2-Dichloroethane	Ethyl ether	Pentane
Acetone	Ethylene oxide	Petroleum ether
Acetonitrile	Heptane	Propane
Benzene	Hexane	Trichloroethylene
Butane	Isopropyl alcohol	Toluene
Chloroform	Methanol	Total xylenes
Ethanol	Methylene chloride	(ortho-, meta-, para-)
Ethyl acetate	Naphtha	

Residual Pesticides

Cannabis cultivation may be affected by pests (BOTEC Analysis Corporation 2013). Pests may be transported to cannabis cultivation locations during delivery of cannabis cultivation materials such as cuttings, soil, or plants, or on workers' clothing or shoes, or may occur as a result of climatic growing conditions (e.g., humidity or temperature). In addition, pests such as gophers or deer may travel to a cultivation site. Reportedly, more than 250 insects and mite pests have been associated with cannabis plants (Medical Marijuana 2016). Potential common pests affecting cannabis plants include, but are not limited to, mites (e.g., spider, russet, broad, and cyclamen), white flies, fungus gnats, root aphids, thrips, powdery mildew, fungus, pond mildew/botrytis, deer, rats, squirrels, and gophers. Growers sometimes apply prophylactic pesticide treatments for difficult pests that are not detectable with the naked eye, such as mites.

The Bureau's regulations will require testing laboratories to test for specific pesticides, which are expected to include the following (the final list may include some different pesticides):

⁷ Kief is the resin glands of cannabis that may accumulate in containers or be sifted from loose, dry cannabis flower with a mesh screen or sieve.

Abamectin	Diazinon	Myclobutanil
Acephate	Dimethoate	Naled
Acequinocyl	Dimethomorph	Oxamyl
Acetamiprid	Ethoprop(hos)	Paclobutrazol
Aldicarb	Etofenprox	Pentachloronitrobenzene
Azoxystrobin	Etoxazole	Permethrin
Bifenazate	Fenhexamid	Phosmet
Bifenthrin	Fenoxy carb	Piperonyl butoxide
Boscalid	Fenpyroximate	Prallethrin
Captan	Fipronil	Propiconazole
Carbaryl	Flonicamid	Propoxur
Carbofuran	Fludioxonil	Pyrethrins
Chlorantraniliprole	Hexythiazox	Pyridaben
Chlordane	Imazalil	Spinetoram
Chlorfenapyr	Imidacloprid	Spinosad
Chlorpyrifos	Kresoxim-methyl	Spiromesifen
Clofentezine	Malathion	Spirotetramat
Coumaphos	Metalaxyl	Spiroxamine
Cyfluthrin	Methiocarb	Tebuconazole
Cypermethrin	Methomyl	Thiacloprid
Daminozide	Methyl parathion	Thiamethoxam
DDVP (Dichlorvos)	Mevinphos	Trifloxystrobin

Non-pesticide products may be used and include substances such as compost teas, biologically based foliar sprays, and lady bugs. Pesticides may be used during cannabis production and include cinnamon, clove, and garlic oils and capsaicin. The use of pesticides not currently registered and allowed for use on cannabis has been reported, including bleach, abamectin, floramite, bifenthrin, Physan, Regalia, and Grandevo. Some amount of residue from pesticides used during cultivation may be present in cannabis products, including cannabis flowers and concentrates.

If the cannabis or cannabis product contains pesticides in concentrations higher than the Bureau's specified "action level" for any substance, the sample would fail quality assurance testing.

Microbiological Impurities

Certain bacterial and fungal microbiological impurities have been found on cannabis flowers, and contained in cannabis products. The Bureau will require testing laboratories to test for microbiological impurities, which are expected to include the following (the final list may include different items):

- Shiga toxin-producing *Escherichia coli*
- *Salmonella* spp.
- *Aspergillus fumigatus*
- *Aspergillus flavus*
- *Aspergillus niger*
- *Aspergillus terreus*

If any of these microbiological impurities are detected in a sample, the sample would fail quality assurance testing and the product may not be sold to consumers.

Filth and Foreign Materials

Cannabis is subject to a range of pests that can be found in the final product. Some of the insects that have been found in cannabis include aphids, leafhoppers, mealybugs, thrips, green flies, black flies, slugs, spider mites, and whiteflies. Residue from mammals such as rodents, which are often attracted to cannabis, may be present as well. Hair from such rodents, as well as from pets (e.g., cats and dogs), can sometimes be found in cannabis flowers and plant material. Insects, hair, and other foreign material can be detected by examining the products under a microscope (McPartland 1996). Samples containing filth or foreign material could fail quality assurance testing and would not be sold to consumers.

Mycotoxins

The Bureau will require testing laboratories to test cannabis samples for mycotoxins, including aflatoxin and ochratoxin, both of which are from families of fungi that are sometimes found on agricultural crops (National Cancer Institute 2015; Schmale and Munkvold 2017). If mycotoxins are found at a concentration greater than the levels set by the Bureau by regulation, the sample would fail quality assurance testing and would not be sold to consumers.

Moisture Content and Water Activity

Moisture content is a measurement of the concentration of water in a sample. The Bureau will set limits for the moisture content of cannabis flowers that may be sold to consumers.

Water activity is a measurement of how available the water in a sample is to other things, like microorganisms. By measuring water activity, one can determine how much water is available to support microbial growth. Because of this, water activity is an important indicator of the possibility of microbiological contamination (Unger et al. 2014). The Bureau will set water activity levels in its regulations implementing MAUCRSA.

Heavy Metals

Cannabis plants can draw in heavy metals from the soil in which they are grown (Handwerk 2015). The Bureau will require laboratories to analyze samples for several heavy metals, which are expected to include arsenic, cadmium, lead, and mercury, although the final list

may include different metals. Samples testing higher than the Bureau's action levels for any of these heavy metals would be deemed to fail laboratory testing.

3.5.3 Samples

The Bureau's testing laboratory regulations will set out detailed sampling procedures and protocols. The regulations will require licensed laboratories to develop and implement standard operating procedures that must be approved by the laboratory director and made available to all laboratory personnel.

Laboratory personnel are expected to wear appropriate personal equipment and use suitable tools when collecting samples. Some of personal equipment that may be used could include disposable lab coats, coveralls, or aprons; filtering dust masks; safety goggles; hair nets, and disposable nitrile gloves. Some of the sanitized tools that could be used may include amber glass jars or containers with PTFE-lined lids, cooler with ice packs, field balance, spoons, spatulas, tongs, and/or sampling devices. Laboratory personnel will be required to store samples in tamper-evident containers and handle the containers to ensure that there is no degradation of the sample while it is being transported to the laboratory. Laboratory personnel will be required to keep records pertaining to the sampling event and ensure that adequate chain-of-custody protocols are observed.

The Bureau will detail sampling procedures for unpackaged harvest batches and for packaged cannabis products. For each of these categories, the regulations will specify the process for collecting samples, the sample size, and the sample increments. For edible products, the regulations will contain requirements for homogeneity. The regulations will also address any requirements for duplicate field samples.

3.5.4 Methods for Analysis

The Bureau does not prescribe any specific method for analyzing samples for any particular contaminant or constituent. Rather, the regulations require that the laboratory must "develop and implement scientifically valid testing methodologies" that comport with guidelines in:

- The U.S. Food and Drug Administration's *Bacterial Analytical Manual* (2016);
- AOAC International's *Official Methods of Analysis for Contaminant Testing of AOAC International*, 20th Edition (2016);
- Methods of analysis for contaminant testing published in the 2016 U.S. Pharmacopeia and the National Formulary (USP-NF); or
- If a laboratory wants to use an alternative scientifically valid testing methodology, the laboratory shall validate the methodology and submit the standard operating procedure for the new methodology to the Bureau.

3.5.5 Typical Equipment Used

As a general matter, the Bureau does not specify in its regulations any particular testing equipment that must be used. Instead, the regulations require laboratories to develop their own testing protocols based on recognized and certified testing methodologies. The following list provides a general description of some of the broad categories of typical equipment used.

Analytical Instruments

High Performance Liquid Chromatography (HPLC) can be used to measure heat-sensitive compounds such as THCA and CBDA because it does not require heating of the sample. The laboratory extracts a sample into a solvent and injects the extract into a liquid-filled column that separates the components of the mixture based on physical and chemical characteristics. Separated components are identified employing an ultraviolet (UV) or other appropriate detector to measure concentration.

Liquid Chromatography-Mass Spectrometry (LC-MS/MS) can be used for chemical residue (pesticide) testing and like HPLC, separates extracted components of a mixture and then uses two mass spectrometers to identify and estimate the concentration of the components.

Gas Chromatography (GC-FID) can be used for cannabinoid profiling for products that will be heated, smoked, or vaporized or that have already been fully decarboxylated prior to testing. Like HPLC, this method separates components of a mixture based on differences in physical and chemical properties. Unlike the HPLC, the GC uses a gas-filled column contained in an oven to perform separation and uses a Flame Ionization Detector (FID) to identify and estimate the concentration of the components. This method typically decarboxylates any acidic cannabinoids (THCA, CBDA, CBGA) present in the sample.

Gas Chromatography-Mass Spectrometry (GC-MS) can be used for chemical residue (pesticide) testing and terpene analysis. This method employs gas chromatography and the use of a mass spectrometer as described above.

Gas Chromatography Headspace Analyzer with an FID (HS-GC-FID) can be used for the separation and quantification of residual solvents. This method is similar to GC-FID, but instead of a sample being extracted with a solvent, the ambient air above a sample (i.e., “headspace”) is introduced into the gas-filled column.

Handheld and Lab Bench Measurement Equipment

This equipment includes instruments to measure weight, pH, and temperature of samples and extracts. It also includes automated mixing and stirring devices often used in extraction and sample preparation.

Glassware

Glassware includes beakers, test tubes, cylinders, flasks, and other related glassware to prepare and store samples.

Chemicals

Various chemicals, such as compressed gases, acids, bases, buffers, and salts, are stored and used in the laboratory to prepare and analyze samples. Reference standards are also used to calibrate and perform quality assurance and quality control of instrumentation. Safety Data Sheets (SDS) for each chemical are present on site and available to laboratory personnel.

Safety Equipment

Extractions with solvents are typically completed under a fume hood to allow proper ventilation of the laboratory and prevent inhalation. Laboratory personnel wear lab coats with safety glasses. Hand protection is used as needed. Eye wash stations and fire extinguishers are present.

3.6 Cannabis Microbusiness Operations

MAUCRSA's microbusiness license type allows for vertical integration of commercial cannabis cultivation, manufacturing with nonvolatile solvents, distribution, and retail sales under a single license to be issued by the Bureau. For the purposes of this analysis, it is assumed that, for each activity a licensed microbusiness plans to operate, the licensee will conduct operations as described under the relevant section in this chapter and that the regulations applicable to that license type will apply to those activities conducted by the microbusiness. Because they have not been described elsewhere in this chapter, cultivation and manufacturing are described in more detail below.

3.6.1 General Operational Activities

A cannabis microbusiness under MAUCRSA will be a business that conducts several types of commercial cannabis activities under a single license. First, microbusinesses would be able to cultivate cannabis plants, with a total canopy of less than 10,000 square feet. Cannabis cultivation activities are described below in "Cultivation Operations," Section 3.6.2. Second, a microbusiness would be permitted to conduct manufacturing activities using nonvolatile solvents. Manufacturing activities are described in "Manufacturing," Section 3.6.3, below. These manufacturing activities may include agitation, pressure, infusion, or CO₂ extraction. Third, a microbusiness may conduct distribution activities, including arranging for product testing or transporting cannabis or cannabis products. Distribution activities are described above in Section 3.3. Finally, the microbusiness may conduct retail sale activities, including delivery and on-site consumption where allowed by the local jurisdiction. Retail sale activities are described above in Section 3.4.

3.6.2 Cultivation Operations

Cannabis cultivation begins with the selection and planting of cannabis cuttings or seeds. Where possible, male seeds are separated from female seeds or, if not identified in the seed stage, male plants would be removed later in the cultivation process, prior to becoming mature. The cuttings or seeds are typically planted in pots with either a growing medium, soil, or an inert material used in hydroponic cultivation methods. Cuttings are preferred over

seeds when the cultivator wishes to better guarantee the genetics of a plant and ensure the consistency of the cannabis product.

After the plants have developed their first leaves and a root system that extends through the bottom of the growth medium, the cannabis plants are transplanted or repotted to larger pots, where they continue to grow in a vegetative stage (i.e., the period of growth between germination and flowering during which the plant has no observable flowers or buds). During this stage, the plants are given water and nutrients through compost teas, which are created by steeping compost material in water, or other amendments, and are exposed to natural and/or artificial light to maintain the vegetative stage. If using artificial light or a combination of natural and artificial light, the photoperiod is typically 18 hours of daylight and 6 hours of darkness. Other climate conditions (e.g., temperature, humidity, air flow) are often controlled to meet the plant's various growth needs. In addition, once the plants have a healthy root system, older leaves identified by their pale green or yellow coloring can be selectively removed (pruned) from the plants to improve airflow, decrease shading, increase light penetration, and allow plants to focus valuable energy on new leaves, rather than on the removed older leaves.

Pest monitoring and, if necessary, pest management activities occur throughout the cultivation period. Under the Proposed Program, such activities would be detailed in the cultivator's cultivation plan, submitted as part of the application process.

Once plants reach a desirable size, they are transitioned to the flowering phase either as a result of natural changes in the period of light (photoperiod) for outdoor cultivation or by altering the light pattern so that the plants are exposed to 12 hours of light and 12 hours of darkness for indoor or mixed-light cultivation. In approximately 6-14 weeks, the flowers are ready for harvesting (Marijuana Growers Headquarters 2012).

Harvesting is the next step in producing the raw cannabis material and occurs when most of the plant's trichomes have changed from clear to either a light amber or cloudy white color. The primary portion of the plant that is harvested is the cannabis flowers, which are generally located at the top of the plant. Flowers are typically removed using a sharp pair of pruners. Since flowers at the top of the plant may be more mature than those lower on the plant, harvesting of the top flowers may precede harvest of the lower flowers.

Three main categories of cannabis cultivation are practiced, differentiated by the location and lighting requirements: outdoor, indoor, and mixed-light. Outdoor cannabis cultivation uses natural lighting for plant growth. It may be grown in fabric pots,⁸ grow bags,⁹ planters, or raised beds; directly in the ground (natural soils); or in greenhouses. Indoor cultivation is conducted within buildings without the use of any natural light. The goal of indoor cultivation is "to create an environment that maximizes the quantity and quality of marijuana flower

⁸ Fabric pots, also known as smart pots, are made from a geotextile fabric that is very durable and allows the pots to last for approximately 5-7 years. The pots are typically black or tan. The geotextile fabric allows for increased aeration and retain less heat than regular/plastic pots or grow bags (Marijuana Growers Headquarters 2012).

⁹ Grow bags are semi-perforated, flexible plastic bags. Challenges associated with use of grow bags include difficulty in moving large bags, and they are difficult to water properly once torn (Marijuana Growers Headquarters 2012).

buds produced" (Arnold 2013). High-intensity lighting is used to stimulate photosynthetic activity and plant growth, and the photoperiod is changed each day to simulate the seasonal changes in daylight that trigger various growth stages of the plant. Mixed-light cultivation is typically conducted within greenhouses. The photoperiod in the greenhouses is manipulated using a variety of lighting and shading techniques, including a combination of natural and artificial light.

Cultivation Regulations

License Types

Table 3-1 describes the various license types identified in CDFA's anticipated regulations.

Cultivation Requirements

While the Bureau is responsible for issuing licenses to microbusinesses, which may include cultivation operations, CDFA is the licensing authority for standalone commercial cultivation licenses. It is expected that, although the Bureau has discretion over issuing a microbusiness license to allow cultivation activity, CDFA will review and make recommendations to the Bureau regarding the cultivation activity contemplated by the microbusiness license. Under MAUCRSA, an applicant for a microbusiness license must be able to demonstrate compliance for all activities it intends to carry out under the license, including cultivation.

Applicants for cultivation licenses must provide a premises diagram that identifies various specific spaces, some of which are specific to certain license types and cultivation practices (e.g., lighting diagrams for indoor and mixed-light cultivators); a pest management plan; the proposed water source and/or irrigation methods; a waste disposal plan; and defined propagation areas.

In addition, licensees must comply with environmental protection measures contained in the CDFA regulations, which are expected to include requirements related to water use, lighting, generators, pesticides, provisions for accidental discovery of human remains, and renewable energy requirements for nurseries, mixed-light cultivators, and indoor cultivators.

Table 3-1. CDFA Proposed License Types

Cultivation License Type	Description	Allowed under Microbusiness License?
Specialty Cottage Outdoor	Outdoor cultivation site with up to 25 mature plants	Yes
Specialty Cottage Indoor	Indoor cultivation site with 500 square feet or less of total canopy.	Yes
Specialty Cottage Mixed-Light	Mixed-light cultivation site with 2,500 square feet or less of total canopy.	Yes
Specialty Outdoor	Outdoor cultivation site with less than or equal to 5,000 square feet of total canopy, or up to 50 mature plants on noncontiguous plots.	Yes
Specialty Indoor	Indoor cultivation site with 501 to 5,000 square feet of total canopy.	Yes
Specialty Mixed-Light	Mixed-light cultivation site with 2,501 to 5,000 square feet of total canopy.	Yes
Small Outdoor	Outdoor cultivation site with 5,001 to 10,000 square feet of total canopy	Yes
Small Indoor	Indoor cultivation site with 5,001 to 10,000 square feet of total canopy.	Yes
Small Mixed-Light	Mixed-light cultivation site with 5,001 to 10,000 square feet of total canopy.	Yes
Medium Outdoor	Outdoor cultivation site with 10,001 square feet to one acre of total canopy.	No
Medium Indoor	Indoor cultivation site with 10,001 to 22,000 square feet of total canopy	No
Medium Mixed-Light	Mixed-light cultivation site with 10,001 to 22,000 square feet of total canopy.	No
Nursery	Cultivation of cannabis solely as a nursery	Yes, up to 10,000 square feet
Processor	Site that conducts only activities associated with drying, curing, grading, trimming, storing, packaging, and labeling of nonmanufactured cannabis products.	Yes

3.6.3 Manufacturing

Under MAUCRSA, CDPH is tasked with the licensing of manufacturers. CDPH is developing regulations that will apply to the manufacture of cannabis products. MAUCRSA creates two license types for manufacturers: Type-6 manufacturers extract using nonvolatile solvents, and Type-7 manufacturers extract using volatile solvents. Under MAUCRSA, CDPH is expected to create two additional license categories: Type-N for manufacturers that produce edible products, topical products, or other types of cannabis products (infusion) and that do not

extract oils; and another license type for manufacturers that do not manufacture the actual product, but only package and label those products. Under the anticipated MAUCRSA regulations, a Type-6 licensee may also conduct infusion operations and/or packaging on the licensed premises without needing an additional license.

The Bureau, as part of its authority under MAUCRSA, is responsible for issuing licenses to microbusinesses, one activity under which is manufacture. A microbusiness under MAUCRSA may only conduct Type 6 (nonvolatile solvent) manufacturing under the microbusiness license. Under MAUCRSA, an applicant for a microbusiness license must be able to demonstrate compliance for all activities it intends to carry out under the license, including manufacture. It is expected that, although the Bureau has discretion over issuing a microbusiness license to allow manufacturing activity, CDPH will review and make recommendations to the Bureau regarding the manufacturing activity contemplated by the microbusiness license.

Extraction is a process by which cannabinoids are separated from cannabis plant material through chemical or physical means. The microbusiness license allows licensees only to conduct manufacturing using nonvolatile solvents, other nonvolatile substances, or mechanical extractions. Under the microbusiness license, licensees would also be able to create products using nonvolatile solvent extractions (including carbon dioxide extraction), distillation, infusion, or mechanical extractions, including pressure, agitation, or sifting techniques. These processes are described below.

- **Carbon dioxide (CO₂) extractions.** The CDPH regulations require manufacturers to use professional closed-loop extraction systems for all CO₂ extractions. The closed-loop system is required for CO₂ extractions because CO₂ can also build up, posing a risk of asphyxiation to personnel and bystanders. Closed-loop systems are designed to mitigate these risks.
- **Mechanical extractions.** This may include sifting cannabis products with a screen or pressing them in a press.
- **Chemical extraction using a nonvolatile solvent.** This technique involves use of water, vegetable glycerin, vegetable oils, animal fats, or food-grade glycerin.
- **Infusion.** Infusion is a process by which cannabis, cannabinoids, cannabis concentrates, or manufactured cannabis are directly incorporated into a product formulation to produce a cannabis product.

Manufacturing Regulations

CDPH expects to begin issuing licenses on January 1, 2018. The CDPH manufacturing regulations are anticipated to cover labeling, packaging, background checks, license fees, bonding, local permitting requirements, infrastructure standards, closed-loop extraction systems, standard operating procedures, general licensing requirements, limits on additives, and track-and-trace requirements.

License Types

As described above, CDPH's regulations will likely include four license types for manufacturing activities. A separate license type will be for entities that only package or repackage cannabis products, or that label or relabel the cannabis product container. Manufacturers that hold other types of manufacturing licenses would not be required to hold a separate license if they are labeling and/or packaging their own manufactured products. Manufacturers that do not conduct extractions, but rather produce edible or topical products using infusion processes or cannabis products other than extracts or concentrates, will be Type-N licensees. Type-6 licensees may conduct extractions using mechanical methods or nonvolatile solvents, and may conduct infusion operations. A Type-7 manufacturing licensee may conduct all of the same activities as a Type-6 manufacturer, but may also conduct extractions using volatile solvents. Table 3-2 summarizes the activities permitted for each manufacturing license type.

Table 3-2. Activities Permitted in CDPH Proposed Regulations

Manufacturing License Type	Activities	Allowed under Microbusiness License?
Type 6	<ul style="list-style-type: none"> ■ Extractions using mechanical methods (such as presses or screens) ■ Extractions using nonvolatile solvents ■ Infusion operations (must be designated on application) ■ Packaging and labeling of own products 	Yes
Type 7	<ul style="list-style-type: none"> ■ Extractions using volatile solvents ■ Extractions using mechanical methods (such as presses or screens) (must be designated on application) ■ Extractions using nonvolatile solvents (must be designated on application) ■ Infusion operations (must be designated on application) ■ Packaging and labeling of own products 	No
Packaging and Labeling Only*	<ul style="list-style-type: none"> ■ Packaging and repackaging of cannabis products ■ Labeling and re-labeling of cannabis products 	Yes
Type N	<ul style="list-style-type: none"> ■ Production of edible or topical cannabis products using infusion ■ Production of cannabis products other than extracts or concentrates (no extractions permitted) ■ Packaging and labeling of own products 	Yes

* The name of this license type has not yet been determined by CDPH.

Labeling and Packaging

CDPH's anticipated regulations will require a primary and an informational panel on product labels. The primary panel would likely be required to identify the product as being cannabis-infused, contain a "cannabis product symbol," and list THC and CBD content in milligrams per serving and milligrams per package. The informational panel would likely identify manufacture dates; list required warnings such as "For medical use only"; list ingredients and allergens; and identify the expiration date or "best by" date of the product, among other requirements. Label font size would be specified, and the proposed regulations will likely contain a list of label restrictions. MAUCRSA requires tamper-resistant and child-resistant packaging.

Facility Compliance and Video Surveillance

Manufacturing will be required to take place in facilities that meet sanitation, safety, and security standards. Sanitation standards may include such requirements as using food-grade equipment and surfaces and maintaining dressing and locker rooms. Manufacturers will be required to take steps to ensure that equipment, work spaces, and utensils are designed to protect against allergen cross-contact and contamination. Licensees will be required to conduct a hazard analysis to identify known or foreseeable biological, chemical, and physical hazards, and then implement preventive controls to minimize or prevent such hazards. Safety standards will include complying with local and state requirements.

Security standards will include maintaining electronically secure records and a security alarm. Security cameras will be required and must allow for remote-access, high-definition recordings, video capture in low-light settings, and camera placement in a number of rooms, among other requirements. Surveillance recordings will be required to be kept for a minimum of 30 days on the licensee's recording device.

Adulterated and Potentially Hazardous Products and THC Limits

CDPH regulations will prohibit additives, such as nicotine, alcohol, caffeine, and chemicals that "increase potency, toxicity or addictive potential, or that would create an unsafe combination with other psychoactive substances" when combined with cannabis products. CDPH will also prohibit potentially hazardous food, which largely means that the product has an unstable shelf life; this essentially limits the size and scope of products manufactured. Manufacturers will be prohibited from making cannabis products from dairy products, meat products, juices, or any perishable bakery product that must be held at temperatures below 41 degrees Fahrenheit (°F).

CDPH regulations are expected to prohibit edible cannabis products that contain more than 10 mg of THC per serving or more than 100 mg of THC per finished product. Edible products containing more than a single serving will be required to be scored, delineated, or otherwise marked to indicate serving size. Edible cannabis products will be required to be homogenized to ensure uniform distribution of cannabinoids throughout the product. Manufactured cannabis products that are not edible will be allowed to contain no more than 1,000 mg of THC per finished product.

3.7 Magnitude of the Proposed Program

The Bureau SRIA, which was prepared by the University of California Agricultural Issues Center (UCAIC) for the Proposed Program (UCAIC 2017), estimated the medicinal cannabis sold at dispensaries with taxation and adult-use legalization,¹⁰ with and without the addition of the Bureau's medicinal cannabis business regulations. With the Bureau's medicinal cannabis business regulations, the SRIA estimated that the quantity of medicinal cannabis sold at dispensaries would decrease by approximately 5,000 pounds of medicinal cannabis flower-equivalent units, from the estimated baseline of approximately 235,000 pounds under taxation and adult-use legalization.¹¹

In addition to the estimated changes in medicinal cannabis quantities sold at dispensaries, the Bureau SRIA estimated the changes in the number of distribution, transport, dispensary, and testing laboratory businesses under the Bureau's medicinal cannabis business licensing program. If the total amount of medicinal cannabis sold at California dispensaries were to decline by about 5,000 pounds, this would result in the need for eight fewer medicinal cannabis retailers. However, the regulations would result in approximately 20 more laboratory testing businesses, and about 40 more medicinal cannabis distribution businesses (UCAIC 2017).¹²

An updated SRIA is in preparation that will address how the above estimates may change as a result of MAUCRSA, including estimates associated with adult use. At this time, the Bureau is estimating that it will issue 11,500 licenses (both medicinal and adult-use, across all license types) in 2018.

¹⁰ A new system of taxes accompanies adult-use legalization (UCAIC 2017). This includes an excise tax (15 percent) on retail revenue added to the existing sales tax. The sales tax for cannabis sales is approximately 8.8 percent. This baseline reflects the medicinal cannabis quantity sold, assuming higher taxes following adult-use legalization and the availability of legal adult-use cannabis.

¹¹ California dispensaries in November 2016 sold approximately 583,000 pounds of medicinal cannabis flower-equivalent units, which is a baseline before taxation and adult-use legalization. Flower-equivalent pound means a unit of cannabis sold at retail that is equivalent to one pound of dried flowers for medicinal dispensary sales. In order to establish a relevant base for the regulatory analysis, the BMCR SRIA projected the impacts of legal sales of adult-use cannabis and taxation of all legal cannabis on the medical cannabis market segment. This step, which was called the "Taxation and Adult-Use Legalization," provides the baseline against which the proposed medicinal cannabis regulations may be measured. (UCAIC 2017).

¹² The passage of MAUCRSA, which repealed MCRSA, eliminated the "transportation" category of business licenses.

Chapter 4

ENVIRONMENTAL ANALYSIS

4.0 Introduction to the Environmental Analysis

This section provides introductory information related to the evaluation of environmental impacts associated with the Bureau's Proposed Program. It describes the overall approach to the impact analyses, including key terminology and a description of how the significance of environmental impacts is evaluated in this IS/ND.

4.0.1 Introduction to the Resource Sections

Eight topical sections are presented that describe the environmental resources and potential environmental impacts of the Proposed Program. Each section (Sections 4.1 through 4.8) contains the following information about its resource topic:

- A description of the regulatory setting related to the resource topic;
- A description of the environmental setting and background information related to the resource topic, to help the public understand the resources that could be affected by the Proposed Program;
- A discussion of the thresholds used in determining the significance of the Proposed Program's potential environmental impacts;
- A discussion of the potential environmental impacts of the Proposed Program on the resource, including the significance of each potential impact; and
- A description of the regulatory requirements of the Bureau and others that would avoid or minimize impacts.

4.0.2 Significance of Environmental Impacts

CEQA requires that lead agencies define thresholds of significance for impacts that may occur on the physical environment. A threshold of significance, or significance criterion, is an identifiable quantity, quality, or performance level of a particular environmental effect. In general, environmental impacts are identified as either potentially significant or significant (above threshold) or less than significant (below threshold).

Under CEQA, impacts of a proposed project or program are assessed relative to the environmental baseline, which is defined as the existing physical conditions in the affected area as they existed at the time environmental analysis commenced. The environmental setting will normally constitute the baseline physical conditions by which a CEQA lead agency determines whether an impact that would result directly, indirectly, or cumulatively from the proposed project or program is significant. (Guidelines §15125[a].) CEQA does not require the lead agency to consider impacts that are speculative. (Guidelines §15145.)

For the purposes of this IS/ND, significance criteria are drawn from the Guidelines, Appendix G: Environmental Checklist Form. Each environmental resource topic is evaluated in a separate section in this chapter. Each section contains impact statements that identify the mechanism of impact of a specific Proposed Program activity on a specific environmental attribute. Each impact statement is tied to one or more significance criteria. Each impact statement is followed by an analysis that characterizes the potential physical change as a result of Proposed Program activities compared to the environmental baseline, relative to one or more significance criteria.

4.0.3 Environmental Baseline of Analysis

Many of the activities that would be regulated under the Proposed Program are already ongoing. The impact analysis presented in this IS/ND considers these ongoing activities to be a part of the baseline environmental conditions. This baseline includes existing testing, transport, distribution, and retail sale of medicinal cannabis and medicinal cannabis products (i.e., medicinal cannabis goods). The impact analysis focuses on the increment of change that would result from implementation of the Bureau’s cannabis business licensing program, considering the adjustment of some ongoing activities to the new regulatory requirements, the cessation of other activities, and the establishment of new operations.

The meaning of this baseline may vary by resource topic, depending on the type of impact—ranging from a “zero” baseline to a “zero” impact. For instance, some commercial cannabis business activities that generate vehicular traffic under baseline conditions would continue under the Proposed Program, and therefore may result in zero impact. Vehicular traffic from transportation related to cannabis business operations, however, would also occur in new locations. In those new locations, the baseline level of traffic from commercial cannabis transportation would be zero and, therefore, a greater impact may result.

On the other end of the spectrum, emissions of criteria air pollutants are considered at the scale of the air basin as a whole. To the extent that emissions from cannabis business operations remain unchanged in that air basin, the Proposed Program would have no incremental impact, regardless of whether the operations are new or ongoing.

In general, the shifts that would occur as cannabis businesses come into compliance with the Proposed Program would have a beneficial impact on many environmental factors, given the environmentally protective standards of the Proposed Program and the monitoring and enforcement efforts that would be conducted related to the Proposed Program. This comparison against the baseline, wherein many cannabis business operations need not and do not comply with such environmentally protective standards, is a core premise of the impact evaluation in the IS/ND.

4.0.4 Focus on Activities Subject to the Bureau’s Regulatory Authority

The action of adopting regulations, in and of itself, does not have the potential for significant impacts on the environment. Rather, it is the activities that would occur under the regulations that have the potential for impacts. Therefore, the impact analysis focuses on the business activities licensed under the Proposed Program (as described in Chapter 3, *Proposed Program Activities*), as they would be implemented considering the requirements of the Proposed Program (as described in Chapter 2, *Proposed Program Description*).

In addition, the analysis focuses specifically on the direct and indirect impacts of the activities subject to the Bureau’s regulatory authority—the distribution, retail sale, laboratory testing, and microbusiness activities for medicinal and adult-use cannabis.

While, in some cases, certain activities may be related to commercial cannabis businesses (e.g., site development for the purposes of developing a testing laboratory), such activities are not necessarily undertaken for the sole purpose of the cannabis business (e.g., a laboratory may initially be developed to test non-cannabis products that are unrelated to the cannabis business, and eventually used to test cannabis). As a result, site development is considered to have potential independent utility from the business activities that would be licensed under the Proposed Program. The extent to which such independent utility exists would be based on site-specific conditions, and it would not be feasible to evaluate every such circumstance in a statewide environmental analysis. In addition, such site development may have been completed prior to the implementation of the Proposed Program, or an individual licensing application to the Bureau. That said, to ensure full disclosure of potential impacts, these separate and potentially related activities are considered as other past, present, or probable future projects whose impacts could combine with those of the Proposed Program to create cumulative impacts; they are discussed in Chapter 5, *Mandatory Findings of Significance*.

4.0.5 Focus on Licensed Activities

The analysis of the Proposed Program focuses on cannabis business activities conducted in accordance with a license issued by the Bureau. Operations that do not have a license after, and if, the Bureau approves and implements the Proposed Program would not be considered to be part of the Proposed Program. In addition, the analysis of direct and indirect impacts excludes operations that may be permitted by local government, but are not under the jurisdiction of the Bureau (e.g., smoking and vaping lounges). Similarly, the impact analysis excludes operations that would be unlawful under both the baseline and the Proposed Program. For instance, transportation of cannabis goods outside of the state would be unlawful and is not considered in the impact analysis. Such unlicensed activities are instead considered as other past, present, or probable future projects whose impacts could combine with those of the Proposed Program to create cumulative impacts; they are discussed in Chapter 5, *Mandatory Findings of Significance*. Note that, to the extent that operations at existing unlicensed cannabis retailer sites would be modified to comply with the Proposed Program, those operations are considered as part of the baseline, and their impacts would generally be beneficial.

The analysis also assumes that licensed cannabis businesses would generally operate in accordance with applicable State and local regulations and other legal requirements, including those of the Proposed Program. The Bureau acknowledges that some cannabis businesses that obtain licenses may not operate in compliance with applicable regulations and requirements, either knowingly or unknowingly, and may necessitate the Bureau taking enforcement action. However, for the purposes of the impact analysis, the IS/ND does not speculate on the extent or nature of such noncompliance, and the analysis assumes that noncompliance would not be sufficiently widespread or of a nature that would meaningfully change the impact conclusions related to the Proposed Program. Note also that the Bureau and other state and local entities would conduct inspections and enforcement actions to ensure licensees are in compliance with applicable laws, regulations, and ordinances.

4.0.6 Reliance on Existing Regulatory Requirements

Reliance on Existing State Laws and Regulations

Each resource section includes a regulatory setting discussion related to the individual resource topic. This regulatory background, in many cases, includes one or more State agencies with jurisdiction over the resources that may be affected by the cannabis business. MAUCRSA requires that licensees comply with all applicable local and State laws, regulations, ordinances, and permits. To the extent that such laws and regulatory requirements adequately address potential adverse environmental effects, the environmental analysis discloses this information in the regulatory setting and describes the manner in which these regulatory requirements would help ensure that the impact would not be significant under CEQA. Examples of relevant existing laws and regulatory requirements include local zoning and building code standards; requirements of the California Department of Industrial Relations, Division of Occupational Safety and Health; and State requirements related to hazardous materials transportation, use, storage, and disposal.

Reliance on Local Regulation

Local governments have various standards and approval processes that apply to cannabis businesses. Some cities and counties have adopted, or are considering adopting, cannabis business ordinances and conducting CEQA compliance for those ordinances (refer to **Appendix C** for summaries of many of these ordinances). In some cases, in addition to or in lieu of conducting CEQA analysis on their ordinances, local governments envision that CEQA compliance may be conducted for individual licensing projects. MAUCRSA requires local standards to be at least as protective as those of the Proposed Program. Where applicable, local ordinances are identified in the IS/ND and analyzed as part of the environmental impact analysis. MAUCRSA requires that applicants comply with all local laws, ordinances, and regulations.

Regardless of whether local governments have developed standards and approval processes specific to commercial cannabis businesses, many other local requirements would apply to these businesses (e.g., general plan policies, zoning ordinances, noise standards). Furthermore, consistent with MAUCRSA, the state's zoning and planning laws, and other laws that establish the police power and regulatory authority of local jurisdictions, the Bureau has determined that some topics fall outside of the Bureau's regulatory authority because they are regulated by local land use authorities at the project-specific level. Indeed, MAUCRSA

explicitly states that it does not supersede or limit the authority of a local jurisdiction to adopt and enforce local ordinances to regulate licensed commercial cannabis businesses, including but not limited to local zoning and land use requirements and business license requirements. Topics delegated to local land use authorities include issues such as aesthetics, land use and planning, noise, odors, compliance with building standards, provisions for police and fire protection, and connections to public utilities, such as public water, wastewater, and storm drainage systems. For these topics, determination of potential impacts is most appropriately evaluated at a local and, in some cases, site-specific level, and the development of statewide requirements to comprehensively address such impacts falls outside of the Bureau's jurisdiction, nor would it be practical and feasible to do so.

The extent to which the regulatory authority and regulatory programs of local jurisdictions are expected to ensure that the impacts of licensed commercial cannabis cultivation would not be significant is identified in the impact discussions contained in Sections 4.1 through 4.8.

Compliance with Federal Laws and Regulations

Each resource chapter includes a federal regulatory setting related to the individual resource topic. Because federal agencies do not issue permits or approvals for cannabis activities, applicants may not be able to be in compliance with federal requirements. As a result, federal requirements that would normally address impacts cannot be relied upon. This circumstance has been acknowledged and considered in the environmental analysis.

4.0.7 Consideration of Proposed Program Regulatory Requirements

Impact discussions first consider the potential for a significant impact from business activities in light of the considerations provided above; the analysis then considers the requirements of the Proposed Program that may reduce or avoid any potentially significant impacts. A final significance conclusion is then made, based on compliance with Proposed Program requirements.

4.0.8 Consideration of Microbusiness Cultivation Activities

Cultivation activities conducted as part of a microbusiness would need to comply with CDFA's regulations governing cultivation. CDFA has prepared a Draft Program Environmental Impact Report (PEIR) that considers the potential impacts of cannabis cultivation pursuant to the agency's proposed regulations in great detail. Rather than repeat that analysis, this IS/ND incorporates the analysis and includes the CDFA Draft PEIR as **Appendix B**. For clarity, the potential impacts from cultivation as a part of microbusiness licensing are summarized within each topical resource section in a discussion that is separate from the impact discussions of other aspects of the microbusiness license and other license types. Note that, in making its impact conclusions, the Bureau has considered the impacts of the Proposed Program as a whole, including microbusiness cultivation, other aspects of the microbusiness, and other license types.

For greater technical detail regarding the impacts of cultivation, the reader is referred to the CDFA Draft PEIR, which is included as Appendix B of this IS/ND.

Once CDFA files a Notice of Determination on its PEIR, the Bureau intends to follow the process for a responsible agency, as outlined in Guidelines section 15096, related to CDFA's PEIR.

4.0.9 Consideration of Site-Specific Effects

In many cases, insufficient data were found during preparation of the IS/ND to support the evaluation of potential impacts relative to baseline conditions. In other cases, the potential for impacts would be based on site-specific conditions, the details of which would be infeasible to identify and evaluate in a statewide analysis, and the characteristics of which may be currently unknown (e.g., the locations of new businesses that would be planned and licensed in the future). In these cases, rather than speculate on the impacts of implementation actions and their significance, the IS/ND makes more general conclusions regarding the likelihood and types of impacts caused by commercial cannabis business activities, including the cumulative impacts that would be expected under the Proposed Program.

Furthermore, many local jurisdictions have conducted, or will conduct, CEQA compliance as part of the process of adopting commercial cannabis ordinances. In some cases, in addition to or in lieu of conducting CEQA analysis on their ordinances, local jurisdictions may conduct CEQA compliance for individual business operations. These CEQA compliance documents would generally be expected to address any site-specific impacts of cannabis businesses that have not been sufficiently considered in this IS/ND. The same is true of further review by various State agencies as they exercise their own regulatory authority over individual business operations. This analysis would need to be completed prior to issuance of a license for an operation that may have a significant impact on the environment in a way not addressed by the IS/ND. As such, all significant impacts would be disclosed before final approval of an activity that may result in such impacts, which would ensure full compliance with CEQA.

4.0.10 Impact Terminology

Each environmental effect of the Program falls within one of the following categories of significance:

- A finding of ***no impact*** is made when the analysis concludes that the Proposed Program would not affect a particular environmental resource or issue.
- A potential impact is considered ***less than significant*** if the analysis concludes that the Proposed Program would not result in a substantial adverse change in the environment, and no mitigation is needed.
- A potential impact is considered ***significant*** or ***potentially significant*** if the analysis concludes that the Proposed Program would or could result in a substantial adverse effect on the environment.
- A potential impact is considered ***beneficial*** if the analysis concludes that the Proposed Program would result in an improvement in the quality of the environment.

In addition to the categories of significance listed above, this IS/ND uses the following terminology to describe the environmental effects of the Proposed Program:

- A ***substantial adverse change*** (i.e., significant or potentially significant impact) in the environment would be a change resulting from the Proposed Program that was greater than the established threshold of significance for each potential impact.
- ***Mitigation*** refers to specific measures or activities that would be implemented by the Bureau to avoid, minimize, rectify, reduce, eliminate, and/or compensate for a significant or potentially significant impact of the Proposed Program.
- A ***cumulative impact*** can result when a change in the environment results from the incremental impact of the Proposed Program when added to similar impacts of other related past, present, and probable future projects or programs. Significant cumulative impacts may result from individually minor but collectively significant interactions among projects. The cumulative impact analysis in this IS/ND focuses on whether the Proposed Program's incremental contribution to identified cumulatively significant impacts caused by past, present, or probable future projects (including the past, present and future statewide Proposed Program activities) is considerable (i.e., significant).

4.0.11 Sections Eliminated from Further Analysis

The following environmental resource areas have been eliminated from further analysis in this IS/ND because little or no potential exists for these activities to have a physical effect on the specified resources, based on the nature and scope of Proposed Program activities.

Agriculture and Forestry Resources

Agricultural resources are lands defined as Important Farmland by the Farmland Mapping and Monitoring Program (FMMP) of the California Department of Conservation (CDOC), as well as lands set aside under the California Land Conservation Act of 1965 (Williamson Act). Important Farmland is classified by CDOC as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. These classifications recognize the land's suitability for agricultural production by considering physical and chemical characteristics of the soil, such as soil temperature range, depth of the groundwater table, flooding potential, rock fragment content, and rooting depth. The classifications also consider location, growing season, and moisture available to sustain high-yield crops.

Construction activities and conversion of agricultural lands to nonagricultural uses are not a part of the Proposed Program, and any development activities would need to be considered and approved by local governments. Cannabis that is cultivated by a microbusiness is considered to be an agricultural product under Health and Safety Code section 11362.777, subdivision (a) and Business and Professions Code section 26067, subdivision (a). Therefore, cultivation of cannabis as part of a microbusiness license would not result in conversion of Important Farmland to nonagricultural use or conflict with a Williamson Act contract.

Forestry resources are lands defined as forest land, including timberland. Forest land is defined as native tree cover greater than 10 percent that allows for management of timber, aesthetics, fish and wildlife, recreation, and other public benefits. (Pub. Res. Code §12220[g].)

Any business operation or site development on forest lands would need to be considered and approved by local authorities, and would need to comply with all State and federal regulations.

In conclusion, the Proposed Program would not: convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use; conflict with existing zoning for agricultural use, or a Williamson Act contract; conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production; result in the loss of forest land or conversion of forest land to non-forest use; or involve other changes in the existing environment which could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. The Proposed Program would have **no impact** on agriculture and forestry resources, and this topic is not considered further.

Cultural and Paleontological Resources

Cultural resources include prehistoric archaeological sites, historic-era archaeological sites, historic-era buildings, structures, landscapes, districts, and linear features. Prehistoric archaeological sites are places where Native Americans lived or carried out activities during the prehistoric period, which in California, depending on the region, is generally defined as being before the arrival of Spanish explorers in 1542. Historic-era archaeological sites reflect the activities of people after initial exploration and settlement, depending on the region, beginning in the mid-1500s. Native American sites can also reflect the historic era. Prehistoric and historic-era sites contain artifacts, cultural features, subsistence remains, and human burials.

Paleontological resources are the fossil remains of prehistoric flora and fauna, or traces of evidence of the existence of prehistoric flora and fauna. Paleontological resources are contained within the geologic deposits or bedrock that underlies the soil layer.

Because development of sites for licensed cannabis business activities is outside the scope of the Proposed Program, licensed business activities would not involve construction activities or other land disturbance with potential to encounter any archeological or paleontological resources. While business operations may occur within historic structures, it is very unlikely that such activities would have a substantial adverse effect on these resources because any such impacts would be associated with site development (i.e., modifications to the building to accommodate the cannabis business). Such development would occur in accordance with all applicable local, State, and federal regulatory requirements, including but not limited to those related to cultural resources. It is within the jurisdiction and responsibility of local agencies to ensure that modifications to historic structures comply with applicable regulations, including CEQA. This review may include evaluation and issuance of local authorizations, such as permits or licenses, to conduct site development activities. Therefore, these topics are not discussed further.

It is possible that outdoor and mixed-light cultivation conducted pursuant to a microbusiness license could involve ground disturbance, which may encounter previously undiscovered archaeological resources. However, this is not anticipated to result in a substantial adverse effect on any such resources, for several reasons: (a) the small size of cultivation area allowed for microbusiness activities and inherently limited extent of potential ground disturbance; (b) many microbusiness licenses would use indoor or mixed-light cultivation techniques

which do not involve ground disturbance; (c) many small outdoor cultivation operations use aboveground pots and containers, limiting potential ground disturbance; (d) most cultivators would be unlikely to use heavy farm equipment such as plows or tractors that could result in substantial ground disturbance on a 10,000-square-foot site; and (e) local, State, and federal regulatory requirements, including but not limited to those related to protection of archeological resources and handling of human remains.

In conclusion, the Proposed Program would not: cause a substantial adverse change in the significance of a historical or archaeological resource; directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or disturb any human remains. Therefore, the impacts of the Proposed Program on cultural and paleontological resources would be **less than significant**.

Geology, Soils, and Seismicity

The Proposed Program would not include construction of structures that could be subject to earthquake-related hazards, unstable soils, expansive soils, or other geotechnical hazards, and it would not entail construction of septic or other wastewater disposal systems. The Proposed Program would not increase geologic or seismic hazards, construct structures on unstable soils, or create wastewater systems in unsuitable soils. Additionally, the Proposed Program would not result in soil erosion or the loss of topsoil. Therefore, the Proposed Program would have **no impact** on geological resources.

Hydrology and Water Quality

Cannabis businesses licensed under the Proposed Program, which include distributors, retailers, testing laboratories, and microbusinesses, would not cause impacts on hydrology and water quality. These businesses would generally operate indoors and would not have a direct mechanism to affect water quality. Those businesses that do generate wastewater would be required to dispose of it in accordance with applicable laws and regulations, such as those governing the disposal of wastewater from laboratories. Outdoor components of these businesses, such as parking, would be subject to local stormwater management requirements. Additionally, site development is not covered under the Proposed Program. This analysis assumes that local jurisdictions would ensure and enforce compliance with local requirements.

Regarding microbusiness-related cultivation operations that may be licensed by the Bureau under the Proposed Program, see further discussion in Section 4.8, *Hydrology and Water Quality*, in Chapter 4 of CDFA's Draft PEIR (Appendix B of this IS/ND), which describes the manner in which regulatory programs of the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs), as well as the regulatory requirements established by CDFA, would ensure that issues such as water diversions, use of pesticides, and site runoff would result in a less-than-significant impact on hydrology and water quality.

In conclusion, the Proposed Program would not: violate any water quality standards or waste discharge requirements; substantially deplete groundwater supplies or interfere substantially with groundwater recharge; substantially alter the existing drainage pattern of the site or area; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of

polluted runoff; otherwise substantially degrade water quality; place housing within a 100-year flood hazard area, or structures which would impede or redirect flood flows; or expose people or structures to a significant risk of loss, injury or death involving flooding or inundation by seiche, tsunami, or mudflow. Therefore, the Proposed Program's impact on hydrology and water quality would be **less than significant**.

Land Use and Planning

Cannabis business operations, such as distribution, retail sale, and testing, that would be licensed under the Proposed Program would not cause impacts on land use. As required by MAUCRSA, licensees would be required to comply with site-specific regulations and requirements of the local jurisdiction, including plans and policies related to land use such as General Plans, Specific Plans, and zoning ordinances. This analysis assumes that local jurisdictions would ensure and enforce local requirements.

In addition, the businesses licensed by the Bureau under the Proposed Program would not be located on land use types that would typically physically divide an established community, such as construction of a road or railway through an existing developed area.

In addition, many cities and counties have adopted local ordinances related to cannabis businesses that include measures to avoid planning conflicts and maintain community character. Examples include limiting businesses to particular zoning districts, and regulating security, odors, and other aspects of these businesses. Some local jurisdictions have opted to ban cannabis businesses altogether.

In conclusion, the Proposed Program would not physically divide an established community; or conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. The Proposed Program would cause **no impact** related to land use and planning.

Mineral Resources

The Proposed Program would not include any activities that would have the potential to affect mineral production sites. The Surface Mining and Reclamation Act requires that local jurisdictions enact planning procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans. On this basis, it is presumed that counties would, as needed and as applicable, encourage the conservation (i.e., protection from incompatible land uses) of areas designated as having substantial potential for mineral extraction and discourage development that would substantially preclude the future development of mining facilities in these areas. The potential for the extraction of substantial mineral resources from lands classified by the State as areas that contain mineral resources (Mineral Resource Zone [MRZ]-3) would be considered by counties at a local level when making land use decisions. The Proposed Program would not result in the loss of availability of a known mineral resource that is valuable to the state or locally. For these reasons, the Proposed Program would have a **less-than-significant** impact on the availability or use of a known, valuable mineral resource.

Population and Housing

As described in the Standardized Regulatory Impact Assessment prepared for the Bureau in anticipation of its MCRSA regulations (UCAIC 2017), the total increase in the number of jobs across the state as a result of commercial cannabis licensing by the Bureau has been estimated in the low thousands and, therefore, would not create a substantial number of new jobs that could induce population growth. The Proposed Program also does not include construction of new housing or displace existing housing, and would not result in construction of infrastructure or include other activities that could indirectly induce or remove an obstacle to population growth. Therefore, the Proposed Program would have no potential to cause adverse effects related to population growth or housing demand, and the Proposed Program would have a **less-than-significant** impact on population and housing.

Recreation

Under the Proposed Program, cannabis business operations would not be allowed on public lands that may be used for recreation. Although some licensed activities may be located near recreational areas, the Proposed Program would not include any actions or cause population growth that would affect the availability or use of recreation sites. As such, it would not have any potential to cause or accelerate physical deterioration of recreational facilities, or include or require construction or expansion of such facilities. The Proposed Program would have **no impact** on recreation.

Tribal Cultural Resources

Tribal cultural resources (TCRs) include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are included or determined to be eligible for inclusion in the California Register of Historic Resources (CRHR); included in a local register of historical resources; or determined by a lead agency, in its discretion and supported by substantial evidence, to be significant under CRHR criteria (PRC Section 21074). As such, TCRs may contain physical cultural remains (i.e., materials found in archaeological sites), or they may be places within the natural landscape.

As with cultural and paleontological resources, the Proposed Program would not result in construction activities and would have very limited potential for land disturbance, and therefore would not have the potential for a substantial adverse effect on TCRs. Furthermore, the Bureau has conducted outreach to Native American tribes throughout California as part of this CEQA process and in compliance with Assembly Bill 52. Through the consultation activities conducted to date, the Bureau has not received any information that suggests that impacts on TCRs are a substantial concern. The Proposed Program would not result in an adverse change in the significance of a tribal cultural resource. In conclusion, the Proposed Program would have a **less-than-significant** impact on TCRs.

Utilities and Service Systems

Cannabis business operations (distribution, retail sale, testing, and microbusiness cultivation and manufacture) that would be licensed by the Bureau under the Proposed Program would use utilities (i.e., electricity, water, wastewater, and natural gas delivery and services) and service systems (i.e., wastewater treatment, stormwater treatment and solid waste disposal

systems). However, it is not anticipated that they would generate sufficient demand to exceed capacity or require new or expanded utility infrastructure in any given location, nor would they be expected to exceed the wastewater treatment requirements of a Regional Water Quality Control Board or require the construction of new wastewater treatment facilities. Additionally, the Proposed Program would not exceed landfill capacity, have insufficient water supplies available to serve the cannabis businesses, or fail to comply with statutes and regulations related to solid waste. For these reasons, the Proposed Program would have a **less-than-significant** impact with regard to utilities and service systems.

4.1 Aesthetics

4.1.1 Introduction

This section of the IS/ND presents the environmental setting and potential impacts on aesthetics (visual resources) that could occur as a result of business operations licensed under the Proposed Program. More specifically, this section evaluates potential impacts on scenic resources, public views of scenic vistas, visual character of potentially affected areas, and nighttime views from Proposed Program activities.

Information regarding aesthetics presented in this section is primarily based on the following sources:

- Relevant state, regional, and local rules, regulations, and requirements;
- Site visits to various testing laboratories and dispensaries and consultation with cannabis industry experts;
- Web-based research on cannabis distributors, retailers, testing laboratories, and associated topics, including online newspaper and magazine articles; and
- *CalCannabis Cultivation Licensing Program Draft Program Environmental Impact Report* (Draft PEIR), prepared by the California Department of Food and Agriculture (CDFA), included as **Appendix B** of this IS/ND.

4.1.2 Terminology

The term *aesthetics* refers to visual resources, the quality of what can be seen, and the overall visual perception of the environment, and may include such characteristics as building scale and mass, design character, and landscaping. Aesthetic impacts are analyzed through an examination of views and/or viewsheds. *Views* refer to visual access to and/or obstruction of prominent visual features, including specific visual landmarks and panoramic vistas. *Viewsheds* refer to the visual qualities of a geographic area. The geographic area is defined by the horizon, topography, and other natural features that give an area visual boundary and context. Viewshed impacts are typically characterized by the loss and/or obstruction of existing scenic vistas or other major views in the area of the project site that are available to the general public.

Visual character, visual quality, and visual sensitivity are three concepts used throughout this section. *Visual character* is the unique set of landscape features that combine to make a view, including native landforms, water, vegetation patterns, and built features (e.g., buildings, roads, and other structures). *Visual quality* is the intrinsic appeal of a landscape or scene resulting from the combination of natural and built features in the landscape. Natural and built features combine to form unique perspectives with varying degrees of visual quality. *Visual sensitivity* reflects the level of interest or concern that viewers and responsible land management agencies have for a particular visual resource with visual quality taken into account. Thus, visual sensitivity is a measure of how noticeable proposed changes might be in a particular setting and is determined based on the distance from a viewer, the contrast of the proposed changes, and the duration that a particular view would be available to viewers.

For example, areas such as scenic vistas, parks, trails, and scenic roadways typically have a high visual quality and visual sensitivity because these locales are publicly protected, appear natural, typically have long view durations, and have more commonly available close-up views. *Sensitive viewers* are individuals or groups that are particularly affected by changes to the aesthetics of the surrounding area.

4.1.3 Regulatory Setting

Federal Laws, Regulations, and Programs

National Scenic Byways Program

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) established the National Scenic Byways Program, implemented by the Federal Highway Administration (FHWA). Under the National Scenic Byways Program (23 U.S.C. §162), a roadway can be designated as a State Scenic Byway, a National Scenic Byway, or an All-American Road based upon intrinsic scenic, historic, recreational, cultural, archaeological, or natural qualities. A road must exemplify the criteria for at least one of these six intrinsic qualities to be designated a National Scenic Byway. For the All-American Road designation, criteria must be met for a minimum of two intrinsic qualities. The jurisdiction of the municipal, county, state, tribal, or federal government that governs the designated highway and the lands adjacent to it remains unchanged. The byway's intrinsic qualities are typically protected by those jurisdictions. The following designated Scenic Byways are located in California: Arroyo Seco Historic Parkway (Route 110), Death Valley Scenic Byway, Ebbetts Pass Scenic Byway, Route 1 – Big Sur Coast Highway, Route 1 – San Luis Obispo North Coast Byway, Tioga Road/Big Oak Flat Road, and Volcanic Legacy Scenic Byway (FHWA 2015, 2016).

Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act of 1968 was enacted to protect “certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations” (Section 1[b] of the Wild and Scenic Rivers Act [16 U.S.C. §§1271-1287], Public Law 90-542) (FHWA 2015). Protected rivers are designated as wild, scenic, or recreational rivers; segments of a given river may be designated with one or all of these classifications. California has approximately 189,454 miles of river, of which 1,999.6 miles (1 percent of the state's river miles) are designated as wild and scenic (National Wild and Scenic Rivers System 2016).

National Trails System Act

The National Trails System Act of 1968 established national recreation, scenic, and historic trails. National scenic trails are designated as such “to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass. National scenic trails may be located so as to represent desert, marsh, grassland, mountain, canyon, river, forest, and other areas, as well as landforms which exhibit significant characteristics of the physiographic regions of the Nation” (16 U.S.C. §1242) (National Park Service 2016). As of 2013, the National Trails System included 11 national scenic trails, 19 national historic trails, more than 1,200 national recreation trails, and six connecting and side

trails. Together the 30 scenic and historic trails total almost 54,000 miles in combined length (Federal Interagency Council on Trails 2014). In the National Trails System, four trails have segments in California: the Pacific Crest National Scenic Trail, Juan Bautista de Anza National Historic Trail, the Pony Express National Historic Trail, and the California National Historic Trail (National Park Service 2017). California is also home to 92 national recreational trails, totaling more than 1,100 miles (American Trails 2017).

State Laws, Regulations, and Programs

California Scenic Highway Program

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code under the jurisdiction of the California Department of Transportation (Caltrans), to preserve and enhance the natural beauty of California (Caltrans 2016). The State highway system includes designated scenic highways and those that are eligible for designation. Official designation requires a local governing body to enact a Corridor Protection Program that protects and enhances scenic resources along the highway. A properly enforced program can include the following actions (Caltrans 2016):

- Protect the scenic corridor from encroachment of incompatible land uses, such as junkyards, dumps, concrete plants, and gravel pits;
- Mitigate activities within the corridor that detract from its scenic quality by proper siting, landscaping, or screening;
- Prohibit billboards and regulate on-site signs so that they do not detract from scenic views;
- Make development more compatible with the environment and in harmony with the surroundings;
- Regulate grading to prevent erosion and minimize alteration of existing contours and to preserve important vegetative features along the highway;
- Preserve views of hillsides by minimizing development on steep slopes and along ridgelines; and
- Prevent the need for noise barriers (sound walls) by requiring a minimum setback for residential development adjacent to a scenic highway.

Local Laws, Regulations, Plans, and Policies

Cities and counties often have established general plan elements that provide land use compatibility guidelines and locally acceptable standards to reduce conflicts between land uses and planning intended for a given area. In addition, some cities and counties have adopted ordinances regulating cannabis businesses, including those that would be licensed under the Proposed Program, in some cases limiting operations by size and/or to specific land use designations and zoning areas. These types of regulations and compatibility requirements may have relevance to, or influence the potential for, aesthetic effects of cannabis business operations. In addition, some local jurisdictions have prohibited cannabis business operations.

Cannabis-related ordinances adopted by counties and cities may include requirements to specifically address the aesthetic effects of cannabis testing, distribution, transportation, and retail sales operations and microbusinesses. Appendix C, *Summary of Existing and Proposed Local Cannabis Business Regulations*, presents detailed information on county and city ordinances and requirements. For those local jurisdictions that have adopted ordinances or requirements allowing cannabis business operations, the requirements applicable to visual resources are generally similar in nature, falling into one or more of the following categories:

Setbacks. Local jurisdictions often require some types of cannabis business operations to be located a specified distance from adjacent property lines.

Sensitivity to nearby receptors. Similar to setback requirements, local jurisdictions may require additional measures specific to nearby sensitive receptors. These may also take the form of setbacks or odor control, but are often tied to the locations of sensitive receptors or defined sensitive use areas rather than property lines. Sensitive use areas are typically defined as schools, school bus stops, public parks, public libraries, licensed child care centers, and other youth-oriented areas. Sensitive use areas may be linked to zoning and land use designation requirements.

Building and landscaping restrictions. Some local jurisdictions require that cannabis business structures and landscaping conform with existing environmental baselines.

Lighting restrictions. Some local jurisdictions require that lighting associated with cannabis business operations be shielded to prevent light trespass into the night sky and/or glare onto adjoining parcels or rights-of-way, and/or require that indoor lighting be restricted to certain hours.

4.1.4 Environmental Setting

Proposed Program Location

Proposed Program activities could occur statewide, including urban/residential, rural/undeveloped, and agricultural areas. Given the nature of the facilities that the Bureau would license under the Proposed Program, the largest share of activities would likely occur in urban/suburban areas, with the exception of microbusinesses engaging in cultivation activities, which may occur in rural areas as well. Surrounding aesthetic characteristics may vary widely and would depend upon the existing visual character of a given location and its proximity to publicly available views, viewsheds, sensitive receptors, and related viewer sensitivities. The discussion below provides an overview of the most common site locations for cannabis business operations. Because of the wide variety of locations where cannabis business operations may occur, as well as the variety of city and county restrictions that are or may be placed on siting of cannabis business operations, these descriptions are not intended to encompass all possible site-specific environmental settings. Rather, these typical descriptions present the most likely representative locations for cannabis business operations, based on the most common restrictions placed by local jurisdictions on business operations siting, and the best available information known about cannabis business operations.

Most of the existing commercial cannabis businesses that would be licensed by the Bureau are typically located in urban/suburban areas, where municipal utility services are easily

accessible. Some types of these cannabis business operations, such as distributor storage buildings, are sited in industrial areas so that, when possible, operations can utilize existing or modified industrial infrastructure, including large, windowless buildings and security features. Generally, activities that occur indoors, including product storage, ventilation, and climate control of storage space, would not be visible to the public. Operational activities that may be visible to the public could include routine maintenance of the property grounds, transportation of products in and out of the facility, activities surrounding security and monitoring of the facility, retail sales in retail stores, and inspection and monitoring of sites. As discussed in Section 4.1.3, "Regulatory Setting," some cities and counties have adopted ordinances limiting the operation of cannabis business operations to designated areas or zones; in some cases, these regulations prohibit the operation of businesses within residentially zoned areas or establish setbacks from residences, schools, or other areas designated for sensitive uses.

State Scenic Highways

As described in Section 4.1.3, "Regulatory Setting," the State highway system includes designated scenic highways and those that are eligible for designation. These highways are identified in Section 263 of the Streets and Highways Code. **Figure 4.1-1** shows State-designated scenic highways (Caltrans 2016).

State Scenic Vistas

Vista points are informal pullouts where motorists can safely view scenery or park and relax. Typically, they include facilities such as walkways, interpretive displays, railings, benches, interpretive information, trash receptacles, monuments, and other pedestrian facilities that are accessible to the public. The locations of scenic vistas within California are shown in Figure 4.1-1 (Caltrans 2015).

Viewer Groups and Viewer Sensitivities

The location and size of individual commercial cannabis businesses licensed under the Proposed Program would depend on factors such as economics (fees, land availability, operational costs) and land use planning (specific cannabis-related restrictions or requirements adopted by local agencies). Proposed Program activities may occur in both rural and urban environments. Therefore, the viewer groups exposed to any particular commercial cannabis business site would range widely and may include nearby residents, employees of nearby businesses, patrons of these businesses, motorists, and/or recreationalists. Their associated viewer sensitivities would differ as well, depending on the site-specific characteristics of a particular cannabis business, its location, and the affected viewer groups.

Generally, residents have a heightened sensitivity to the surrounding visual character and quality because they have high frequency and duration of views and an expectation of a consistent setting. Employees and patrons of businesses generally have moderate sensitivity to their surroundings, with interest in both the built environment and natural landscapes. Motorists' viewing sensitivities can be highly variable, depending on the presence of scenic views, duration of time traveled, purpose and speed of travel, duration of the view, and other site-specific conditions. Recreationalists generally have higher sensitivities to the surrounding viewsheds because of the nature of their use for purposes of recreation and pleasure, often with the intent of enjoying the local natural landscapes.

Because many existing cannabis business sites are located in urban/suburban settings, viewers of cannabis business sites may include residents living nearby; motorists, pedestrians, and bicyclists sharing city and county streets and roadways; and other commercial business operators operating nearby. Generally, cannabis business operations occur primarily within buildings in areas shielded from windows and public views, with the exception of retailers, which often are more typical commercial business storefronts with street-fronting windows.

Light and Glare

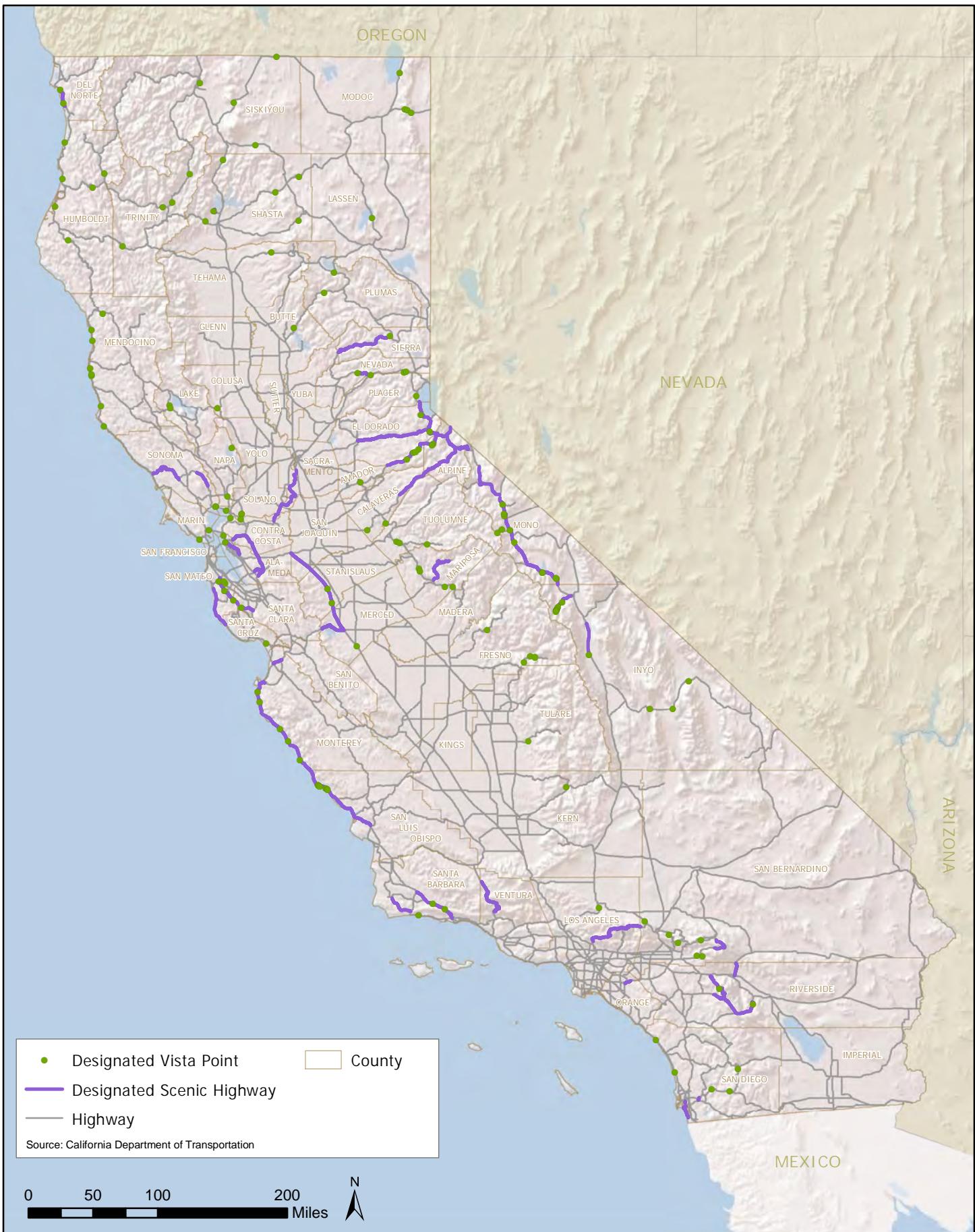
Nighttime lighting is necessary to provide and maintain safe and secure environments. Light that falls beyond the intended area of illumination is referred to as “light trespass.” The most common cause of light trespass is spillover light, which occurs when a lighting source illuminates surfaces beyond the intended area, such as when building security lighting or parking lot lights shine onto neighboring properties. Spillover light can adversely affect light-sensitive uses, such as residences, at nighttime. Both light intensity and type of fixture can affect the amount of light spillover. Fixtures that face downward and are shielded are typically less obtrusive than upward-facing and/or unshielded light fixtures.

Glare is caused by light reflections from pavement, vehicles, and building materials, such as reflective glass, polished surfaces, or metallic architectural features. During daylight hours, the amount of glare depends on the intensity and direction of sunlight.

Local regulations frequently require licensed cannabis business operations to have some form of security, which may include outdoor nighttime security lighting surrounding business operation sites.

4.1.5 Impact Analysis

This section describes the methodology and significance criteria that were used to analyze visual impacts. It then presents the analysis of potential environmental impacts of the Proposed Program.



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Methodology

Because Proposed Program activities may take place in a variety of locations and settings throughout the state, many of which are currently unknown, it is not feasible to assess site-specific impacts on views, viewsheds, visual character, or visual quality or the level of sensitivity from potential nearby receptors. In addition, the size and characteristics of a given cannabis business, and therefore the associated effects on surrounding visual character and quality, can vary widely as a result of operational practices employed by a particular cannabis business and any local jurisdiction ordinances for commercial cannabis businesses that may be in place. In addition, aesthetics analyses should consider effects of a project on the general environment of persons, and not on particular persons. (*Eureka Citizens for Responsible Gov't v. City of Eureka*, [2007] 147 Cal. App. 4th 357, 376.) Therefore, this analysis focuses on the primary activities that could, in general, affect visual character and quality.

Significance Criteria

For the purposes of this analysis, based on Appendix G of the Guidelines, the Proposed Program would result in a significant impact related to aesthetics if it would:

- A. Have a substantial adverse effect on a scenic vista;
- B. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- C. Substantially degrade the existing visual character or quality of the site and its surroundings; or
- D. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

Environmental Impacts of the Proposed Program

Impacts of Distribution, Retail Sale, Laboratory Testing, and Microbusiness Manufacturing Activities

Impact AES-1: Result in a substantial adverse effect on a scenic vista, scenic resource, or State-designated scenic highway, and/or the existing visual character or quality of a site and its surroundings. (Less than Significant)

The vast majority of the licensed activities associated with the distribution, retail sale, laboratory testing, and microbusiness manufacturing of commercial cannabis products would have no potential to affect scenic vistas, scenic resources, State-designated scenic highways, or the existing visual quality of a site and its surroundings. These activities primarily focus on various aspects of handling cannabis, whether it be acquiring cannabis from growers, testing the quality of cannabis, transporting cannabis, manufacturing cannabis products, or selling packaged and labeled cannabis products at medicinal or adult-use retail storefronts. Most of these activities would be required to take place out of public view; therefore, none of these activities should incur aesthetic impacts.

That said, each of these activities would require facilities in which to store, sell, test, or manufacture commercial cannabis goods. Although unlikely, it is possible that development of these facilities would result in potential degradation to a scenic vista, scenic resource, or State-designated scenic highway and/or the existing visual character or quality of a site and its surroundings. Such impacts, however, would be more likely to occur as part of site development and, as a result, would be evaluated by the local agency during its approval process for site development.

Site development falls outside of the scope of the Proposed Program. Potential construction activities associated with site development would need to be performed in accordance with all applicable local, State, and federal regulatory systems, including but not limited to those related to scenic resources and visual character/quality. As with any local business, local agencies would have responsibility for ensuring that site development complies with applicable regulations, including CEQA, through review and issuance of local authorizations, such as permits and licenses, to conduct site development. Site development activities are more fully considered in the cumulative impact analysis contained in Chapter 5, *Mandatory Findings of Significance*, of this IS/NR.

Because of the small likelihood of impacts from the distribution, retail sale, laboratory testing, or manufacture of commercial cannabis goods on scenic resources and visual character/quality, and the requirement for adherence to local laws, ordinances, and regulations, the Proposed Program would have a **less-than-significant** impact on a scenic vista, scenic resource, or State-designated scenic highway and the existing visual character or quality of a site and its surroundings.

Impact AES-2: Create a new source of substantial light or glare that would adversely affect daytime or nighttime views. (Less than Significant)

Although the cannabis businesses that the Bureau will license under the Proposed Program would utilize nighttime lighting for security purposes, the issuance of licenses as part of the Proposed Program is contingent upon licensed commercial cannabis premises meeting the local jurisdiction's requirements related to zoning and land use compatibility. Many local jurisdictions have restrictions on outdoor lighting for commercial businesses, including requirements that outdoor lighting be downward facing and/or shielded.

In addition to general local jurisdiction zoning and land use compatibility requirements, some commercial cannabis business-specific local ordinances have requirements intended to reduce potential impacts from outdoor lighting. For example, in Los Angeles County, outdoor lighting for cannabis dispensaries must be hooded or oriented to deflect light away from adjacent properties.

Finally, the vast majority of commercial cannabis businesses would be located in commercial or industrial settings, which would not have viewer groups (e.g., residences) that would be substantially adversely affected by nighttime lighting.

For these reasons, the impact on aesthetics from light or glare would be **less than significant**.

Impacts Related to Microbusiness Cultivation

CDFA's Draft PEIR (Appendix B of this IS/ND) examined impacts on aesthetics that may occur as a result of licensed cannabis cultivation. The findings of the Draft PEIR with regard to aesthetic impacts resulting from cultivation are summarized as follows:

- **Substantial adverse effect on a scenic vista, scenic resource, or State-designated scenic highway.** Potential visual effects, including impacts on scenic vistas, scenic resources, and State-designated scenic highways associated with cultivation activities would generally include the presence of cultivation personnel and operation of equipment used for cultivation, which may be either temporary or permanent in nature. The Draft PEIR found that this impact would be less than significant.
- **New source of substantial light or glare.** Under CDFA's regulations, outdoor security lighting associated with all types of cultivation operations (outdoor, indoor, mixed-light, and nurseries) would be required to be shielded and downward facing, limiting the potential for light trespass. In addition, CDFA's regulations require that mixed-light cultivation operations shield lights used for cultivation from sunset to sunrise to avoid nighttime glare. Lighting used in indoor cultivation is not expected to be visible from outside the facility. For these reasons, the Draft PEIR found that this impact would be less than significant.

Microbusiness cultivation would be required to comply with CDFA's regulations, and the aesthetic impacts of the microbusiness cultivation under the Proposed Program are expected to be the same as other types of cultivation analyzed in CDFA's Draft PEIR. Impacts would be **less than significant**.

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4.2 Air Quality

4.2.1 Introduction

This section of the IS/ND for the Bureau's Proposed Program presents the environmental setting and potential impacts of the Proposed Program related to air quality. Greenhouse gas (GHG) emissions from the Proposed Program are discussed in Section 4.4, *Energy Use and Greenhouse Gas Emissions*.

Information regarding air quality presented in this section is primarily based on the following sources:

- Publicly available literature on methods and equipment needs relating to cannabis distribution, retail sale, testing, and microbusiness operations;
- Site visits to existing commercial cannabis businesses;
- Available data from the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (USEPA) on existing air quality conditions in California and relevant regulations;
- *Economic Costs and Benefits of Proposed Regulations for the Implementation of the Medical Cannabis Regulation and Safety Act Standardized Regulatory Impact Assessment* prepared for the Bureau (Bureau SRIA) by the University of California Agricultural Issues Center (UCAIC 2017);
- *Economic Impact Analysis of Medical Cannabis Cultivation Program Regulations Standardized Regulatory Impact Assessment* prepared for the California Department of Food and Agriculture (CDFA SRIA) (ERA Economics 2017); and
- *CalCannabis Cultivation Licensing Program Draft Program Environmental Impact Report* (Draft PEIR), prepared by the California Department of Food and Agriculture (CDFA), included as **Appendix B** of this IS/ND.

4.2.2 Regulatory Setting

Federal Laws, Regulations, and Standards

Clean Air Act

The federal Clean Air Act (CAA) and the 1990 CAA Amendments govern air quality in the United States and are administered by USEPA. The CAA authorizes USEPA to set limits on the concentrations in the air of certain air pollutants and grants it the authority to place limits on emission sources. USEPA implements a variety of programs under the CAA that focus on reducing ambient air concentrations of pollutants that cause smog, haze, acid rain, and serious health effects and on phasing out ozone-depleting chemicals.

National Ambient Air Quality Standards

As required by the CAA, USEPA has established National Ambient Air Quality Standards (NAAQS) for six major air pollutants. These pollutants, known as criteria air pollutants, are

ozone (O_3); particulate matter (PM), specifically PM₁₀ (PM with aerodynamic radius of 10 micrometers or less) and PM_{2.5} (PM with aerodynamic radius of 2.5 micrometers or less); carbon monoxide (CO); nitrogen dioxide (NO₂); sulfur dioxide (SO₂); and lead. California also has established ambient air quality standards, known as the California Ambient Air Quality Standards (CAAQS), which generally are more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide (H₂S), vinyl chloride, and visibility-reducing particles. CAAQS are discussed in more detail below in “State Laws, Ordinances, Regulations, and Standards.”

The federal and state standards for criteria air pollutants are shown in **Table 4.2-1**. The primary standards have been established to protect public health. The secondary standards are intended to protect the nation’s welfare and account for air pollutant impacts on soil, water, visibility, materials, vegetation, and other aspects of the general welfare.

A basic measure of air quality is whether an air basin is meeting the NAAQS and CAAQS. Areas that do not exceed these standards are designated as being in attainment, areas that exceed these standards are designated as nonattainment areas, and areas for which insufficient data are available to make a determination are designated unclassified. As part of its enforcement responsibilities, USEPA requires each state with nonattainment areas (NAAs) to prepare and submit a State Implementation Plan (SIP) that demonstrates the means by which it will attain the federal standards, and requires that a maintenance plan be prepared for each former NAA for which the state subsequently has demonstrated attainment of the standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs, within the time frame identified in the SIP.

National Emission Standards for Hazardous Air Pollutants

The National Emission Standards for Hazardous Air Pollutants are standards for major sources of hazardous air pollutants (HAPs). The standards are contained in 40 Code of Federal Regulations part 61, promulgated before the 1990 CAA Amendments, and part 63, promulgated as part of the CAA Amendments in 1990. Part 61 regulates seven HAPs: asbestos, beryllium, mercury, vinyl chloride, benzene, arsenic, and radon/radionuclides. Part 63 establishes a list of 187 additional HAPs. The maximum achievable control technology standards of 40 Code of Federal Regulations part 63 regulate major sources of HAPs as well as certain specific source categories of HAPs. A major source is defined as a source having the potential to emit 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. The Proposed Program would not fall under any of the specific source categories identified in the standards.

Table 4.2-1. State and Federal Ambient Air Quality Standards

Contaminant	Averaging Time	State Standards ¹	Federal Primary Standards ²	Federal Secondary Standards
Ozone (O₃)	1-hour	0.09 ppm	See footnote 3	—
	8-hour	0.070 ppm	0.070 ppm ³	Same as primary
Carbon Monoxide (CO)	1-hour	20 ppm	35 ppm	—
	8-hour	9.0 ppm	9.0 ppm	—
Nitrogen Dioxide (NO₂)	1-hour	0.18 ppm	0.100 ppm ⁴	—
	Annual arithmetic mean	0.030 ppm	0.053 ppm	Same as primary
Sulfur Dioxide (SO₂)	1-hour	0.25 ppm	0.075 ppm	0.5 ppm ⁷
	24-hour	0.04 ppm	0.14 ppm	—
	Annual arithmetic mean	—	0.030 ppm	—
Particulate Matter (PM₁₀)	24-hour	50 µg/m ³	150 µg/m ³	Same as primary
	Annual arithmetic mean	20 µg/m ³	—	—
Fine Particulate Matter (PM_{2.5})	24-hour	—	35 µg/m ³	Same as primary
	Annual arithmetic mean	12 µg/m ³	12 µg/m ³	15 µg/m ³
Sulfates	24-hour	25 µg/m ³	—	—
Lead⁵	30-day average	1.5 µg/m ³	—	—
	Calendar quarter	—	1.5 µg/m ³	—
	Rolling 3-month average	—	0.15 µg/m ³	Same as primary
Hydrogen Sulfide (H₂S)	1-hour	0.03 ppm	—	—
Vinyl Chloride⁵ (chloroethene)	24-hour	0.010 ppm	—	—
Visibility-reducing Particles	8-hour (10:00 to 18:00 PST)	See footnote 6	—	—

Notes: ppm = parts per million; USEPA = U.S. Environmental Protection Agency; µg/m³ = micrograms per cubic meter

¹ California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter – PM₁₀, and visibility-reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour, or 24-hour average (i.e., all standards except for lead and the PM₁₀ annual standard), then some measurements may be excluded. In particular, measurements are excluded that CARB

determines would occur less than once per year on the average. The Lake Tahoe carbon monoxide standard is 6.0 ppm, one-half the national standard and two-thirds the state standard.

- ² National standards shown are the primary standards designed to protect public health. National air quality standards are set by USEPA at levels determined to be protective of public health with an adequate margin of safety. National standards other than for ozone, particulates, and those based on annual averages are not to be exceeded more than once per year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the three-year average of the 4th highest daily concentrations is 0.075 ppm (75 parts per billion) or less. The 24-hour PM₁₀ standard is attained when the three-year average of the 99th percentile of monitored concentrations is less than 150 µg/m³. The 24-hour PM_{2.5} standard is attained when the three-year average of 98th percentiles is less than 35 µg/m³. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM₁₀ is met if the three-year average falls below the standard at every site. The annual PM_{2.5} standard is met if the three-year average of annual averages spatially averaged across officially designed clusters of sites falls below the standard.
- ³ The national 1-hour ozone standard was revoked by USEPA on June 15, 2005. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. However, the attainment status has not yet been updated based on this revised 8-hour standard. It is likely that the region will remain in nonattainment.
- ⁴ To attain this standard, the three-year average of the 98th percentile of the daily maximum 1-hour average at each monitoring station within an area must not exceed 0.100 ppm (effective January 22, 2010).
- ⁵ CARB has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure below which there are no adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- ⁶ Statewide Visibility-Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.
- ⁷ The secondary standard is for a 3-hour averaging time and should not be exceeded more than once per year.

Sources: CARB 2016a, USEPA 2017a

Corporate Average Fuel Economy Standards

The Corporate Average Fuel Economy (CAFE) standards, which were first enacted by Congress in 1975, require vehicle manufacturers to comply with federally established gas mileage or fuel economy standards. These standards are set and regulated by the National Highway Traffic Safety Administration (NHTSA), with testing and data support from USEPA.

The issued rules include fuel economy standards for both light- and heavy-duty vehicles. On September 15, 2011, USEPA and NHTSA issued a final rule on GHG emission standards and fuel efficiency standards for medium- and heavy-duty engines and vehicles model years 2014-2018. (76 Fed. Reg. 57106.) On August 28, 2012, USEPA and NHTSA issued a joint final rulemaking to establish 2017-2025 GHG emission and CAFE standards for light-duty vehicles. (77 Fed. Reg. 62624.) In March 2017, USEPA announced that the CAFE standards would be revisited as part of a mid-term evaluation to determine whether the 2022-2025 standards are appropriate (USEPA 2017b). A decision would be required by April 2018 (USEPA 2017b).

Nonroad Emission Regulations

USEPA has adopted emission standards for different types of nonroad engines, equipment, and vehicles. For nonroad diesel engines, USEPA has adopted multiple tiers of emission standards.

USEPA signed a final rule on May 11, 2004, introducing the Tier 4 emission standards, to be phased in between 2008 and 2015 (40 C.F.R. Parts 9, 69, et al., Control of Emissions of Air Pollution from Nonroad Diesel Engines and Fuel; Final Rule, June 29, 2004). The Tier 4 standards require that emissions of PM and nitrogen oxides (NO_x) be further reduced by about 90 percent. Such emission reductions can be achieved through the use of control technologies, including advanced exhaust gas after-treatment. To enable sulfur-sensitive control technologies in Tier 4 engines, such as catalytic particulate filters and NO_x absorbers, USEPA also mandated reductions in sulfur content in nonroad diesel fuels. In most cases, federal nonroad regulations also apply in California, which has only limited authority to set emission standards for new nonroad engines. The CAA preempts California's authority to control emissions from new farm and construction equipment of less than 175 horsepower (CAA §209[e][1][A]) and requires California to receive authorization from USEPA for controls over other off-road sources (CAA §209[e][2][A]).

State Laws, Ordinances, Regulations, and Standards

California Clean Air Act and California Ambient Air Quality Standards

The State of California initiated its own air quality standards, the CAAQS, in 1969 under the mandate of the Mulford-Carrell Act. The CAAQS are goals for air quality within the state. The CAAQS generally are more stringent than the NAAQS. In addition to the six criteria pollutants covered by the NAAQS, CAAQS also regulate sulfates, H_2S , vinyl chloride, and visibility-reducing particles. These standards are listed in **Table 4.2-1**.

The California Clean Air Act (CCAA), enacted in 1988, provides a comprehensive framework for air quality planning. The CCAA requires NAAs to achieve and maintain the health-based CAAQS by the earliest practicable date. The CCAA is administered by CARB at the State level and by local air districts at the regional level; the air districts are required to develop plans and control programs for attaining State standards.

The CCAA requires NAAs in the state to prepare attainment plans, which are required to achieve a minimum 5 percent annual reduction in the emissions of nonattainment pollutants unless all feasible measures have been implemented. All air basins in California are either unclassified or in attainment of the NAAQS and CAAQS for CO, SO_2 , and NO_2 . Some air basins are classified as NAAs for the NAAQS and CAAQS for O_3 , PM_{10} , and $\text{PM}_{2.5}$. In addition, a few air basins have been classified as nonattainment for H_2S under the CAAQS. A portion of the South Coast Air Basin in Los Angeles County is designated as an NAA for the NAAQS for lead, while all other air basins are in attainment for the lead-related NAAQS and CAAQS.

CARB is responsible for ensuring implementation of the CCAA, meeting State requirements for the federal CAA, and establishing the CAAQS. CARB oversees activities of local air districts and is responsible for incorporating air quality management plans for local air basins into a SIP for USEPA approval. It also is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications.

Truck and Bus Regulation

On December 12, 2008, CARB approved a new regulation to substantially reduce emissions of diesel PM, NO_x, and other pollutants from existing on-road diesel vehicles operating in California. The regulation requires affected trucks and buses to meet performance standards and requirements between 2011 and 2023. Affected vehicles include on-road, heavy-duty, diesel-fueled vehicles with a gross vehicle weight rating great than 14,000 pounds. The regulation was updated in 2011 to provide more compliance flexibility and reflect the impact of the economic recession on vehicle activity and emissions.

Commercial Vehicle Idling Regulation

On October 20, 2005, CARB approved an Airborne Toxic Control Measure (ATCM) to limit idling of diesel-fueled commercial motor vehicles. This regulation was a follow-up to previous idling ATCMs, and it consists of new engine and in-use truck requirements, as well as idling emission performance standards. The regulation requires heavy-duty diesel engines of model years 2008 and newer to be equipped with a non-programmable system that automatically shuts down the engine after 5 minutes of idling or, optionally, meets a stringent NO_x idling emission standard (30 grams per hour) (CARB 2008). The regulation also is applicable to the operation of in-use trucks, requiring operators of both in-state and out-of-state registered, sleeper berth-equipped trucks to manually shut down their engines when idling more than 5 minutes at any location within California, beginning in 2008. Affected vehicles include diesel-fueled commercial vehicles with a gross vehicle weight rating greater than 10,000 pounds.

Heavy-duty On-board Diagnostic System Regulations

In 2004, CARB adopted a regulation requiring on-board diagnostic (OBD) systems on all heavy-duty engines and vehicles (i.e., gross vehicle weight rating greater than 14,000 pounds) of model year 2007 and later in California. CARB subsequently adopted a comprehensive on-board diagnostic regulation for heavy-duty vehicles of model years 2010 and later. The heavy-duty OBD regulation was updated in 2010, 2013, and 2016 with revisions to enforcement requirements, testing requirements, and implementation schedules.

Heavy-duty Vehicle Inspection Program

CARB's heavy-duty vehicle inspection program requires heavy-duty trucks and buses to be inspected for excessive smoke and tampering and for engine certification label compliance. Any heavy-duty vehicle (i.e., gross vehicle weight rating greater than 6,000 pounds) traveling in California, including vehicles registered in other states and foreign countries, may be tested. Tests are performed by CARB inspection teams at border crossings, California Highway Patrol weigh stations, fleet facilities, and randomly selected roadside locations. Owners of trucks and buses found in violation are subject to penalties starting at \$300 per violation.

California Standards for Diesel Fuel Regulations

California regulations require that diesel fuel with sulfur content of 15 parts per million (ppm) or less by weight be used for all diesel-fueled vehicles that are operated in California. The standard also applies to non-vehicular diesel fuel, other than diesel fuel used solely in

locomotives or marine vessels. The regulations also contain standards for the aromatic hydrocarbon content and lubricity of diesel fuels.

In-use Off-road Diesel Vehicle Regulation

In 2007, CARB adopted a regulation to reduce diesel PM and NO_x emissions from in-use, off-road, heavy-duty diesel vehicles in California. The regulation imposes limits on vehicle idling and requires fleets to reduce emissions by retiring, replacing, repowering, or installing exhaust retrofits to older engines. In December 2010, major amendments were made to the regulation, including a delay of the first performance standard compliance date to no earlier than January 1, 2014 (CARB 2011, 2016b). Personal-use vehicles and vehicles used solely for agriculture are exempt from this regulation (CARB 2016b).

Assembly Bill 1803

In 1983, the California State Legislature enacted Assembly Bill 1803, establishing a two-step process of risk identification and risk management to address the potential health effects from airborne toxic substances and protect public health. In the first step (identification), CARB and the California Office of Environmental Health Hazard Assessment (OEHHA) determine whether a substance needs to be formally identified as a toxic air contaminant (TAC) in California. In the second step (management), CARB reviews the emission sources of an identified TAC to determine whether any regulatory action is necessary to reduce the risk. The analysis includes a review of controls already in place, the available technologies and associated costs for reducing emissions, and the associated risk. Public outreach is an essential element in the development of a control plan and any control measures, so that CARB's efforts are cost-effective and appropriately balance public health protection and economic growth.

Using this process, CARB has adopted several ATCMs to reduce exposure to TACs. This includes several measures and controls to limit exposure of diesel PM by limiting vehicle idling and limiting the emission rate of engines through engine or exhaust control technologies. Other ATCMs are aimed at reducing exposure to several other sources of TACs, including benzene from retail service stations; hexavalent chromium from plating facilities and vehicle coatings; asbestos from construction, grading, quarrying, surface mining operations, and surfacing applications; formaldehyde from composite wood products; various TACs associated with combustion sources; ethylene oxide from sterilizers and aerators; perchloroethylene from dry cleaning; and TACs from thermal spraying, cooling towers, nonferrous metal mining, and automotive maintenance and repair.

Portable Engine Airborne Toxic Control Measure

The California Portable Engine ATCM is designed to reduce the PM emissions from portable diesel-fueled engines rated at 50 brake horsepower or larger. Some commercial cannabis businesses such as distributors are likely to use generators of this size as a backup in case of power outages, and this ATCM would apply to them.

Portable Equipment Registration Program

The statewide Portable Equipment Registration Program (PERP) establishes a system to uniformly regulate portable engines and portable engine-driven equipment units. After being registered in this program, engines and equipment units may operate throughout the

state without the need to obtain separate permits from individual air districts. Owners or operators of portable engines and certain types of equipment can voluntarily register their units to operate their equipment anywhere in the state. Operation of registered portable engines still may be subject to certain district requirements for reporting and notification. Engines with less than 50 brake horsepower are exempt from this program.

California Toxic Air Contaminant Act

Under the California Toxic Air Contaminant Act, the California Department of Pesticide Regulation (CDPR) is responsible for evaluating pesticide use of chemicals as TACs. CDPR lists pesticides that have been previously identified under federal laws as HAPs and pesticides identified as TACs by CDPR through the TAC statute evaluation process. The list contains 38 HAPs, as well as eight pesticides identified by CDPR through the TAC evaluation process.

California Department of Pesticide Regulation Air Program Activities

As described previously, the federal CAA requires each state to submit a SIP for achieving and maintaining the NAAQS, including the standard for O₃. NAAs are regions in California that do not meet either NAAQS or CAAQS. CARB and CDPR have developed a plan to track and reduce pesticide sources of volatile organic compounds (VOCs) in NAAs as part of the California SIP to meet the O₃ standard. CDPR is responsible for regulating agricultural and commercial structural pesticide products, and CARB is responsible for regulating pesticides in consumer products. CDPR, in collaboration with CARB, implements several activities related to air monitoring, evaluating health risk of pesticides in air, mitigating and controlling health risks of pesticides, and tracking and reducing pesticide VOC emissions.

California Division of Occupational Safety and Health

The California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) convened an advisory committee to determine whether there was a need to develop industry-specific regulations for medicinal cannabis facilities to protect workers from all health and safety hazards associated with the cannabis industry (Cal/OSHA 2017). As part of the analysis, the Cal/OSHA committee reviewed proposed regulations from the Bureau as well as CDPH and CDFA. Ultimately, Cal/OSHA found that the current Title 8 regulations are sufficient to cover any potential hazards associated with the cannabis industry and that no industry-specific regulations would be required (Cal/OSHA 2017).

Regional Laws, Plans, Policies, and Regulations

CARB has divided the state into 15 air basins, which are managed by 35 air districts. These air basins may be under the jurisdiction of more than one district. Air districts have substantial authority regarding air quality control, in regulating stationary source emissions and developing local attainment plans.

A discussion of applicable district rules and regulations is provided below. Summaries of general regulatory areas are presented with examples from selected districts. The specific rules cited below represent a large sample of districts throughout the state; however, because of their large number, not all applicable rules and regulations of all districts have been included. Further information on all district rules and regulations is available in CARB's District Rules database (CARB 2016c).

Portable Equipment Regulations

Many districts have adopted rules that require portable equipment to be registered with the district. Each air district may have different definitions of portable engines, based on the type of activity or duration of operation. These portable equipment rules generally contain registration protocols, source category standards (emission standards for pollutants such as NO_x, CO, VOCs, and PM), testing requirements, and reporting and recordkeeping requirements. These rules include San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 2280, Yolo-Solano Air Quality Management District (YSAQMD) Rule 3.3, San Diego County Air Pollution Control District (APCD) Rule 12.1, and Northern Sierra Air Quality Management District (AQMD) Rule 523.

Other districts may require operators of portable equipment to obtain permits to operate. Under these rules, portable engines may be subject to emission standards, administrative requirements, and monitoring and reporting requirements. These rules include South Coast Air Quality Management District (SCAQMD) Rule 203, Bay Area Air Quality Management District (BAAQMD) Regulation 2-Rule 1, Sacramento Metropolitan Air Quality Management District (SMAQMD) Rule 201, Santa Barbara County APCD Rule 201, Ventura County APCD Rule 10, San Luis Obispo County APCD Rule 202, Mojave Desert AQMD Rule 203, Imperial County APCD Rule 201, Monterey Bay Unified APCD Rule 200, and Mendocino County AQMD Rule 1-200.

In addition, districts may adopt permitting and registration rules that specifically apply to equipment used in agricultural operations. These rules include YSAQMD Rule 11.3, SMAQMD Rule 215, Santa Barbara County APCD Rule 1201, Ventura County APCD Rule 250, San Luis Obispo County APCD Rule 250, Mojave Desert AQMD Rule 1160.1, and Monterey Bay Unified APCD Rule 220.

As stated previously, the statewide PERP allows portable units to be registered and then operate anywhere within the state. Portable engines registered with PERP are exempt from district registration and permitting requirements, although certain district requirements for reporting and notification of operation may still apply.

Odor Regulations

In general, odor regulations fall into two categories: (1) they are covered through a general nuisance regulation or (2) they are covered under a separate air district rule. Nuisance regulations are described in the “Nuisance” discussion below, while odor-specific rules are described here.

California Health and Safety Code section 41700 prohibits discharge of air contaminants, including odors, that cause nuisance or annoyance to the public; however, odors related to agricultural operations are exempt under Health and Safety Code section 41704. The exemption for odors from agricultural operations is repeated in rules by many air districts that have established odor-specific rules, including Mendocino County AQMD Rule 1-400, SJVAPCD Rule 4102, Mojave Desert AQMD Rule 402, and SCAQMD Rule 402. Other air district rules, such as the North Coast Unified AQMD Rule 104, solely include odor regulations related to specific activities, such as rendering.

Nuisance Regulations

Nuisance is generally defined in air regulations as those discharges that cause annoyance or endanger the comfort, repose, or health of the public. Rules regarding nuisance air contaminants and emissions may limit the emissions from various sources. Exemptions for agricultural operations exist in many district rules, including Mendocino County AQMD Rule 1-400, SJVAPCD Rule 4102, San Diego County APCD Rule 51, Mojave Desert AQMD Rule 402, SCAQMD Rule 402, SMAQMD Rule 402, SLOCAPCD Rule 402, MBUAPCD Rule 402, Northern Sierra AQMD Rule II-205, and YSAQMD Rule II-2.5. However, some air districts either do not provide exemptions for agricultural operations in their nuisance rules (e.g., Santa Barbara County APCD Rule 303), or they do not have rules specific to nuisance air pollution emissions, other than burning (i.e., the North Coast Unified AQMD Rule 201).

Fugitive Dust Regulations

Rules regarding fugitive dust (i.e., PM in the air) aim to prevent, reduce, or mitigate fugitive dust emissions from agriculture and other anthropogenic sources. The North Coast Unified AQMD Rule 104 requires that reasonable precautions be taken to prevent particulate matter from becoming airborne, including conducting agricultural practices in a manner that minimizes the creation of airborne dust and covering open-bodied trucks used for transporting materials likely to create airborne dust. These requirements are similar to those stated in Mendocino County AQMD Rule 1-430. The SJVAPCD and the Santa Barbara County APCD addresses fugitive dust only in the context of PM10 and/or fugitive dust from construction and demolition activities. Mojave Desert AQMD Rule 403 and the SMAQMD Rule 403 exempt agricultural operations from fugitive dust regulations. Other districts do not exempt agriculture, such as San Diego County APCD Rule 54 and SCAQMD 403.

Agricultural/Open Burning Regulations

Air districts have established a variety of rules regulating the burning of vegetative agricultural materials generated by agricultural operations, including establishing requirements related to the type of incinerator or other equipment used to burn the waste, restricting burning to specific burn days based on air quality forecasts and observations, requiring permits from the air districts, and limiting burning to specific types of waste or limited quantities. The North Coast Unified AQMD has specific incinerator equipment requirements (Rule 104), and requires that a non-standard burn permit be obtained for open outdoor fires used in agricultural operations (Rule 201). The YSAQMD's Regulation VI establishes a variety of rules related to agricultural burning, including prohibitions, burn permits, restricted burning days, fire prevention, and specific rules regarding the burning of empty sacks or containers that contained pesticides or other toxic substances. Other air districts statewide have established similar agricultural burning regulations as those described above and include but are not limited to: Mendocino County AQMD Rule 2-300, SJVAPCD Rule 4103, San Diego County APCD Rule VI-101, Monterey Bay Unified APCD Rule 438, Mojave Desert AQMD Rule 444, SMAQMD Rule 501, and the SCAMQD Rule 444. The Santa Barbara County APCD is one of the few agricultural burning rules that directly discusses/allows the burning of confiscated cannabis (Rule 312).

Solvent Regulations

Some districts have adopted rules to limit emissions of VOCs from the use of organic solvents and other organic materials. These rules may contain VOC emissions limits, control measures,

reduction standards, and testing or monitoring requirements. In several districts, the application of pesticides is exempt under these rules. These rules include SJVAPCD Rule 4661, SCAQMD Rule 442, YSAQMD Rule 2.13, SMAQMD Rule 441, Santa Barbara County APCD Rule 317, San Diego County APCD Rule 66.1, San Luis Obispo County AQMD Rule 407, Mojave Desert AQMD Rule 442, Imperial County APCD Rule 417, and Monterey Bay Unified APCD Rule 416.

Rules in some districts may not contain exemptions for these operations. For example, BAAQMD Regulation 8–Rule 2 regarding organic compound emissions from miscellaneous operations contains an emissions limit of 6.8 kilograms (15 pounds) per day for materials with a concentration of more than 300 ppm total carbon on a dry basis. BAAQMD does not exempt pesticides from this rule.

Visible Emission Regulations

Rules regarding visible emissions may limit the duration, volume, or opacity of emissions from various sources. Exemptions for agricultural operations or pesticide spraying exist in certain district rules, including SJVAPCD Rule 4101, SCAQMD Rule 401, YSAQMD Rule 2.3, SMAQMD Rule 401, Santa Barbara County APCD Rule 302, San Diego County APCD Rule 50, San Luis Obispo County AQMD Rule 401, Monterey Bay Unified APCD Rule 400, and Mendocino County AQMD Rule 1-410. Other visible emission rules, such as BAAQMD Regulation 6, Mojave Desert AQMD Rule 401, and Northern Sierra AQMD Rule 202, may not provide these exemptions.

Local Laws, Plans, Policies, and Regulations

Local General Plans

Many city and county general plans contain goals, policies, and strategies related to air quality and air pollutant emissions. Applicable policies and strategies from these general plans include encouraging the use of alternative fuels, limiting idling time of vehicles and equipment, recommending appropriate practices for agriculture operations and construction, and encouraging the installation of emission control devices.

Local Odor Controls

Counties and cities frequently have nuisance provisions in their local zoning and public health codes to control the generation of objectionable odors and the proximity of objectionable odors to local sensitive receptors.

Local Cannabis Ordinances

Numerous counties and some cities have adopted or are considering adopting cannabis ordinances (see Appendix C, *Summary of Existing and Proposed Local Cannabis Business Regulations*). Some of these ordinances contain provisions for cannabis businesses to prevent airborne odors, and some mandate specific methods (e.g., air filtration or air scrubbers) to attain that objective. Many ordinances rely upon more qualitative standards and stipulate that cannabis business activities must not adversely affect the environment or public health, safety, or general welfare by creating dust, smoke, noxious gases, or odors.

4.2.3 Environmental Setting

The following discussion describes the location, meteorology and climate, criteria air pollutants and potential health impacts, TACs and their potential health impacts, and existing air quality relevant to the Proposed Program.

Proposed Program Location

California is divided into 15 air basins that are managed by 35 air districts, with responsibility for attaining and maintaining air quality within the state. The extent of each activity under the Proposed Program would vary throughout the air basins and would have the potential for varying air emissions. Air basins also are dissimilar in their ambient air quality and emissions standards. The existing air quality of each air basin and subregion is described in “Existing Air Quality” below.

Meteorology and Climate

As the cannabis business licensing program would be effective statewide, the meteorology and climate for the state are characterized very generally in this IS/ND. Because it is such a large area, California has substantial variability in climate, depending on specific locations within the state. Latitude, elevation, and proximity to the coast are the primary factors influencing specific climates. The following information on climate and meteorology was obtained from the Western Regional Climate Center (2016).

California extends between 32.5 degrees ($^{\circ}$) and 42 $^{\circ}$ north latitude and has an extensive coastline along the Pacific Ocean. The Coast Ranges in the west merge with the Cascade Range in northern California. The Cascades then extend southeastward until they merge into the Sierra Nevada. The Sierra Nevada, which parallels the coast, is located up to 150 miles farther inland. The Central Valley is a broad, flat valley between the Coast Ranges and the Sierra Nevada. The southern end of the Central Valley is closed off by the southern Sierra Nevada, joining the Tehachapi Mountains, which bend southwestward to join the Coast Ranges. Furthermore, a series of ranges continues southeastward to the southern border of California, from the point where the Tehachapi Mountains and the Coast Ranges join. This wide-ranging topography creates a variety of climates in the state.

In addition, the Eastern Pacific High, which is a strong, persistent area of high atmospheric pressure over the Pacific Ocean, is the major influence on regional climate. The Eastern Pacific High moves northward in summer, attaining its greatest strength and keeping away storm tracks. Therefore, California receives little or no precipitation from this source during that period. In winter, the Eastern Pacific High often retreats southward and decreases in intensity, allowing storm centers to swing into and across California. These storms bring widespread, moderate precipitation to the state.

The coastal and southern regions of California have a predominantly Mediterranean climate that is characterized by warm to hot, dry summers and cool, wet winters. The presence of the Pacific Ocean helps to moderate temperatures. The northern coastal area of California is characterized as having more of a maritime climate, with narrower temperature ranges and heavier rainfall. Warm winters, cool summers, small daily and seasonal temperature variation, and high relative humidity are characteristic of this area. A more continental climate is experienced further inland, resulting in wider temperature ranges during the year.

The Coast Ranges form a barrier to the west, keeping the interior from the strong flow of air off the Pacific Ocean. Therefore, farther to the east, winters are colder, summers are warmer, and precipitation is relatively greater on the coastal or western side of the major mountain ranges. The low-lying inland valleys, in particular the Central Valley, normally have subtropical temperatures with a dry summer season and a cool and foggy rainy season, similar to a hot Mediterranean climate. The desert regime east of the mountain ranges in southeastern California experiences a low relative humidity and high temperatures during the summer. Death Valley and the Mojave Desert are the hottest parts of California.

Because the dispersion of air pollutants is strongly associated with wind speed and wind direction, the general wind pattern in California also is important. California lies within the zone of westerly prevailing winds along with a high-pressure area over the northeast Pacific Ocean on the east side. The wind generally blows from the west or northwest during most of the year. Because of the state's mountain ranges, however, wind direction can be deflected and often is more a product of local terrain than of this prevailing westward circulation. In the Sacramento and San Joaquin Valleys, winds come from the north, caused by the compressed heating of air flowing out of the Great Basin, which creates pronounced heat waves in summer. In winter, the result usually is a rather mild temperature, accompanied by a dry, persistent wind. The Central Valley and the Southeastern Desert Basin experience a typical northwest wind in summer, reinforced by the dynamics of the thermal low-pressure area that is located over these areas. The Santa Ana wind flows out of the Great Basin into the Central Valley, the Southeastern Desert Basin, and the South Coast. The air in these areas typically is very dry. The winds are strong and gusty, particularly near the mouth of canyons that are oriented in the direction of the airflow. In the San Francisco Bay area, a diurnal wind pattern (offshore at night and onshore during the day) helps to carry locally produced air pollutants away from the Bay Area but creates problems for the regions immediately south and east of the source area. In the Los Angeles area, the basin is almost completely surrounded by mountains on the north and east. Coupled with the atmospheric inversion¹¹ layer, this topography causes a fairly regular diurnal daily wind pattern that tends to cause an accumulation of air pollutants in the basin.

Criteria Air Pollutants and Potential Health Impacts

Seven common criteria air pollutants are known to cause harm to human and environmental health. Ambient air concentration levels of criteria air pollutants are one metric used as an indicator of ambient air quality. A brief description of each criteria air pollutant and its adverse health effects is presented below.

Ozone

O_3 is formed by photochemical reactions between NO_x and reactive organic gases (ROGs) in the presence of sunlight rather than being directly emitted. O_3 is a pungent, colorless gas that is a component of smog. Elevated O_3 concentrations can result in reduced lung function, particularly during vigorous physical activity. This health problem can be particularly acute

¹¹ Atmospheric inversions are horizontal layers of air that increase in temperature with height. Such warm, light air often lies over air that is cooler and heavier. As a result, the air has a strong vertical stability, especially in the absence of strong winds (Environmental Encyclopedia 2003).

in sensitive receptors such as the sick, seniors, and children. O₃ levels peak during the summer and early fall months.

Carbon Monoxide

CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairment to central nervous system functions. CO passes through the lungs into the bloodstream, where it interferes with the transfer of oxygen to body tissues.

Nitrogen Oxides

NO_x contributes to other pollution problems, including a high concentration of fine PM, poor visibility, and acid deposition. Nitrogen dioxide (NO₂), a reddish-brown gas, and nitric oxide (NO), a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are referred to collectively as NO_x. NO_x is a primary component of the photochemical smog reaction. NO₂ can decrease lung function and may reduce resistance to infection.

Sulfur Dioxide

SO₂ is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO₂ levels in California. SO₂ irritates the respiratory tract, can injure lung tissue when combined with fine PM, and reduces visibility and the level of sunlight.

Reactive Organic Gases

ROGs are formed from combustion of fuels and evaporation of organic solvents. ROGs are the fraction of VOCs that are a prime component of the photochemical smog reaction. Individual ROGs can be TACs.

Particulate Matter

PM is the term used for a mixture of solid particles and liquid droplets suspended in the air. PM ranges from particles that can be seen with the naked eye, such as dust or soot, to particles that can only be seen with an electron microscope. Respirable PM of 10 microns in diameter or less is called PM₁₀. Fine particulate matter is a subgroup known as PM_{2.5} and is defined as particles with a diameter of 2.5 microns or less.

PM can be emitted directly from primary sources or formed secondarily from reactions in the atmosphere. Primary sources include windblown dust, grinding operations, smokestacks, and fires. Secondary formation of PM occurs from reactions of gaseous precursors within the atmosphere, such as the formation of nitrates from NO_x emissions from combustion activities.

PM can accumulate in the respiratory system and aggravate health problems. These health effects include cardiovascular symptoms; cardiac arrhythmias; heart attacks; respiratory symptoms; asthma attacks; bronchitis; alterations in lung tissue, lung structure, and respiratory tract defense mechanisms; and premature death in people with heart or lung disease. Those at particular risk of increased health decline from exposure to PM include people with preexisting heart or lung disease, children, and seniors.

Lead

Lead is a metal that can be found naturally in the environment and also is released from metal production processes and manufactured products. In the past, motor vehicles were the major contributor of lead emissions to the air. However, because of increased regulations, air emissions of lead from vehicles have declined. The major sources of lead emissions to the air today are ore and metal processing and piston-engine aircraft operating on leaded aviation gasoline. Lead can accumulate in the bones and adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and cardiovascular system. Lead exposure also affects the oxygen carrying capacity of the blood.

Toxic Air Contaminants and Potential Health Impacts

TACs are air pollutants that may lead to serious illness or increased mortality, even when present in relatively low concentrations. Hundreds of different types of TACs exist, with varying degrees of toxicity. Many TACs are confirmed or suspected carcinogens, or are known or suspected to cause birth defects or neurological damage. For some chemicals, such as carcinogens, no thresholds exist below which exposure can be considered risk-free. Examples of TAC sources used by businesses licensed under the Proposed Program include CO₂, pesticides, fertilizers, soil amendments, and fossil fuel combustion sources.

Sources of TACs include stationary sources, areawide sources, and mobile sources. USEPA maintains a list of 187 TACs, also known as hazardous air pollutants or HAPs. These HAPs are included on CARBs list of TACs (CARB 2016d). According to the California Almanac of Emissions and Air Quality (CARB 2009), many researchers consider diesel PM to be a primary contributor to health risk from TACs because particles in the exhaust carry many harmful organic compounds and metals, rather than being a single substance, as are other TACs. Unlike many TACs, outdoor diesel PM is not monitored by CARB because no routine measurement method exists. However, using the CARB emission inventory's PM₁₀ database, ambient PM₁₀ monitoring data, and results from several studies, CARB has made preliminary estimates of diesel PM concentrations throughout the state (OEHHA 2001).

In addition to diesel PM, the TACs posing the greatest health risk in California, based primarily on ambient air quality monitoring data, are acetaldehyde, benzene, 1, 3-butadiene, carbon tetrachloride, hexavalent chromium, *para*-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene (CARB 2009). In addition, pesticides are evaluated as potential TACs because of their potential health risks.

Sensitive Receptors

Sensitive receptors are those segments of the population most susceptible to the effects of poor air quality—children, the elderly, and individuals with preexisting serious health problems affected by air quality (e.g., asthma) (CARB 2005). Examples of locations that contain sensitive receptors are residences, schools and school yards, parks and playgrounds, daycare centers, nursing homes, and medical facilities. Residences include houses, apartments, and senior living complexes. Medical facilities can include hospitals, convalescent homes, and health clinics. Playgrounds include play areas associated with parks or community centers. Sensitive receptors located near commercial cannabis businesses licensed under the Proposed Program could include any of these groups depending on local land uses, zoning designations, and siting restrictions.

Existing Air Quality

Air quality impacts can occur over broad regions such as an air basin (e.g., California's San Joaquin Valley) or within local microclimates (e.g., the area surrounding a particular cannabis business licensed under the Proposed Program). As noted above, activities licensed under the Proposed Program could occur statewide. Therefore, this assessment discusses air quality on a regional, air basin level. Monitoring stations are located throughout the state and are used to determine the air quality of each of California's 15 air basins. **Appendix D** contains monitoring data for each of the criteria pollutants discussed below.

Monitoring data from 2014 through 2016 for 1-hour O₃ and 8-hour O₃ indicate that the air basins with O₃ exceedances are Lake County, Mojave Desert, Mountain Counties, Sacramento Valley, Salton Sea, San Diego, San Francisco Bay Area, San Joaquin Valley, South Central Coast, and South Coast (refer to Tables D-1 and D-2 in Appendix D) (CARB 2017). The South Coast Air Basin has the most exceedances, with more than 70 exceedances each year during 2014-2016.

For PM₁₀, all air basins with the exception of the North Central Coast recorded exceedances of the state standard (Table D-3). In general, the basins with the greatest number of exceedances are Great Basin Valleys, Salton Sea, San Joaquin Valley, South Central Coast, and South Coast. Monitoring data for PM_{2.5} indicate that all air basins other than Lake Tahoe and Northeast Plateau experienced at least one exceedance during 2014-2016 (Table D-4), with San Joaquin Valley recording the most (more than 25 exceedances per year).

As previously mentioned and as shown in Tables D-5 and D-6, all air basins in California are either unclassified or in attainment for the NAAQS and CAAQS for CO, SO₂, and NO₂ (CARB 2016e; USEPA 2016a, 2016b, 2016c). Some air basins are classified as NAAs for the NAAQS and CAAQS for O₃, PM₁₀, and PM_{2.5}. In addition, a few air basins have been classified as NAAs for H₂S under the CAAQS. A portion of the South Coast Air Basin in Los Angeles County is designated as an NAA for the NAAQS for lead, while all other air basins are in attainment for the lead-related NAAQS and CAAQS.

Table 4.2-2 summarizes air basin CAAQS and NAAQS nonattainment status and approximate cannabis production by region.

Table 4.2-2. Air Basin CAAQS and NAAQS Nonattainment Status and Approximate Cannabis Production by Region

Air Basin (Counties)	O ₃		PM ₁₀ *		PM _{2.5}		Cannabis Production Region**	Estimated 2016 Cannabis Production (lbs) by Region**
	NAAQS	CAAQS	NAAQS	CAAQS	NAAQS	CAAQS		
Great Basin Valleys (Alpine, Inyo, Mono)	X ⁵		X ⁵	X			Southeast Interior (portion), Intermountain (portion)	300,000 + 3,875,000
Lake County (Lake)							North Coast (portion)	4,150,000
Lake Tahoe (El Dorado, Placer)	X (NA-T)		X				Intermountain (portion)	3,875,000
Mojave Desert (Kern, Los Angeles, San Bernardino, Riverside)	X ¹	X	X ¹	X	X ¹		Southeast Interior (portion), South San Joaquin Valley (portion), South Coast (portion)	300,000 + 1,750,000 + 625,000
Mountain Counties (Amador, Calaveras, El Dorado, Mariposa, Nevada, Placer, Plumas, Sierra, Tuolumne)	X ²	X ²	X ²		X ²	X ²	Intermountain (portion), Southeast Interior (portion)	3,875,000
North Central Coast (Monterey, San Benito, Santa Cruz)	X (NA-T)		X				Central Coast (portion)	1,350,000
North Coast (Del Norte, Humboldt, Mendocino, Sonoma, Trinity)			X ⁶				North Coast (portion), Intermountain (portion)	4,150,000 + 3,875,000
Northeast Plateau (Lassen, Modoc, Siskiyou)			X ⁷				Intermountain (portion)	3,875,000
Sacramento Valley (Butte, Colusa, Glenn, Placer, Sacramento, Shasta, Solano, Sutter, Tehama, Yolo, Yuba)	X ³	X ³	X ³	X	X ³		Intermountain (portion), Sacramento Valley	3,875,000 + 1,000,000
Salton Sea (Imperial, Riverside)	X	X	X	X	X ⁸	X ⁸	Southeast Interior (portion)	300,000
San Diego (San Diego)	X	X	X		X		South Coast (portion)	625,000

Air Basin (Counties)	O ₃		PM ₁₀ *		PM _{2.5}		Cannabis Production Region**	Estimated 2016 Cannabis Production (lbs) by Region**
	NAAQS	CAAQS	NAAQS	CAAQS	NAAQS	CAAQS		
San Francisco Bay Area (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma)	X	X		X		X	Bay Area, Central Coast (portion), North Coast (portion), Sacramento Valley (portion)	175,000 + 1,350,000 + 4,150,000 + 1,000,000
San Joaquin Valley (Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare)	X	X		X	X	X	North San Joaquin Valley, South San Joaquin Valley (portion)	275,000 + 1,750,000
South Central Coast (San Luis Obispo, Santa Barbara, Ventura)	X ⁴	X		X		X ⁴	Central Coast (portion), South Coast (portion)	1,350,000 + 625,000
South Coast (Los Angeles, Orange, Riverside, San Bernardino)	X	X		X	X	X	South Coast (portion), Southeast Interior (portion)	625,000 + 300,000

Notes: NAAQS = National Ambient Air Quality Standards; NA-T = Nonattainment-Transition; CAAQS = California Ambient Air Quality Standard;
X = nonattainment of that ambient air quality standard

*All PM_{2.5} attainment status designations were based on the annual standard.

**Cannabis production by region includes an entire economic region, which may overlap with multiple air basins, and therefore is not the individual amount assigned to a particular air basin. The statewide total of 2016 cannabis production is \$13,500,000. Cannabis production regions consist of the following counties:

Bay Area production region includes Alameda, Contra Costa, San Francisco, and San Mateo Counties.

Central Coast production region includes Monterey, San Benito, San Luis Obispo, Santa Clara, and Santa Cruz Counties.

Intermountain production region includes Amador, Alpine, Calaveras, El Dorado, Lassen, Placer, Plumas, Modoc, Nevada, Shasta, Sierra, Siskiyou, and Trinity Counties.

North Coast production region includes Del Norte, Humboldt, Lake, Marin, Mendocino, Napa, and Sonoma Counties.

North San Joaquin Valley production region includes Madera, Merced, San Joaquin, and Stanislaus Counties.

Sacramento Valley production region includes Butte, Colusa, Glenn, Sacramento, Solano, Sutter, Tehama, Yolo, and Yuba Counties.

South Coast production region includes Los Angeles, Orange, San Diego, Santa Barbara, and Ventura Counties.

South San Joaquin Valley production region includes Fresno, Kern, Kings, and Tulare Counties.

Southeast Interior production region includes Imperial, Inyo, Mariposa, Mono, Riverside, San Bernardino, and Tuolumne Counties.

Notes on Attainment Status:

A = attainment; N = nonattainment; U = unclassified; U/A = unclassified/attainment.

- ¹ Mojave Desert Air Basin classifications: O₃ – N for all but eastern portions of San Bernardino and Riverside Counties; PM₁₀ – N for San Bernardino, Riverside, and portions of Kern Counties, U/A for all other areas; PM_{2.5} and H₂S – N for San Bernardino County, U for all other areas.
- ² Mountain Counties Air Basin classifications: CAAQS O₃ – N for Nevada, Placer, El Dorado, Calaveras, and Mariposa Counties, U/A for Plumas, Sierra, Amador, and Tuolumne Counties; CAAQS PM_{2.5} – N for part of Plumas County, U/A for all other areas; NAAQS O₃, this air basin is classified as N for all counties within the air basin except Plumas and Sierra Counties, which are classified as U; PM₁₀ – N for all counties except Amador and Tuolumne Counties, which are U; NAAQS PM_{2.5} – U for all counties except Plumas County, which is N.
- ³ Sacramento Valley Air Basin classifications: CAAQS O₃ – N for Butte, Sutter, Placer, Sacramento, Yolo, and Solano Counties, U/A for all other areas; PM₁₀ – N for Sacramento County, U for all other counties; NAAQS O₃, the Sacramento Valley Air Basin is classified as N for Butte, Placer, Sacramento, Shasta, Solano, Tehama, and Yolo Counties; Colusa and Glenn Counties are classified as A; and the remainder of the air basin is classified as NA-T; PM_{2.5} – N for Butte County, A for Colusa, Glenn, Placer, Sacramento, Shasta, Sutter, and Yuba Counties, U for the remainder of the air basin.
- ⁴ South Central Coast Air Basin classifications: O₃ – N for Ventura County and the eastern portion of San Luis Obispo County, U/A for all other areas; PM_{2.5} – A for San Luis Obispo and Ventura Counties, U for Santa Barbara County.
- ⁵ Great Basin Valleys Air Basin classifications: O₃ – N for Inyo and Mono Counties, U for Alpine County; PM₁₀ – N for portions of Mono and Inyo Counties, U/A for all other areas.
- ⁶ North Coast Air Basin classifications: PM₁₀ – A for Del Norte, Sonoma, and Trinity Counties, N for the remainder of the air basin.
- ⁷ Northeast Plateau Air Basin classifications: PM₁₀ – A for Siskiyou County, N for the remainder of the air basin.
- ⁸ Salton Sea Air Basin classifications: CAAQS PM_{2.5} – N for a portion of Imperial County, U for all other areas; NAAQS PM_{2.5} – N for Imperial County, A for the remainder of the air basin.

Sources: USEPA 2016b, 2016c; ERA Economics 2017

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Nuisance Odors

Cannabis plants and products emit as many as 233 volatile compounds (Rice and Koziel 2015) and many are known to emit a distinctive odor that may be detectable beyond the boundaries of licensed cannabis premises (Mendocino County 2016).

The determination of odors as offensive or a “nuisance,” particularly cannabis, is quite often subjective and based on a number of factors. For example, the Oregon judicial system found that cannabis odors can be offensive to some people and enjoyable to others (Los Angeles Times 2015). The Oregon judicial system also found that the perception of whether a cannabis odor was offensive was linked to the intensity, duration, and frequency of the odor and the location at which the odor occurred (i.e., outdoors versus at a residence) (Los Angeles Times 2015). Impacts from cannabis odors identified by Denver Environmental Health in Denver, Colorado, have been reported to include headaches, eye and throat irritation, nausea, discomfort being outside (e.g., exercising, gardening, socializing), mental stress, and lack of desire to entertain due to strong odors (Denver Environmental Health 2016).

Following complaints regarding odors, some local agencies have begun requiring buffers between sensitive receptors and cannabis businesses, requiring implementation of odor control technologies and odor control plans, establishing qualitative or quantitative odor limits, and restricting cannabis business locations (Yakima Herald 2016). As an example, Monterey County and Marin County require that cannabis businesses must incorporate odor prevention devices and techniques to ensure that odors are not detectable off site (Monterey County 2016; Marin County 2015). Many counties and cities expressly prohibit smoking or otherwise consuming cannabis products either on or near the premises (e.g., Alameda County and Kern County). While San Francisco County allows smoking on premises in some circumstances, it prohibits consumption in the public right of way within 50 feet of a dispensary.

Although these techniques are helpful in reducing nuisance odors, defining a “nuisance odor,” particularly with regard to cannabis, is not well documented. For example, a Colorado odor advisory group made up of agency, consultant, and public representatives found that the “technical research and literature is limited regarding cannabis-generated odors, the chemical compounds making up these odors, and the levels at which these chemicals would need to be controlled in order to prevent these odors” (City of Denver 2016a). Regardless, the City of Denver, Colorado, has established a nuisance odor detection threshold, which is the detection of odorous contaminants when one volume of the odorous air has been diluted with seven or more volumes of odor-free air as measured by any instrument, device, or method designated by the state air pollution control division (City of Denver 2016b). One tool used by Denver enforcement officers is an odor detection device (“Nasal Ranger”) that combines specially filtered air with outside air in measured increments (USA TODAY 2014).

4.2.4 Impact Analysis

Methodology

Conflict with Air Quality Plans and Violate Air Quality Standards

For this IS/ND, quantification of baseline criteria pollutant emissions, and the change from baseline, was not feasible due to a lack of available information about existing and future

cannabis business operations within individual air basins to support such an analysis. For example, both the Bureau's SRIA (UCAIC 2017) and CDFA's SRIA (ERA Economics 2017) provide estimates on potential statewide changes in commercial cannabis activities, including generation of jobs or changes in cannabis sales or cultivation quantities from existing conditions as a result of the MCRSA regulations.² However, this information is not available on an air basin-specific basis. In addition, a wide range of variation exists in the types of equipment that are used at various business types. In short, developing assumptions regarding "typical" scenarios for distributors, retailers, testing laboratories, and microbusinesses would necessitate speculation, and even if such scenarios were developed, the information collected and generated for the Bureau's regulation development process does not support quantification of where and how such scenarios could change across the state's air basins.

For this reason, the change from baseline related to criteria air pollutant emissions under the Proposed Program, and the potential for those emissions to contribute to existing air quality impairments, thereby conflicting with air quality plans or to violate air quality standards, were qualitatively evaluated. The qualitative analysis considered: existing air quality conditions throughout the state; the typical criteria air pollutant emission sources associated with cannabis distribution, retailer operations, testing laboratories, and microbusiness activities; and the Proposed Program's potential to alter cannabis business operations (both permitted and unpermitted) in method or magnitude from existing cannabis business operations.

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

The Proposed Program's potential to emit substantial pollutant concentrations of TACs and thereby expose sensitive receptors was qualitatively evaluated by considering the equipment, vehicle and chemical usage for cannabis business operations, and the potential proximity of these operations to sensitive receptors, considering baseline TAC emissions associated with cannabis business operations.

Odors

Odors were evaluated on a qualitative basis by considering potential odor-generating sources under the Proposed Program and their proximity to sensitive receptors. While baseline conditions may be relevant to the extent that receptors may be habituated to the odors, the analysis considered the potential for all future odors to be substantially adverse, regardless of the baseline level of odor emissions.

Significance Criteria

For the purposes of this analysis, based on Appendix G of the Guidelines, the Proposed Program would result in a significant impact related to air quality if it would:

- A. Conflict with or obstruct implementation of an applicable air quality plan;

² The SRAs referenced were prepared to assess the economic impacts of the Medical Cannabis Regulation and Safety Act (MCRSA), a predecessor to MAUCRSA, regulating cultivation, manufacture, distribution, transportation, dispensing, and laboratory testing of medicinal cannabis.

- B. Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- C. Expose sensitive receptors to substantial pollutant concentrations;
- D. Create objectionable odors affecting a substantial number of people; or
- E. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Environmental Impacts of the Proposed Program

Impacts of Distribution, Retail Sale, Laboratory Testing, and Microbusiness Manufacturing Activities

Impact AQ-1: Conflict with or obstruct implementation of an applicable air quality plan, and/or violate any air quality standard or contribute substantially to an existing or projected air quality violation. (Less than Significant)

Under both baseline conditions and the Proposed Program, cannabis business operations may include truck or vehicle trips to and from licensed premises such as distributors, retailers, testing laboratories, and microbusiness manufacturers by vendors, workers, delivery drivers, retail customers, and other cannabis business licensees, which would result in direct criteria air pollutant emissions from fuel combustion. Combustion of fossil fuels from diesel- or gasoline-fueled equipment or vehicles used for transportation, as well as for temperature and humidity control and lighting within licensed business premises, would generate ozone precursors (NO_x, ROG), CO, and particulate matter (PM₁₀ and PM_{2.5}). Electrical equipment and lighting would not contribute directly to criteria air pollutant emissions at or immediately adjacent to the cannabis business operation site, but would contribute indirectly to criteria air pollutant emissions if the electricity consumed was generated by the combustion of fossil fuels.

Transportation of products and materials as well as cannabis delivery operations may generate fugitive dust emissions through vehicle or truck trips on unpaved roads, particularly when transporting cannabis goods to or from rural businesses or cultivation locations or delivering cannabis goods to rural consumer residences.

Laboratory testing and manufacturing operations could include the use of chemicals and equipment that would potentially result in some air pollutant emissions from ventilated work spaces; however, these facilities are required to follow regulations and permitting requirements that limit the emission of pollutants from their operations. These regulations and permitting requirements include construction and operation permits under the stationary equipment permitting program issued by state air quality management districts; California Health and Safety Code section 41700, which prohibits discharge of air contaminants that cause nuisance or annoyance to the public; and the Indoor Air Quality Program administered by the CDPH under California Health and Safety Code, division 103, part 5.

California's air basins are in varying levels of attainment for NAAQS and CAAQS for criteria air pollutants (see Appendix D). Commercial cannabis business operations under both baseline conditions and the Proposed Program would emit criteria air pollutants and potentially contribute to these existing air quality impairments or violate applicable air quality standards. Elevated local concentrations of some criteria air pollutants can also cause local exceedances of air quality standards. CO, PM₁₀, and PM_{2.5} are the criteria air pollutants of concern for local hot-spot analyses. NO_x and ROG emissions typically are a concern only on a regional scale because they take time to react and disperse in the environment to create ozone.

The likelihood that commercial cannabis business-related emissions of criteria pollutants would comply with air quality plans and would not conflict with the air quality standard attainment goals or contribute to air quality impairments or violation of standards, is dependent on multiple factors, including, but not limited to, the following:

- the extent of cannabis business activities within a particular air basin;
- the type and quantity of use, on a daily and annual basis, of pollutant-emitting equipment or vehicles, including use of unpaved or gravel roads;
- the quantity and extent of cannabis business practices;
- the existing air quality attainment status of the local air basin and the corresponding need for air quality plans; and
- the specific goals, policies, and/or measures identified in air quality plans and their applicability to commercial cannabis business-related activities.

To the extent that cannabis business-related emissions would increase in a particular air basin under the Proposed Program compared to the baseline, commercial business operations under the Proposed Program may contribute to nonattainment conditions in local air basins or violations of the applicable air quality plans, their corresponding policies, and emission standards. To the extent that emissions would decrease as a result of the Proposed Program, and/or to the extent that currently unpermitted and unregulated business operation sites would become licensed under the Proposed Program and become part of air district planning processes, the Proposed Program would be anticipated to make beneficial contributions to nonattainment conditions or violations of plans, policies, and standards.

Compared to baseline conditions, under the Proposed Program, laboratory testing, and distribution-related business operations and employment would likely increase while transportation-related activities may remain fairly stable (UCAIC 2017). The total increase in the number of jobs has been estimated in the low thousands and, as such, emissions from these businesses would be expected to represent only a tiny proportion of overall emissions in the state. The Bureau's SRIA did not predict in which areas or air quality basins the new jobs would be located. These findings indicate that the potential increase in criteria pollutant emissions from licensed commercial cannabis operations and the potential to conflict with air quality plans would not change substantially from existing conditions.

Therefore, the Proposed Program would comply with air quality plans and this impact would be **less than significant**.

Impact AQ-2: Expose sensitive receptors to substantial pollutant concentrations as a result of the Proposed Program. (Less than Significant)

As described in Impact AQ-1, equipment used for commercial cannabis activities under both the baseline and the Proposed Program may emit criteria pollutants or noxious gases, and thereby have potential to expose nearby sensitive receptors or cannabis workers to these pollutants. Potential pollutants of concern (e.g., TACs) include PM and dust, as well as the chemicals that would be used in microbusiness manufacturing and laboratory testing.

OSHA and Cal/OSHA are responsible for regulating and enforcing worker safety measures. Cal/OSHA has recently affirmed that its existing regulations are sufficient for protection of worker safety (Cal/OSHA 2017). Compliance with the applicable federal and State requirements would therefore be expected to address or resolve any impacts related to exposing sensitive receptors to substantial pollutant concentrations as a result of commercial cannabis operations.

For these reasons, implementation of the Proposed Program would not expose sensitive receptors or commercial cannabis workers to substantial quantities of TACs or other pollutants. Therefore, this impact would be **less than significant**.

Impact AQ-3: Create objectionable odors affecting a substantial number of people as a result of the Proposed Program. (Less than Significant)

During some commercial cannabis business operations, odors would be emitted from the cannabis products, particularly from dried cannabis flowers. The odors emanating from packaged dried flowers, such as those available at a retail store, would be less intense than those from unpackaged flowers or live plants. However, odors could potentially affect nearby sensitive receptors. As described in Section 4.2.3, "Environmental Setting," the degree to which an individual or community finds the odor of cannabis plants objectionable is highly variable. In cases where the perception of the odor as objectionable is widespread in a community, the Bureau anticipates that the community may develop odor control requirements that correspond to their local community expectations and standards, including and up to banning commercial cannabis activity altogether. Businesses in these locations would be required to comply with applicable local cannabis nuisance- or odor-related policies and regulations. As mentioned in Section 4.1, *Aesthetics*, local jurisdictions may require setbacks, odor controls, or other measures often tied to the location of sensitive receptors or sensitive use areas that would decrease odor impacts from Proposed Program activities on nearby receptors. For these reasons, commercial cannabis activities under the Proposed Program would not be anticipated to emit odors that would be considered objectionable by a substantial number of people, especially when considered on a statewide basis. This impact would be **less than significant**.

Impact AQ-4: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard. (Less than Significant)

Several air basins throughout the state are in nonattainment status for a variety of air pollutants. Nonattainment status is the result of a combination of emissions sources, with no single source typically of sufficient magnitude to cause nonattainment. The ongoing

nonattainment status for some basins/pollutants and the potential for new instances of nonattainment are considered a significant cumulative impact. As described in Impact AQ-1, the Bureau's SRIA findings indicate that the potential increase in criteria pollutant emissions from licensed commercial cannabis business operations and the potential to conflict with air quality plans would not change substantially from existing conditions. As such, the contribution of the Proposed Program to cumulative impacts related to criteria pollutant emissions and attainment status would not be considerable, and this would be a **less-than-significant** impact.

Impacts Related to Microbusiness Cultivation

CDFA's Draft PEIR (Appendix B of this IS/ND) examined impacts on air quality that may occur as a result of licensed cannabis cultivation. The findings of the Draft PEIR with regard to air quality impacts resulting from cultivation are summarized as follows:

- **Conflict with or obstruct implementation of an applicable air quality plan, and/or violate any air quality standard or contribute substantially to an existing or projected air quality violation.** Combustion of fossil fuels from diesel- or gasoline-fueled equipment or vehicles used for cannabis cultivation activities would generate ozone precursors (NO_x, ROG), CO, and particulate matter (PM₁₀ and PM_{2.5}). In addition, cultivation operations—primarily outdoor cultivation—may generate fugitive dust emissions (PM₁₀ and PM_{2.5}) through ground-disturbing activities such as ground tilling, uncovered soil or compost piles, and vehicle or truck trips on unpaved roads. Cannabis cultivation equipment operated by electricity would not contribute directly to criteria air pollutant emissions at or immediately adjacent to the cannabis cultivation site, but would contribute indirectly to criteria air pollutant emissions if the electricity consumed was generated by the combustion of fossil fuels.

To the extent that cannabis cultivation-related emissions would increase in a particular air basin under the CalCannabis program compared to the baseline, cultivation under the CalCannabis program may contribute to nonattainment conditions in local air basins or violations of the applicable air quality plans, their corresponding policies, and emission standards. To the extent that emissions would decrease as a result of the program, and/or to the extent that currently unpermitted and unregulated cultivation sites would become licensed under the program and become part of air district planning processes, the program would be anticipated to make beneficial contributions to nonattainment conditions or violations of plans, policies, and standards.

Under CDFA's regulations, cultivation would also be required to comply with environmental protection measures related to air quality. These measures would potentially reduce criteria air pollutant emissions associated with cannabis cultivation compared to the baseline by placing limits on the use of generators, and by requiring that mixed-light and indoor cultivators achieve GHG emissions reduction targets. The Draft PEIR found these impacts would be less than significant.

- **Expose sensitive receptors to substantial pollutant concentrations.** In indoor cultivation areas, workers could be exposed to hazards associated with oxygen-deficient air or mold spores. Improper operation of CO₂ generators could potentially result in oxygen-deficient air; however, OSHA and Cal/OSHA are responsible for

regulating and enforcing worker safety measures which would prevent adverse impacts. The Draft PEIR found these impacts would be less than significant.

- **Create objectionable odors affecting a substantial number of people.** During the cultivation of cannabis, odors would be emitted by the plants, particularly mature (i.e., flowering) plants. Other odor sources would include fertilizers, during use or storage; soil storage or composting areas; and diesel-powered equipment, which emits diesel particulate matter (DPM). These odors could potentially affect nearby sensitive receptors. However, the Draft PEIR concluded that cultivation would not emit odors considered objectionable by a substantial number of people, based on a similar rationale as presented in Impact AQ-3, above. The Draft PEIR found these impacts would be less than significant.
- **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard.** Cannabis cultivation activities would emit criteria air pollutants via the operation of equipment and/or mobile-source emissions. Licensed cultivators' potential use of criteria air pollutant-emitting equipment, such as generators, would be required to meet restrictions/requirements established by CDFA's regulations, which would result in a beneficial impact. In addition, mobile-source emissions would not substantially change under the cultivation program. The Draft PEIR found these impacts would be less than significant.

Microbusiness cultivation would be required to comply with CDFA's regulations, including environmental protection measures related to use of generators and renewable energy standards for indoor and mixed-light cultivation. In addition, because of the limited size of cultivation at a microbusiness (less than 10,000 square feet) compared to the larger CDFA license types (up to 4 acres), and the expected smaller number of microbusiness cultivators compared to other types of cultivators, the impacts of cultivation from microbusinesses would be inherently limited in comparison to the impacts analyzed in the CDFA Draft PEIR. For instance, use of heavy farm equipment that generate emissions, such as tractors, would be less likely to be used at sites that are less than 10,000 square feet. For all of these reasons, air quality impacts of microbusiness cultivation under the Proposed Program would be **less than significant**.

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4.3 Biological Resources

4.3.1 Introduction

This section of the IS/ND presents the environmental setting and potential impacts of the Bureau’s Proposed Program related to biological resources. The biological resources analysis includes special-status plant and wildlife species; sensitive natural communities, including jurisdictional wetlands and other waters; and wildlife movement corridors.

Information regarding biological resources presented in this section is primarily based on the following sources:

- Agency webpages and fact sheets;
- Peer-reviewed or scientific journal articles;
- Regulatory orders and agency publications; and
- *CalCannabis Cultivation Licensing Program Draft Program Environmental Impact Report* (Draft PEIR), prepared by the California Department of Food and Agriculture (CDFA), included as **Appendix B** of this IS/ND.

4.3.2 Regulatory Setting

Some of the regulatory setting relevant to biological resources is also applicable to hydrology and water quality. In particular, cannabis-specific water quality regulations established by the State Water Resources Control Board (SWRCB) and the regional water quality control boards (RWQCBs) are described in Section 4.8, *Hydrology and Water Quality*, in Appendix B, CDFA’s Draft PEIR.

Federal Laws, Regulations, and Standards

Endangered Species Act of 1973

The Endangered Species Act (ESA) (16 U.S.C. §1531 et seq.; 50 C.F.R. parts 17 and 222) provides for conservation of species that are endangered or threatened throughout all or a significant portion of their range, as well as the protection of habitats on which they depend. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, USFWS manages land and freshwater species, whereas NMFS manages marine and anadromous species. The ESA and subsequent amendments provide guidance for projects that may affect the continued existence of federally listed species or adversely affect their designated critical habitat.

Section 9 (Prohibited Acts)

Section 9 of the ESA and its implementing regulations prohibit the take of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The term “take” means to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” USFWS has interpreted the definition of harm to include habitat modification. Section 9 prohibits a number of

specified activities with respect to endangered and threatened plants as well as adverse modifications to critical habitat.

Section 7 (Interagency Consultation and Biological Assessments)

Section 7 of the ESA (16 U.S.C. §1531 et seq.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 7(a)(1) directs the Secretary of the Interior (for species managed by USFWS) or the Secretary of Commerce (for species managed by NMFS) to review other programs administered by those departments and use such programs to further the purposes of the ESA. It also directs all other federal agencies to use their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of species listed pursuant to the ESA. Section 7(a)(2) states that each federal agency shall, in consultation with the Secretary, ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. In fulfilling these requirements, each agency must use the best scientific and commercial data available. This section of the ESA defines the consultation process, which is further developed in regulations promulgated by 50 Code of Federal Regulations part 402.

Section 10 (Habitat Conservation Plans)

Section 10(a)(1)(B) of the ESA provides a process by which nonfederal entities may obtain an incidental take permit from the USFWS or NMFS for otherwise lawful activities that incidentally may result in take of endangered or threatened species, subject to specific conditions. A habitat conservation plan (HCP) must accompany an application for an incidental take permit. The HCP associated with the permit ensures that the effects of the authorized incidental take are adequately minimized and mitigated.

Magnuson-Stevens Fishery Conservation and Management Act (Sustainable Fisheries Act)

The amended Magnuson-Stevens Fishery Conservation and Management Act of 1996, also known as the Sustainable Fisheries Act, provides for the conservation and management of all fish resources within the exclusive economic zone of the United States. It requires that all federal agencies consult with NMFS on activities or proposed activities authorized, funded, or undertaken by that agency that may adversely affect Essential Fish Habitat of commercially managed marine and anadromous fish species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§703–712; 50 C.F.R. Subchapter B) makes it unlawful to pursue, hunt, take, capture, kill, or possess any migratory birds, or part, nests, or eggs of such migratory birds, that are listed in wildlife protection treaties between the United States and Canada, Mexico, Japan, and Russia. The MBTA applies to almost all avian species that are native to California. The MBTA prohibits the take of such species, including the removal of nests, eggs, and feathers. It requires that all federal agencies consult with USFWS on activities or proposed activities authorized, funded, or undertaken by that agency that may adversely affect migratory birds.

The Migratory Bird Treaty Reform Act amends the MBTA so that nonnative birds or birds that have been introduced by humans to the United States or its territories are excluded from protection under the MBTA.

Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, directs each federal agency taking actions that have or may have adverse impacts on migratory bird populations to work with USFWS to develop a memorandum of understanding to promote the conservation of migratory bird populations.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions (16 U.S.C. §668). Under the Bald and Golden Eagle Protection Act, it is a violation to “take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest or egg, thereof....” *Take* is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. *Disturb* is further defined in 50 Code of Federal Regulations part 22.3 as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”

State Agencies, Laws, and Programs

California Fish and Game Code

Sections 2050-2098 (California Endangered Species Act)

The California Endangered Species Act (CESA), Fish and Game Code sections 2050–2098, declares that it is the policy of the state that state agencies should not approve projects that would jeopardize the continued existence of a species listed under CESA as endangered or threatened or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if reasonable and prudent alternatives are available consistent with conserving the species or its habitat that would prevent jeopardy (Fish & G. Code §2053).

Section 2080 of the Fish and Game Code prohibits the take of any species that is state-listed as endangered or threatened, or designated as a candidate for such listing. “Take” is defined by section 86 of the Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” an individual of a listed species. Under the CESA, the California Department of Fish and Wildlife (CDFW) may issue an incidental take permit authorizing the take of listed and candidate species that is incidental to an otherwise lawful activity, subject to specified conditions.

Sections 3511, 4700, 5050, and 5515 (Fully Protected Species)

CDFW has designated 37 fully protected species and prohibited the take or possession of these species at any time, and no licenses or permits may be issued for their take except for necessary scientific research or relocation of certain bird species for the protection of livestock.

Sections 3503, 3503.5, and 3513 (Nesting Bird Protections)

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by code or any regulation made in accordance with the code. Section 3503.5 prohibits the take, possession, or needless destruction of any nests, eggs, or birds in the orders Falconiformes (New World vultures, hawks, eagles, ospreys, and falcons, among others) or Strigiformes (owls). Section 3513 prohibits the take or possession of any migratory nongame bird or part thereof, as designated in the MBTA. To avoid violation of the take provisions, projects are generally required to reduce or eliminate disturbances at active nesting territories during the nesting cycle.

Section 1600 et seq. (Lake and Streambed Alteration)

Section 1600 et seq. of the Fish and Game Code establishes the Lake and Streambed Alteration Program to provide for protection and conservation of fish and wildlife resources with respect to any project that may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake.

Under the program, an applicant must notify and enter into an agreement with CDFW before undertaking any activity that would substantially divert or obstruct the natural flow of any river, stream, or lake; or would substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or would deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

CDFW typically interprets its jurisdiction under section 1600 to include the bed and bank of lakes and stream, as well as the adjacent floodplain and riparian vegetation, if present.

Sections 1900-1913 (California Native Plant Protection Act)

The California Native Plant Protection Act requires all State agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of this act prohibit the taking of listed plants from the wild and require notification, by the land owner undertaking a land use change action, of the CDFW at least 10 days in advance of that land use change on lands in California. This allows CDFW to salvage listed plant species that otherwise would be destroyed.

Local and Regional Laws and Plans

Within California, numerous regional, county, and city ordinances and policies exist for the protection of biological resources. Examples include ordinances and local zoning that specify setbacks for wetlands, streams, and lakes and regulate the removal of trees. Because of the broad geographic scope of the Proposed Program and the programmatic scope of this IS/ND, specifically considering local ordinances, policies, and land use designations was not feasible in this analysis. **Appendix C** summarizes local ordinances that address commercial cannabis-related businesses.

4.3.3 Environmental Setting

Activities conducted under the Proposed Program would occur in locations across the state at established business sites. As discussed in Section 4.0, *Introduction to the Environmental Analysis*, site construction and development activities for commercial cannabis businesses are outside the scope of the Proposed Program and therefore are not considered. For this reason, Proposed Program activities would generally not be conducted in previously undisturbed areas, although such areas may be present adjacent to Proposed Program activities.

Ecoregions

The geographic scope of the Proposed Program encompasses the entire state. California is divided into eight regions according to physiographic characteristics (e.g., topography and hydrography) (Bunn et al. 2007). The descriptions of these regions, presented below, address the general physical landscape (**Figure 4.3-1**) and major stressors affecting wildlife and habitats within each of the following eight regions:

- Mojave Desert Region,
- Colorado Desert Region,
- South Coast Region,
- Central Coast Region,
- North Coast–Klamath Region,
- Modoc Plateau Region,
- Sierra Nevada and Cascades Region, and
- Central Valley and Bay-Delta Region.

Full descriptions of each region are provided by Bunn et al. (2007), which, except as noted otherwise, was the source for the summaries presented below.

Mojave Desert Region

The 32-million-acre Mojave Desert extends into four states: California, Nevada, Arizona, and Utah. Most of the landscape is a moderately high plateau at elevations between 2,000 and 3,000 feet above mean sea level (amsl). Variations in topography, soil composition, and aspect largely account for habitat diversity. Aquatic, wetland, and riparian habitats are associated with seeps, springs, and ephemeral and perennial streams. Important perennial streams include the Amargosa and Mojave Rivers, as well as Surprise Canyon and Cottonwood Creek in the Panamint Range.

The federal government manages about 80 percent of the Mojave Desert Region in California. The largest land manager is the Bureau of Land Management (BLM), overseeing 8 million acres. The National Park Service (NPS) manages another 5 million acres, including the Mojave National Preserve and Death Valley and Joshua Tree National Parks. The U.S. Department of Defense manages five military bases that cover the remaining 2.5 million acres of federal land.

In contrast, the California State Park System and CDFW manage only 0.32 percent of the region.

Major stressors affecting wildlife and habitats in the Mojave Desert Region are multiple uses conflicting with wildlife on public lands, growth and development, solar energy development, fire, groundwater overdraft, loss of riparian habitat, inappropriate off-road vehicle use, excessive livestock grazing, excessive burro and horse grazing, invasive plants, nonnative fish, military lands management conflicts, illegal harvest or illegal commercialization, and mining operations.

Colorado Desert Region

The Colorado Desert Region consists of 7 million acres and extends from the Mojave Desert in the north to the Mexican border in the south, and from the Colorado River in the east to the Peninsular Ranges in the west. Most of the landscape lies below 1,000 feet amsl, but elevations range from 275 feet below sea level in the Salton Trough to nearly 10,000 feet amsl in the Peninsular Ranges. These mountain ranges block most coastal air, resulting in an arid climate. The region experiences higher summer daytime temperatures than those found in higher-elevation deserts, and seldom experiences frost. Precipitation occurs over two seasons, in winter and late summer. The common habitats of the Colorado Desert Region are creosote bush scrub; mixed scrub, including yucca (*Yucca* spp.) and cholla (*Opuntia* spp.) cactus; desert saltbush (*Atriplex polycarpa*); sandy soil grasslands; and desert dunes. Higher elevations are dominated by pinyon pine (primarily *Pinus monophylla*, *P. edulis*, and *P. quadrifolia*) and California juniper (*Juniperus californica*), with areas of manzanita (*Arctostaphylos* spp.) and Coulter pine (*P. coulteri*).

In the Colorado Desert Region's arid climate, aquatic and wetland habitats are uncommon but critical to wildlife. Springs and runoff from seasonal rains form alluvial fans, arroyos, fan palm oases, freshwater marshes, brine lakes, washes, ephemeral and perennial streams, and riparian vegetation communities dominated by cottonwood (*Populus* spp.), willow (*Salix* spp.), and invasive tamarisk (*Tamarix* spp.). The region's two largest water systems are the Salton Sea and the Colorado River.

The largest land manager of the region is BLM, overseeing 2.9 million acres. U.S. Department of Defense land accounts for 500,000 acres. Various other public landholdings occur around the Salton Sea. Slightly less than half of the Joshua Tree National Park lies within the Colorado Desert Region. Anza Borrego Desert State Park encompasses more than 600,000 acres. Santa Rosa Wildlife Area encompasses about 100,000 acres.

Although the Colorado Desert remains one of the least populated regions in California, human activities have had a substantial impact on the region's habitat and wildlife. Some of the greatest human-caused effects on the region have resulted from water diversions and flood control measures along the Colorado River. In addition, portions of the region are experiencing substantial growth and development pressures, most notably within the Coachella Valley.

Major stressors affecting wildlife and habitats in the Colorado Desert Region are water management conflicts and water transfer effects, inappropriate off-road vehicle use, loss and degradation of dune habitats, growth and development, solar energy development, and invasive species.



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South Coast Region

The 8 million acres of California's South Coast Region extend along the coast from the middle of Ventura County in the north to the Mexican border in the south. Inland, the region is bounded by the Peninsular Ranges and the transition to the Mojave and Colorado Deserts on the east and by the Transverse Ranges on the north. The landscape varies from wetlands and beaches to hillsides, rugged mountains, arid deserts, and densely populated metropolitan areas. The region's coastal habitats include coastal strand, lagoons, and river-mouth estuaries that transition from riparian wetlands to freshwater and saltwater marshes. Inland, the predominant hillside and bluff communities are coastal sage scrub and chaparral. Low- to mid-elevation uplands often feature oak woodlands, while coniferous forests dominate higher-elevation mountainous areas.

The region's largest river drainages are the Tijuana, San Diego, San Luis Rey, Santa Margarita, Santa Ana, San Gabriel, Los Angeles, Santa Clara, and Ventura Rivers. Pine forests occur along the high-elevation stream reaches, and mountain drainages support southern mountain yellow-legged frog (*Rana mucosa*), California red-legged frog (*R. draytonii*), arroyo toad (*Bufo californicus*), arroyo chub (*Gila orcutti*), Santa Ana sucker (*Catostomus santaanae*), and Santa Ana speckled dace (*Rhinichthys osculus* ssp.). In urbanized coastal areas, many sections of the region's river corridors are channelized with concrete.

Major stressors affecting wildlife and habitats in the South Coast Region are growth and development, water management conflicts and degradation of aquatic ecosystems, invasive species, altered fire regimes, and recreational pressures.

Central Coast Region

California's Central Coast Region encompasses 8 million acres, extending from the southern boundary of Los Padres National Forest north to the San Francisco Bay lowlands. Inland, the region is bounded on the east by the Diablo and Temblor Ranges. A rugged coastline characterizes the landscape, with small mountain ranges that roughly parallel the coast, river valleys with rich alluvial soils, and arid interior valleys and hills. Across the region, differences in climate, geography, and soils result in widely varying ecological conditions, supporting diverse coastal, montane, and desert-like natural communities. The region's coastal habitats include river-mouth estuaries, lagoons, sloughs, tidal mudflats, marshes, coastal scrub, and maritime chaparral. Coastal scrub and grasslands extend inland along river valleys. The outer Coast Ranges support mixed coniferous forests and oak woodlands.

The region's largest drainages are the Santa Ynez, Santa Maria, Carmel, Salinas, and Pajaro watersheds. The outer Coast Ranges, including the Santa Cruz and Santa Lucia Mountains, run parallel to the coastline.

Major stressors affecting wildlife and habitats in the Central Coast Region are population growth, expansion of intensive types of agriculture, invasions by exotic species, and overuse of regional water resources.

North Coast–Klamath Region

The 14-million-acre North Coast–Klamath Region extends along the Pacific coast from the Oregon-California border to the San Francisco Bay watershed. The region's inland boundary is formed by the Cascade Ranges along the north and the transition to the Sacramento Valley

in the south. The region is characterized by large expanses of rugged, forested mountains that range in elevation from 3,000 to more than 9,000 feet amsl. The climate features high precipitation in the coastal areas and dry conditions in some inland valleys. The region's coastal habitats include beaches, rocky shorelines, estuaries, lagoons, marshes, open-water bays, grasslands, coastal shrub, pine forests, mixed evergreen forests, and redwood forests. The inland ecological communities include moist forests dominated by Douglas fir (*Pseudotsuga menziesii*), ponderosa pine (*P. contorta*), and sugar pine (*P. lambertiana*) mixed with a variety of other conifers and hardwoods.

The region's major inland waterways are part of the Klamath River system, which includes the Klamath, Scott, Shasta, Salmon, and Trinity Rivers. River systems draining the Coast Ranges include the Eel, Russian, Mattole, Navarro, Smith, Mad, Little, and Gualala Rivers and Redwood Creek. Most of California's rivers with state or federal "wild and scenic river" designations are in the North Coast–Klamath Region, including portions of the Klamath, Trinity, Smith, Scott, Salmon, Van Duzen, and Eel Rivers.

Major stressors affecting wildlife and habitats in the North Coast–Klamath Region are water management conflicts, in-stream gravel mining, forest management conflicts, altered fire regimes, agriculture and urban development, excessive livestock grazing, nonnative fishes, and invasive species. The introduction of nonnative fish to formerly fishless lakes and streams has substantially affected the aquatic life of the region, particularly in the subalpine and alpine ecosystems. Decades of stocking fish to create and maintain a recreational fishery have contributed to the decline of some native species in the region.

Modoc Plateau Region

The Modoc Plateau Region is framed by and includes the Warner Mountains and Surprise Valley along the Nevada border on the east and the edge of the southern Cascade Ranges on the west. The region extends north to the Oregon border and south to include the Skedaddle Mountains and the Honey Lake Basin. Elevations range from 4,000 to 5,000 feet amsl. The region is situated on the western edge of the Great Basin and supports high-desert plant communities and ecosystems similar to that region, including shrub-steppe, perennial grasslands, sagebrush, antelope bitterbrush, mountain mahogany, and juniper woodlands. Conifer forests dominate the higher elevations. Wetland, spring, meadow, vernal pool, riparian, and aspen communities are scattered throughout the rugged and otherwise dry desert landscape. The region's major waterway is the Pit River and its tributaries.

Sixty percent of the region is federally managed: the U.S. Forest Service manages 30 percent, BLM manages 26 percent, and USFWS and the U.S. Department of Defense each manage about 2 percent of the land in the region. CDFW manages 1 percent of the land, while about 37 percent is privately owned or belongs to municipalities.

The 3-million-acre Pit River watershed is the major drainage of the Modoc Plateau, providing 20 percent of the water to the Sacramento River. The upper reaches of the watershed are in creeks of the Warner Mountains that drain into Goose Lake. The north fork of the Pit River flows from Goose Lake southwest and merges with the south fork of the Pit River, which drains the southern Warner Mountains. Several endemic aquatic species, including Modoc sucker (*Catostomus microps*), Goose Lake redband trout (*Oncorhynchus mykiss* ssp.), Goose Lake tui chub (*Gila bicolor* spp.), Goose Lake (Pacific) lamprey (*Lampetra tridentata*), and Shasta crayfish (*Pacifastacus fortis*), inhabit the watershed (Moyle 2002).

Creeks of the northern Modoc Plateau (or Lost River watershed) drain to Clear Lake. The outlet of Clear Lake is the Lost River, which circles north into Oregon farmland and then joins the Klamath River system. The Lost River watershed has its own endemic aquatic fish and invertebrates.

Major stressors affecting wildlife and habitats in the Modoc Plateau Region are excessive livestock grazing, excessive feral horse grazing, altered fire regimes, Western juniper (*Juniperus occidentalis*) expansion, invasive plants, forest management conflicts, and water management conflicts and degradation of aquatic ecosystems. The introduction of exotic aquatic species (e.g., largemouth bass [*Micropterus salmoides*] and nonnative trout to lakes, and bullheads [*Ameiurus* spp.], catfishes, and signal crayfish to rivers and streams) has reduced or extirpated populations of native amphibians and fish and affected invertebrates in many segments of the rivers, creeks, and lakes of the region.

Sierra Nevada and Cascades Region

The Sierra Nevada and Cascade Ranges form the spine of California's landscape, extending 525 miles from north to south. The southern Cascades extend from north of the Oregon border southeastward to Mount Lassen, where they merge with the Sierra Nevada Range. The Sierra Nevada Range extends south to the Mojave Desert, where it curves south to link with the Tehachapi Mountains. The region includes oak woodland foothills on the western slope of the Sierra Nevada and Cascade Ranges and, on the east, the Owens Valley and edges of the Great Basin. On the west side, elevations gradually increase from near sea level at the floor of the Central Valley to ridgelines ranging from 6,000 feet amsl in the north to 14,000 feet amsl in the south. The east slope of the Sierra Nevada drops off sharply, and the east side of the Cascade Range slopes gradually. As elevations increase from west to east, habitats transition from chaparral and oak woodlands to lower-level montane forests of ponderosa and sugar pine to upper montane forests of firs, Jeffrey pine (*P. jeffreyi*), and lodgepole pine and, above timberline, to alpine plant communities.

Sixty-one percent of the Sierra Nevada and Cascade Ranges are managed by federal agencies: the U.S. Forest Service manages 46 percent, the National Park Service manages 8 percent, and BLM manages 7 percent. State parks and wildlife areas account for 1 percent of the region, while the remaining area is privately owned.

The hundreds of creeks and streams on the western slope of the Sierra Nevada and Cascade Ranges drain via major river basins to merge with the Sacramento River in the north and the San Joaquin River in the south. The southernmost streams drain into the Tulare Basin via the Kings, Kaweah, Tule, and Kern Rivers, while the streams east of the Sierra Nevada crest drain into the Great Basin via the Lahontan, Mono, and Owens River drainages. Many of the creeks and streams of northeastern California drain to the Pit River, which joins the Sacramento River at Lake Shasta.

There are 67 aquatic habitat types in the region. Major riparian habitats include valley foothill riparian, montane riparian, wetland meadow, and aspen. Numerous invertebrate and vertebrate species are associated with these moist habitats. Other wildlife species, including some raptors and numerous songbirds, live in drier plant communities and rely on nearby aquatic and riparian habitats for hunting, foraging, cover, and resting. Of the 67 aquatic habitat types, nearly two-thirds are in decline. Ecosystem functions have been disrupted in

thousands of riparian areas, and more than 600 miles of river habitat have been submerged under reservoirs.

Major stressors affecting wildlife and habitats in the Sierra Nevada and Cascades Region are growth and land development, forest management conflicts, altered fire regimes, excessive livestock grazing, invasive plants, recreational pressures, climate change, and introduced nonnative fish.

Central Valley and Bay-Delta Region

The Central Valley and Bay-Delta Region comprises most of the low-lying lands of central California. Forty percent of the state's water falls as either rain or snow over much of the northern and central parts of the state and drains into the Sacramento or San Joaquin Rivers, which feed into the Sacramento–San Joaquin Delta (Delta). The Delta and the San Francisco Bay together form California's largest estuary (1,600 square miles of waterways). The region has four subregions, each with its own unique climate, topography, ecology, and land use: the San Francisco Bay Area, the Delta, the Sacramento Valley, and the San Joaquin Valley.

The San Francisco Bay Area is the second most densely populated area of the state of California, after the southern California metropolitan region. The region consists of low-lying baylands, aquatic environments, and watersheds that drain into the San Francisco Bay. The region is bounded on the east by the Delta, on the west by the Pacific Ocean, on the north by the North Coast–Klamath Region, and on the south by the Central Coast Region. Low coastal mountains surround the region, with several peaks rising above 3,000 feet amsl. The climate is characterized by relatively cool, often foggy summers and cool winters. The area receives 15–25 inches of rain annually from October to April, leaving most of the smaller streams dry by the end of summer. The topography of the San Francisco Bay Area allows for a variety of habitats, including deep and shallow estuarine environments in the bay itself. The bay also supports many marine species. Along the shoreline are coastal salt marshes, coastal scrub, tidal mudflats, and salt ponds. Ninety percent of the surface water from the Sacramento and San Joaquin Rivers and their tributaries is received through the Delta. Other major river drainages are the Napa and Petaluma Rivers and Sonoma, Petaluma, and Coyote Creeks.

The Great Central Valley contains the Sacramento Valley, the San Joaquin Valley, and the Delta. Together they form a vast, flat valley, approximately 450 miles long and averaging 50 miles wide, with elevations almost entirely below 300 feet amsl. The Sutter Buttes (2,000 feet) are the only topographic feature that exceeds that height. The Central Valley is surrounded by the Sierra Nevada on the east, the Coast Ranges on the west, the Tehachapi Mountains on the south, and the Klamath and Cascade Ranges on the north. The Central Valley has hot, dry summers and foggy, rainy winters. Annual rainfall averages 5–25 inches, with the least rainfall occurring in the southern portions and along the west side (in the rain shadow of the coastal mountains). Agriculture dominates land use in the Central Valley. The major natural upland habitats are annual grassland, valley oaks on floodplains, and vernal pools on raised terraces.

The Delta is a low-lying area that contains the tidally influenced portions of the Sacramento, San Joaquin, Mokelumne, and Cosumnes Rivers. The Delta was once an extensive brackish marsh formed by the confluence of the Sacramento and San Joaquin Rivers, but has been extensively diked and drained for agriculture, flood protection, and water supply.

The Sacramento Valley contains the largest river in the state, the Sacramento River. Along with its numerous tributaries, the Sacramento River supports winter-run, spring-run, and fall-/late fall-run Chinook salmon (*Oncorhynchus tshawytscha*) populations; steelhead (*O. mykiss*); green sturgeon (*Acipenser medirostris*); and hardhead (*Mylopharodon conocephalus*). The lower 180 miles of the river are contained by levees, and excess floodwaters are diverted into large bypasses to reduce risks to human populations.

The San Joaquin Valley has two distinct, or separate, drainages. In the northern portion, the San Joaquin River flows north toward the Delta. It captures water from the Stanislaus, Tuolumne, and Merced Rivers and supports fall-/late fall-run Chinook salmon, steelhead, and hardhead populations. The southern portion of the valley is isolated from the ocean and drains to the closed Tulare Basin, except in very wet years when the Tulare Basin overflows to the San Joaquin River. Lakes and vast wetlands in this region are now dry most of the time because water has been dammed and diverted for agriculture.

Major stressors affecting wildlife and habitats in the Central Valley and Bay-Delta Region are urban, residential, agricultural, and solar energy growth and development; water management conflicts; water pollution; invasive species; and climate change.

Wildlife Habitats

The California Wildlife Habitat Relationships system classifies and describes the major wildlife habitat types that occur in the state. At present, 59 habitat types have been classified (Mayer and Laudenslayer 1988). Because the geographic scope of the Proposed Program encompasses the entire state, commercial cannabis businesses have the potential to occur in any of these habitats.

Special-status Species

Special-status species include plant and animal species protected under the ESA, CESA, the California Fish and Game Code, and the California Native Plant Protection Act, as well as those that are considered rare, threatened, or endangered under sections 15380 and 15125 of the Guidelines. Special-status species are classified as follows:

Federal endangered (FE): species designated as endangered under the ESA. An FE species is one that is in danger of extinction throughout all or a substantial portion of its range. Take of any individual of an FE species is prohibited except with prior authorization from USFWS or NMFS.

Federal threatened (FT): species designated as threatened under the ESA. An FT species is one that is likely to become endangered in the foreseeable future throughout all or a substantial portion of its range. At the discretion of USFWS or NMFS, take of any individual of an FT species may be prohibited or restricted.

Federal proposed (FP): species that have been proposed by USFWS or NMFS for listing as endangered or threatened under the ESA. Federal proposed species must be evaluated in Section 7 consultation for any federal action (described in Section 4.4.2, “Regulatory Setting,” under “Federal Laws, Regulations, and Standards – Endangered Species Act – Section 7”) and normally are evaluated in the National Environmental Policy Act review of any action that may affect the species.

State endangered (SE): species designated as endangered under the CESA. These include native species or subspecies that are in serious danger of becoming extinct throughout all or a substantial portion of its range resulting from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease. (Fish & G. Code §2062.) Take, as defined by Section 86 of the Fish and Game Code, of any State-listed endangered species is prohibited, except as authorized by CDFW.

State threatened (ST): species designated as threatened under the CESA. These include native species or subspecies that, although not threatened currently with extinction, are likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts (Fish & G. Code §2067). Take, as defined by Section 86 of the Fish and Game Code, of any State-listed threatened species is prohibited, except as authorized by CDFW.

State candidate (SC): species designated as a candidate for listing under the CESA. These are native species or subspecies for which the Fish and Game Commission has accepted a petition for further review under section 2068 of the CESA, finding that sufficient scientific information exists to indicate that the petitioned action may be warranted. Take of any State-designated candidate species, as defined by Section 86 of the Fish and Game Code, is prohibited, except as authorized by CDFW.

State Species of Special Concern (SSC): a species, subspecies, or distinct population of a vertebrate animal native to California that has been determined by CDFW to warrant protection and management, intended to reduce the need to give the species formal protection as an SE, ST, or SC species. SSC is an administrative designation and carries no formal legal status. Generally, SSC should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined in section 15380 of the Guidelines. However, some older lists of SSC were not developed using criteria relevant to CEQA, and the information used in generating those lists is out of date. Therefore, the current circumstances of each unlisted SSC must be considered against those criteria and not automatically assumed to be rare, threatened, or endangered.

State Fully Protected (SFP): species designated as fully protected under sections 3511, 4700, 5050, or 5515 of the Fish and Game Code. SFP species may not be taken at any time unless authorized by CDFW for necessary scientific research, which cannot include actions for project mitigation. Necessary scientific research includes efforts to recover populations of FP, SE, and ST species. A notification must be published in the California Regulatory Notice Register prior to CDFW authorizing take of SFP species. Although some species included under these statutes also are listed as threatened, endangered, or SSC, others are not.

California Rare Plant Rank (CRPR): The CNPS Inventory of Rare, Threatened, and Endangered Plants identifies groups of species that are commonly recognized as special-status plants. Rank 1A plants are presumed extinct in California. Rank 1B plants are considered rare, threatened, or endangered in California and elsewhere. Rank 2 plants are rare, threatened, or endangered in California but more common elsewhere. Rank 3 species are plants about which more information is needed to place them in one of the three other rankings; Rank 3 is considered a review list. Rank 4 species are plants of limited distribution, and Rank 4 is considered a watch list.

Sensitive Natural Communities

Sensitive natural communities are those communities identified as sensitive by CDFW on a list maintained by CDFW (California Department of Fish and Game 2010), natural communities that are specifically regulated under section 1600 of the California Fish and Game Code, and wetlands and other special aquatic sites regulated under section 404 of the Clean Water Act.

Sensitive natural communities are located in every county of California. CDFW's classification uses the National Vegetation Classification hierarchy (Federal Geographic Data Committee 2008), which groups the natural communities in California into the following six major categories:

- Mesomorphic Tree Vegetation (e.g., blue oak woodland, willow riparian forest, bristlecone pine woodland)
- Mesomorphic Shrub and Herb Vegetation (e.g., serpentine bunch grass, vernal pools, California poppy fields)
- Xeromorphic (Semi-Desert) Scrub and Herb Vegetation (e.g., Joshua tree woodland, giant coreopsis scrub)
- Cryomorphic (Polar and High Montane Vegetation) Shrub and Herb Vegetation (e.g., Southern California Fell Field)
- Hydromorphic Vegetation (Aquatic Vegetation) (e.g., seasonal wetlands, yellow pond-lily mats)
- Lithomorphic Vegetation (Nonvascular and Sparse Vascular Rock Vegetation) (e.g., active desert dunes)

Baseline Conditions of Commercial Cannabis Business Operations in California

The approach to baseline conditions in this analysis is described in Section 4.0.3, "Environmental Baseline of Analysis." Retailers are located in developed commercial urban or suburban areas zoned for retail activity. Commercial cannabis distribution facilities, testing laboratories, and manufacturing sites are located in developed urban and suburban areas, often among other business and industrial facilities. Distributors may also transport cannabis and cannabis products on existing roadways around the state. As a result, the operations associated with most of the existing cannabis businesses that may be licensed under the Proposed Program do not create substantial adverse impacts on biological resources.

Commercial cannabis cultivation across the state, such as that associated with a microbusiness, may affect biological resources through water diversions, sedimentation or erosion, wildlife exposure to pesticides, transport of pollutants to waterways, nighttime light impacts, and noise impacts. The potential for impacts on biological resources varies tremendously based on the setting of the cultivation operation (Zuckerman 2013). The environmental impacts associated with unpermitted cannabis cultivation appear substantial but have been difficult to quantify, in part because cultivation has been clandestine and often occurs on private property (Bauer et al. 2015). Factors such as abundant grow sites clustered in steep locations far from developed roads, potential for substantial water consumption, and close proximity to habitat for threatened species all point toward high risk of adverse

ecological consequences associated with cannabis agriculture as it is currently practiced in northern California (Butsic and Brenner 2016). These adverse effects vary based on site-specific conditions and are not uniform across the state. For microbusinesses, because of the nature of the activity, which also involves distribution, manufacturing, and/or retail sales, it is less likely that cultivation is taking place in remote, undisturbed areas.

4.3.4 Impact Analysis

This discussion describes the methodology and significance criteria that apply to the analysis of biological resources. It also presents the analysis of the potential environmental impacts of the Proposed Program.

Methodology

Commercial cannabis distribution, retail sale, testing laboratories, and microbusiness activities that would be licensed under the Proposed Program are evaluated as a function of the following factors:

- Location of the activity;
- Intensity, frequency, and duration of the activity;
- The mechanism(s) by which the activity could reasonably affect, either directly or indirectly, sensitive biological resources; and
- The effectiveness of existing regulatory requirements that would apply to Proposed Program activities (see Section 4.3.2, “Regulatory Setting”).

Proposed Program activities were evaluated to determine their potential to affect the following categories of sensitive biological resources:

- Special-status species;
- Sensitive natural communities (including aquatic natural communities);
- Movement of native fish or wildlife species; and
- Use of native wildlife nursery sites.

Potential effects on these resources were evaluated within geographic areas or ecoregions where Proposed Program activities may take place and where biological impacts are reasonably foreseeable. As discussed in Section 3.1, “Overview of Licensed Cannabis Business Operations,” in Chapter 3, *Proposed Program Activities*, impact analyses do not include site development activities, including new construction or modifications to existing structures.

Significance Criteria

For the purposes of this analysis, based on Appendix G of the Guidelines, the Proposed Program would result in a significant impact related to biological resources if it would:

- A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or

- regional plans, policies, or regulations, or by CDFW or USFWS (special-status species);
- B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
 - C. Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means;
 - D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
 - E. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
 - F. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

Environmental Impacts of the Proposed Program

Impacts of Distribution, Retail Sale, Laboratory Testing, and Microbusiness Manufacturing Activities

Impact BIO-1: Cause adverse effects on aquatic and semi-aquatic special-status species. (Less than Significant)

Commercial cannabis distribution, retail sale, laboratory testing, and microbusiness manufacturing activities would not be expected to involve impact mechanisms such as water withdrawals, wastewater discharges, or disturbance near water bodies, which could lead to substantial adverse effects on aquatic and semi-aquatic special-status species. Operations of these businesses would be primarily located indoors, in previously developed areas, and with connections to domestic water supply and sanitary sewer systems. Stormwater runoff would be managed by the local jurisdictions. Similarly, transportation of products and supplies to support these businesses would take place on existing roadways. For these reasons, impacts would be **less than significant**.

Impact BIO-2: Cause substantial adverse effects on special-status plant species. (Less than Significant)

As described above, most types of licensed commercial cannabis businesses would be expected to operate primarily in existing buildings and use existing facilities; therefore, they would not be expected to have any impacts on special-status plant species. As a result, effects on special-status plant species are not expected to be substantial, and this impact would be **less than significant**.

Impact BIO-3: Cause substantial adverse effects on wildlife due to increased light, including special-status terrestrial wildlife species. (Less than Significant)

All types of commercial cannabis activities may result in increased nighttime light compared to baseline conditions. As discussed in Chapter 3, *Proposed Program Activities*, commercial cannabis distribution, sale, testing, and microbusiness manufacturing operations would typically use some form of security system, which may include outdoor security lighting surrounding the premises.

Increased nighttime light is known to have adverse effects on nocturnal wildlife species, such as bats, nocturnal birds, and nocturnal mammals. Special-status nocturnal species such as Townsend's big eared bat (*Corynorhinus townsendii*) or San Joaquin kit fox (*Vulpes macrotis mutica*) could be affected. Adverse effects could include changes in animal behavior such as disorientation and being repelled or attracted to the artificial light, which could affect foraging, reproduction, communication, and other critical behaviors (Longcore and Rich 2004). These effects vary across species (Health Council of the Netherlands 2000). Nighttime artificial light can also result in disruption of biological rhythms (i.e., circadian rhythms), as well as changes in habitat quality (Health Council of the Netherlands 2000).

Because commercial cannabis business associated with distribution, retail sale, laboratory testing, and microbusiness manufacturing are likely to be located in areas zoned for industrial, business, and retail uses, any new commercial cannabis activity would be unlikely to differ from the baseline. These settings would also be unlikely to provide habitat for special-status nocturnal species. In addition, as described in Section 4.1, *Aesthetics*, some local jurisdictions have regulations requiring nighttime security lighting to be downward facing and shielded. For these reasons, this impact would be **less than significant**.

Impact BIO-4: Cause substantial adverse effects on special-status terrestrial wildlife species due to increased noise and human presence. (Less than Significant)

Commercial cannabis operations may result in increased noise and human presence in some areas. The extent to which this may adversely affect special-status wildlife species would be highly contextual and based on the location, its proximity to such species, and the nature of the activity. As noted throughout this section, most commercial cannabis activities conducted under the Proposed Program would be sited in existing facilities in locations zoned for business, retail, and/or industrial uses. Commercial cannabis activities would not generate more noise or human presence than other analogous non-cannabis-related businesses in these areas. Special-status wildlife would not be common in these developed areas, and these wildlife species would be habituated to the noise and disturbance found in urban and suburban settings. For instance, vehicle traffic is extremely common in urban business centers, where retail stores would be located.

One potential impact on terrestrial wildlife species might be mortality from vehicle collisions during transportation activities. It is unlikely, however, that these impacts would substantially differ from the baseline when considered at the statewide level. As discussed in Section 4.8, *Transportation and Traffic*, commercial cannabis business operations are not anticipated to result in a substantial number of new vehicle trips and, therefore, would not create additional impacts due to vehicle collisions with special-status terrestrial wildlife species.

For these reasons, noise and human activity associated with commercial cannabis distribution, retail sale, laboratory testing and microbusiness manufacturing operations would not result in a substantial adverse impact on special-status wildlife species. This impact would be **less than significant**.

Impact BIO-5: Cause substantial adverse effects on riparian habitat, other sensitive natural communities, or federally protected wetlands. (Less than Significant)

As discussed above, most of the commercial cannabis businesses to be licensed under the Proposed Program would be conducted in developed areas, often in existing buildings in urban, suburban, and developed settings in sites that are zoned for industrial, retail, or business uses. These locations are unlikely to be in or near sensitive areas or federally protected wetlands. In addition, the activities themselves would primarily take place indoors and would have little potential for impacts on such natural communities. For instance, stormwater and wastewater discharges would be connected to municipal systems. As a result, impacts are not anticipated to be substantial, especially when considering their magnitude in the context of a statewide program. Therefore, these impacts would be **less than significant**.

Impact BIO-6: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or wildlife corridor, or impede the use of native wildlife nursery sites. (Less than Significant)

Based on the types of areas where commercial cannabis businesses would be located and MAUCRSA's requirement to comply with local zoning and ordinances, they would be unlikely to be located within a migratory corridor or native wildlife nursery site, or to involve substantial discharges to water bodies that support migrating fish and aquatic species. As a result, impacts are not anticipated to be substantial, especially when considering their magnitude in the context of a statewide program. This impact would be **less than significant**.

Impact BIO-7: Conflict with local policies or ordinances protecting biological resources. (No Impact)

MAUCRSA requires that applicants for a commercial cannabis business license must comply with all local ordinances and regulations, including those intended to protect biological resources. The Bureau would defer to the local jurisdiction in making such a determination regarding the local jurisdiction's own policies and ordinances. Thus, there would be **no impact**.

Impact BIO-8: Conflict with applicable habitat conservation plans or natural community conservation plans. (Less than Significant)

Because the Proposed Program would be implemented throughout the state, it is possible that some licensed commercial cannabis businesses would be located within an area covered by an HCP or natural community conservation plan (NCCP). The potential for conflicts would depend upon the species and activities covered by the HCP or NCCP, in the context of the individual business activities; therefore, it is not possible at a statewide scale to definitively determine what conflicts could arise.

To the extent that these businesses could be located within an area covered by an HCP or NCCP, be subject to the discretionary approval of a signatory to the HCP or NCCP (e.g., a city or county), and be a covered activity in the HCP or NCCP (e.g., buildup of a general plan), applicants may be required to adhere to applicable HCP/NCCP avoidance and minimization measures. Alternatively, the local jurisdiction may develop measures to avoid conflicts (for instance, in the event that the commercial cannabis business premises is located in an area that has been identified for conservation under the HCP/NCCP).

Because any conflicts with HCPs and NCCPs would be based on site-specific circumstances that are unknown at this time, and because potential conflicts with HCPs or NCCPs would need to be resolved during the local government approval process, this impact would be **less than significant**.

Impacts Related to Microbusiness Cultivation

CDFA's Draft PEIR (Appendix B of this IS/ND) examined impacts on biological resources that may occur as a result of licensed commercial cannabis cultivation. The findings of the Draft PEIR with regard to biological resource impacts resulting from cultivation are summarized as follows:

- **Effects of cultivation on special-status aquatic, plant, and terrestrial wildlife species.** Because licensed commercial cannabis cultivation could occur in habitats and locations throughout the state, there is potential for various special-status species to occur near cultivation operations, particularly for outdoor cultivation near sensitive habitats. Cultivation activities could affect aquatic and semi-aquatic special-status wildlife species through water diversions, erosion/ sedimentation, and release of hazardous materials (e.g., fuels, fertilizers) into water bodies. Special-status plants could be adversely affected by water diversions, erosion, sedimentation, trampling, pesticides, or fertilizer runoff from cultivation activities. Wildlife, including special-status terrestrial species, could be adversely affected by increased light, increased noise, and human presence.

However, the CDFA Draft PEIR identified several factors that would reduce the potential for such impacts. Specifically, cultivators would be required to comply with relevant CDFW and SWRCB requirements and regulations; in particular, provisions of the California Water Code and the Fish and Game Code include measures to protect special-status species. In addition, existing unlicensed cultivators that become licensed under the CalCannabis program would result in a beneficial impact on biological resources to the extent that the unlicensed sites, which may have been causing adverse impacts, would be required to comply with applicable laws and regulations protecting biological resources.

Cultivation sites may use security lighting at night, and mixed-light cultivation operations as part of a microbusiness may also use lighting at night to extend the photoperiod for the cannabis plants; both of these circumstances could result in light trespass issues. However, CDFA's regulations for cultivation would minimize potential effects by requiring security lighting to be downward facing and shielded to minimize the effects of the lighting, and would require mixed-light operations to eliminate any nighttime light trespass.

Finally, outdoor commercial cultivation operations located in rural areas may create noise through the use of landscaping equipment or trucks entering and

leaving, which could affect wildlife. In particular, birds could be affected, especially during the nesting season. Several federal and State laws have been established to protect birds (e.g., MBTA; California Fish and Game Code Sections 3503, 3503.5, and 3513), and licensees would be required to comply with these laws. In addition, the noise generated by commercial cannabis cultivation activities would be consistent with other land uses in the vicinity; for instance, chainsaws and mowers are commonly used in rural environments.

The Draft PEIR found that these impacts would be less than significant.

- **Effects on the movement of native species or use of wildlife nursery sites.** The water rights process administered by SWRCB would ensure bypass flows that would be protective of fish migration needs and instream habitat, such as low-velocity refugia for immature fish and adequate instream flows for migrating adult fish. With respect to upland species, commercial cannabis cultivation operations under CalCannabis' program would be limited to one acre in size and, therefore, would typically not be large enough to substantially interfere with movement of wildlife. Even if multiple cultivation sites were located near one another, they would be unlikely to substantially impede wildlife movement because there would be separation between the cultivation sites. Indeed, many local jurisdictions have adopted setback requirements or limits on the percentage of a parcel that can be dedicated to commercial cannabis cultivation, allowing wildlife to pass through or around the cultivated areas. The Draft PEIR found that this impact would be less than significant.
- **Effects on wildlife from pesticide use.** Impacts on wildlife from use of pesticides at indoor commercial cannabis cultivation sites are not expected, as wildlife would not be present within these indoor environments—access to indoor cultivation sites would be highly restricted. However, for outdoor and mixed-light cultivation, wildlife could be present and, therefore, a mechanism exists whereby wildlife could become exposed to pesticides. However, CDFA's regulations for commercial cannabis cultivation include control measures for pesticide application and storage that would reduce the potential for adverse effects on wildlife.

In addition, use of rodenticides has potential to lead to secondary poisoning issues. Consistent with CDPR guidance, commercial cannabis cultivation licensees are allowed to use only the following repellants in and around commercial cannabis cultivation sites, consistent with the label, to protect their crops from rodent herbivory: capsicum oleoresin, putrescent whole egg solids, and garlic. Because these are repellants and not rodenticides, they have no potential for secondary poisoning of non-target species. The Draft PEIR found that this impact would be less than significant.

- **Effects on riparian habitat, other sensitive natural communities, or federally protected wetlands.** Water diversion, runoff and sedimentation, and discharges of other contaminants could adversely affect riparian habitat, other sensitive natural communities, and federally protected wetlands adjacent to commercial cannabis cultivation sites. However, the federal and State regulations described above that protect special-status species would also be protective of aquatic habitats, including riparian areas and wetlands, by imposing limits on water diversions and requiring measures to minimize discharges to these

habitats. The Draft PEIR found that this impact would be less than significant.

Because of the limited size of cultivation at a microbusiness (less than 10,000 square feet) compared to the larger CDFA license types (up to four acres), and the expected smaller number of microbusiness cultivators compared to other types of cultivators, the impacts from cultivation at a microbusiness would be inherently limited in comparison to the impacts analyzed in the CDFA Draft PEIR. Furthermore, it is less likely that these vertically integrated businesses would be located in remote areas that contain sensitive biological resources. For these reasons, the impacts on biological resources from cultivation activities as part of a microbusiness would be **less than significant**.

4.4 Energy Use and Greenhouse Gas Emissions

4.4.1 Introduction

This section of the IS/ND presents the environmental setting and potential impacts of the Bureau's Proposed Program related to energy use and greenhouse gas (GHG) emissions. Information regarding energy use and GHG emissions presented in this section is based on numerous sources, including the following:

- Local, state, federal, and international governmental reports;
- Published scientific studies and peer-reviewed academic journal articles;
- Nongovernmental organization reports; and
- *CalCannabis Cultivation Licensing Program Draft Program Environmental Impact Report* (Draft PEIR), prepared by the California Department of Food and Agriculture (CDFA), included as **Appendix B** of this IS/ND.

4.4.2 Regulatory Setting

Federal Laws, Ordinances, Regulations, and Standards

At the federal level, the U.S. Environmental Protection Agency (USEPA) has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting and reporting requirements for large stationary emitters of GHGs. The Proposed Program regulations would not require separate GHG emission permitting or reporting because the Bureau's license types are not included among the industrial sectors regulated due to the relatively small scale of total emissions. The following sections briefly describe the history and content of the regulatory programs developed to date by USEPA and the U.S. Supreme Court.

The U.S. Supreme Court (Court) ruled for the first time in 2007 that GHG emissions are air pollutants covered under the federal Clean Air Act. (*Massachusetts v. Environmental Protection Agency*, [2007] 549 U.S. 497.) The Court found that USEPA has a mandatory duty to enact rules regulating mobile GHG emissions under the Clean Air Act. The Court held that GHGs fit the definition of an air pollutant causing and contributing to air pollution, which reasonably may be anticipated to endanger public health or welfare. In 2009, the USEPA Administrator determined that existing and projected concentrations of GHGs threaten public health and welfare of present-day and future generations, and that combined emissions from motor vehicles contribute to GHG pollution. USEPA's endangerment finding covers emissions of six key GHGs: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These GHGs are discussed further in Section 4.4.3, "Environmental Setting."

Corporate Average Fuel Economy and GHG Emission Standards

In 2009, the National Highway Traffic Safety Administration (NHTSA) and USEPA issued the first joint ruling to establish a national program to regulate passenger cars and light trucks of model years 2012-2016 to improve fuel economy and reduce GHG emissions. NHTSA

previously had set Corporate Average Fuel Economy (CAFE) standards for vehicle fuel efficiency, but the joint rule was the first coordinated effort between federal programs for fuel economy and GHGs. Since then, NHTSA and USEPA have issued new fuel efficiency and GHG emission standards. On April 1, 2010, USEPA and NHTSA established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012-2016 cars and light trucks. On August 28, 2012, USEPA and NHTSA enacted further reductions and issued a joint final rulemaking to establish 2017-2025 GHG emissions and CAFE standards for motor vehicles.

To address larger motor vehicles not covered in the regulations for cars and light trucks, on September 15, 2011, USEPA and NHTSA issued a final rule for Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles. (76 Fed. Reg. 57106.) This final rule is tailored to each of three regulatory categories of heavy-duty vehicles, including combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles, as well as medium-duty vehicles. On October 15, 2012, USEPA and NHTSA established a program to reduce GHG emissions and improve fuel economy standards for new cars and light trucks through 2025 (USEPA 2012). However, on March 15, 2017 President Donald Trump ordered a midterm evaluation of the later years of the 2017-2025 standards, and thus the increased mileage standard requirements may be subject to change.

Mandatory Reporting of Greenhouse Gases Rule

In response to the 2008 Consolidated Appropriations Act, USEPA issued the Mandatory Reporting of Greenhouse Gases Rule in 2009. The purpose of this rule is to collect accurate GHG data to inform future policy decisions. The rule requires reporting of GHG data and other relevant information from large sources and suppliers in the United States. Large sources are considered to have facilities that emit more than 25,000 metric tons of carbon dioxide equivalent (CO₂e) emissions per year. Facilities began reporting yearly emissions for 2010, and these data became available to the public in January 2012.

Clean Power Plan

In 2015, President Barack Obama and USEPA announced the Clean Power Plan, which is aimed at reducing carbon pollution from existing fossil fuel-fired electric generating units. The plan was designed to be flexible while implementing strict regulations to encourage the development of cleaner and lower-polluting American energy. On February 9, 2016, the Court stayed implementation of the Clean Power Plan pending judicial review. While awaiting action by the Court, USEPA was continuing to work with states that choose to find ways to reduce GHG emissions from power plants. In March 2017, however, President Trump issued an Executive Order titled “Promoting Energy Independence and Economic Growth,” which orders USEPA to review the final rule and potentially suspend, revise, or rescind it. In late April 2017, the U.S. Court of Appeals for the District of Columbia Circuit granted a 60-day deferral decision on litigation against the Clean Power Plan (New York Times 2017). In addition, President Trump has withdrawn the United States from the international Paris Climate Accord, in which representatives from 196 nations made a pact in December 2015 to adopt green energy sources, cut down on climate change emissions, and limit the rise of global temperatures (NPR 2017). Thus, the federal commitment to GHG reductions is in flux and it is not known at this time whether this program will be implemented.

State Agencies, Laws, and Programs

At the state level, the California Air Resource Board (CARB) has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting and reporting requirements for large stationary emitters of GHGs such as fossil-fueled power plants. As with federal requirements, the Proposed Program regulations would not require separate GHG emission permitting or reporting at the state level, because the Bureau's license types are not one of the industrial sectors regulated, which are primarily related to manufacturing and production of select products (e.g., cement, paper, hydrogen, nitric acid, lime, glass, and lead), electricity generation and cogeneration units, or suppliers of various fuel types (natural gas, transportation fuels), due to the relatively small scale of total emissions compared to other large emission sources.

Other efforts on a statewide level to regulate and reduce GHG emissions are detailed below but include establishing GHG emission goals, developing vehicle emission standards, and promoting sustainable land use and transportation planning. Most recently, the state's efforts to continuing GHG emission control and regulation progress include developing international partnerships. In June 2017, California's Governor Brown and the China's Science and Technology Minister signed an agreement, the California-China Clean Technology Partnership, to work collaboratively to develop clean energy technologies, drive innovation and commercialization in advance information technology and carbon capture and storage, and cooperate on emissions trading to help cut GHG emissions (Fortune 2017, Business Insider 2017).

Assembly Bill 1493

With the passage of Assembly Bill (AB) 1493 in 2002, California launched a proactive approach for dealing with GHG emissions and climate change at the state level. AB 1493 required CARB to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards apply to automobiles and light trucks beginning with the 2009 model year. Although litigation was filed challenging these regulations and USEPA initially denied California's related request for a waiver, a waiver subsequently was granted (CARB 2014).

Executive Orders S-03-05, B-16-2012, and B-30-15

In 2005, Governor Arnold Schwarzenegger issued Executive Order S-03-05, calling for statewide GHG reductions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. The executive order also called for the creation of a "Climate Action Team," which was to report to the Governor every 2 years on progress toward meeting the targets and the effects of GHG emissions on the state. The latest of these reports, *Climate Action Team Report to Governor Schwarzenegger and the California Legislature*, was published in December 2010 (California Environmental Protection Agency [Cal/EPA] 2010). In March 2012, Governor Jerry Brown issued Executive Order B-16-2012, affirming the long-range climate goal for California to reduce GHG emissions to 80 percent below 1990 levels by 2050. In 2015, Governor Brown issued Executive Order B-30-15, which established a California GHG reduction target of 40 percent below 1990 levels by 2030.

California Global Warming Solutions Act

CARB is the lead agency for implementing AB 32, the California Global Warming Solutions Act, adopted by the California State Legislature in 2006. AB 32 set a statewide target to reduce GHG emissions to 1990 levels by 2020. AB 32 also required CARB to prepare a Scoping Plan identifying the main strategies to be used to achieve reductions in GHG emissions in California.

After receiving public input on its discussion draft of the Proposed Scoping Plan (released in June 2008), CARB issued its Climate Change Proposed Scoping Plan in October 2008, and adopted the plan in December 2008 (CARB 2008). This plan contains an outline of the proposed State strategies to achieve the 2020 GHG emission limits. Key elements of the Scoping Plan include the following recommendations:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewable energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures in accordance with existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (described below); and
- Creating targeted fees, including a public goods charge on water use, fees on gas emissions with high global warming potential, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

Under the Scoping Plan, approximately 85 percent of the state's emissions are subject to a cap-and-trade program, where covered sectors are placed under a declining emissions cap. Emissions reductions are to be achieved through regulatory requirements and the option to reduce emissions further or purchase allowances to cover compliance obligations. Emission reductions from this cap-and trade program are expected to account for a large portion of the reductions required by AB 32.

CARB is updating the Scoping Plan to reflect progress since 2005, additional reduction measures, and plans for reductions beyond 2020. CARB recently released the draft proposed second update to reflect the 2030 target set by Executive Order B-30-15 and codified by SB

Senate Bill 32 and Assembly Bill 197

Senate Bill (SB) 32, a follow-up to the California Global Warming Solutions Act of 2006 (AB 32), calls for a statewide GHG emissions reduction to 40 percent below 1990 levels by December 31, 2030, by promoting technology and cost-effective GHG emission reductions. SB 32 particularly targets reductions in the state's most disadvantaged communities, which would be disproportionately affected by climate change.

AB 197 expands the legislative oversight of CARB and its associated climate change activities. The bill includes updates to the number and responsibilities of the CARB board membership, CARB regulations and rulemaking, and the schedule by which information is updated and disclosed. AB 197 and SB 32 were approved by Governor Brown in September 2016.

Low Carbon Fuel Standard

Executive Order S-1-07, the Low Carbon Fuel Standard (LCFS), was issued in January 2007. The order called for a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020. The LCFS was approved by CARB in 2009, and was implemented in January 1, 2011 with subsequent amendments going into effect December 2011. The regulation established annual performance standards for fuel producers and importers, applicable to all fuels used for transportation in California (CARB 2011). In September 2015, the Board approved the readoption of the LCFS, which became effective on January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted.

Senate Bill 375

SB 375, the Sustainable Communities and Climate Protection Act of 2008, enhanced California's ability to reach its AB 32 goals by promoting land use and transportation planning with the goal of more sustainable communities. SB 375 requires CARB to develop regional GHG emission reduction targets for 2020 and 2035 for each region covered by one of the state's 18 metropolitan planning organizations (MPOs). Executive Order G-11-024 set these targets in 2011. The MPOs were tasked with developing Sustainable Communities Strategies (SCS) that integrate land use and transportation planning and demonstrate an ability to attain the 2020 and 2035 reduction targets.

CEQA Guidance and GHG Significance Thresholds

Several air districts have drafted or adopted guidance on the analysis of GHGs under the California Environmental Quality Act (CEQA). These guidance documents contain recommended methods for quantifying GHGs and determining the significance of GHG emission impacts. Additionally, the California Governor's Office of Planning and Research added a Greenhouse Gas Emissions section to the Guidelines Appendix G Environmental Checklist to assist lead agencies with review and quantification of potential climate change impacts. Typically, GHG emission significance thresholds are based on a "bright-line" level of GHG emissions, which sets a numerical mass emission limit for the incremental increase from baseline to future; best performance standards; a reduction target from baseline GHG emission levels; or consistency with a climate action plan (CAP). Section 15064.4 of the Guidelines provides the following direction on determining the significance of impacts from GHG emissions:

- (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

- (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
 - (2) Rely on a qualitative analysis or performance based standards.
- (b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:
- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
 - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
 - (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The “Methodology” discussion in Section 4.4.4, “Impact Analysis,” identifies the thresholds applicable to this analysis.

Local Laws, Plans, Policies, and Regulations

Sustainable Communities Strategy

As mentioned above and described in Section 4.2, *Air Quality*, MPOs throughout the state were tasked with developing an SCS to integrate land use and transportation planning in their respective planning regions. An SCS may contain provisions for projects that are consistent with the SCS to be relieved of certain environmental review requirements, although these streamlining processes mainly apply to development involving residential and mixed-use projects.

Local General Plans and Climate Action Plans

Many city and county general plans contain goals, policies, and strategies related to air quality and GHG emissions. In addition, some cities and counties have adopted or drafted CAPs or GHG emission reduction plans. Demonstration of project compliance and consistency with the CAP may involve evaluation of GHG emissions with a bright-line threshold, implementation of mandatory or voluntary GHG reduction measures, or a comparison of project emission reductions and CAP emission reduction goals.

For example, the Tulare County CAP requires that projects achieve a 6 percent reduction in GHG emissions to be consistent with the CAP (Tulare County 2010). The City of Sacramento

CAP lists primary actions for GHG emissions reductions that must be incorporated into new development projects and existing development for CAP compliance (City of Sacramento 2012). The San Diego County CAP contains an efficiency threshold (emissions per service population), a bright-line threshold, and a performance threshold for development projects, as well as a stationary-source threshold (County of San Diego 2012).

General plans and CAPs may include applicable policies and strategies such as encouraging the use of low-carbon fuels and alternative energy, limiting idling time of vehicles and equipment, recommending best management practices for agricultural operations and construction, and supporting heavy-duty fleet conversions.

Local Ordinances Related to Commercial Cannabis Business

Several counties and cities in the state have established commercial cannabis ordinances; these are summarized in **Appendix C**. Although none of these ordinances specifically address commercial cannabis business operations, some counties and cities do have regulations related to energy use and GHG emissions for cannabis cultivation (Table 4.4-1). As indicated in Table 4.4-1 and described below, Humboldt, Mendocino, and Monterey County regulations specify limitations on the source of energy that can be used in cultivation, such as renewable sources or offset requirements, and some prohibit the use of on-site diesel generators.

Table 4.4-1. Local Regulations Addressing Energy Use for Commercial Cannabis Cultivation

County	Ordinance	Summary of Policies
<i>Renewable Energy Requirements</i>		
Humboldt	Ordinance No 2544	Electrical power for indoor cultivation shall be provided by on-grid power with 100% renewable source, on-site net-zero-energy renewable source, or the purchase of carbon offsets of any portion of power not from renewable sources.
Mendocino	Ordinance No. 4356	Indoor cultivation may not rely on diesel generators for a source of power.
Monterey	Ordinance No. 5270	On-site renewable energy generation shall be required for all indoor cultivation activities. Renewable energy systems shall be designed to have a generation potential equal to or greater than one half of the anticipated energy demand.
<i>Energy Use Requirements</i>		
Mendocino	Ordinance No. 4383	Light assistance for outdoor cultivation must not exceed 35 watts per square foot of growing area.
Yolo	Ordinance No. 1542	Use of light assistance for outdoor cultivation shall not exceed 600 watts per 100 square feet of growing area.

Humboldt County implemented Ordinance No. 2544 in early 2016; the ordinance mandates the use of renewable energy for medicinal cannabis cultivation. The ordinance states that electrical power for indoor cultivation operations, including (but not limited to) illumination, heating, cooling, and ventilation, shall be provided by on-grid power with 100-percent renewable sources, on-site zero-net-energy renewable sources, or the purchase of carbon offsets of any portion of power not from renewable sources. According to Monterey County Ordinance No. 5270, on-site renewable energy generation shall be required for all indoor operations (cultivation activities using high-intensity artificial lighting). The required use of renewables in these two regulations offsets the increase in energy demand from standard public energy sources such as fossil fuel plants, and subsequently reduces potential impacts related to GHG emissions and climate change. For similar reasons, Mendocino County placed restrictions on the use of diesel generators for cultivation in Ordinance No. 4356; this restriction has the added benefit of fire protection as well as reducing potential emissions.

In addition, Mendocino and Yolo Counties have existing medicinal cannabis cultivation energy use requirements (Table 4.4-1). Current regulations are primarily based on limiting the allowed wattage for a cultivation site, either by total wattage allowed for the entire operation or by square footage. It is important to note that each of these counties requires a special use permit to allow for new development or operation of a cultivation site. A special use permit allows local review of a proposed project and the ability to place additional mitigation measures and restrictions on the project.

Mendocino County in Ordinance No. 4356 and Yolo County in Ordinance No. 1542 both set limitations on energy use per square foot of cultivation area. These two counties have chosen to adopt the CalCannabis Cultivation Licensing Program's allowances for the various license types.

4.4.3 Environmental Setting

Greenhouse Gas Emissions

This section describes global climate change; GHG and related emissions; and global, national, and California GHG emission inventories.

Global Climate Change

“Global warming” and “global climate change” are terms that describe changes in the Earth’s climate. Global climate change is a broader term, used to describe any worldwide, long-term change in the Earth’s climate. This change could be, for example, an increase or decrease in temperatures, the start or end of an ice age, or a shift in precipitation patterns. The term global warming is more specific and refers to a general increase in temperatures across the Earth. Although global warming is characterized by rising temperatures, it can cause other climatic changes, such as a shift in the frequency and intensity of rainfall or hurricanes. Global warming does not necessarily imply that all locations will be warmer. Some specific locations may be cooler even though the Earth, on average, is warming. All of these changes fit under the umbrella of global climate change.

Because GHGs persist and mix in the atmosphere, they have impacts on a global scale, rather than locally or regionally as with most air pollutants. Consequently, GHG emissions that contribute to global climate change result in a worldwide cumulative impact (global

warming) rather than a local or regional project-specific impact like those typically associated with criteria pollutants.

Although natural processes have, in the past, caused global warming, general scientific consensus concurs that present-day global warming is primarily the result of human activity on the planet (IPCC 2008, 2013). According to the Intergovernmental Panel on Climate Change's (IPCC's) *Fourth Assessment Report: Climate Change 2007*, scientific consensus concurs that the global increases in atmospheric concentrations of GHGs since 1750 have resulted mainly from human activities such as fossil fuel use, land use change (e.g., deforestation), and agriculture (IPCC 2008, 2013). This human-made, or anthropogenic, warming primarily is caused by increased GHG emissions that keep the Earth's surface warm, known as the "greenhouse effect." The greenhouse effect and the role GHG emissions play in it are described below.

Greenhouse Gases and Related Emissions

The term "greenhouse gases" refers to the group of gases that contribute to the natural greenhouse effect¹ as well as gases that are human-generated and are emitted by modern industrial products, such as HFCs, chlorinated fluorocarbons, and SF₆. These last two families of gases, although not naturally present, have properties that also cause them to trap infrared radiation when they are present in the atmosphere, thus making them GHGs. Each of these gases affects global warming through a combination of the volume of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas will contribute to global warming (i.e., its potential to trap heat) relative to how much warming would be caused by the same mass of CO₂. **Table 4.4-2** shows the six GHGs and their respective GWPs.

The most important GHG in human-induced global warming is CO₂. Although many gases have much higher GWPs than the naturally occurring GHGs, CO₂ is emitted in such vastly higher quantities that it accounts for 85 percent of the GWP of all GHGs emitted in the United States (USEPA 2006). Fossil fuel combustion, especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO₂ emissions over time and, thus, substantial increases in atmospheric CO₂ concentrations. In 2005, atmospheric CO₂ concentrations were about 379 parts per million (ppm), more than 35 percent higher than the preindustrial concentrations of about 280 ppm (IPCC 2008). In addition to the sheer increase in the volume of its emissions, CO₂ is a major factor in human-induced global warming because of its long lifespan in the atmosphere (50 to more than 200 years).

Global, National, and California GHG Emission Inventories

GHG emissions typically are measured in terms of mass of CO₂e. CO₂e is calculated as the product of the mass of a given GHG and its specific GWP. Worldwide emissions of GHGs in 2004 were more than 20 billion metric tons (1 metric ton being equivalent to 1,000 kilograms) of CO₂e per year (United Nations Framework Convention on Climate Change 2014). In 2013, U.S. sources emitted about 6.7 billion metric tons of CO₂e, an increase of about 8.4 percent since 1990, but a reduction of about 6.9 percent from 2005 inventories (USEPA

¹ The greenhouse effect occurs when gases comprising Earth's atmosphere trap some of the heat from solar radiation, and radiate that heat back to Earth's surface. The effect's name is derived from the similar warming effect experienced by glass-walled greenhouses (SFGate 2017).

2013). Approximately 80 percent of the GHG emissions in the U.S. are comprised of CO₂ emissions from fossil fuel combustion (USEPA 2013). Figure 4.4-1 and Figure 4.4-2 provide an overview of relative GHG emissions in the United States by type of GHG and source, respectively.

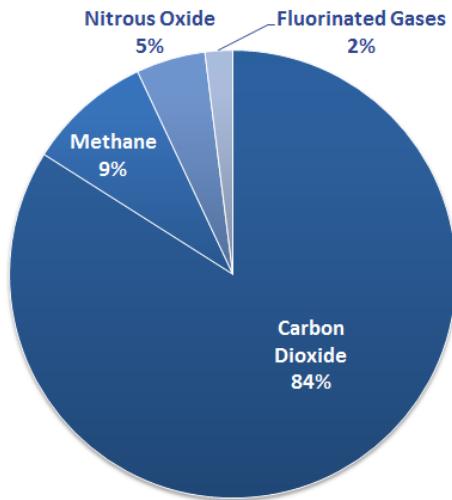
Table 4.4-2. Greenhouse Gas Overview and Global Warming Potential

Greenhouse Gas	100 year GWP (IPCC 2013/SAR) ^a	Brief Description
Carbon Dioxide (CO ₂)	1/1	Released into the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and wood products, and agricultural crop wastes or residues, and also because of certain chemical reactions; removed from the atmosphere when absorbed by plants (including agricultural activity) and the oceans; remains in the atmosphere for 50 to more than 200 years.
Methane (CH ₄)	28/21	Emitted during the production and transport of coal, natural gas, and oil; also result from livestock and other agricultural practices and created by the decay of organic waste in municipal solid waste landfills; remains in the atmosphere for about 10 years.
Nitrous Oxide (N ₂ O)	265/310	Emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste; remains in the atmosphere for about 100 years.
Hydrofluoro-carbons (HFCs)	4-12,400/650–11,700	Typically used in refrigeration and air conditioning equipment, as well as in solvents, and primarily generated from use in air conditioning systems in buildings and vehicles; remain in the atmosphere from 10 to 270 years.
Perfluoro-carbons (PFCs)	6,630-11,100/6,500–9,200	Emitted as by-products of industrial and manufacturing sources; remain in the atmosphere from 800 to 50,000 years.
Sulfur Hexa-fluoride (SF ₆)	23,500/23,900	Used in electrical transmission and distribution; remain in the atmosphere approximately 3,200 years.

Note:

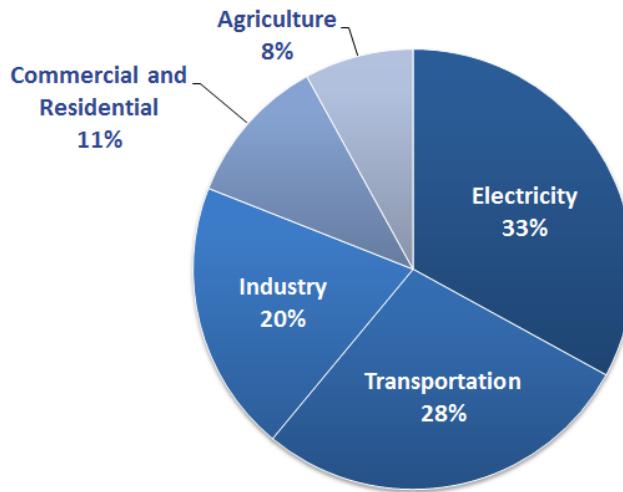
^a As scientific understanding of the global warming potential (GWP) of GHGs improves over time, GWP values are updated in the Intergovernmental Panel on Climate Change (IPCC) scientific assessment reports. However, for regulatory consistency, the Kyoto Protocol fixed the use of GWP values to those published in the IPCC 1996 Second Assessment Report (SAR). The table shows GWP values for 100 years from both the most recent IPCC report (IPCC 2013) and SAR.

Sources: USEPA 2013, IPCC 1996, 2008, 2013



Source: USEPA 2013

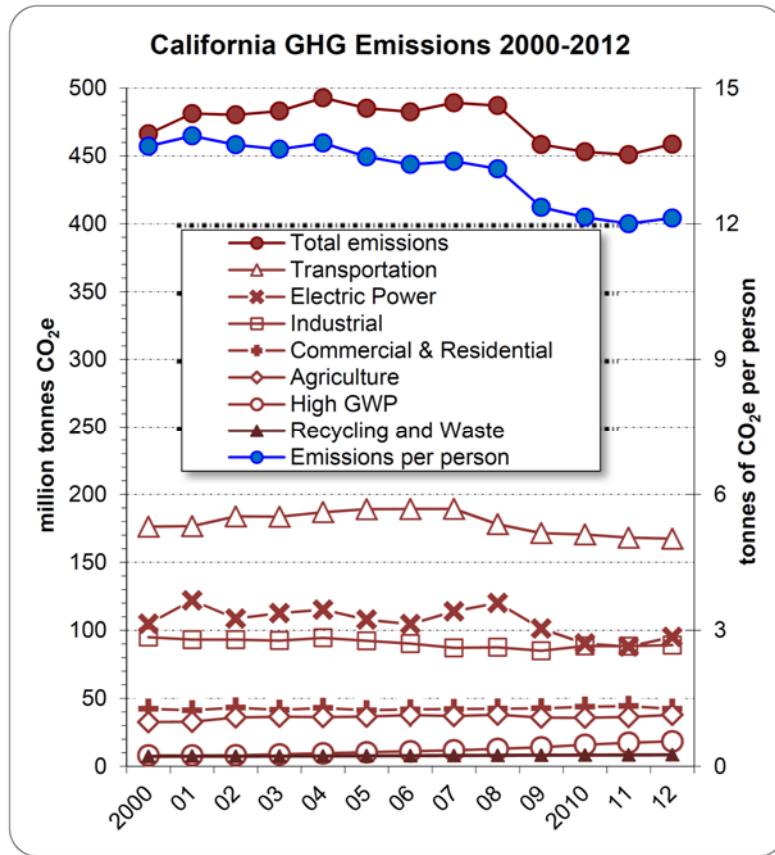
Figure 4.4-1. Greenhouse Gas Emissions by Type in U.S. (2011)



Source: USEPA 2013

Figure 4.4-2. Greenhouse Gas Emissions by Source in U.S. (2011)

In 2011, California emitted approximately 448 million metric tons of CO₂e, or about 6.7 percent of U.S. emissions; this is a reduction of about 8.4 percent since 2005, although the population grew during that period by about 5 percent. This is a large amount of emissions, primarily because of the sheer size of California; compared to other states, California has a per capita GHG emission rate of 3.1 metric tons per person, which is the seventh lowest of the 50 states. This low rate reflects California's higher energy efficiency standards, its temperate climate, and its reliance on substantial out-of-state energy generation. Figure 4.4-3 shows GHG emissions in California by sector and per capita emissions.



Note: Tonne = metric ton (1,000 kilograms)

Source: CARB 2013

Figure 4.4-3. Greenhouse Gas Emissions in California by Sector and Per Capita (2000-2012)

Energy Use

This section describes energy use related to commercial cannabis business activities, including the commercial cultivation of cannabis. Most studies have focused on energy use for cannabis cultivation, and little information has been found related to other business types; for this reason, this discussion primarily focuses on cultivation, which may occur under the Proposed Program under a microbusiness license. Cultivation is divided into three main groups: indoor, mixed-light, and outdoor grow operations.

Energy Sources and Use in Cannabis Cultivation and Business Operations

Cannabis cultivation equipment, particularly the lighting and climate control equipment required for indoor and mixed-light cannabis cultivation operations, requires a relatively large amount of energy (primarily electricity) for operation. As described by Mills (2012), specific energy uses in indoor grow operations include high-intensity lighting, dehumidification to remove water vapor and avoid mold formation, space heating or cooling during non-illuminated periods and drying processes, preheating of irrigation water, generation of CO₂ from fossil fuel combustion, and ventilation and air conditioning to remove waste heat. Reliance on equipment can vary widely as a result of factors such as plant spacing, layout, and

the surrounding climate of a given facility. Substantial energy inefficiencies also arise from air cleaning, noise and odor suppression, and inefficient electric generators sometimes used to avoid conspicuous utility bills (Mills 2012). As a result of these appliances and systems, Mills (2012) estimates that cannabis production requires eight times as much energy per square foot as a typical U.S. commercial building, four times that of a hospital, and 18 times that of an average U.S. home.

Typically, a connection to a local electricity provider's electrical system/network is used as a primary energy source for equipment. For example, in Humboldt County, Pacific Gas and Electric Company is the main electricity supplier (Arnold 2013). Additional energy sources for indoor, mixed-light, and outdoor cultivation equipment could include, but are not limited to, on-site solar panels and diesel or gasoline generators.

Mixed-light and outdoor cannabis cultivation practices typically involve a lower energy demand. In 2014, the Northwest Power and Conservation Council estimated that approximately 90 percent of the cannabis cultivated in California was grown outdoors (Northwest Power and Conservation Council 2014). Mixed-light operations, commonly referred to as greenhouses, offer a middle ground between a controlled growing environment and reduced energy demand. Mixed-light grows have substantially lower energy demand than indoor grows (San Diego Gas & Electric [SDG&E] 2016).

As mentioned above, no similar studies of energy used in other commercial cannabis activities were found as those studies described above for cannabis cultivation operations. All types of commercial cannabis businesses, similar to other types of existing commercial businesses, would use energy for lighting, including indoor and outdoor security, and general operations equipment such as computers, printers, and cash registers. Structures used for storage and retail sales of cannabis would use energy for temperature and possibly humidity control. In addition, energy would be used for transportation of commercial cannabis in automobiles and trucks from cultivation sites to distributors and testing laboratories, as well as from those locations to retailers, and for delivery services from retailers to customers. Microbusinesses that manufacture commercial cannabis goods may use kitchen equipment such as ovens or stoves or industrial equipment such as mechanical presses or CO₂ extraction equipment. Testing laboratories use testing and other diagnostic equipment that requires energy.

4.4.4 Impact Analysis

Methodology

Due to the proprietary and often illicit nature of past and current cannabis business activities, little reliable data are available regarding the various types of businesses that may become licensed under the Proposed Program, including: their sites; their sizes; their specific activities, associated energy use, and GHG emissions. Therefore, it is not possible to provide a quantitative estimate and analysis on how these activities would change from existing levels, if at all, under the Proposed Program.

For the same reason, it is not possible to provide a quantitative estimate and analysis of current and future GHG emissions associated with the different categories of transportation: employee-related commuting transportation to business sites; transportation of cannabis in automobiles and trucks from cultivation sites to distributors' storage facilities; and from

distributors to testing laboratories and retailers, and for delivery services from retailers and microbusinesses to customers.

Thus, this section provides a qualitative analysis of the Proposed Program's impacts with regard to energy use, GHG emissions, and climate change.

In addition, because it is unknown where many licensed commercial cannabis premises, including microbusiness cultivation sites, would be located under the Proposed Program, it is not possible to determine specific impacts at these sites. Even in cases where the sites are known, the statewide focus of this analysis makes it infeasible to evaluate every site-specific impact. Potential impacts are instead discussed generally, considering the various types of impacts that could occur. Additionally, as noted throughout the IS/ND, this analysis does not consider site development impacts (e.g., potential short-term impacts related to the construction or modification of cannabis business facilities); rather, these types of effects are evaluated in the cumulative impact analysis contained in Chapter 5, *Mandatory Findings of Significance*.

Significance Criteria

For the purposes of this analysis, based on Appendix G of the Guidelines, the Proposed Program would result in a significant impact related to energy use and GHG emissions if it would:

- A. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment;
- B. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases;
- C. Cause wasteful, inefficient, and unnecessary consumption of energy during construction, operation, and/or maintenance; or
- D. Cause a substantial increase in energy demand and the need for additional energy resources.

The primary goals for statewide GHG reductions are to reduce GHG emissions initially to 1990 levels by 2020, and eventually to 80 percent below 1990 levels by 2050, to stabilize GHG levels in the atmosphere. These goals are tied fundamentally to AB 32 and Executive Orders S-03-05 and B-16-2012. The necessary steps to achieve these goals have been interpreted in various ways. The California Air Pollution Control Officers Association (CAPCOA) described many options in its 2008 report *CEQA and Climate Change* (CAPCOA 2008). It is widely recognized that no single project could generate enough GHG emissions to change the global climate noticeably; however, the combination of worldwide GHG emissions from past, present, and future projects could contribute substantially to global climate change. Thus, project-specific GHG emissions need to be evaluated in terms of whether or not they would result in a considerable contribution to cumulatively significant impacts related to global climate change.

Environmental Impacts of the Proposed Program

Impacts of Distribution, Retail Sale, Laboratory Testing, and Microbusiness Manufacturing Activities

Impact GHG-1: Potential for cannabis business operations to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment conflict with an applicable plan, policy, or regulation adopted to reduce the emissions of GHGs, result in wasteful, inefficient, and unnecessary consumption of energy, or cause a substantial increase in energy demand and the need for additional energy resources. (Less than Significant)

Under both baseline conditions and the Proposed Program, commercial cannabis activities may include truck or vehicle trips to and/or from licensees such as distributors, retailers, testing laboratories, and microbusinesses by vendors, workers, delivery drivers, retail customers, and other commercial cannabis licensees, which would result in energy use for fuel and direct GHG emissions from fuel combustion. Combustion of fossil fuels from electricity generation sources would occur for temperature, humidity control, odor control equipment, and lighting, including interior and exterior security, for cannabis distribution storage buildings, retail stores, testing laboratories, and microbusiness manufacturers, which would also use energy and generate GHG emissions.

Many of the emissions from licensed cannabis businesses would represent a continuation of baseline conditions and their energy use would not be substantially different from other (non-cannabis-related) businesses; it is unknown the extent to which new emissions may occur as a result of the Proposed Program, and whether they would be substantial. In addition, many energy providers to licensed cannabis businesses would be required to comply with renewable portfolio standards that will increase over time, helping to ensure that emissions meet the State's GHG emissions reduction targets. Similarly, efficiency standards for various types of equipment used in businesses and fuel efficiency standards for vehicles will have the effect of moderating GHG emissions over time. Finally, many local jurisdictions have adopted regulations to limit energy use and GHG emissions, some of which are specific to cannabis commerce, with which licensed cannabis businesses must comply. For these reasons, energy and GHG impacts would be **less than significant**.

Impacts Related to Microbusiness Cultivation

CDFA's Draft PEIR (Appendix B of this IS/ND), examined energy and GHG impacts that may occur as a result of licensed cannabis cultivation. The findings of the Draft PEIR for energy and GHG impacts resulting from cultivation are summarized as follows:

- **Potential to conflict with an applicable plan, policy, or regulation adopted to reduce the emissions of GHGs; result in wasteful, inefficient, and unnecessary consumption of energy; or cause a substantial increase in energy demand and the need for additional energy resources.** Licensed cannabis cultivation would generate energy demand and GHG emissions from use of high-intensity lighting, ventilation, and temperature control systems necessary to grow cannabis indoors and in mixed-light operations. The high energy demand of indoor cultivation represents the largest contributor of GHG emissions. Outdoor and mixed-light grow

operations could also utilize fuel-powered equipment that would contribute to GHG emissions. Additional sources of GHG emissions would include employee vehicle use and truck trips associated with the commuting of workers to and from cultivation sites.

CDFA's regulations will include environmental protection measures that would limit the use of gas- or diesel-powered generators, and establish renewable energy requirements for indoor and mixed-light cultivators. The regulations are expected to reduce the current levels of baseline energy demand and/or GHG emissions produced in the state from cultivation to help meet the state's GHG reduction target.

Several counties and cities, as referenced above in Section 4.4.2, have implemented more stringent energy use performance standards for cannabis cultivation operations. For example, Humboldt County requires 100 percent renewable energy use or carbon offsets for indoor operations. As a result, energy use and associated GHG emissions would likely be lower than baseline levels in those locations.

The PEIR concluded that the CalCannabis Licensing program would increase the potential for attainment of the statewide GHG emission reduction goals of AB 32 and Executive Orders S-03-05 and B-16-2012, compared to baseline conditions, and would not be expected to conflict with local agencies' GHG plans and policies. The requirements of CDFA's regulations and the program would also reduce the wasteful, inefficient, and unnecessary consumption of energy and reduce energy demand and the need for additional energy resources. The Draft PEIR found that these impacts would be less than significant.

The conclusions summarized above would apply to the much smaller scale cultivation activities associated with microbusinesses under the Proposed Program, and these activities are not expected to amount to a substantial increase from baseline conditions. For all of these reasons, energy use and GHG emissions impacts from microbusiness-related cultivation under the Proposed Program would be **less than significant**.

4.5 Hazards, Hazardous Materials, and Human Health

4.5.1 Introduction

This section of the IS/ND presents the environmental setting and potential impacts of the Bureau's Proposed Program related to hazards, hazardous materials, and human health.

Under federal and State laws, any material, including waste, may be considered hazardous if it is specifically listed by statute as such, or if it is toxic (i.e., causes adverse human health effects), ignitable (i.e., has the ability to burn), corrosive (i.e., causes severe burns or damage to materials), or reactive (i.e., causes explosions or generates toxic gases). The term *hazardous material* is defined as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a substantial present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. (Health & Saf. Code §25501[o].)

Information regarding hazards, hazardous materials, and human health presented in this section is primarily based on the following sources:

- Agency webpages and fact sheets;
- Peer-reviewed or scientific journal articles;
- Regulatory orders and agency publications; and
- *CalCannabis Cultivation Licensing Program Draft Program Environmental Impact Report* (Draft PEIR), prepared by the California Department of Food and Agriculture (CDFA), included as **Appendix B** of this IS/ND.

4.5.2 Regulatory Setting

Federal Laws, Ordinances, Regulations, and Standards

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act) (42 U.S.C. §9601 et seq.) was established to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. CERCLA created a tax on the chemical and petroleum industries to generate funds to clean up abandoned or uncontrolled hazardous waste sites in which no responsible party could be identified (U.S. Environmental Protection Agency [USEPA] 2016a). CERCLA also granted authority to USEPA to respond directly to hazardous waste spills and required those responsible for a spill or accidental release of hazardous materials to report the release to USEPA.

The Superfund Amendments and Reauthorization Act of 1986 (SARA) (Public Law 99-499) amended some provisions of CERCLA (USEPA 2016b). SARA increased the focus on human health problems posed by hazardous waste releases, stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, and

encouraged greater citizen participation in making decisions on how sites should be cleaned up (USEPA 2016b). It is unlikely that commercial cannabis businesses could spill or release hazardous materials in sufficient quantities to require placement of a site on the National Priorities List.¹

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) (42 U.S.C. §6901 et seq.) was enacted in 1976 to address the increasing problems the nation faced from the growing volume of municipal and industrial solid waste (USEPA 2016c). RCRA sets national goals for protecting human health and the environment from the potential hazards of waste disposal, conserving energy and natural resources, reducing the amount of waste generated, and ensuring that wastes are managed in an environmentally sound manner. To achieve these goals, RCRA established three interrelated programs: the solid waste program, the hazardous waste program, and the underground storage tank program.

The hazardous waste program established a system for controlling hazardous wastes from the time they are generated to the time they are disposed of (“cradle-to-grave” management) (USEPA 2016c). Under RCRA, owners and operators of hazardous waste treatment, storage, and disposal facilities must follow a set of standards (e.g., facility design and operation, contingency planning and emergency preparedness, and recordkeeping) to minimize risk and impacts on human health and the environment, codified in 40 Code of Federal Regulations, part 264. Commercial cannabis business operations would be subject to RCRA to the extent that they generate hazardous waste or store hazardous materials in underground storage tanks.

Emergency Planning and Community Right-to-Know Act—Toxic Release Inventory

Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) established the Toxic Release Inventory (TRI) (USEPA 2016d). TRI is a publicly available database containing information on disposal and other releases of toxic chemicals from industrial facilities. As stipulated in 40 Code of Federal Regulations, part 372, owners or operators of facilities that release toxic chemicals above a certain threshold (25,000 pounds or more per year) are required to submit information about: (1) on-site releases and other disposals of toxic chemicals; (2) on-site recycling, treatment, and energy recovery associated with TRI chemicals; (3) off-site transfers of toxic chemicals from TRI facilities to other locations; and (4) pollution prevention activities at facilities. It is unlikely that commercial cannabis business operations could release toxic chemicals above the threshold requiring reporting under TRI.

Federal Insecticide, Fungicide, and Rodenticide Act

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. §136 et seq.) was enacted in 1947, but has since been amended by the Federal Environmental Pesticide Control Act of 1972 and the Food Quality Protection Act of 1996. In its current form, FIFRA mandates

¹ The National Priorities List is the list of national priorities for cleanup and remediation among the known or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories.

USEPA to regulate the use and sale of pesticides to protect human health and the environment (USEPA 2017). USEPA achieves this mandate by registering and labeling pesticides.

Under FIFRA, all new pesticides (with minor exceptions) must be registered by the Administrator of USEPA through a process in which appropriate crops and sites for use of the pesticide are identified and prescribed based on research data (USEPA 2017). Labeling requirements control when and under what conditions pesticides can be applied, mixed, stored, loaded, or used; when cultivation areas can be reentered after application; and when crops can be harvested (USEPA 2017). Microbusinesses using registered pesticides in cultivation activities would be required to follow the label instructions developed pursuant to FIFRA.

Occupational Safety and Health Administration Regulations

The Occupational Safety and Health Act of 1970 created the Occupational Safety and Health Administration (OSHA) to ensure safe and healthful conditions for workers by setting and enforcing standards and by providing training, outreach, education, and assistance (U.S. Department of Labor 2017a). To fulfill this purpose, OSHA develops and enforces mandatory job safety and health standards.

These standards, codified in 29 Code of Federal Regulations, part 1910, address issues that range in scope from walking and working surfaces, to exit routes and emergency planning, to hazardous materials and personal protective equipment. They include exposure limits for a wide range of specific hazardous materials, including pesticides, as well as requirements that employers provide personal protective equipment (i.e., protective equipment for eyes, face, or extremities; protective clothing; respiratory devices) to their employees wherever it is necessary (i.e., when required by the label instructions) (29 C.F.R. §1910.132).

OSHA standards also require that chemical manufacturers and importers obtain and develop Safety Data Sheets (SDSs) (formerly known as Material Safety Data Sheets) (29 C.F.R. §1910.1200; U.S. Department of Labor 2017b). Employers must have an SDS in the workplace for each chemical they use (29 C.F.R. §1910.1200). Commercial cannabis businesses operations would be required to comply with OSHA regulations and standards, including worker personal protective equipment requirements.

State Laws, Ordinances, Regulations, and Standards

Unified Program

The Unified Program consolidates and coordinates several regulatory programs in California related to hazardous wastes and materials (California Environmental Protection Agency [Cal/EPA] 2012). Codified in California Code of Regulations, title 27, division 1 and California Health and Safety Code chapter 6.11, the Unified Program consolidates the following programs: HMBPs/HMAPs, CalARP, Underground Storage Tank, Aboveground Petroleum Storage Act, Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting), and California Uniform Fire Code HMMPs and HMISs. The Unified Program transfers responsibility for implementation of various hazardous waste and materials regulatory programs to local agencies, such as cities and counties, which are designated as Certified Unified Program Agencies (CUPAs) (Cal/EPA 2012).

California Health and Safety Code—Hazardous Waste and Hazardous Materials

Several sections of the California Health and Safety Code deal with hazardous waste and hazardous materials. Division 20, chapter 6.5 addresses hazardous waste control and contains regulations on hazardous waste management plans, hazardous waste reduction, recycling and treatment, and hazardous waste transportation and hauling. Under chapter 6.5, article 6, persons generating hazardous wastes that are to be transported for off-site handling, treatment, storage, or disposal must complete a hazardous waste manifest before transport, indicating the facility to which the waste is being shipped for treatment, disposal, or other purposes.

Under chapter 6.95, article 1, areas and businesses that have a threshold amount of hazardous materials on site (55 gallons of liquid; 500 pounds of solid for businesses) must have plans in place for emergency response to an accidental release of materials. These Hazardous Materials Business Plans (HMBPs) and Hazardous Materials Area Plans (HMAPs) must include at least the following:

- A listing of the chemical name and common names of every hazardous substance or chemical product handled by the business;
- The category of waste, including the general chemical and mineral composition, of every hazardous waste handled by the business;
- The maximum amount of each hazardous material or mixture containing a hazardous material that is present on site;
- Sufficient information on how and where the hazardous materials are handled by the business to allow fire, safety, health, and other appropriate personnel to prepare adequate emergency responses to potential releases of the hazardous materials;
- Emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material; and
- Training for all new employees and annual training, including refresher courses, for all employees on safety procedures in the event of a release or threatened release of a hazardous material.

Under chapter 6.95, article 2, operators of stationary sources of hazardous materials are required (if they are deemed an accident risk) to prepare risk management plans (RMPs), detailing strategies to reduce the risk of accidental hazardous material release, and submit them to the California Emergency Management Agency. Commercial cannabis businesses that store hazardous materials (e.g., pesticides, fuel) exceeding the threshold quantity would be required to prepare an HMBP.

California Accidental Release Prevention Program

First implemented in 1997, the California Accidental Release Prevention (CalARP) program was designed to prevent accidental releases of hazardous substances, minimize damage if releases occur, and satisfy community right-to-know laws (California Office of Emergency Services [Cal OES] 2017). Similar to the chemical accident prevention provisions of the federal Clean Air Act, the CalARP program and implementing regulations (Cal. Code Regs., tit.

19, division 2, chapter 4.5) require businesses that handle more than a threshold quantity of regulated substances to develop an RMP.

In most cases, the Certified Uniform Program Agency (CUPA) is the administering agency responsible for implementing the CalARP program. When no CUPA exists, the administering agency is designated by the Secretary for Environmental Protection or the Office of Emergency Services. The administering agency determines the level of detail in the RMPs, reviews the RMPs, conducts facility site inspections, and provides public access to most of the information provided by facilities.

California Fire Code—Hazardous Materials Management Plans and Hazardous Materials Inventory Statements

The California Fire Code (29 Cal. Code Regs., tit. 29, part 9) requires businesses that handle more than a threshold quantity of hazardous materials to prepare a Hazardous Materials Management Plan (HMMP) and a Hazardous Materials Inventory Statement (HMIS). HMMPs and HMISs are similar to the HMBPs and HMAPs required under chapter 6.95 of the California Health and Safety Code. Similar to business and area plans, the HMMP/HMIS requirement is an element of the Unified Program; however, the California Department of Forestry and Fire Protection (CAL FIRE) Office of the State Fire Marshall is responsible for implementing the HMMP and HMIS (CAL FIRE 2013).

The HMMP must include a facility site plan containing information such as the location of emergency equipment, hazardous material storage tanks, and emergency exits. The HMIS must include information on the hazardous materials at the site, such as product name, chemical components, amount in storage, and hazard classification. As part of an application for a permit, owners or operators of facilities that handle hazardous materials also must submit an emergency response plan and an emergency response training plan. Commercial cannabis businesses that store or handle greater than threshold quantities of hazardous materials (e.g., pesticides, fuel) would be required to prepare an HMMP and HMIS.

California Emergency Services Act

The California Emergency Services Act (Gov. Code, chapter 7) established the California Emergency Management Agency and created requirements for emergency response training and planning. Under this act, the State is required to develop a statewide toxic disaster contingency plan that can facilitate an effective, multi-agency response to a situation in which toxic substances are dispersed in the environment so as to cause, or potentially cause, injury or death to a substantial number of persons or substantial harm to the natural environment (Gov. Code §8574.18). The California Emergency Services Act also requires the agency to develop and manage the California Hazardous Substances Incident Response Training and Education Program, which provides classes in hazardous substance response (Gov. Code §8574.20). Under the California Emergency Services Act, the California Emergency Management Agency would have the ability to provide an effective response to a catastrophic hazardous materials release, such as from an accident at a chemical pesticide manufacturing plant.

Hazardous Waste Generator Program

The Hazardous Waste Generator Program is administered by CUPAs under the Unified Program with oversight and assistance from the California Department of Toxic Substances Control (DTSC). Under the program, CUPAs conduct inspections at hazardous waste generator facilities. Inspectors check hazardous waste generators for compliance with such requirements as having a USEPA identification number, contingency plan information posted near a telephone, containers in good condition and properly labeled, and authorized waste transport vehicles (DTSC 2017). If generators fail to comply with regulations or permit requirements, CUPAs may assess penalties (DTSC 2002a).

CUPAs also administer on-site, tiered permitting programs. Based on the type of waste they treat and the treatment processes they employ, businesses are required to obtain a permit for the appropriate tier (DTSC 2002b). Permits may require businesses to clean equipment or alter processes to improve safety (DTSC 1999). Depending on their specific practices and processes, commercial cannabis businesses could be considered hazardous waste generators that would be subject to the requirements of the Hazardous Waste Generator Program.

Pesticides and Pest Control Operations (3 CCR Division 6)

Detailed implementing regulations for the California Department of Pesticide Regulation's (CDPR's) pesticide regulatory program are codified in the California Code of Regulations, title 3, division 6. CDPR is the state agency with primary responsibility for regulating pesticide use in California. CDPR oversees state pesticide laws, including pesticide labeling, and is vested by USEPA to enforce federal pesticide laws in California. CDPR also oversees the activities of the county agricultural commissioners (CACs) related to enforcement of pesticide regulations and related environmental laws and regulations locally.

As identified in California Code of Regulations title 3, division 6, CDPR evaluates proposed pesticide products and registers those pesticides that it determines can be used safely. In addition, CDPR's oversight includes:

- Licensing of pesticide professionals;
- Site-specific permits required before restricted-use pesticides may be used in agriculture;
- Strict rules to protect workers and consumers;
- Mandatory reporting of pesticide use by agricultural and pest control businesses;
- Environmental monitoring of water and air; and
- Testing of fresh produce for pesticide residues.

The regulations require that employers of pesticide workers provide protective clothing, eyewear, gloves, respirators, and any other required protection, and also requires employers to ensure that protective wear is worn according to product labels during application. The regulations also require that employers provide workers with adequate training in pesticide application and safety; communicate pesticide-related hazards to workers; ensure that emergency medical services are available to workers; and ensure adherence to restricted-entry intervals between pesticide treatments. (Cal. Code Regs., tit. 3, §6764.) Under

MAUCRSA, CDPR must require that the application of pesticides or other pest control in connection with the indoor or outdoor cultivation of cannabis complies with the California Code of Regulations, title 3, division 6, commencing with section 11401 of the Food and Agricultural Code and its implementing regulations. (Bus. & Prof. Code §26060[g].) CDFA's cannabis cultivation regulations will require compliance with pesticide laws and regulations as enforced by CDPR.

CDPR Guidance on Pesticide Use in Cannabis Cultivation

In accordance with MAUCRSA, CDPR is required to develop guidelines for the use of pesticides in the cultivation of cannabis and residue in harvested cannabis. (Bus. & Prof. Code §26060[d].) However, CDPR is preempted by federal law from registering a pesticide for sale and use that is not first registered by USEPA.

CDPR has advised CACs to issue a Unique Identifier (i.e., an operator identification data number) to any cannabis grower who submits a valid application, except in counties in which growing cannabis is prohibited by a local ordinance (CDPR 2015a). The operator identification data would be used in the management of pesticide use data. CDPR has advised that the use of a pesticide for the cultivation of cannabis falls under the broad definition of "agricultural use" in the Food and Agricultural Code, even though the Food and Agricultural Code does not explicitly consider cannabis an agricultural commodity (CDPR 2015b).

CDPR has also prepared two documents outlining the legal requirements for pesticide use on cannabis and providing guidance on legal pest management practices for California cannabis growers. Essentially, CDPR's guidance states that the only pesticide products allowable for use on cannabis are those that contain an active ingredient that is exempt from residue-tolerance requirements and are either (1) registered and labeled for a use that is broad enough to include use on cannabis (e.g., unspecified green plants), or (2) exempt from registration requirements as a minimum-risk pesticide under FIFRA section 25(b) and the California Code of Regulations, title 3, section 6147 (CDPR 2015a). CDPR intends to update this list for use in the Proposed Program; the *Human Health and Ecological Screening Risk Evaluation* contained in CDFA's Draft PEIR (Appendix B of this IS/ND) evaluates many of the pesticides that meet these criteria and may be authorized for use under the Proposed Program.

With respect to rodenticides, CDPR's guidance finds that the following rodent repellants may be used in and around cannabis cultivation sites consistent with the label: capsicum oleoresin, putrescent whole egg solids, and garlic (CDPR 2015a).

Pesticide Contamination Prevention Act

The Pesticide Contamination Prevention Act (Food & Agr. Code §§13145–13152) requires CDPR to:

- Obtain environmental fate and chemistry data for agricultural pesticides before they can be registered for use in California;
- Identify agricultural pesticides with the potential to pollute groundwater;
- Sample wells to determine the presence of agricultural pesticides in groundwater;

- Obtain, report, and analyze the results of well sampling for pesticides by public agencies;
- Formally review any detected pesticide to determine whether its use can be allowed; and
- Adopt use modifications to protect groundwater from pollution if formal review indicates that continued use can be allowed.

The act requires CDPR to develop numerical values for water solubility, soil adsorption coefficient, hydrolysis, aerobic and anaerobic soil metabolism, and field dissipation of pesticides to protect groundwater, based in part on data submitted by pesticide registrants.

The act also states that CDPR shall establish a list of pesticides that have the potential to pollute groundwater, called the Groundwater Protection List. Any person who uses a pesticide that is listed on the Groundwater Protection List is required to file a report with the CAC, and pesticide dealers are required to make quarterly reports to CDPR of all sales of pesticides on the list to persons not otherwise required to file a report. The Pesticide Contamination Prevention Act ensures that pesticides allowed for use in California, including those that may be used in cannabis cultivation, will have been studied by CDPR for their potential to contaminate groundwater and the environment.

Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

The Safe Drinking Water and Toxic Enforcement Act, or Proposition 65, requires the Governor to maintain and publish a list of chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Once a chemical has been listed, businesses are responsible for providing a warning before knowingly or intentionally exposing their employees or the public to an amount of the chemical that poses a significant risk (CDPR 2016). The California Office of Environmental Health Hazard Assessment (OEHHA) is the lead agency responsible for implementing Proposition 65, with input from CDPR and other agencies so that the best scientific information is used in listing chemicals. In its current state, the Proposition 65 list contains a wide variety of chemicals, including pesticides and cannabis smoke² (OEHHA 2016). Proposition 65 would require commercial cannabis businesses using or selling substances on the Proposition 65 list to comply with its provisions.

California Division of Occupational Safety and Health Regulations

The California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) regulations contain requirements for agricultural operations related to pesticide application. The regulations require that a notice be attached to all tanks larger than 100 gallons in capacity that are used for pesticides, providing precautionary instructions; controls on the tanks must be placed to minimize exposure to employees from ruptured or breaking lines (Cal. Code Regs., tit. 8, §3453). Machines, applicators, and other equipment used for

² Cannabis smoke is listed on the Proposition 65 list as causing cancer, and has been listed since 2009. As stated throughout this IS/ND, this environmental analysis is focused on the environmental effects of commercial cannabis business operations; the potential effects from smoking or consuming cannabis are discussed in Chapter 5, *Mandatory Findings of Significance*.

pesticide application must be decontaminated before they are overhauled or placed in storage (Cal. Code Regs., tit. 8, §3451).

In addition, the Cal/OSHA regulations contain various provisions that require safe operation of equipment, safety instructions provided in a language that employees understand, and access to first aid. Any commercial cannabis cultivator that uses pesticides, including microbusinesses, may be subject to these requirements.

California Department of Public Health Office of Manufactured Cannabis Safety

The California Department of Public Health (CDPH) Office of Manufactured Cannabis Safety is responsible for regulating the manufacturers of cannabis products for both medicinal and adult-use.

California Fire Code

The California Fire Code (Cal. Code Regs., tit. 24, part 9) establishes minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. The California Fire Code also contains requirements related to emergency planning and preparedness, fire service features, building services and systems, fire resistance-rated construction, fire protection systems, and construction requirements for existing buildings, as well as specialized standards for specific types of facilities and materials. Structures used for commercial cannabis businesses under the Proposed Program would be subject to applicable sections of the California Fire Code.

Fire Prevention (California Government Code Sections 51175–51181)

Sections 51175–51181 of the California Government Code outline the responsibilities of CAL FIRE and local agencies with respect to fire prevention. CAL FIRE is legally responsible for providing fire protection on all State Responsibility Area (SRA) lands (CAL FIRE 2016a). SRA lands do not include lands within city boundaries or under federal ownership.

CAL FIRE Defensible Space Requirements

California law requires that homeowners in SRAs maintain defensible space³ around their buildings to 100 feet. This requirement is designed to halt the progress of an approaching wildfire, as well as keep firefighters safe while defending the structure (CAL FIRE 2016b). The law also requires that new homes be constructed with fire-resistant materials, such as fire-resistant roofing, enclosed eaves, and dual-paned windows. Any commercial cannabis business structures located in SRAs would need to comply with these requirements.

Naturally Occurring Asbestos Airborne Toxic Control Measures

The California Air Resources Board (CARB) has published maps and fact sheets on naturally occurring asbestos (NOA). The following Airborne Toxic Control Measures (ATCMs) apply to asbestos during surfacing and construction activities (CARB 2017a):

³ Defensible space is generally defined as the natural and landscaped area around a structure that has been maintained and designed to reduce fire danger, such as through fire-resistive plant selection and pruning.

- Asbestos ATCM for Surfacing Applications, and
- Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations.

Local Laws, Plans, Policies, and Regulations

Certified Unified Program Agencies

After a local agency is certified by Cal/EPA as CUPAs (described above under “State Laws, Ordinances, Regulations, and Standards”), it must establish a program that consolidates, coordinates, and makes consistent the administrative requirements, permits, inspection activities, enforcement activities, and hazardous waste and hazardous materials fees associated with programs under the Unified Program. With oversight from Cal/EPA, CUPAs conduct inspections for all program activities according to the standards contained in the relevant statute or regulation (Cal/EPA 2012).

Pesticide Regulatory Program—County Agricultural Commissioners

Although CDPR is responsible for managing California’s statewide pesticide regulatory program, the local enforcement of pesticide use regulations is delegated to CACs. With assistance from CDPR, CACs plan and develop county programs and regulate pesticide use to ensure that applicators comply with label directions and pesticide laws and regulations (CDPR 2011). CACs oversee pesticide use reporting, promote best management practices, and monitor field applications, and they may assist in cleanup of accidental pesticide spills.

CACs inspect operations and records of growers, nonagricultural (including industrial and institutional) applicators, pest control dealers, agricultural pest control advisers (PCAs), farm labor contractors, and government agencies for compliance with worker protection standards and other pesticide safety requirements. CACs, assisted by CDPR, investigate incidents in which pesticides harm agricultural workers, people nearby, and the environment, including environmental damage (such as fish or wildlife kills) and water quality contamination. When an enforcement action is needed, CACs have the option to revoke or suspend the right of a company to do business in the county or to issue civil or criminal penalties (CDPR 2011).

License and certificate types issued by CACs under the pesticide regulatory program include, but are not limited to, the following (CDPR 2017):

PCA license. Required to offer recommendation on any agricultural use of pesticides, to sell services as an authority on any agricultural use of pesticides.

Qualified applicator certificate (QAC). Required for government employees and some other categories of workers who apply or supervise the application of restricted pesticides for any purpose or on any property other than that provided by the definition of private applicator (see below); or by maintenance gardeners and some other employees who perform pest control incidental to their job or business.

Qualified applicator license (QAL). Required to apply or supervise the application of restricted pesticides for any purpose or on any property other than that provided by the definition of private applicator (see below); or by anyone who supervises pesticide applications made by a licensed pest control business.

Private applicator certificate. Required for people who use or supervise the use of restricted pesticides on property owned or leased by the applicator or the applicator's employer.

Application of pesticides for cannabis cultivation at microbusinesses would likely either not require any type of license or certificate (i.e., for application of pesticides that are not restricted) or fall under the purview of a private applicator certificate. Cannabis microbusiness cultivators would not necessarily be required to obtain the services of a PCA, but may choose to do so. Microbusinesses also may themselves obtain a QAC or QAL, or hire individuals with these credentials, but this would not be required given that the cultivation is conducted on private property.

Local Jurisdiction Ordinances on Commercial Cannabis Businesses

Currently, local laws regarding commercial cannabis activities vary substantially across the state. At the time of writing this IS/ND, some jurisdictions allow the full range of commercial cannabis activities, whereas other jurisdictions prohibit them entirely, and many fall somewhere in between.

In areas where commercial cannabis activities are permitted, some counties and cities include requirements related to storage, use, and disposal of hazardous materials, as well as public health and safety. For example, Calaveras County requires that dispensaries providing cannabis in the form of food must obtain and maintain the appropriate permits from the county environmental health department. Calaveras County also requires that cultivators, including microbusiness cultivators, must comply with all laws and regulations related to use, storage, and disposal of hazardous materials or wastes, including but not limited to pesticides. El Dorado, Humboldt, Mendocino, and Monterey Counties identify similar requirements. Several jurisdictions, likewise, require that hazardous materials storage areas be set back a minimum distance from drinking water wells.

Appendix C provides a summary of existing and proposed local ordinances relating to commercial cannabis businesses.

4.5.3 Environmental Setting

Proximity to Schools

Schools are distributed throughout the state, generally in relation to population. Urbanized areas may have a large number of schools commensurate with denser populations, whereas rural areas typically have fewer school facilities spaced farther apart. Local jurisdictions vary in their zoning and land use regulations, and specific school sites in the state differ in their proximity to other types of land uses. MAUCRSA specifies that licensees may not be located within a specified radius of a school. A number of local governments have established restrictions on the siting of commercial cannabis businesses near schools.

Hazardous Waste Sites and Clean-up Sites

Hazardous waste clean-up sites are located throughout the state. The State Water Resources Control Board's (SWRCB's) GeoTracker site identifies thousands of such sites, including leaking underground storage tank sites, military cleanup sites, and other types of hazardous

waste contamination sites. These sites are commonly associated with certain types of historical land uses, such as gas stations, dry cleaning facilities, military bases, and other land uses that frequently use or store hazardous materials.

Naturally Occurring Asbestos

NOA is found at multiple locations around the state, often in association with ultramafic rock. When rock containing asbestos is broken or crushed, asbestos fibers may be released and become airborne. Exposure to asbestos fibers may result in health issues, including cancer and asbestosis (CARB 2017b). ATCMs for NOA are described above in Section 4.5.2.

Airports

Airports are located throughout California, including major international airports in large metropolitan areas (San Diego, Los Angeles, the San Francisco Bay Area, and Sacramento) and smaller airports in various locations. Local jurisdictions typically site airport uses in accordance with zoning and general plan land use designations, and regulate land uses that are permitted in close proximity to airports. In addition to commercial airports, private airstrips may be located in various locations in the state, typically in less developed, more rural areas.

Fire Hazard

Wildland fire hazard varies in accordance with vegetation, climatic patterns, development, and other factors. Figure 4.5-1 shows fire hazard in California, as mapped by CAL FIRE. As shown in Figure 4.5-1, many areas of the state are designated as Very High or High Fire Hazard Severity Zones, indicating that the physical conditions (e.g., vegetation, topography, weather, crown fire potential, ember production and movement) create a high likelihood that the area will burn over a 30- to 50-year period, and may burn at a high intensity and speed (CAL FIRE 2012).

Pesticide Usage in California

Pesticides are used throughout California—by state and local jurisdictions as well as private businesses and homeowners—for pest control around buildings and structures, protection of residential fruit trees, landscape maintenance, public health, sanitation, and commercial agriculture. The types of pesticides used in California include a wide variety of chemicals of varying levels of toxicity, persistence, fate and transport properties, and other characteristics.



Source: CDFFP 2007

Figure 4.5-1
Statewide Fire Hazard Severity Zone Map

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4.5.4 Impact Analysis

Methodology

Impacts related to hazardous materials were analyzed qualitatively based on a review of the activities and associated equipment and materials that may be used by the cannabis businesses types that would be licensed under the Proposed Program. The analysis focused on the Proposed Program's potential to create hazards to humans through the transport, use, exposure, or accidental release of hazardous materials and exposure to other hazards such as fires. These were analyzed in the context of existing laws and regulations, and the extent to which these existing regulations and policies adequately address and minimize the potential impacts of the hazards associated with the Proposed Program. As discussed in Section 3.1 of Chapter 3, *Proposed Program Activities*, site development and building construction activities have been excluded from this analysis. With respect to cannabis cultivation as part of microbusiness activities, the *Human Health and Ecological Screening Risk Evaluation* contained in CDFA's Draft PEIR (Appendix B of this IS/ND) assessed the potential risks to human health from use of pesticides in commercial cannabis cultivation. This evaluation and the CDFA Draft PEIR have been used to support the impact conclusions related to these topics.

Significance Criteria

For the purposes of this analysis, based on Appendix G of the Guidelines, the Proposed Program would result in a significant impact related to hazards, hazardous materials, and human health if it would:

- A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- B. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school;
- D. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to section 65962.5 of the Government Code and, as a result, create a significant hazard to the public or the environment;
- E. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- F. For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area; or
- G. Expose people or structures to a significant risk of loss, injury, or death involving fire, including wildland fires and structure fires, and potential risks to first responders from fires.

Environmental Impacts of the Proposed Program

Impacts of Distribution, Retail Sale, Laboratory Testing, and Microbusiness Manufacturing Activities

Impact HAZ-1: Release hazardous materials from routine transport, use, and disposal. (Less than Significant)

Commercial cannabis activities involve the use of hazardous materials. For example, microbusiness manufacturers or testing laboratories may use solvents or other hazardous materials as part of their operations under the Proposed Program. Power equipment and backup generators may include the use of materials such as gasoline, diesel fuel, oil, and lubricants.

Improper use, storage, and disposal of these materials can endanger workers, as well as enforcement officers or members of the public visiting these sites. Bodily contact or inhalation of some materials may cause illness or adverse health consequences. Commercial cannabis businesses would be required to store, use, and dispose of hazardous materials in accordance with a broad range of applicable laws and regulations. OSHA and Cal/OSHA are responsible for regulating and enforcing federal and State worker safety measures. For example, OSHA and Cal/OSHA requirements include maintaining SDSs for each chemical in use and providing personal protective equipment, as necessary, to protect the health of workers. Cal/OSHA has recently affirmed that its existing regulations are sufficient for protection of worker safety (Cal/OSHA 2017). Compliance with the applicable federal and State requirements, as well as other existing laws and regulations related to transport, use, storage, and disposal of hazardous materials, would avoid creating a substantial hazard to workers or the public.

Retailers who sell live immature plants at retail stores will be prohibited from applying pesticides to such plants. Therefore, there would be no risk of exposure to pesticides to retailers or their customers.

Therefore, this impact would be **less than significant**.

Impact HAZ-2: Create a significant hazard through release of hazardous materials from upset or accident conditions. (Less than Significant)

As discussed above, licensed cannabis businesses may use hazardous materials that, through transport, storage, and use, could endanger human health and the environment in the event that upset or accident conditions cause a release of the materials. Numerous existing laws and regulations are designed to prevent spills of hazardous materials and limit damage in the event that such materials are released. The Proposed Program would require that licensees comply with existing laws regarding storage and use of hazardous materials. California Health and Safety Code provisions and the CalARP program would require any commercial cannabis business storing more than a threshold quantity of regulated substances to prepare an HMBP and/or RMP. These plans would include measures such as emergency response procedures to coordinate response in the event of a release and chemical accident prevention measures. With adherence to existing hazardous materials laws, the risk of accidental

releases of hazardous materials from commercial cannabis activities that could cause substantial hazards is considered low. This impact would be **less than significant**.

**Impact HAZ-3: Emit hazardous emissions or materials within 0.25 mile of a school.
(Less than Significant)**

Under MAUCRSA, facilities may not be sited within 600 feet of a school, unless another distance is specified. Additionally, some local jurisdictions require larger buffers, such as 1,000 feet. Both of these distances, however, are less than 0.25 mile, or 1,320 feet. Therefore, the potential exists for sites to be located within 0.25 mile of a school.

For commercial cannabis businesses that could operate within 0.25 mile of a school, business activities have the potential to generate hazardous emissions (refer to Impacts HAZ-1, HAZ-2, and AQ-2 for further discussion of the mechanisms and types of emissions that are possible). In addition, commercial cannabis businesses in these locations may use power equipment and gas- or diesel-powered backup generators and vehicles, which could emit air pollutants, including toxic air contaminants; however, these emissions would not be substantially different from emissions associated with other typical land uses that may occur near schools. In businesses where a large amount of cannabis may be stored, such as a large distribution facility, activities may generate odors, which may be a concern for other reasons when emitted near schools but would not be hazardous. Odor emissions are discussed further in Section 4.2, *Air Quality*.

Given the low probability that cannabis businesses would emit substantial hazardous emissions, based on the nature of their business activities; the requirements under MAUCRSA that licensed premises be located a minimum of 600 feet from existing and proposed schools, unless another distance is specified; and other legal requirements described throughout this section that would minimize the intentional or accidental release of emissions, there is no reason to believe that impacts related to emissions of hazardous materials near schools would be substantial. Therefore, this impact would be **less than significant**.

Impact HAZ-4: Locate project activities on a hazardous materials site. (Less than Significant)

As noted in Section 4.5.3, “Environmental Setting,” hazardous materials clean-up and/or contamination sites occur throughout the state and are typically associated with past land uses involving use or storage of hazardous materials, such as gas stations, military bases, and dry-cleaning facilities. Siting of commercial cannabis businesses in relation to hazardous materials sites would be determined through local land use permitting and environmental review; therefore, substantial adverse impacts associated with such activities being located on a hazardous materials site are not anticipated. Therefore, this impact would be **less than significant**.

Impact HAZ-5: Locate project activities near an airport or private airstrip such as to increase hazards. (No Impact)

Siting of commercial cannabis businesses in relation to airports or private airstrips would be determined through local land use permitting and environmental review. Given the exclusion of site development activities from this analysis, in general, cannabis businesses would not

add tall structures (such as towers), generate substantial sources of glare or dust, or have other characteristics that could interfere with air traffic. Therefore, there would be **no impact**.

**Impact HAZ-6: Expose people or structures to substantial risk of loss from wildfire.
(Less than Significant)**

Commercial cannabis businesses may be located in areas of high risk for wildfire. As shown in Figure 4.5-1, many parts of California are designated as Very High or High Fire Hazard Severity Zones, either in local responsibility areas or other areas, including SRAs. Cannabis businesses could be located in such areas and/or at the urban-wildland interface. However, permitted facilities are required to be in compliance with State and local laws, ordinances, and regulations, including building and fire codes. Thus, the risk of these businesses being located in these locations would be no different than for any other type of business that may be located in the same areas. Therefore, the Proposed Program would not create a substantial wildfire risk; this impact would be **less than significant**.

Impacts Related to Microbusiness Cultivation

CDFA's Draft PEIR (Appendix B of this IS/ND) examined impacts related to hazards and hazardous materials that may occur as a result of licensed cannabis cultivation. The findings of the Draft PEIR related to hazards and hazardous materials impacts resulting from cultivation are summarized as follows:

- **Release hazardous materials through routine use or accident, or emit hazardous materials within ¼ mile of a school.** Pesticide use for cannabis cultivation has been identified as an issue of potential concern for human health. A screening-level human health risk assessment conducted for CDFA's Draft PEIR found no significant risks to human health as a result of pesticide use by cannabis cultivators. The Draft PEIR found that, although cultivator exposure to certain chemicals could result in localized skin, eye, throat, or lung irritation, none of these effects are anticipated to be significant. In general, most chemicals that may be used as pesticides for licensed cultivation, and that were evaluated in the risk assessment, have histories of safe use, and all of these chemicals are exempt from food tolerance limits, due in part to their substantially low toxicity.

Cultivation activities would need to adhere to pesticide laws and regulations as enforced by CDPR, as well as environmental protection measures from CDFA's regulations for use of pesticides. The Draft PEIR found that this impact would be less than significant.

- **Locate project activities on a hazardous materials site, or near an airport or private airstrip.** Siting of cannabis cultivation sites in relation to hazardous materials sites or airports would be determined through local land use permitting and environmental review. The Draft PEIR found that this impact would be less than significant.
- **Expose people or structures to substantial risk of loss from wildfire.** Cannabis cultivation could increase risk of fire and/or introduce ignition sources or flammable materials into an area. In particular, indoor cultivation practices

could generate large electrical loads from high-intensity lights and other growing equipment, which could increase the risk of an electrical fire. Numerous fires have occurred at indoor grow operations, particularly at residences with faulty or substandard wiring as the primary cause (Gustin 2010). Outdoor and/or mixed-light cultivation operations may involve the use of power equipment or gas- or diesel-fueled backup generators, which may generate a spark or provide flammable materials to any possible ignition source. With respect to the increment of change from baseline conditions relative to the CalCannabis program, CDFA's regulations and increased compliance with other laws and regulations would reduce many of these impacts of cannabis cultivation related to fire risk. Under the program, cannabis cultivation, including indoor cultivation operations, would be required to adhere to State and local building, electrical, and fire codes. The Draft PEIR found that this impact would be less than significant.

Microbusiness cultivators would be required to adhere to the same requirements cited above for other licensed cultivators, which were determined in the CDFA Draft PEIR to ensure that impacts would be less than significant. Because of the limited size of cultivation at a microbusiness (less than 10,000 square feet) compared to the larger CDFA license types (up to 4 acres), it is expected that microbusiness cultivation operations would be unlikely to use heavy equipment requiring fuels and maintenance chemicals. The small-scale cultivation operations conducted as part of a microbusiness would be likely to cultivate plants in aboveground pots or containers, rather than on large, open fields that would be tilled, making ground disturbance and any exposures to NOA unlikely. Additionally, the expected fewer number of microbusiness cultivators compared to other licensed cultivators, the impacts from cultivation associated with microbusiness would be inherently limited in comparison to the impacts analyzed in the CDFA Draft PEIR. Thus, impacts related to hazards and hazardous materials from the Proposed Program as a result of microbusiness cultivation would also be **less than significant**.

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4.6 Noise

4.6.1 Introduction

This section of the IS/ND presents the environmental setting and potential impacts of the Bureau's Proposed Program related to noise and vibration. In addition, this section provides fundamentals of noise and vibration and a regulatory setting related to those topics.

Information regarding noise presented in this section is primarily based on the following sources:

- Manufacturer's information on equipment used in commercial cannabis business operations;
- Online information related to cannabis business operations and equipment requirements;
- Site visits to various medicinal cannabis operations, including retailers, testing laboratories, manufacturers, and outdoor, indoor, and mixed-light cultivation facilities, and consultation with cultivators and other cannabis industry experts;
- The Federal Transit Administration's (FTA's) *Transit Noise and Vibration Impact Assessment* (2006); and
- *CalCannabis Cultivation Licensing Program Draft Program Environmental Impact Report* (Draft PEIR), prepared by the California Department of Food and Agriculture (CDFA), included as **Appendix B** of this IS/ND.

4.6.2 Acoustic Fundamentals

Noise is generally defined as loud, unpleasant, unexpected, or undesired sound typically associated with human activity and that interferes with or disrupts normal activities. Although exposure to high noise levels has been demonstrated to cause hearing loss, the principal human response to environmental noise is annoyance (Goldsmith and Jonsson 1973). The response of individuals to similar noise events is diverse and influenced by the type of noise, time of day, perceived importance of the noise, sensitivity of the individual, its appropriateness in the setting, and the type of activity during which the noise occurs.

Sound is a physical phenomenon consisting of vibrations that travel through a medium, such as air, and are sensed by the human ear. Sound is generally characterized by several variables, including frequency and intensity. Frequency describes the pitch of a sound and is measured in Hertz (Hz), whereas intensity describes the loudness of sound and is measured in decibels (dB), using a logarithmic scale. Because the human ear is not equally sensitive to all frequencies in the spectrum, noise measurements are weighted more heavily for frequencies to which humans are sensitive, creating the A-weighted decibel (dBA) scale.

A sound level of 0 dB is approximately the threshold of human hearing and is barely audible under extremely quiet listening conditions. Normal speech has a sound level of approximately 60 dB. Sound levels above about 120 dB begin to be felt inside the human ear

as discomfort and eventually as pain at still higher levels. The minimum change in the sound level of individual events that an average human ear can detect is approximately 3.0 dB. The average person perceives a change in sound level of approximately 10 dB as a doubling (or halving) of the sound's loudness; this relation holds true for sounds of any loudness. Examples of typical noise levels are provided in **Table 4.6-1**. Land use compatibility standards established by the California Governor's Office of Planning and Research (OPR) are shown in Table 4.6-2.

Table 4.6-1. Examples of Common Noise Levels

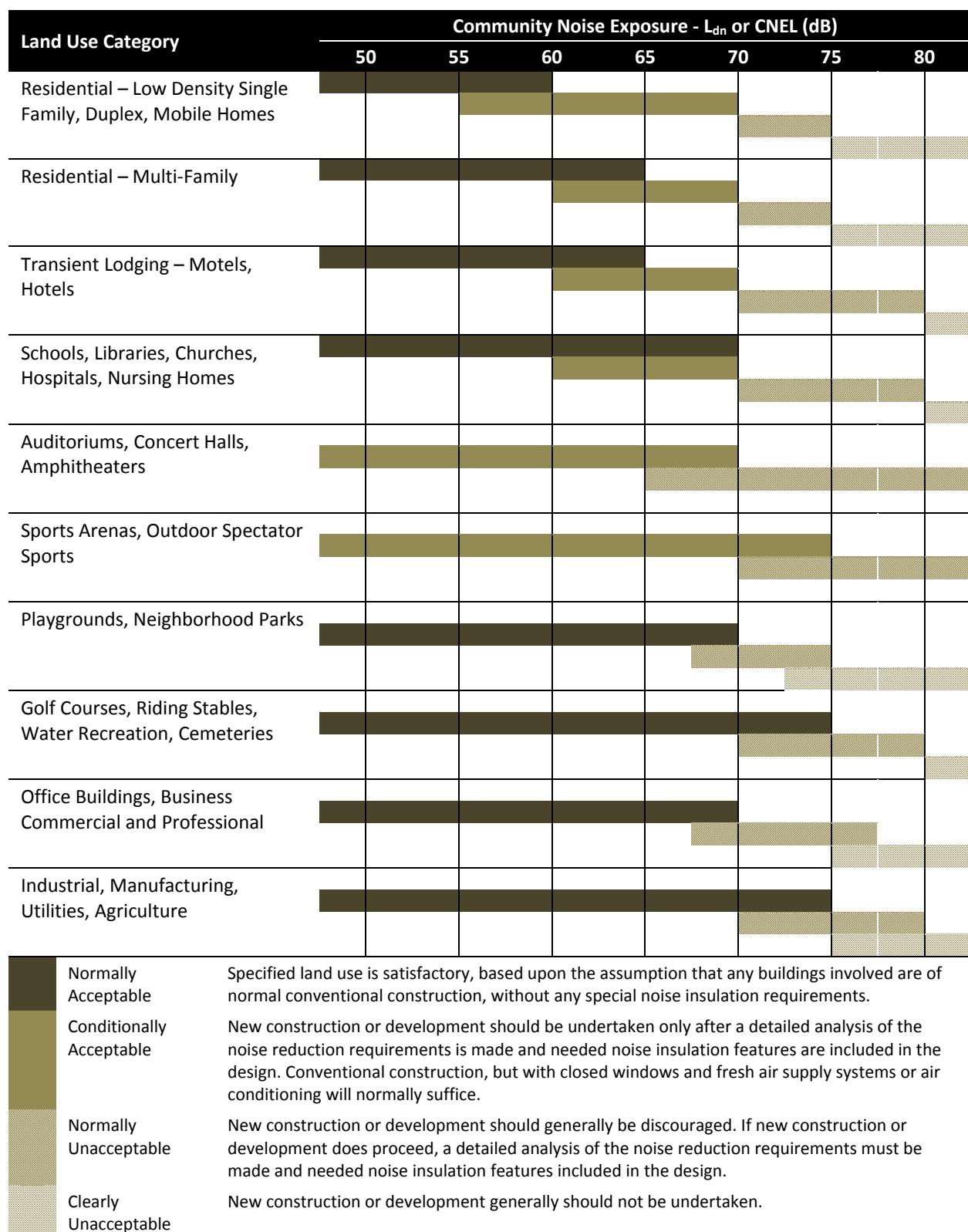
Common Outdoor Activities	Noise Level (dBA)
Jet flyover at 1,000 feet	110
Gas lawnmower at 3 feet	100
Diesel truck at 50 feet traveling 50 miles per hour	90
Noisy urban area, daytime	80
Gas lawnmower at 100 feet, commercial area	70
Heavy traffic at 300 feet	60
Quiet urban area, daytime	50
Quiet urban area, nighttime	40
Quiet suburban area, nighttime	30
Quiet rural area, nighttime	20

Source: California Department of Transportation (*Caltrans*) 2009

4.6.3 Vibration Fundamentals

Groundborne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be composed of a single pulse, a series of pulses, or a continuous oscillatory motion.

Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. High-frequency vibrations reduce much more rapidly than do those characterized by low frequencies, so that in a far-field zone distant from a source, the vibrations with lower frequency amplitudes tend to dominate. Soil properties also affect the propagation of vibration. When groundborne vibration interacts with a building, a ground-to-foundation coupling loss usually results but the vibration also can be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. In some cases, the vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as groundborne noise.

Table 4.6-2. State Land Use Compatibility Standards for Community Noise Environment

Notes: CNEL = community noise equivalent level; dB = decibel; Ldn = day-night sound level.

Source: California Governor's Office of Planning and Research (OPR) 2003

Groundborne vibration is generally limited to areas within a few hundred feet of certain types of industrial operations and construction/demolition activities, such as pile driving. Road vehicles rarely create enough groundborne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency vibration. Human annoyance also is related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes.

4.6.4 Regulatory Setting

Federal Laws, Ordinances, Regulations, and Standards

The following guidelines at the federal level direct consideration of a broad range of noise issues:

- Noise Control Act of 1972 (42 U.S.C. §4910) and
- U.S. Department of Housing and Urban Development (HUD) Noise Guidelines (24 CFR §51, Subpart B) (HUD 2009).

Furthermore, the U.S. Environmental Protection Agency (USEPA) has published a guideline document that specifically addresses issues of community noise (USEPA 1974). This report, commonly referred to as the “levels document,” contains goals for noise levels affecting residential land use: less than 55 dBA L_{dn} for exterior levels and less than 45 dBA L_{dn} for interior levels. HUD’s *Noise Guidebook* (HUD 2009; 24 C.F.R. §51.101[a][8]) also recommends that exterior areas of frequent human use follow the USEPA guideline of 55 dBA L_{dn}. However, the same section of these guidelines indicates that a noise level of up to 65 dBA L_{dn} can be considered acceptable.

Occupational exposure to noise is regulated by 29 Code of Federal Regulations, section 1910.95, Occupational Noise Exposure. In summary, this regulation describes the employer’s responsibility to implement feasible administrative or engineering controls, provide personal protective equipment, and/or implement a hearing conservation program to protect employees against the effects of noise exposure that exceeds an average of 90 dBA for an 8-hour period.

Federal Transit Administration Guidelines

Noise

FTA has published guidance for assessment of noise and vibration impacts for mass transit projects, including construction activity (FTA 2006). Although the Proposed Program is not transit-related or construction-related, the FTA guidelines provide a widely accepted method for analyzing noise and vibration impacts, specifically those related to mechanical equipment, that may be used for commercial cannabis business activities. FTA has developed three “sensitive” land use categories to evaluate the compatibility of predicted noise levels, as described below and also provided in Table 4.6-3:

- Category 1 includes land uses where quiet is an essential element of its intended purpose, such as outdoor amphitheaters.
- Category 2 includes land uses where people sleep, such as residences.
- Category 3 includes institutional buildings where quiet is important, such as schools, libraries, and places of worship.

Categories 1 and 3 use the hourly equivalent sound level ($L_{eq}[h]$), whereas Category 2 uses L_{dn} . Such criteria recognize the heightened community annoyance caused by late-night or early-morning operations, and respond to the varying sensitivities of communities to projects under different ambient noise conditions. The noise criteria are to be applied outside of building locations for residential land uses and at the property line for parks and other outdoor uses.

The applicable noise criteria in this context, as shown in Table 4.6-3, are relative to and vary with the existing ambient sound environment in a receiving land use category.

As the existing level of ambient noise increases, the allowable level of transit noise decreases, but the total community noise exposure is allowed to increase (albeit at a reduced rate). This accounts for the unexpected result when additional noise that is less than the existing noise exposure can still cause an impact. This is clearer from the examples given in Table 4.6-4, which indicate the level of noise allowed for different existing levels of exposure.

Table 4.6-3. Land Use Categories and Metrics for Transit Noise Impact Criteria

Land Use Category	Noise Metric ¹ (dBA)	Land Use Category
1	Outdoor $L_{eq}(h)$ ²	Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use.
2	Outdoor L_{dn}	Residences and buildings where people normally sleep. This category includes homes and hospitals, where nighttime sensitivity to noise is assumed to be of the utmost importance.
3	Outdoor $L_{eq}(h)$ ²	Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and places of worship, where it is important to avoid interference with such activities as speech, meditation, and concentration. Buildings with interior spaces where quiet is important, such as medical offices, conference rooms, recording studios, and concert halls, fall into this category, as do places for meditation or study associated with cemeteries, monuments, and museums. Certain historical sites, parks, and recreational facilities also are included.

Notes: dBA = A-weighted decibels; L_{dn} = day-night sound level, dBA; $L_{eq}(h)$ = equivalent sound level for a 1-hour period, dBA

¹ Onset-rate adjusted sound levels (L_{eq} , L_{dn}) are to be used where applicable.

² L_{eq} for the noisiest hour of transit-related activity during hours of noise sensitivity.

Source: FTA 2006

Table 4.6-4. Noise Impact Criteria – Effect on Cumulative Noise Exposure

L _{dN} or L _{eq} in dBA (rounded to nearest whole decibel)			
Existing Noise Exposure	Allowable Noise Exposure	Allowable Combined Total Noise Exposure	Allowable Noise Exposure Increase
45	51	52	7
50	53	55	5
55	55	58	3
60	57	62	2
65	60	66	1
70	64	71	1
75	65	75	0

Notes: dBA = A-weighted decibels; L_{dN} = day-night sound level, dBA; L_{eq} = equivalent sound level, dBA

Source: FTA 2006

Vibration

Summarized in Table 4.6-5, FTA guidance indicates groundborne vibration impact levels associated with three categories of receiver sensitivity (similar to those previously described for noise) as they pertain to human annoyance. As described in Section 4.6.3, “Vibration Fundamentals,” human annoyance from vibration is measured as vibration velocity in decibels (VdB) because decibel notation acts to compress the range of numbers required to describe vibration. VdB are the vibration-related noise levels that occur when the vibration velocity reference level is 1 micro-inch per second (standard U.S. units).

Table 4.6-5. Groundborne Vibration Impact Criteria – Human Annoyance

Land Use Category	Velocity in Decibels (VdB) (reference to 1 micro inch/second)		
	Frequent Events ¹	Occasional Events ²	Infrequent Events ³
Category 1: Buildings where Vibration Interferes with Interior Operations	65 ⁴	65 ⁴	65 ⁴
Category 2: Residences and Buildings where People Normally Sleep	72	75	80
Category 3: Institutional Land Uses with Primarily Daytime Usage	75	78	83

Notes: ¹ “Frequent Events” is defined as more than 70 vibration events of the same source per day.

² “Occasional Events” is defined as between 30 and 70 vibration events of the same source per day.

³ “Infrequent Events” is defined as fewer than 30 vibration events of the same kind per day.

⁴ This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the heating, ventilating, and air conditioning (HVAC) systems and stiffened floors.

Source: FTA 2006

As shown in Table 4.6-6, FTA guidance indicates groundborne vibration impact levels associated with four building categories as they pertain to risk of building damage.

Table 4.6-6. Groundborne Vibration Impact Criteria – Building Damage Risk

Building Category	Peak Particle Velocity (inches per second)	VdB (re: micro-inches per second)
Category 1: Reinforced Concrete, Steel, or Timber (no plaster)	0.5	102
Category 2: Engineered Concrete and Masonry (no plaster)	0.3	98
Category 3: Nonengineered Timber and Masonry	0.2	94
Category 4: Extreme Susceptibility to Vibration Damage (e.g., historic structures)	0.12	90

Source: FTA 2006

State Codes and Agencies

California Building Code, Title 24

The California Building Code establishes a uniform minimum noise insulation performance standard to protect persons within hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings from the effects of excessive noise, including hearing loss or impairment and interference with speech and sleep. (Cal. Code Regs., tit. 24, part 2, §1207.) The code states that interior noise levels attributable to exterior sources are not to exceed 45 dB in any habitable room. (Cal. Code Regs., §1207.) The noise metric must be either the L_{dn} or the CNEL, consistent with standards in the noise element of the local general plan.

Local Laws, Plans, Policies, and Regulations

Cities and counties often have established general plan noise elements and/or noise ordinance thresholds that provide land use compatibility guidelines and locally acceptable standards to reduce noise conflicts between various land uses. OPR developed guidelines for the preparation and content of noise elements for city and county general plans. These guidelines are contained in the *State of California General Plan Guidelines* (OPR 2003).

As shown in Appendix C, *Summary of Existing and Proposed Local Cannabis Business Regulations*, many counties and cities have adopted local ordinances that address noise impacts of commercial cannabis businesses within the local jurisdiction. The city and county ordinances approach noise in one or more of the following ways:

Quantitative. Quantitative noise thresholds have been defined, or a requirement is imposed that cannabis businesses comply with quantitative local noise thresholds or standards, typically identified in a general plan or noise ordinance. These standards commonly vary by designated land use or zoning designation, specific time of day (nighttime vs. daytime standards), and/or duration of noise-generating activity.

Qualitative. No quantitative thresholds exist, but noise is characterized as a potential nuisance or health and safety hazard that must generally be avoided or must not be audible at adjoining property boundaries or residents.

Defers to Other Noise Guidelines and Standards. The cannabis business ordinance explicitly defers to generally applicable local noise requirements or standards.

No Noise Requirements in Cannabis Ordinance. The ordinance does not mention noise requirements or restrictions, or identify any quantitative or qualitative noise goals. In this situation, cannabis businesses may be subject to other noise standards.

Prohibits Cannabis Businesses. Some municipalities and counties may prohibit cannabis-related businesses from operating within their jurisdiction.

In addition, some of the local ordinances for cannabis businesses effectively regulate noise generation by placing land use and buffer restrictions on the businesses. These primarily relate to dispensaries. Specifically, some local ordinances specify that cannabis businesses may operate in certain zoning areas or, conversely, that they may not operate in or near certain zones. Several ordinances establish buffers between cannabis businesses and other types of activities, including schools, libraries, parks, playgrounds, cinemas, tobacco retailers, public beaches, or churches (e.g., Kern County, San Luis Obispo County, City of Sacramento, City of Long Beach). Other ordinances require buffers between businesses and residential areas (e.g., City of Sacramento).

Some local jurisdictions also effectively limit noise by limiting the allowed hours of operation of cannabis businesses (e.g., Kern County, San Diego County, San Luis Obispo County, Santa Cruz County). These ordinances require that cannabis businesses be closed during nighttime hours. Other ordinances require dispensaries to take actions to prevent loitering and/or consumption of cannabis at or near dispensary premises. Such ordinances would limit patient and customer noise both outside and inside the premises that may affect areas beyond the borders of the premises.

Local ordinances (those specific to cannabis businesses or otherwise) may also require a noise permit, waiver, or variance application, which would be important if the activity itself (regardless of noise level) may be prohibited (or allowed) during certain periods or under certain circumstances.

4.6.5 Environmental Setting

The following discussion describes sensitive receptors and broadly characterizes the existing noise environment relevant to the Proposed Program.

Sensitive Receptors

The location and size of individual commercial cannabis business premises licensed under the Proposed Program would depend on factors such as economics (fees, land availability, operational costs), and land use planning (specific cannabis-related restrictions or requirements adopted by local agencies). Proposed Program activities may occur in both rural and urban environments, depending on the type of operation. The information collected for this IS/ND suggests that retail sales and laboratory testing primarily occur in urban areas

(UCAIC 2017). The presence and type of noise-sensitive receptors would be related to the location of the cannabis business and the surrounding land uses. Some locations may include land uses where quiet is an essential element in their intended purpose, such as indoor or outdoor concert halls; residences and buildings where people sleep; and institutional land uses with primarily daytime and evening use, such as schools, places of worship, and libraries. Commercial or industrial uses are not considered noise sensitive because, in general, the activities that take place there are compatible with higher noise levels. For parks or recreation areas, noise sensitivity reflects how the area is used and how essential quiet is to the enjoyment of the area.

An individual's reaction to noise is determined by the noise itself and the environment in which the noise occurs. Individuals accustomed to noisy environments or to uses of noise-producing equipment are less likely to consider engine noise to be intrusive than those who are not. Likewise, the use of noise-generating equipment is more likely to be considered disruptive in areas with low ambient noise levels than in areas where noise levels are normally high.

Similarly, vibration-sensitive land uses include residences where people sleep and institutional uses such as laboratories where the activities within the building are particularly sensitive to vibration.

Existing Noise Environment

The noise environments in which cannabis businesses may operate would vary based on site-specific conditions. As previously stated, activities associated with the Proposed Program could occur in urban, rural, or agricultural areas throughout California; therefore, the magnitude range (in dBA) and characteristics of the ambient sound would vary widely depending on natural and human-made sound-emitting sources near a given location. In general, the ambient outdoor sound environment that may be measured or perceived at a given location represents an aggregate of many different, distinct sound sources located at varying distances from the receptor, combined with any underlying, indistinct background noise from more distant sources.

4.6.6 Impact Analysis

Methodology

Noise

A semi-quantitative analysis approach was performed to consider the potential noise levels associated with various cannabis business activities and their related effects. This analysis included compiling and averaging reference noise levels for potential cannabis business-related operational equipment, as shown in **Table 4.6-7** and described below.

The analysis of Proposed Program noise effects is based on the information in Table 4.6-7; preparation of that table included the following steps:

Table 4.6-7. Noise Reference Levels at 50 Feet from Primary Noise-generating Cannabis Business Equipment

Equipment Type	Noise Reference Level at 50 feet ¹ (dBA)	Potential Business License Type	Potential Use Frequency ²
Chainsaw	76.3–95.9	Microbusiness cultivation (outdoor only)	Temporary
Irrigation Pump	67.2–76.3	Microbusiness cultivation	Permanent
Generator (diesel)	70.2–81.0	All	Temporary (used as a backup)
HVAC unit	56.9–69.9	All	Permanent
Mower	66.3–91.9	Microbusiness cultivation (outdoor and mixed-light)	Temporary
Loaded Truck	88.0	All	Permanent ³

Notes: dBA = A-weighted decibels; HVAC = heating, ventilation, and air conditioning

¹ Noise levels at a distance of 50 feet from the equipment source were estimated from varying reference level distances. Manufacturer's data included in this table provide a potential range of representative noise levels for various equipment sources and are not meant to be an exhaustive list of the precise equipment that may be used by licensees under the Cannabis Business Licensing Program.

² Permanent use is defined as the use of the equipment at least daily. Temporary use is defined for this analysis as anything that is used less frequently than daily.

³ It is expected that some business types (e.g., distribution) would use trucks more frequently than others (testing).

Sources: American Speech-Language-Hearing Association 2016; Bryant Heating and Cooling Systems 2016; FTA 2006; Global Industrial 2016a, 2016b, 2016c; Lennox 2016; Mountain Electric Bike 2016a, 2016b, 2016c; Ontario Ministry Agriculture, Food, and Rural Affairs 2015.

1. From available online information and site visits of existing cannabis business operations, the pieces of electromechanical equipment or vehicles associated with a specific type of cannabis business activity under the Proposed Program were identified.
2. A reference maximum (L_{max}) sound power or sound pressure level (in dBA) was determined or estimated for the equipment and vehicles under consideration at a specified distance (for this analysis, 50 feet) through a review of available manufacturer's data and other sources.

Using this information, the anticipated noise generated by the various Proposed Program activities were analyzed, considering the frequency, location, and duration of use, assuming a nearby noise-sensitive receiver, and considered in the context of applicable local noise-related regulations. The L_{max} was considered in making a determination as to whether the noise generation could be considered substantial, given the various regulatory guidance provided in Section 4.6.4, "Regulatory Setting," above. If commercial cannabis activities would take place in or near a community where a local noise ordinance or similar regulation or policy exists, that ordinance, regulation, or policy may apply. The Proposed Program would not authorize licensees to violate other applicable requirements, irrespective of the conclusions of this analysis.

Vibration

A quantitative analysis of vibration that could be generated by commercial cannabis activities under the Proposed Program was conducted, focused on human annoyance and building damage risk vibration effects, considering the type and frequency of equipment and vehicles used during distribution, retail sale, laboratory testing, and microbusiness operations under the Proposed Program. The equipment that may be used under the Proposed Program with the greatest likelihood of being a substantial source of vibration would be a loaded truck.

Noise-generating Equipment Typically Used at Commercial Cannabis Business Sites

As described in Chapter 3, *Proposed Program Activities*, commercial cannabis business license types under the Proposed Program may have similar or varying equipment needs depending on the specific activities performed, including distribution, retail sale, laboratory testing, and microbusinesses. This discussion describes the noisiest potential equipment that would be used and the related temporary and permanent noise sources for each business type. “Permanent” noise sources are considered to be equipment that, at a minimum, would likely be used daily. “Temporary” noise sources are equipment or activities that would be conducted infrequently (less than daily). Table 4.6-7 provides noise reference levels for equipment that could be used under the various Proposed Program license types.

Significance Criteria

CEQA significance criteria were used to determine whether the Proposed Program would result in a potentially significant impact related to noise. For the purposes of this analysis, based on Appendix G of the Guidelines, the Proposed Program would result in a significant impact related to noise if it would:

- A. Expose persons to or generate noise levels in excess of applicable noise thresholds or standards;
- B. Expose persons to or generate excessive groundborne vibration or groundborne noise levels;
- C. Cause a substantial permanent increase in ambient noise levels in the vicinity of a Proposed Program activity above levels existing without the Proposed Program;
- D. Cause a substantial temporary or periodic increase in ambient noise levels in the vicinity of a Proposed Program activity above levels existing without the Proposed Program;
- E. For a Proposed Program activity located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the area of the Proposed Program activity to excessive noise levels; or
- F. For a Proposed Program activity within the vicinity of a private airstrip, expose people residing or working in the area of the Proposed Program activity to excessive noise levels.

These criteria are consistent with community noise standards published by OPR (see Table **4.6-1**).

Environmental Impacts of the Proposed Program

Impacts of Distribution, Retail Sale, Laboratory Testing, and Microbusiness Manufacturing Activities

Impact NOI-1: Expose persons to or generate noise levels in excess of applicable noise thresholds or standards and/or cause a substantial temporary or permanent increase in ambient noise levels in the vicinity of a Proposed Program activity above levels existing without the Proposed Program. (Less than Significant)

Commercial cannabis business operations typically require the use of noise-generating equipment such as that indicated in Table 4.6-7. The level of noise generated is related to the size, type, and amount of equipment being used; the location of the equipment within or outside of a building; frequency of equipment use; and operating condition of the equipment. The specific equipment needs for individual cannabis businesses are dependent on the type of business and a variety of other factors, including the size and design of the facility, specific equipment or product storage needs (i.e., temperature or humidity control), specific operational needs such as creating a safe, sterile laboratory area to support testing activities, and local climate conditions.

Some types of cannabis business equipment, including HVAC systems and loaded trucks, would be used on at least a daily basis, if not more frequently, at many licensed cannabis business sites. For example, distributors may use loaded trucks as part of their daily operations. Distributors, retail stores, and testing laboratories may also have HVAC systems that create noise. These are identified as permanent noise sources in Table 4.6-7. Vehicle use or foot traffic from employees or customers of licensed cannabis businesses may also be a noise source but would not be anticipated to substantially differ from typical temporary traffic-related noise related to any type of retail operation or business. Other noise sources, such as backup generators, would be used less frequently, and their noise generation would be considered temporary in nature.

The degree to which the noise from these sources would reach nearby sensitive receptors would depend on a number of factors, including the type and location of activity being conducted, distance to the receptor, intervening topography or vegetation, whether the receptor is enclosed in a building, and the related building materials. Noise generated indoors at cannabis business operations would generally be muted by the building's structure and would not be substantial outside of the business facility.

In addition, most licensed cannabis businesses, including distributors, retailers, testing laboratories, and microbusiness manufacturers would be located in areas zoned for commercial, retail, business, and industrial land uses. Noise from licensed cannabis businesses would not create a substantial change in noise levels in these areas compared to other surrounding noise-generating activities. These locations would also generally not contain many sensitive receptors (e.g., residents).

Finally, all licensed commercial cannabis businesses would be required to comply with applicable local noise ordinances or policies.

For these reasons, temporary or permanent increases in noise from cannabis businesses are generally not anticipated to be substantial and this impact would be **less than significant**.

Impact NOI-2: Expose persons to or generate excessive groundborne vibration or groundborne noise levels. (Less than Significant)

With respect to groundborne vibration, a loaded truck (as listed in Table 4.6-7) is expected to have the greatest potential to generate groundborne vibration or groundborne noise and could potentially be used in connection with most, if not all, of the commercial cannabis business types. An HVAC system may also generate groundborne vibration or groundborne noise levels but would not be a substantial source (i.e., a detectable source on properties adjacent to a commercial cannabis business) as long as the system is properly installed, maintained, and operated in accordance with California building standards and codes. Other potential equipment types used for the various cannabis business activities would not generate substantial vibration due to the type or location of the equipment or duration of equipment use, and therefore are not considered further.

The likelihood of any structurally sensitive buildings (i.e., buildings subject to damage from vibration), sensitive receptors (as described in Section 4.6.5 above), or residences being located close enough to commercial cannabis business activities to cause human annoyance or building damage would be small due to the likely siting of the Proposed Program's facilities in non-residential areas and the short distances (up to 18 feet) from the Program's vibration sources at which vibration effects would be observed (**Table 4.6-8**). Note that many local jurisdictions have setback requirements which would reduce the potential to be within this 18-foot distance.

The only likely source of groundborne vibration would be loaded trucks delivering cannabis goods, supplies, or business equipment to and from business locations. Due to zoning requirements and cost considerations, most cannabis businesses under the Proposed Program, including distributors, retailers, testing laboratories, and microbusiness manufacturers would primarily be located in existing buildings in commercial, retail, business, or industrial areas that regularly experience truck activity, and these areas would not experience any changes in this regard.

Cannabis businesses that transport cannabis or cannabis products may be more likely to travel in rural areas with loaded trucks, and groundborne vibration in these areas may be more likely to cause human annoyance. Based on the distances shown in Table 4.6-8, the likelihood of any sensitive buildings being located close enough to cannabis business operation activities to cause human annoyance or building damage would be small. For infrequent (i.e., less than 30 vibration events of the same kind per day) events such as the use of a loaded truck to deliver business supplies or transport cannabis products, a loaded truck operating at 40 feet or more from a sensitive use would not exceed the threshold for annoyance from vibration activities.

Table 4.6-8. Minimum Activity-to-Receiver Distances for Vibration Sources (Compliant with Indicated Noise Criterion)

Equipment	Category 2 Human Annoyance ¹ (VdB) Infrequent Events (80)	Building Damage Risk Category ^{2,3} (peak particle velocity)			
		Cat. 1 (0.5)	Cat. 2 (0.3)	Cat. 3 (0.2)	Cat. 4 (0.12)
Loaded Truck	40 feet	7 feet	10 feet	13 feet	18 feet

Notes: VdB = vibration decibel

¹ Category 2 (Human Annoyance) refers to the groundborne vibration impact criteria for residences and buildings where people normally sleep. To meet that criterion, the cannabis transportation equipment (loaded truck) would need to be located at the distance indicated in the table (40 feet or less) from the residences and buildings where people sleep.

² The Building Damage Risk Category provides the maximum distances from nearby structures at which cannabis transportation equipment would result in any structural damage.

³ Cat. 1 refers to building damage to reinforced concrete, steel, or timber (no plaster). Cat. 2 refers to building damage to engineered concrete and masonry (no plaster). Cat. 3 refers to building damage to nonengineered timber and masonry. Cat. 4 refers to building damage to buildings with extreme susceptibility to vibration damage (e.g., historic structures).

Source: FTA 2006

In addition, cannabis business licensees under the Proposed Program would be required to comply with all federal, State, and local policies, rules, and regulations, including vibration criteria. For these reasons, the vibration-generating impact associated with the Proposed Program's activities would be **less than significant**.

Impact NOI-3: Expose people or residences to excessive noise levels in the vicinity of a private airstrip, within an airport land use plan, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport. (Less than Significant)

Noise impacts on people or residences near public airports and private airstrips have been considered qualitatively by comparing potential noise levels from airports to those generated by Proposed Program activities. Although it is possible that some commercial cannabis business sites licensed under the Proposed Program may be located near airports or airstrips, these operations are not anticipated to expose nearby residents or workers to substantial additional noise levels beyond those already generated by the airport or airstrip. Specifically, noise-generating sources used for cannabis business operations (generally equipment to control temperature and climate) would not be substantially different than other climate control equipment used for other land uses typically found near airports. Therefore, this impact would be **less than significant**.

Impacts Related to Microbusiness Cultivation

CDFA's Draft PEIR (Appendix B of this IS/ND) examined noise impacts that may occur as a result of licensed cannabis cultivation. The findings of the Draft PEIR with regard to noise impacts resulting from cultivation are summarized as follows:

- **Expose persons to or generate noise levels in excess of applicable noise thresholds or standards and/or cause a substantial temporary or permanent increase in ambient noise levels.** Cultivation equipment types, including HVAC

systems and irrigation pumps, were determined to be noise sources that could result in a permanent increase in ambient noise levels. Residents in less developed (e.g., rural) areas are the most sensitive noise receptors for these sources, as noise from adjacent cannabis cultivation activities may be a primary human-caused noise source affecting these receptors. However, rural areas would be less likely than urban areas to have large indoor operations with HVAC systems, although irrigation pumps may be a more common noise source. Given that larger parcel sizes are a common feature in rural areas, a buffer would typically exist between pumps and receptors, as well as intervening vegetation and topography, such that the sound would be attenuated before reaching the receptor. In urban environments, most cultivation activities would occur in commercial and industrial areas where the noise generated by cultivation would not be substantially different from other surrounding land uses. Local noise standards or ordinances would also generally reduce the potential for excessive permanent noise that could adversely affect sensitive receptors.

Temporary noise generated by equipment used for cannabis cultivation would include chainsaws and mowers, although these would typically only be used in outdoor cultivation. These noise sources would be infrequent and unlikely to occur at night, when noise generation would be of most concern to nearby sensitive receptors. As such, impacts from temporary noise sources would typically not be substantial. The Draft PEIR found that this impact would be less than significant.

- **Expose persons to or generate excessive groundborne vibration or groundborne noise levels.** As described above in Section 4.6.5, “Environmental Setting,” a loaded truck is expected to have the greatest potential to generate groundborne vibration or groundborne noise. HVAC systems were determined not to be a substantial source (i.e., a detectable source on properties adjacent to a microbusiness cultivation site) of groundborne noise or vibration as long as the system is properly installed, maintained, and operated in accordance with California building standards and codes. The likelihood that sensitive buildings would be located close enough to roadways used by loaded trucks to cause human annoyance or building damage would be small. The Draft PEIR found that this impact would be less than significant.
- **Expose people or residences to excessive noise levels in the vicinity of a private airstrip, within an airport land use plan, or within 2 miles of a public airport or public use airport.** While some cultivation sites may be located near airports or airstrips, these cannabis business operations would not expose nearby residents or workers to substantial additional noise levels beyond those already generated by the airport or airstrip. Specifically, noise-generating sources used for cultivation operations (generally equipment to control temperature and climate) would not be substantially different than climate control equipment used for other land uses. The Draft PEIR found that this impact would be less than significant.

Impacts of microbusiness cultivation would be consistent with the analysis summarized above. In addition, because of the limited size of cultivation at a microbusiness (less than 10,000 square feet) compared to the larger CDFA license types (up to 4 acres), the impacts of cultivation at a microbusiness would be inherently limited in comparison to the impacts analyzed in the CDFA Draft PEIR. Thus, noise impacts from the Proposed Program as a result of microbusiness cultivation would also be **less than significant**.

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4.7 Public Services

4.7.1 Introduction

This section of the IS/ND presents the environmental setting and potential impacts to public services of the Bureau's Proposed Program for various types of commercial cannabis businesses in California, including distributors, retailers, testing laboratories, and microbusinesses. Information regarding public services presented in this section is primarily based on the following sources:

- Peer-reviewed studies of the effects of cannabis laws on crime and public services;
- White papers on crime, fire, and related effects of cannabis business operations and associated activity;
- News articles of crime and fire incidents involving cannabis business operations;
- Agency websites and fact sheets; and
- *CalCannabis Cultivation Licensing Program Draft Program Environmental Impact Report* (Draft PEIR), prepared by the California Department of Food and Agriculture (CDFA), included as **Appendix B** of this IS/ND.

4.7.2 Regulatory Setting

Federal Laws, Regulations, and Programs

No federal laws, regulations, or programs were identified related to public services and the Proposed Program. However, several federal agencies have jurisdiction over law enforcement and fire protection on federal lands in California, related to unlicensed cultivation operations. The U.S. Forest Service (USFS) responds to fires in National Forests as well as to fires on other lands in support of other federal, state, and local agencies (USFS 2016). Federal agencies involved in law enforcement in California include the USFS, whose Law Enforcement and Investigations (LEandI) division conducts law enforcement operations on federal lands, including eradication of unpermitted cannabis gardens on National Forest lands. Both the Bureau of Land Management (BLM) and the National Park Service (NPS) have law enforcement authority on federally managed lands.

The Federal Bureau of Investigation (FBI), as the nation's foremost law enforcement agency, works in California to investigate federal crimes and crimes that occur across state lines, including drug trafficking. The U.S. Drug Enforcement Administration (DEA) enforces federal controlled substances laws and regulations.

State Laws, Regulations, and Programs

California Building, Electrical, and Fire Codes

The California Building Standards Code, Title 24 of the California Code of Regulations, serves as the basis for the design and construction of buildings in California. The California Building Code (Cal. Code Regs., tit. 24, part 2) covers all aspects of building design and required safety

features for all types of buildings, including fire protection systems, fire and smoke protection features, means of egress, and structural design and materials. Title 24, part 3 is the Electrical Code, which contains standards for electrical systems, including safety features such as overcurrent protection, surge arresters, and proper wiring methods.

Title 24, part 9 is the California Fire Code. This portion of the code contains requirements related to emergency planning and preparedness, fire service features, building services and systems, fire-resistance-rated construction, fire protection systems, and construction requirements for existing buildings, as well as specialized standards for specific types of facilities and materials.

California Public Resources Code, Division 4, Part 2: Protection of Forest, Range, and Forage Lands

Division 4, Part 2 of the California Public Resources Code contains requirements for structures and land uses with respect to prevention and control of forest fires. Public Resources Code section 4291 requires that any person who owns or operates a structure in a mountainous area or brush-covered lands shall at all times maintain defensible space¹ of 100 feet from each side and from the front and rear of the structure.

Fire Protection and State Responsibility Area

The California Department of Forestry and Fire Protection (CAL FIRE) provides fire suppression and emergency response services within the State Responsibility Area (SRA) of the state, as defined in Public Resources Code sections 4125-4128. The SRA is the area within which the State of California has the primary financial responsibility for the prevention and suppression of wildland fires. The SRA forms an area of more than 31 million acres.

The SRA Fire Prevention Fee was enacted following the signing of Assembly Bill X1 29 in July 2011. The law approved the new annual fee to pay for fire prevention services within the SRAs. The fee is applied to all habitable structures within the SRAs. Owners of habitable structures that are also within the boundaries of a local fire protection agency receive a fee reduction.

Law Enforcement

Several State agencies provide law enforcement services within specified jurisdictions in California. The CDFW has game wardens who are responsible for enforcing its regulations, including hunting, fishing, and firearms laws and eradication of unpermitted “trespass grows,” where cannabis cultivators trespass on public lands to grow cannabis without permission or permits. State park rangers provide law enforcement within State parks. The California Highway Patrol (CHP) is responsible for enforcing vehicular and traffic laws on state highways and freeways, regulating the transport of goods, and serving as emergency responders to incidents on the state’s highway system.

¹ Defensible space is generally defined as the natural and landscaped area around a structure that has been maintained and designed to reduce fire danger, such as through fire-resistant plant selection and pruning.

Local Laws, Regulations, Plans, and Policies

Currently, local laws and regulations governing cannabis business operations are highly variable across different counties and cities in California. In some local jurisdictions, cannabis business operations are prohibited in all or part of the city or county. In addition, many local jurisdictions have not adopted ordinances related to cannabis business operations.

In areas where commercial cannabis business operations are permitted, many jurisdictions impose restrictions on business activities to limit possible environmental impacts, including those on public services. For example, some local jurisdictions require that cannabis business operations implement security measures (e.g., locked and enclosed operations spaces, perimeter alarms) to deter crime. Many local jurisdictions require that indoor facilities obtain all applicable electrical and building permits to limit the potential for electrical fires in indoor facilities. Others require minimum setback distances for some cannabis business operations from some other land uses, such as schools and public parks. For example, in Calaveras County, cannabis dispensaries are not permitted to be located within 1,000 feet of a school or public park. In the City of Los Angeles, medicinal cannabis businesses may not be located within 1,000 feet of a school, or within 600 feet of a public park, library, church, or similar land use.

See **Appendix C** for a summary of existing and proposed local cannabis business regulations in California, including provisions designed to limit impacts on public services.

4.7.3 Environmental Setting

Fire Protection and Emergency Services

Fire protection and emergency services are provided throughout California in a patchwork of service areas under local, State, federal, and tribal agency jurisdiction. Timber owners also may provide firefighting services. In many instances, agencies work together, particularly in response to large fires or emergencies that require more resources than the primary responding agency can provide.

Local Government Fire Departments

In most areas of the state where cannabis business operations could occur under the Proposed Program, fire protection would primarily be the responsibility of the local city or county fire department. The resources of these local fire departments vary throughout California. Generally, large city fire departments have greater resources (i.e., personnel, apparatus, fire stations) but also serve much larger populations and receive many more calls for service. Rural and county fire departments often have fewer resources than large city departments, serve smaller populations, and are spread out over a greater land area. City and county departments may work in collaboration with state and federal agencies on possible fires in the urban-wildland interface.

Local fire department staffing and resources are typically planned in accordance with applicable general plans to ensure that acceptable response times and service ratios are maintained.

State and Federal Fire Agencies

As described above, several state and federal agencies provide fire protection services in California. CAL FIRE provides fire suppression and emergency response services in the SRA portion of the state. CAL FIRE also contracts with local jurisdictions to provide fire protection services to non-state lands. In addition to fire protection, CAL FIRE responds to needs for medical aid, hazardous material spills, swiftwater rescues, search and rescue missions, civil disturbances, train wrecks, floods, and earthquakes (CAL FIRE 2012).

USFS responds to fires in National Forests as well as to fires on other lands in support of other federal, state, and local agencies (USFS 2016).

Police Protection

Police protection is provided in California by various local, state, federal, and tribal agencies. It is anticipated that, in most instances, police protection services related to commercial cannabis activities under the Proposed Program would be provided by local city and county departments. In certain instances, State or federal agencies may be called in to assist with an investigation or enforcement activity.

Local Government Police Departments

In unincorporated areas within California, police protection service is typically provided by the county sheriff's department. These county departments often cover large, sparsely populated areas and, therefore, have longer response times for their service areas than their city counterparts. Incorporated areas of the state are generally served by city police departments. Depending on the populations served, prevailing crime rates, and other factors, these police departments may have a large number of staff and equipment, or may have less need for resources in response to fewer calls for service.

Similar to local government fire departments, police departments are typically staffed in accordance with standards for response time and service ratios specified in the general plan. Jurisdictions also may impose an impact fee on new development to cover the cost of providing necessary public services, including police protection.

State and Federal Law Enforcement Agencies

Various state agencies provide law enforcement services in California. CHP is the statewide law enforcement agency responsible for enforcing vehicular and traffic laws on state highways and freeways, regulating the transport of goods, and serving as emergency responders to incidents on the state's highway system.

Federal agencies involved in law enforcement in California include USFS, whose LEandI division conducts law enforcement operations on federal lands, including eradication of unpermitted cannabis gardens on National Forest lands. BLM and NPS also have law enforcement authority on federally managed lands. The FBI, as the nation's foremost law enforcement agency, also works in California to investigate federal crimes and crimes that occur across state lines, such as unpermitted drug trafficking. DEA investigates crimes related to the federal Controlled Substances Act.

Schools

School districts in California are funded by a combination of state and local or tribal governments. School standards are often described in general plans, which may specify acceptable student-to-teacher ratios and other metrics for determining whether new or upgraded facilities are needed. School districts are independent jurisdictions in California, however; they have the ability to raise funds through bond measures and make decisions about their facilities and services without input from local governments.

Parks

Parks are provided throughout the state by local, state, and federal governments. Generally, local and regional parks are provided consistent with general plan goals and policies, which often articulate desired quantities and types of parkland per number of residents.

State and national parks, forests, and monuments are managed by the applicable State and federal agencies. Most state-designated recreational properties are operated by the California Department of Parks and Recreation; federal properties are controlled by USFS, BLM, and (for recreational water bodies) the U.S. Bureau of Reclamation. State and federal resource agencies (i.e., CDFW and USFWS) also have responsibility over management of those resources within parks and recreation areas.

Other Public Services

Other public services include hospitals, libraries, and community centers. These facilities are distributed throughout the state, generally in proportion to population.

4.7.4 Impact Analysis

Methodology

Potential impacts on public services have been evaluated qualitatively by considering various aspects of the Proposed Program in light of the Guidelines Appendix G significance criteria (listed below) and the existing regulatory and environmental setting (described above). Identified potential impacts are not considered significant unless they would result in changes to the physical environment that would trigger one of the CEQA significance criteria listed below.

Because it is unknown where many commercial cannabis business sites would be located under the Proposed Program, it is not possible to determine specific impacts at these sites. Even in cases where the sites are known, the statewide focus in this IS/ND makes it infeasible to evaluate every site-specific impact. Potential impacts are instead discussed generally, considering the various types of impacts that could occur. Additionally, as described in Section 4.0.4, “Focus on Activities Subject to the Bureau’s Regulatory Authority,” and as noted throughout the IS/ND, this analysis does not consider site development impacts (e.g., potential short-term impacts related to the construction or modification of cannabis business facilities); rather, these types of effects are evaluated as part of the cumulative impact analysis contained in Chapter 5, *Mandatory Findings of Significance*.

As required by MAUCRSA, licensees would be required to comply with site-specific regulations and requirements of the local jurisdiction, including land use and zoning

designations. This analysis assumes that local jurisdictions would be responsible for ensuring and enforcing compliance with local requirements.

Significance Criteria

For the purposes of this analysis, based on Appendix G of the Guidelines, the Proposed Program would result in a significant impact related to public services if it would:

- A. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of these public services:
 - 1. Fire protection
 - 2. Police protection
 - 3. Schools
 - 4. Parks
 - 5. Other

Note that potential hazards to firefighters and first responders associated with cannabis business operations are evaluated in Section 4.4, *Hazards, Hazardous Materials, and Human Health*.

Environmental Impacts of the Proposed Program

Impacts of Distribution, Retail Sale, Laboratory Testing, and Microbusiness Manufacturing Activities

Impact PS-1: Cause a substantial adverse impact related to police protection services. (Less than Significant)

An elevated risk of crime associated with cannabis business operations has been a concern noted in the literature on cannabis business operations and cultivation (California Police Chiefs Association 2009; Garmire 2009). The risk of criminal activity at cannabis businesses may be driven by several factors, including the fact that cannabis continues to be extremely valuable and, therefore, is a potential target for criminals. According to Forbes (2015), the retail price of cannabis (note that the report did not distinguish between cannabis grown for medicinal or adult use) in California is approximately \$242 per ounce, equating to \$3,872 per pound. This could translate to millions of dollars in product present at any given time at a commercial cannabis business facility. Also, currently, federally insured banks are generally unwilling to provide services to the cannabis industry. This means that cannabis-related organizations or businesses are operating primarily with cash transactions, subjecting them to an increased risk for crime compared to non-cash-based operations.

In Colorado, where cannabis was legalized in 2014 for adult use, retail stores have faced frequent robbery and burglary attempts despite requirements since 2010 to install alarms and surveillance cameras (Dokoupil and Briggs 2014). Likewise, the Police Foundation (2015) reports that burglary rates at licensed cannabis facilities in Colorado are much higher than at other retail outlets, such as liquor stores: 13 percent of Denver's licensed cannabis

facilities experienced burglaries in 2012 and 2013, compared with 2 percent of liquor stores. Research conducted for this IS/ND revealed a number of armed robberies and related crimes that have occurred at both dispensaries and cultivation operations in California and around the country (Aldax 2013; Chang 2016; Hickey and Hooley 2015; Johnson 2016; Kemp 2014; Kirschenheuter 2015; KRCR Staff 2013; Macz 2015; NBC 6 South Florida 2015; Nichols 2011; O'Neill 2015; Ray 2015; Rose 2015). It should be noted, however, that many of these incidents involved unpermitted or unregulated commercial cannabis business activities. Many of the cannabis business sites that have been targeted by criminals may not have implemented proper security measures, or may have attracted criminals simply by their unpermitted nature.

Indeed, several studies suggest that cannabis retail businesses or cannabis laws more generally do not generate crime and, in some instances, may actually reduce crime. Morris et al. (2014) evaluated the effect of medicinal cannabis laws on crime in states that have approved the use of medicinal cannabis. After controlling for a number of sociodemographic factors, the study found that medicinal cannabis laws were not predictive of higher crime rates and may be related to reductions in rates of homicide and assault (Morris et al. 2014). Kepple and Freisthler (2012) evaluated the relationship between medicinal cannabis dispensaries and crime based on location, and found no relationship between the two. Their results suggest that measures such as surveillance cameras and private security services may act as effective deterrents to crime.

Each of the criminal incidents noted above received a response from one or more law enforcement agencies and emergency responders, potentially temporarily decreasing their availability to respond to other calls for service. That said, none of the literature reviewed indicated that these incidents, on their own, required construction of new or expanded police facilities.

On balance, the information contained in the literature and from available news stories suggests that cannabis business operations could potentially be at elevated risk for crime; however, an elevated risk of crime is not a significant impact under CEQA unless it can be tied to a physical impact on the environment.

As described in Chapter 2, *Proposed Program Description*, the anticipated regulations identify standard security protocols that must be in place in order for commercial cannabis businesses to obtain a license from the Bureau. These regulations are expected to include the requirements to install an alarm system; limit access to certain areas of licensed premises; implement 24-hour video surveillance; and install commercial-grade door locks on entrances, exits, and limited-access areas. In addition, the Proposed Program would require that applicants for commercial cannabis business licenses must comply with all local laws and ordinances. As shown in Appendix C, some local jurisdictions already require cannabis business operations to implement security measures, such as video surveillance and alarm systems, to prevent unlawful diversion of cannabis and deter crime. These measures are anticipated to reduce robbery and burglary attempts.

Furthermore, considering that many unlicensed cannabis business operations would likely seek licensing under the Proposed Program, there is reason to believe that implementation of the Proposed Program may decrease pressure on police protection resources. Under existing conditions, police departments throughout the state spend considerable time and resources dealing with cannabis business operation issues, such as investigating and abating

unpermitted dispensaries. Under the Proposed Program, it is reasonable to assume that some of the cannabis business operators not currently operating in compliance with local requirements would become lawful businesses, reducing the enforcement needs for these operations. With a legal pathway for cannabis business operations and increased supply of legally grown cannabis, there also may be less opportunity or incentive for criminal organizations to introduce black market cannabis products into the supply chain, thus decreasing the need for police resources to address these issues (Margolin 2016).

In areas of California that would experience a large number of new cannabis business operations under the Proposed Program, it is possible that existing police protection services could be strained. However, there is no evidence or information in the available literature about where such growth could trigger the need for new or additional police facilities.

In summary, while some crime associated with licensed cannabis business operations may continue, no information has been found that indicates that the Proposed Program would increase law enforcement needs overall compared to baseline conditions. If anything, demand may decrease due to a larger number of lawful cannabis business operations and their increased coordination and cooperation with law enforcement authorities. Furthermore, linking any increase in demand for law enforcement to a need for new or additional police facilities in any particular location, the construction of which could cause significant environmental effects, is speculative. Such requirements would need to be addressed by law enforcement agencies on a case-by-case basis, and the agency undertaking the development of any new or expanded facilities would be required to comply with CEQA to address potentially significant impacts. Therefore, this impact would be **less than significant**.

Impact PS-2: Cause a substantial adverse impact related to fire protection services. (Less than Significant)

Although an elevated risk of fire associated with indoor cannabis cultivation is a commonly cited concern in the literature (California Police Chiefs Association 2012), no similar literature was located for the types of cannabis business operations that the Bureau will regulate under the Proposed Program, including distributors, retailers, microbusiness manufacturers, and testing laboratories. Business operators under the Proposed Program would be required to obtain electricity legally and use facilities that meet applicable codes, including electrical, building, and fire codes. In addition, the types of facilities and structures used for the activities regulated under the Bureau's Proposed Program would not differ substantially in their operations from other commercial facilities and structures typically permitted by local jurisdictions in a manner that would cause an increased fire risk.

In conclusion, licensed cannabis operations would not result in an increased risk of fire compared to baseline conditions. Required compliance with building and electrical codes would adequately address fire risk and would help ensure compliance, thereby preventing the need for construction of additional fire protection facilities. Therefore, this impact would be **less than significant**.

Impact PS-3: Cause a substantial adverse impact related to schools. (Less than Significant)

Under the Proposed Program, cannabis business operations are required to have a minimum buffer distance between the premises to be licensed and nearby schools. MAUCRSA mandates a buffer of 600 feet between licensees and schools, day care facilities, and/or youth centers, but allows licensing authorities or local agencies to specify different allowable buffer distances. A school is defined as any grades from kindergarten/1 through 12.

It is unlikely that new or altered school facilities (e.g., relocations of schools) would occur as a result of licensed commercial cannabis business operations being located near schools. In addition, planning efforts and permitting decisions by local government related to commercial cannabis business operations would help address any potential for siting conflicts or inconsistencies.

As previously discussed, the Proposed Program is not anticipated to result in substantial population growth, and therefore would be unlikely to increase demand for schools in any particular location to the extent that it would necessitate new or altered school facilities, the construction of which could cause significant impacts. Demand for schools would need to be addressed by local jurisdictions on a case-by-case basis, and the agency undertaking the development of any new or expanded schools would be required to comply with CEQA to address potentially significant impacts. Therefore, this impact would be **less than significant**.

Impact PS-4: Cause a substantial adverse impact related to parks or other public services. (Less than Significant)

As described in Impact PS-3, the Proposed Program is not anticipated to result in substantial population growth; as such, demand for parks or other public facilities in any particular location would not necessitate new or altered facilities, the construction of which could cause significant impacts. Any need for new or altered facilities would need to be addressed by relevant government agencies on a case-by-case basis, and the agency undertaking the development of any new or expanded facilities would be required to comply with CEQA to address potentially significant impacts. Therefore, this impact would be **less than significant**.

Impacts Related to Microbusiness Cultivation

CDFA's Draft PEIR (Appendix B of this IS/ND) examined impacts on public services that may occur as a result of licensed cannabis cultivation. The findings of the Draft PEIR with regard to public services impacts resulting from cultivation are summarized as follows:

- **Cause a substantial adverse impact related to police protection services.** No information was found that indicates that licensed cannabis cultivation would increase law enforcement needs overall compared to baseline conditions. If anything, demand may decrease the potential conversion of unlicensed cultivators to licensed lawful cultivators and their coordination and cooperation with law enforcement authorities. Furthermore, linking any increase in demand for law enforcement to a need for new or additional police facilities in any

particular location, the construction of which could cause significant environmental effects, is speculative. Such requirements would need to be addressed by law enforcement agencies on a case-by-case basis, and the agency undertaking the development of any new or expanded facilities would be required to comply with CEQA to address potentially significant impacts. The Draft PEIR found that this impact would be less than significant.

- **Cause a substantial adverse impact related to fire protection services.** Outdoor cultivation activities would have the potential to generate calls for fire protection service. As described in the Draft PEIR (Section 4.4, *Hazards, Hazardous Materials, and Human Health*), outdoor cultivation sites may be located in forested areas and/or areas designated Extremely High Fire Hazard Severity Zones. Outdoor cultivation could involve uses that would generate fire risk (e.g., storage and use of flammable materials, use of power equipment), but this risk would not be substantially different from that posed by other agricultural operations that use similar equipment and practices, and would not be substantial. In general, most local jurisdictions would incorporate the need for adequate fire protection services into their planning efforts related to cannabis cultivation, such as through their general plans and/or development impact fee processes. No information has been found to suggest that licensed cannabis cultivation would increase fire protection needs overall compared to baseline conditions.

Indoor cultivation would involve the use of high-intensity grow lights, as well as various other pieces of equipment (e.g., water pumps, humidity control, temperature control), which can create a relatively large electrical load. If the load exceeds the system capacity (e.g., as may occur in a building without appropriate or updated wiring for use in cannabis cultivation), an electrical fire could result. However, licensed indoor cultivation would have a substantially reduced risk of fire compared to baseline conditions, as applicants would be required to meet all relevant codes and requirements, including those of the electrical code. The Draft PEIR found that this impact would be less than significant.

- **Cause a substantial adverse impact related to schools.** Under MAUCRSA, cultivation business operations could not be licensed if the proposed site is within 600 feet or other specified distance from a school, reducing the potential for conflicts with school operations. As such, it is considered unlikely that new or altered school facilities (e.g., relocations of schools) would occur as a result of licensed cannabis business operations being located near schools. In addition, planning efforts and permitting decisions by local government related to cannabis cultivation should help address any potential for siting conflicts or inconsistencies. In addition, licensed cultivation is not anticipated to change the overall amount of cannabis production in the state and, therefore, would not result in substantial population growth (ERA Economics 2017). As such, licensed cultivation businesses would be unlikely to increase demand for schools in any particular location to the extent that it would necessitate new or altered school facilities, the construction of which could cause significant impacts. Environmental analysis of such construction would need to be addressed by local jurisdictions on a case-by-case basis, and the agency undertaking the development of any new or expanded schools would be required to comply with

CEQA to address potentially significant impacts. The Draft PEIR found that this impact would be less than significant.

- **Cause a substantial adverse impact related to parks or other public services.** Licensed cannabis cultivation is not expected to cause direct adverse impacts on parks or other public facilities. While unpermitted cultivation operations are known to occur on public lands used for recreation, such operations would not be licensed by the State. If anything, implementation of the licensing program may reduce such trespass grows, as creation of a licensed pathway for cannabis cultivation may decrease incentive for criminals to grow cannabis on park lands. In addition, licensed cannabis cultivation is not anticipated to result in substantial population growth such that demand for parks or other public facilities in any particular location would necessitate new or altered facilities, the construction of which could cause significant impacts. Such requirements would need to be addressed by relevant government agencies on a case-by-case basis, and the agency undertaking the development of any new or expanded facilities would be required to comply with CEQA to address potentially significant impacts. The Draft PEIR found that this impact would be less than significant.

The CDFA Draft PEIR found that all impacts on public services from cultivation would be less than significant due to the nature of the activities, the required environmental protection measures in CDFA's regulations for cultivation, such as the requirement that applicants would be required to meet all relevant local and state codes, ordinances, and requirements related to structure electrical usage and the prohibition for issuing cultivation licenses within 600 feet of schools, and similar requirements that many local jurisdictions with cannabis cultivation ordinances require.

Because of the limited size of cultivation at a microbusiness (less than 10,000 square feet) compared to the larger CDFA license types (up to 4 acres), and the expectation that the number of microbusiness cultivators would be less than other licensed cultivators, the impacts of cultivation from microbusinesses would be inherently limited in comparison to the impacts analyzed in the CDFA Draft PEIR. Thus, public services impacts of the Proposed Program as a result of microbusiness cultivation would also be **less than significant**.

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4.8 Transportation and Traffic

4.8.1 Introduction

This section of the IS/ND presents the environmental setting and potential impacts of the Bureau's Proposed Program related to transportation and traffic.

Impacts on transportation and traffic under CEQA are generally related to conflicts with applicable circulation plans and congestion management plans, and/or addition of vehicle trips sufficient to substantially reduce roadway operating conditions. CEQA also requires consideration of air traffic and safety issues.

Information regarding transportation and traffic presented in this section is primarily based on the following sources:

- Relevant state, regional, and local rules, regulations, and requirements;
- Site visits to various testing laboratories and retailers, and consultation with cannabis industry experts; and
- Web-based research on cannabis distributors, retailers, testing laboratories, and associated topics, including online newspaper and magazine articles; and
- *CalCannabis Cultivation Licensing Program Draft Program Environmental Impact Report* (Draft PEIR), prepared by the California Department of Food and Agriculture (CDFA), included as **Appendix B** of this IS/ND.

4.8.2 Regulatory Setting

Federal Laws, Regulations, and Programs

Federal Aviation Administration

Under title 14 of the Code of Federal Regulations, part 77.9, projects must notify the Federal Aviation Administration (FAA) of structural construction or alteration that involves the following:

- Any construction or alteration that is more than 200 feet above ground level;
- Any construction or alteration located at specified distances from an airport runway, at heights determined based on slope ratios identified in 14 Code of Federal Regulations part 77.9(b);
- Any highway, railroad, or other traverse way that, if adjusted upward by specified vertical distances, would exceed a standard identified in 14 Code of Federal Regulations part 77.9(a) or (b); or
- Any construction or alteration on airports and heliports, as described in 14 Code of Federal Regulations part 77.9(d).

Federal Highway Administration

The Federal Highway Administration (FHWA), an agency of the U.S. Department of Transportation, provides stewardship over the construction and preservation of the nation's highways, bridges, and tunnels (FHWA 2017). FHWA also conducts research and provides technical assistance to State and local agencies in an effort to improve safety, mobility, and livability and to encourage innovation in these areas (FHWA 2017).

State Laws, Regulations, and Programs

California Department of Transportation

The California Department of Transportation (Caltrans) manages the state highway system and ramp interchange intersections. Caltrans is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance. Caltrans requires transportation permits for the movement of vehicles or loads exceeding the limitations on the size and weight contained in California Vehicle Code section 35551.

Local Laws, Regulations, Plans, and Policies

Local Cannabis Ordinances Addressing Traffic

At the time of writing this IS/ND, local laws and regulations related to cannabis business operations vary across California. Some counties and cities allow commercial cannabis businesses, whereas other jurisdictions limit cannabis-related activities to personal medicinal use and still others prohibit commercial cannabis-related activities entirely. Many local jurisdictions have not adopted ordinances related to commercial cannabis.

Appendix C contains a summary of existing and proposed local cannabis business regulations in California.

Other Relevant Local Plans and Policies

In general, city and county general plans contain circulation elements that include goals and policies related to transportation and traffic. Many jurisdictions and regional transportation agencies also produce congestion management plans. The standards set by local plans are highly variable with respect to measures of acceptable traffic conditions. What is considered acceptable delay in a dense urban environment may not be acceptable in a rural environment. Although a comprehensive review of such policies is beyond the scope of this statewide analysis, these plans may include provisions that would be relevant to cannabis business operations.

4.8.3 Environmental Setting

California Transportation Network

Cannabis business operations would involve distribution and deliveries of commercial cannabis goods, materials required for business operations, and employee vehicle trips on all types of roads throughout the state. Under MAUCRSA, the Bureau is authorized to establish minimum safety and security regulations for transport activities by licensees. In addition to the transportation of commercial cannabis goods between licensees, retailers and microbusinesses may also offer delivery services to customers.

Licensed cannabis business activities, including distribution, retail sale, testing, and microbusiness activities could generate vehicle trips from employees commuting to and from the licensed premises, movement or shipment of goods and equipment, and customers purchasing commercial cannabis goods.

The baseline level of intensity and impacts resulting from commercial cannabis transportation are highly variable and site specific. Many commercial cannabis businesses in rural areas may be located near low-volume rural highways and roads, and/or may be accessed by dirt or gravel roads. By contrast, businesses in urban or suburban areas may be located near streets with higher traffic volumes, areas of congested traffic, and highway systems.

Existing traffic conditions in California vary on a regional, local, and, in many cases, site-specific basis. In general, areas of the state that experience high levels of traffic congestion are major metropolitan areas where population and commercial centers are located, such as the San Diego, Los Angeles, San Francisco, and Sacramento areas. The North Coast of California, which includes the Emerald Triangle (i.e., Trinity, Mendocino, and Humboldt Counties), one of the largest cannabis-producing regions of the state, is sparsely populated compared to other areas and, therefore, has fewer ongoing traffic congestion issues. Licensees may transport batches of commercial cannabis goods throughout several regions of the state with differing traffic conditions.

Airports and private airstrips are widely distributed throughout the state. Because commercial cannabis goods may not be transported by aircraft under the Proposed Program, airports and airstrips are not discussed further here.

Figure 4.8-1 shows major State and federal highways in California.

4.8.4 Impact Analysis

Methodology

Traffic impacts that could result from the Proposed Program were identified by evaluating Proposed Program activities in the context of statewide and regional circulation patterns, impacts on existing roadway configurations, and relevance to standard traffic control plan requirements and strategies. The criteria for determining the significance of potential impacts are outlined below.

Because it is unknown where many commercial cannabis businesses would be located under the Proposed Program, it is not possible to determine specific impacts at these sites. Even in cases where the sites are known, the statewide focus in this IS/ND makes it infeasible to evaluate every site-specific impact. Potential impacts are instead discussed generally, considering the various types of impacts that could occur. Additionally, as noted throughout the IS/ND, this analysis does not consider site development impacts (e.g., potential short-term impacts related to the construction or modification of cannabis business facilities); rather, these types of effects are evaluated in the cumulative impact analysis contained in Chapter 5, *Mandatory Findings of Significance*.

As required by MAUCRSA, licensees would be required to comply with site-specific regulations and requirements of the local jurisdiction, including land use and zoning

designations and traffic requirements. This analysis assumes that local jurisdictions would be responsible for ensuring and enforcing compliance with local requirements.

Significance Criteria

For the purposes of this analysis, based on Appendix G of the Guidelines, the Proposed Program would result in a significant impact related to transportation and traffic if it would:

- A. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel, and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- B. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- C. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- D. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- E. Result in inadequate emergency access; or
- F. Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

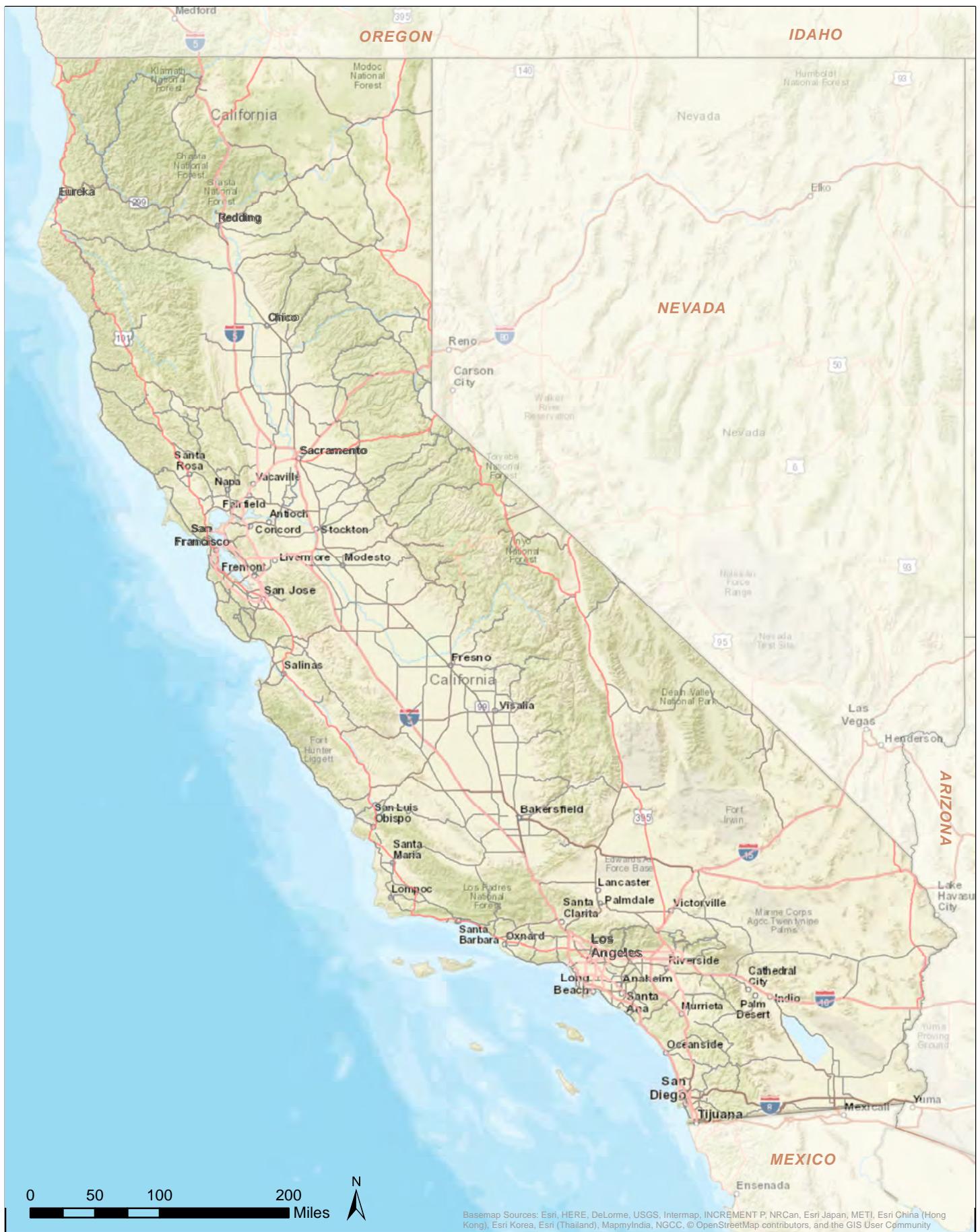


Figure 4.8-1
Statewide Transportation Network

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Environmental Impacts of the Proposed Program

Impacts of Distribution, Retail Sale, Laboratory Testing, and Microbusiness Manufacturing Activities

Impact TRA-1: Conflict with circulation plans, ordinances, or policies. (Less than Significant)

The number of workers and customers traveling to any given cannabis business site is expected to vary widely. Retailers would have the greatest level of customer traffic, with multiple customers coming and going in any given day in addition to traffic generated by delivery services. One existing cannabis dispensary in Oakland estimated that it attracts 500-1,000 customers per day (Borchardt 2015). Because Oakland is a densely populated urban area, some customers would arrive by car but many would also arrive on foot, by bicycle, or on public transportation.

Traffic to and from distributors would mostly be generated by employees, although distributors would also generate vehicle trips across the transportation network as they move cannabis goods from one licensed business to another.

With respect to testing laboratories, only a portion of their business may be dedicated to testing of cannabis goods, and hence some worker trips may not be related to the Proposed Program. As an example, a testing laboratory visited during the preparation of this IS/ND employs approximately 30-35 employees, but estimates that 30 percent of its business is cannabis testing. The other 70 percent of its business comes from testing other food products.

Microbusinesses containing retail outlets would generate similar traffic as standalone retailers, as well as generating worker trips associated with cultivation and manufacturing (as applicable).

Depending on the location and type of the cannabis business operation, vehicle trips related to the activities noted above could contribute to increased congestion or a decrease in circulation system performance. For those sites already in operation, ongoing effects would represent a continuation of baseline conditions and would not be a significant impact for purposes of CEQA. For sites that are currently unknown or have not yet been established, it is speculative to determine whether and where such possible impacts may be significant. For example, it cannot be determined which specific circulation plans, ordinances, or policies may be applicable to a given cannabis business in this circumstance.

In general, commercial cannabis businesses are not anticipated to generate substantial numbers of new vehicle trips, as individual business operations would be limited in size and, therefore, would not contain large numbers of employees or involve a large number of deliveries. The possible exception would be retailers, which would generate the greatest amount of customer traffic, in addition to worker trips and commercial cannabis delivery services. However, because of zoning laws and other local regulations and ordinances, retailers would generally be located in areas that contain other retail establishments that generate customer traffic and make deliveries. Therefore, substantial conflicts with circulation plans, ordinances, or policies are not likely. While impacts could occur in particular locations, widespread traffic congestion from implementation of the Proposed

Program is not anticipated to be a substantial issue when considering the state as a whole. In addition, local jurisdictions, as part of their land use approval process, would consider and address these site-specific issues, such as ingress/egress, parking, and other requirements, in conformance with their own local traffic-related policies and with CEQA. Overall, this impact would be **less than significant**.

Impact TRA-2: Conflict with congestion management programs. (Less than Significant)

As described in Impact TRA-1, commercial cannabis business operations would generate vehicle trips for employee commutes, material shipments, and customer visits, among others. Depending on the location of the business site and conditions on nearby roadways, these additional vehicle trips could cause or worsen existing congestion or level of service in particular locations and, thereby, potentially conflict with an applicable congestion management program.

In particular, as previously mentioned, retailers would attract customer traffic and may also create vehicle trips as a result of deliveries to customers. Retail sites in urban or suburban areas could potentially generate heavy foot and vehicle traffic in the immediate vicinity of the site (California Police Chiefs Association 2009). As noted in Impact TRA-1, however, retailers would generally be located in areas zoned for retail activity that would already generate foot and vehicle traffic. Such activities would be unlikely to differ substantially from the baseline.

In addition, cannabis businesses, including retailers, are required to comply with local plans, ordinances, and regulations. As part of this requirement, cannabis businesses would need to be in compliance with local congestion management programs.

At the statewide scale of this analysis and because of uncertainties regarding the future location of many cannabis businesses that may seek licensing under the Proposed Program, it is speculative to determine whether and where additional trips relating to the various license types could have a substantial adverse effect on existing levels of service or other traffic standards and thereby conflict with a congestion management program. In addition, local jurisdictions, as part of their land use approval process, would consider and address site-specific issues related to congestion management. Therefore, this impact would be **less than significant**.

Impact TRA-3: Result in a change to air traffic patterns. (No Impact)

The operation of commercial cannabis businesses does not include the use of aircraft. The Bureau's regulations will explicitly require that commercial cannabis transportation and deliveries of commercial cannabis goods may only be made by motor vehicle.

It is possible that some licensed cannabis businesses may be located near airports. However, cannabis business operations do not typically involve buildings, structures, or land uses that are considered incompatible with airport activities (e.g., height that would obstruct landing/takeoff zones). Additionally, activities under the Proposed Program are required to be consistent with local zoning requirements and airport land use plans. Thus, it is not anticipated that cannabis businesses would require or result in a change in location of any airports or air traffic patterns that could result in substantial safety risks, such as air traffic safety issues. Therefore, there would be **no impact**.

Impact TRA-4: Increase hazards due to a design feature or incompatible uses. (Less than Significant)

Commercial cannabis business activities would not routinely require or result in road design changes. In specific instances, site development may require alterations to existing roads, addition of ingress/egress facilities, or addition of access roads; such site development activities are outside of the licensing authority of the Bureau and would be reviewed by the local jurisdiction on a site-specific basis; such effects have been considered in the cumulative impact analysis contained in Chapter 5, *Mandatory Findings of Significance*.

In addition, licensed cannabis transportation activities by distributors could utilize commercial vehicles such as trucks, vans, trailers, or armored cars to transport cannabis to and from commercial cannabis businesses. Again, these types of vehicles are commonly found on roadways throughout the state.

If anything, the Proposed Program would be likely to decrease traffic hazards because, as stated above, MAUCRSA creates new safety and security standards for cannabis transportation. Distributors that transport cannabis goods must meet requirements for safety and security, which may have a beneficial effect. Overall, this impact would be **less than significant**.

Impact TRA-5: Result in effects on emergency access. (Less than Significant)

Under the Proposed Program, cannabis business operations may involve truck or trailer deliveries, customer traffic, retail or microbusiness delivery service vehicles, and worker trips. Depending on the location and type of commercial cannabis business activities, deliveries of materials and supplies could restrict emergency vehicle access to the site or to adjacent businesses for brief periods. These delivery and transportation activities would be in line with comparable deliveries to other businesses already operating throughout the state. Additionally, any adverse effects related to emergency access would not be expected to be substantial because, in the event of an emergency, the truck(s) could be relocated.

In addition, local jurisdictions, through their cannabis business permitting processes, would address emergency access through ingress/egress, commercial loading zones, and other requirements.

Therefore, this impact would be **less than significant**.

Impact TRA-6: Result in effects related to public transit, bicycle, or pedestrian facilities. (Less than Significant)

Cannabis business operations under the Proposed Program would not involve any alterations to existing public transit stops or bicycle/pedestrian facilities. While some customers or workers at distribution, retail sale, testing laboratory, and microbusiness sites may use these modes of transportation to travel to and from the site, they would not substantially affect the capacity or operation of these facilities. Commercial cannabis delivery services will be expressly prohibited from making deliveries on foot, by bicycle, or on public transit, so these activities would not place any additional burden on existing services.

As described in Impact TRA-5, cannabis business operations may involve customer traffic, materials deliveries, and worker trips at commercial cannabis business sites, as well as delivery service vehicles at retailers. These activities could interfere with bicycle lanes or pedestrian facilities if delivery vehicles were to temporarily block passways. However, any such blockages would be short term and comparable to other commercial business practices. Therefore, they would not be considered a substantial adverse effect, particularly when considered on a statewide level.

Therefore, this impact would be **less than significant**.

Impacts Related to Microbusiness Cultivation

CDFA's Draft PEIR (Appendix B of this IS/ND) examined impacts on transportation and traffic that may occur as a result of CDFA's cultivation licensing program. The findings of the Draft PEIR for transportation and traffic impacts resulting from cultivation are summarized as follows:

- **Conflict with circulation plans, ordinances, policies, or congestion management programs.** In general, licensed cannabis cultivation is not anticipated to generate substantial numbers of vehicle trips, as individual cultivation sites would be limited in size and most sites would not contain a high density of employees or involve a large number of deliveries. Cultivation facilities would vary in their supply requirements, but deliveries of fertilizer, pesticides, or other cultivation materials would be unlikely to cause any noticeable increase in traffic or roadway congestion. Therefore, substantial conflicts with circulation plans, ordinances, or policies are not considered likely. The Draft PEIR found that this impact would be less than significant.
- **Change to air traffic patterns.** Cultivation operations do not routinely use aircraft or operate in buildings, structures, or land uses that are incompatible with airport or aircraft activities. The Draft PEIR found that this impact would be less than significant.
- **Hazards due to a design feature or incompatible uses.** Generally, cultivation sites would not require or result in road changes. Cannabis cultivators could use some farm equipment, which could be operated on local roads for brief periods. Although operation of farm equipment on roadways could create a hazard from incompatible uses, cannabis cultivation in general is no more likely to substantially increase hazards on roadways than other types of agricultural activities that take place in many of the same areas of the state. The Draft PEIR found that this impact would be less than significant.
- **Effects on emergency access.** While deliveries of materials for cultivation could potentially restrict emergency vehicle access to a cannabis business site, or to adjacent businesses for brief periods, any impacts would not be substantial and would be mitigated by compliance with local regulations and ordinances. The Draft PEIR found that this impact would be less than significant.
- **Effects related to public transit, bicycle, or pedestrian facilities.** While cultivation sites may have workers who travel to the sites using these facilities, or

may have deliveries that temporarily affect these facilities, the effects would not be significant and may be addressed by local ordinances and regulations. The Draft PEIR found that this impact would be less than significant.

Impacts of microbusiness cultivation would be consistent with the analysis summarized above. Because of the limited size of cultivation at a microbusiness (less than 10,000 square feet) compared to the larger CDFA license types (up to 4 acres), the impacts of cultivation at a microbusiness would be inherently limited in comparison to the analysis contained in the CDFA Draft PEIR. That said, the traffic impacts of cultivation could combine with traffic effects from other aspects of the microbusiness (e.g., retail, delivery); this potential impact is referenced where appropriate in the impact discussion of other license types above. For these reasons, the impacts from the Proposed Program as a result of microbusiness cultivation would also be **less than significant**.

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Chapter 5

MANDATORY FINDINGS OF SIGNIFICANCE

5.1 Introduction

In accordance with Section 15065 of the Guidelines, the Bureau as CEQA Lead Agency must make a determination regarding whether there is substantial evidence, in light of the whole record, that implementation of the Proposed Program has the potential to result in a significant impact on the environment. If the Bureau were to determine that a significant effect would occur, the Bureau would need to prepare an EIR. However, for the reasons described below, the Bureau has determined that implementation of the Proposed Program would not result in a significant effect. For this reason, the Bureau has prepared this IS/ND to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the Proposed Program.

5.2 Effects on the Quality of the Environment and Impacts on Biological and Cultural Resources

Section 15065(a)(1) of the Guidelines requires that IS/NDs make the following mandatory finding of significance:

Does the Proposed Program have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As explained in Section 4.0.11, “Sections Eliminated from Further Analysis,” of Section 4.0, *Introduction to the Environmental Analysis*, the Proposed Program has little or no potential to result in physical impacts on the following resource topics: agriculture and forestry resources; cultural and paleontological resources; geology, soils, and seismicity; hydrology and water quality; land use and planning; mineral resources; population and housing; recreation; tribal cultural resources; and utilities and service systems. According to the evaluation of impacts by resource topic in other sections of Chapter 4, the program would result in less-than-significant impacts related to aesthetics; air quality; biological resources; energy use and greenhouse gas (GHG) emissions; hazards, hazardous materials, and human health; noise; public services; and transportation and traffic.

Therefore, the Bureau has concluded that the Proposed Program does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range

of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

5.3 Cumulative Impacts

Section 15065(a)(3) of the Guidelines requires that IS/NDs make the following mandatory finding of significance:

Does the Proposed Program have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of the Proposed Program are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

This section presents the setting for the cumulative impacts analysis and characterizes the significance of cumulative impacts to which the Bureau’s Proposed Program may contribute. According to Guidelines section 15130(a)(1), a cumulative impact is created by the combination of a proposed project or, in this case, a proposed program with other past, present, and probable future projects or programs causing related impacts. Cumulative impacts can result from individually minor, but collectively significant, projects taking place over a period of time. (Guidelines §15355[b].) Under CEQA, an Initial Study must evaluate the cumulative impacts of a project when the project’s incremental contribution to the group effect is “cumulatively considerable.” An Initial Study does not need to consider cumulative impacts that do not result, in part, from the project evaluated in the Initial Study.

To meet the adequacy standard established by Guidelines section 15130, an analysis of cumulative impacts must contain the following elements:

- An analysis of related past, present, and reasonably foreseeable projects or planned development that would affect resources in the project area similar to those affected by the proposed project;
- A summary of the environmental effects expected to result from those projects, with specific reference to additional information stating where that information is available; and
- A reasonable analysis of the combined (cumulative) impacts of the relevant projects.

The cumulative impacts analysis must evaluate a project’s potential to contribute to the significant cumulative impacts identified, and it must discuss feasible options for mitigating or avoiding any contributions determined to be cumulatively considerable.

The discussion of cumulative impacts is not required to provide as much detail as the discussion of the effects attributable to the project alone. Rather, the level of detail is to be guided by what is practical and reasonable.

5.3.1 Methods Used in this Cumulative Impact Analysis

Approach to the Analysis

The following analysis of cumulative impacts focuses on whether the impacts of the Proposed Program would be cumulatively considerable within the context of impacts resulting from the Proposed Program and other past, present, or reasonably foreseeable future projects or programs. The cumulative impact scenario considers other projects and programs proposed within the geographic area defined for each resource topic that would have the potential to contribute to significant cumulative impacts.

Guidelines section 15130 provides the following two alternative approaches for analyzing and preparing an adequate discussion of significant cumulative impacts:

- the list approach, which involves listing past, existing, and probable future projects or activities that have produced, or would produce, related or cumulative impacts, including, if necessary, those projects outside the control of the lead agency; or
- the projection approach, which uses a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions and their contribution to the cumulative effect.

This evaluation utilizes a hybrid approach, whereby the list approach has been used to describe cannabis-related activities other than those that would occur under the Proposed Program, and a projection approach has been used for non-cannabis-related activities that could contribute to cumulative impacts.

Activities related to the Proposed Program that are included in the cumulative impacts analysis were determined using several factors, including the location and type of activity and the characteristics of the activity related to resources that could be affected by the Proposed Program. In addition, regional conditions that might lead to cumulative impacts, such as air pollutant emissions, are also described.

Note that, because GHG emissions are intrinsically a cumulative issue and are already addressed in Section 4.4, *Energy Use and Greenhouse Gas Emissions*, this topic is not discussed further in this chapter.

Geographic Scope of Analysis

The level of detail of a cumulative impacts analysis should consider a proposed project's geographic scope and other factors (e.g., a project's construction or operation activities, the nature of the environmental resource being examined) to ensure that the level of detail is practical and reasonable. The scope of individual Proposed Program activities generally would be limited to small geographic areas. However, the overall geographic scope for the purposes of the cumulative impacts analysis is statewide because collectively, Proposed Program activities would have the potential to occur throughout the state. The geographic scope of the cumulative impact analysis for each resource topic is focused on the areas where potential effects of the Proposed Program could contribute to significant cumulative impacts.

Table 5-1 defines the geographic scope of the cumulative impacts analysis for resource topics that are evaluated in this chapter.

Table 5-1. Geographic Scope for Resources with Potential Cumulative Impacts Relevant to the Proposed Program

Resource Area	Geographic Scope
Aesthetics	Statewide, at Proposed Program activity locations near sensitive receptors
Air Quality	Statewide within each air basin for criteria pollutant emissions, and locally at Proposed Program activity locations near sensitive receptors for toxic air contaminants
Biological Resources	Statewide, at Proposed Program activity locations near special-status species, their habitats, and sensitive natural communities
Hazards, Hazardous Materials, and Human Health	Statewide, at Proposed Program activity locations near people
Noise	Statewide, at Proposed Program activity locations near sensitive receptors
Public Services	Statewide, at Proposed Program activity locations
Transportation and Traffic	Statewide, at Proposed Program activity locations

5.3.2 Cumulative Setting

The cumulative setting considers several categories of activities outside the scope of the Proposed Program that are closely related; past, present, or reasonably foreseeable; and may combine with the effects of the Proposed Program to create significant cumulative impacts, as follows:

- Development of sites for licensed cannabis business activities other than cultivation;
- Development of sites for licensed cultivation activities, as a part of cannabis microbusinesses;
- Unlicensed (illegal) cannabis businesses, including unlicensed cultivation and related activities;
- Non-commercial cannabis cultivation and related activities;
- Commercial cannabis activities licensed by other State agencies (e.g., cultivation and manufacture);
- Cannabis consumption; and
- Other activities, not related to cannabis, that may result in similar impacts.

Each of these is described in turn below. Following this discussion is a list of resource topics that have been considered and dismissed in this IS/ND due to a determination that these activities would not contribute to any cumulative impacts.

Development of Sites for Licensed Commercial Cannabis Business Activities

Both prior to and since the passage of MAUCRSA, potential license applicants have been, and are likely to continue, performing a variety of site development activities prior to applying for a license under the Proposed Program. While the Bureau would issue licenses for commercial cannabis businesses under the Proposed Program regulations, the Bureau does not have discretion or authority over site development for the purposes of utilizing a particular site for a commercial cannabis business. For this reason, these site development activities are not considered to be part of the Proposed Program, and their potential impacts have been considered separately from the activities that would occur in accordance with a State license. Rather, site development is considered here as a past, present, and reasonably foreseeable future related activity, the impacts of which could combine with those of the Proposed Program to create cumulative impacts.

Site development activities may include, but are not limited to, the following:

- Developing a new business site or constructing a new facility for the purpose of operating that site/facility under the Proposed Program;
- Upgrading or otherwise modifying an existing site/facility to bring it into compliance with all applicable local, State, and federal regulations; permitting programs; and requirements, including those of the Proposed Program; and/or
- Modifying an existing site's design or facilities to support the applicant's planned activities; for example, modifications allowing the site to operate under multiple or combination licenses in one particular location.

In most cases, site development activities would require review and approval by the local jurisdiction in which the activity is located. To guide the approval process for site developments, local jurisdictions are required to develop and periodically update long-range planning documents called general plans, which serve as a blueprint for the future planning and growth of cities and counties. General plans set forth local development policies, objectives, principles, and standards specific to a given local jurisdiction. Many general plan policies are intended to reduce or minimize significant environment effects associated with site development and land use. Local jurisdictions would typically provide guidance and restrictions on siting locations, such as consideration of the impacts of siting cannabis business operations in a given location, as well as the potential impacts of multiple cannabis business sites in an area considering other related or unrelated projects in that area. Compliance with applicable land use plans overseen by local, State, and federal agencies, along with related CEQA compliance evaluations, would help to address potential impacts of site development. Such land use plans could include, but are not limited to, general plans, specific plans, local ordinances including those pertaining specifically to cannabis businesses, and relevant plans and policies such as Local Coastal Programs.

The following discussion considers site development activities for the different types of cannabis businesses that will be licensed under the Proposed Program. As a general matter, business activities that will occur inside buildings will have similar site development activities. Site development of the buildings themselves may include construction of new buildings or refurbishment/modification of existing buildings or parcels, both to meet the equipment and facility needs for the particular business and to comply with applicable regulations. Outdoor modifications to new or existing spaces may include the development

of parking areas and installation of signage and lighting. Businesses may make modifications to product loading areas or parking areas. For development of new structures, outdoor modifications could include land clearing and grading, installation of infrastructure for connection to municipal utilities, water storage, water and stormwater treatment, security lighting, landscaping, and fencing.

Access roads and parking may need to be developed or modified to allow for access to a cannabis business site. This could require construction activities near or across streams, installation of culverts, and/or placement of fill within a water body. Access roads and parking areas may be paved or unpaved. During site development, vehicle trips to and from the site would be needed for workers, materials deliveries, and off-hauling.

Development of new cannabis business sites may require the use of heavy equipment to perform site clearing, including vegetation removal and soil preparation, and grading. In some cases, demolition and removal of existing structures and other infrastructure may also be necessary. Similar activities may be needed for modification of existing sites. Staging areas for the storage of construction materials or equipment may be located on site or off site and could involve ground-disturbing activities.

Development of new cannabis business sites or modification/expansion of existing sites may necessitate the installation of utility infrastructure. This activity could include, but would not be limited to, the installation of water supply infrastructure (e.g., water storage and irrigation equipment, such as water storage ponds, tanks, or reservoirs; groundwater wells; and water treatment equipment), stormwater and wastewater infrastructure, and electrical systems. Wires, utility poles, and other electrical equipment may be necessary to connect commercial cannabis operations to existing electrical sources. Typically, a connection to a local provider's electrical system/network is used as a primary energy source for equipment. Interior electrical system improvements may include installation of new or additional wiring, panels, and power outlets.

Site development activities that are specific to individual cannabis business license types are outlined below.

Retailers. Site development activities for retailers would typically include remodel and renovation of existing buildings or construction of new buildings, primarily located in commercial retail or business areas. Interiors of existing buildings may be modified to create separate spaces, including a retail sales area for customers and limited-access areas for product storage, operations management, and delivery operations. Storage of cannabis may require the installation of refrigeration and humidity control equipment. Where on-site smoking, vaping, or otherwise consuming cannabis is permitted by local jurisdictions, a separate space may be created for these purposes. These facilities may be required to install air filters and/or other heating, ventilation, and air conditioning (HVAC) equipment. Retailers that offer delivery services may make modifications to product loading areas or parking areas to increase security or efficiency for delivery vehicles.

Distributors. Distribution facilities are expected to be located in new or existing commercial buildings such as warehouses or other buildings designed or modified to store commercial goods. Indoor modifications to existing buildings may include installation of refrigeration or humidity control equipment, or security equipment.

Testing Laboratories. Site development activities for testing laboratories may include construction of new buildings or refurbishment/modification of existing buildings or parcels to meet the equipment and facility needs for laboratory testing, and to comply with applicable regulations. Modifications of existing buildings would largely occur within the interior of the structure, including changes to the facility layout; upgrades or replacement of the electrical, HVAC, and plumbing systems; and installation of equipment (testing equipment, security systems).

Manufacturing Sites (as part of microbusiness). As with testing laboratories described above, site development activities for manufacturers may include construction of new buildings or refurbishment/modification of existing buildings or parcels to meet equipment and facility needs and to comply with applicable regulations. Modifications of existing buildings would occur largely within the interior of the structure, including changes to the facility layout; upgrades or replacement of the electrical, HVAC, and plumbing systems; and installation of equipment (manufacturing equipment, security systems).

Cultivation Sites (as part of microbusiness). Site development for outdoor and mixed-light cultivation would typically involve basic land preparation activities, including, but not limited to, tree and vegetation removal for the clearing of land, as well as land terracing and grading. Outdoor and mixed-light cultivation may also require the construction of roads, irrigation systems and water storage facilities, parking, security lighting, and landscaping and fencing, as described above.

For mixed-light (and some outdoor) cultivation, greenhouse or hoop house¹ structures are typically used. These structures are often constructed with a frame of heavy-duty polyvinyl chloride (PVC) or metal pipes and clear plastic tarps as coverings. Glass may be used instead of tarps. Site development may also involve construction or modification of other ancillary structures such as storage buildings or residences.

Indoor site development activities may involve the construction of new buildings or the refurbishment/modification of existing buildings or parcels to meet the equipment and facility needs for indoor cultivation and to comply with applicable regulations. Modifications of existing buildings would largely occur within the interior of the structure, including changes to the facility layout; creation of additional rooms indoors to allow for separated cultivation phases; upgrades or replacement of the electrical, HVAC, and plumbing systems; and installation of equipment (high-intensity grow lights, movable platforms for plants, security systems).

Site development for cultivation activities may need specialized utility infrastructure. Cannabis cultivation sites may require the installation of equipment for the purposes of collecting, diverting, and/or storing water for use in cultivation. This may involve the installation of new or modified surface water intakes, wells, pumps, irrigation lines, and/or water impoundments such as water storage ponds, reservoirs, or tanks. Other water-related equipment for cannabis operations may include hoses, PVC pipes, spray nozzles, and/or drip

¹ A hoop house is a series of hoops or bows made of wood, metal, or PVC in the shape of a tunnel, covered in greenhouse-type plastic tarps. Like a greenhouse, the interior heats up because incoming solar radiation warms plants, soil, and other objects inside the structure faster than heat can escape the structure. Air warmed by the heat from hot interior surfaces is retained in the structure by the roof and walls.

irrigation equipment. Water treatment equipment can include chemicals, filters, or similar treatment equipment to modify the pH, treat or remove other water pollutants, and/or add nutrients or other chemicals to the water supply for use by the plants. Depending on the water source, cannabis cultivators may need to receive authorization from the State Water Resources Control Board (SWRCB) and/or regional or local permitting authorities, as applicable, for development of water supply facilities and infrastructure.

Regulatory Requirements Applicable to Site Development

Various regulatory requirements would potentially apply to site development, including the following:

Water Quality Permitting: Permits administered by SWRCB and the regional water quality control boards (RWQCBs) specific to cannabis cultivation, construction activity, and municipal stormwater discharges contain stormwater management and other requirements to minimize the potential for erosion or discharge of other contaminants to water bodies.

State Threatened, Endangered, Candidate, and Rare Species: The CDFW has discretionary authority over activities that could result in the “take” of any species listed as candidate, threatened, endangered, or rare species pursuant to CESA (Fish & G. Code §2050 et seq.) and the Native Plant Protection Act (NPPA) (Fish & G. Code §1900 et seq.). CDFW generally considers adverse impacts on CESA- and NPPA-listed species, for the purposes of CEQA, to be significant without mitigation. Take of any CESA- or NPPA-listed species is prohibited except as authorized by state law (Fish & G. Code §§2080 and 2085; Cal. Code Regs., tit. 14, §786.9[b]). Consequently, if a site development project, including project construction or any project-related activity during the life of the project, results in take of CESA- or NPPA-listed species, CDFW recommends that the project proponent seek appropriate authorization prior to project implementation. This may include an Incidental Take Permit or a Consistency Determination in certain circumstances (Fish & G. Code §§2080.1 and 2081.).

Rivers, Lakes, and Streams: An entity may not substantially divert or obstruct the natural flow of; substantially change, or use any material from the bed, channel, or bank of; or dispose of any debris, waste, or other material into, any river, stream, or lake unless certain conditions are met. For such activities, the entity must provide written notification to CDFW. Based on the written notification and site-specific conditions, CDFW will determine if the activity may substantially adversely affect an existing fish or wildlife resource and issue a Lake or Streambed Alteration Agreement to the entity that includes reasonable measures necessary to protect the resource (Fish & G. Code §1600 et seq.).

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is generally prohibited and CDFW cannot authorize take except in limited circumstances such as under the authority of the Natural Community Conservation Planning (NCCP) Act (Fish & G. Code §2800 et seq.).

Birds: CDFW has jurisdiction over actions that may result in the disturbance or destruction of nests or the unauthorized take of birds. Fish and Game Code sections 3503, 3503.5, and 3513 prohibit the following: unlawful take, possession, or needless destruction of the nest or

eggs of any bird; unlawful take, possession, or destruction of any birds of prey or their nests or eggs; and unlawful take of any migratory nongame bird.

Furbearing Mammals: CDFW has jurisdiction over furbearing mammals pursuant to California Code of Regulations, title 14, section 460. This section states, “[f]isher, marten, river otter, desert kit fox, and red fox may not be taken at any time,” and therefore CDFW cannot authorize their take.

Water Pollution: It is unlawful to deposit in, permit to pass into, or place where it can pass into the “Waters of the State” any of the following: (1) petroleum, acid, coal or oil tar, lampblack, aniline, asphalt, bitumen, or residuary product of petroleum, or carbonaceous material or substance; (2) refuse, liquid or solid, from any refinery, gas house, tannery, distillery, chemical works, mill, or factory of any kind; (3) sawdust, shavings, slabs, or edgings; (4) any factory refuse, lime, or slag; (5) *Coccus indicus*; or (6) any substance or material deleterious to fish, plant life, mammals, or bird life (Fish & G. Code §5650). “Waters of the state,” “waters of this state,” and “state waters” have the same meaning as “waters of the state” as defined in subdivision (e) of section 13050 of the California Water Code (Fish & G. Code §89.1). “Waters of the state” means any surface water or groundwater, including saline waters, within the boundaries of the state.

Dredge or Fill Activities: Site development that would result in temporary or permanent dredge or fill to Waters of the U.S. (e.g., for a road crossing) would be required to obtain a Clean Water Act section 404 permit from the U.S. Army Corps of Engineers, which would contain requirements to ensure that the functions and values of Waters of the U.S. are not reduced. This would be accompanied by a Clean Water Act section 401 water quality certification from the RWQCB that such dredge or fill activities would not violate any state water quality standards or beneficial uses.

Other: A number of other federal, State, and local regulatory requirements would apply to site development that would be infeasible to comprehensively list here.

In addition to these state and federal mandates, all site development activities for cannabis business activities would require review and approval by the local jurisdiction in which the activity is located.

Unlicensed Cannabis Businesses, Including Cultivation, and Related Activities

While MAUCRSA and the Proposed Program provide a regulatory framework for legal commercial cannabis business activity under California law, some individuals or businesses may elect not to participate in the Proposed Program but still elect to cultivate, transport, manufacture, test, and/or sell cannabis without a State license. Of these activities, the bulk of documented environmental impacts are the result of cultivators operating without State licensure and regulation. This circumstance is defined in this document as “unlicensed cultivation.” Because of its impacts on resources and the environment, unlicensed cultivation is the primary cannabis business type discussed in this section. Other unlicensed cannabis businesses are discussed in the “Intrastate, Interstate, and International Transport” and “Security, Crime, and Theft” sections below.

In particular, those cultivating for export outside of the state would not be able to obtain a license under the Proposed Program. CDFA’s SRIA (ERA Economics 2017) anticipates that

the number of unlicensed cultivators supplying cannabis to the illegal export market would remain unchanged under the Proposed Program, but that many of the unlicensed cultivators producing cannabis for in-state consumption would obtain licenses and become lawful cultivators. For the purposes of this analysis, unlicensed cultivation also includes cultivators who have sought or obtained licenses under the Proposed Program but subsequently operate out of compliance with their license and/or Proposed Program requirements.

The cumulative setting for the Proposed Program acknowledges the potential existence of unlicensed cultivation operations and considers the potential impacts of the Proposed Program given the underlying past, present, and foreseeable future unlicensed cannabis market.

The characteristics of unlicensed cultivation activities, and challenges more commonly associated with illegal cultivation in comparison to licensed/lawful cultivation, are described below.

Unlicensed Cultivation Locations and Setting

While unlicensed cultivation sites are often operated at locations and within settings similar to those described for licensed sites, the desire to avoid detection by local, State, or federal enforcement agencies encourages unlicensed cultivators to conduct cultivation activities in more remote, undeveloped areas, such as California's Coast Ranges, Klamath Mountains, and Sierra Nevada foothills, or to otherwise disguise their cultivation sites. Unlicensed cannabis production in California is often centered in sensitive watersheds with relatively high biodiversity and often in habitats of rare State-listed and federally listed species (Carah et al. 2015). Grow sites are sometimes clustered in steep locations, far from developed roads, with potential for substantial water consumption, and near habitats for special-status species (Butsic and Brenner 2016). Unpermitted cannabis cultivation activities may occur on private, public (State or federal [e.g., U.S. Forest Service and National Park Service]), and tribal lands.

Site Development Activities

Unlicensed cultivators often perform site development activities to establish new or modified cultivation sites, similar to those described above for licensed cultivators in "Development of Sites for Licensed Commercial Cannabis Business Activities." However, site development activities by unlicensed cultivators are less likely to be in compliance than licensees with applicable local, State, and federal requirements, such as those related to building codes, human health and safety, biological resources, water quality and water supplies, air quality and GHG emissions, and cultural and tribal cultural resources because cultivators must demonstrate legal compliance with each of these requirements prior to obtaining a license.

Some examples of environmentally damaging activities typically related to unlicensed cannabis cultivation are unpermitted deforestation and conversion of forest land, construction of unregulated water diversions, and illegal ties into electric utility systems. Construction of unpermitted river and lake diversions for the irrigation of cannabis crops have reportedly resulted in reduced water flows and the dewatering of streams and rivers, contamination of watersheds, and alteration of watersheds and natural water courses (U.S. Department of Justice, National Drug Intelligence Center [NDIC] 2007; Gabriel et al. 2013). Unauthorized clearing of land for construction of unlicensed cultivation operations can destroy wildlife and wildlife habitat; critically damage parks, streams, and lakes; and lead to

erosion into water bodies (Warren 2015, Gabriel et al. 2013, NDIC 2007). Illegal indoor cultivation operations may have exposed wiring, terminals, or connections onsite due to substandard modifications to a structure's electrical system (Gustin 2010, Durbin 2016). Illegal diversion of electrical service, which has been commonly observed at indoor cultivation operations, may make it difficult or impossible for firefighters to effectively cut off power to an operation before entering (Gustin 2010).

Use of Hazardous Chemicals

Common practices at unlicensed cannabis cultivation sites involve the use or generation of hazardous pollutants that may enter streams, other surface waters, and groundwater and create a risk of exposure to these materials for people and wildlife. This includes the use of various pesticides not authorized for use on cannabis (e.g., rodenticides, fungicides, herbicides, and insecticides), improper disposal of trash and chemicals, haphazard management of human waste, and substandard storage of hazardous materials such as diesel and gasoline (Gabriel et al. 2013, North Coast [NC] RWQCB] 2013, Central Valley RWQCB [CVRWQCB] 2014). Additionally, fertilizers and pesticides used at cultivation sites are often mixed directly in the water source, thereby contaminating streams (SWRCB et al. 2014).

Intrastate, Interstate, and International Transport

Unlicensed cannabis cultivators and distributors distribute their products to various locations, including exports to other states and countries. These activities involve transport by drivers and, sometimes, support for safe houses for the drivers and for product storage en route (ERA Economics 2017).

Security, Crime, and Theft

A defining feature of cannabis production and distribution—historically and currently—is the existence of substantial security, legal, and production risks. Owners and operators of unlicensed cannabis businesses risk incarceration and fines if they are caught and are subject to other security risks from managing a business that involves large amounts of cash because banking is unavailable. Cannabis business activities often involve security measures, including security cameras, armored cars, and armed personnel. For unlicensed cultivation operations, cultivators may take additional measures to avoid detection and prevent theft, including the following:

- Locating a cultivation operation in a remote or prohibited area, including federal or State public lands or, tribal lands;
- Barbed-wire fencing or electrically charged fencing around the property;
- Land mines (Live Science 2014); and
- Weapons and/or guard dogs on the site.

Non-commercial Cannabis Activities

Under MAUCRSA, qualified patients and adults over 21 years of age are allowed to cultivate up to six plants without a license. Non-commercial cannabis cultivation is subject to local restrictions and requirements; for instance, many municipalities limit cultivation to indoor areas.

In general, the activities associated with non-commercial cannabis cultivation and related site development are similar to those conducted for commercial cannabis cultivation, albeit on a smaller scale. Potential for noncompliance with applicable laws and regulations may be greater, due to a lack of knowledge on the part of the cultivator and/or lack of a mechanism to ensure compliance.

Commercial Cannabis Activities Licensed by Other State Agencies

Under MAUCRSA, other State agencies would continue to operate existing licensing programs and/or are in the process of developing licensing programs. The Proposed Program's cumulative setting includes potential cumulative impacts related to these existing and future programs.

In addition, applicants obtaining combinations of multiple licenses for both medicinal and adult-use; multiple licenses of a single type such as multiple cultivation licenses; or combinations of multiple license types such as cultivation, manufacture, distribution, and retail may directly or indirectly result in cumulative changes to the environment. The Proposed Program's cumulative setting also includes these multiple programs and combinations of licenses.

Other Licensing Programs

The following State agencies are in the process of establishing licensing programs to regulate, license, and enforce laws and regulations for medicinal and adult-use commercial cannabis activities in California under MAUCRSA.

California Department of Food and Agriculture

Following development of its licensing program as required under MAUCRSA, CDFA will issue licenses for the cultivation of cannabis. CDFA is also developing the track-and-trace system to document the transport path of plants from cultivation to manufacturing, testing, distribution, and retail sale of cannabis products.

CDFA is expected to begin issuing licenses on January 1, 2018, with a focus on ensuring that cannabis cultivation activities would be performed in a manner that protects the environment, workers, and the general public from the individual and cumulative effects of these operations and fully complies with all applicable laws and regulations.

California Department of Public Health

Under MAUCRSA, the California Department of Public Health (CDPH) will issue licenses to manufacturers of cannabis products. As with CDFA and the Bureau, CDPH is expected to begin issuing licenses on January 1, 2018. In addition, CDPH will establish and maintain a voluntary program for the issuance of identification cards to qualified medicinal cannabis patients.

Multiple Licenses

An individual licensee may hold multiple commercial cannabis licenses, including licenses in separate license categories, subject to restrictions in MAUCRSA. It is possible that procurement of multiple licenses and implementation of operations that conduct multiple businesses or types of operations—whether multiple types of cultivation operations or multiple types of businesses within the larger cannabis industry (e.g., cultivating,

manufacturing, or distributing)—may result in combined impacts that exceed those associated with an individual license. These potential impacts are considered here within the cumulative setting.

Cannabis Consumption

Commercial cannabis activities licensed under MAUCRSA, as well as non-commercial and unlicensed cannabis production, ultimately result in consumption of cannabis and cannabis products for medicinal and nonmedicinal purposes. Consumption of cannabis and cannabis products may have certain medicinal benefits, as well as certain adverse impacts.

Medicinal Benefits of Cannabis Consumption

Cannabis has been legal for medicinal use in California since the passage of Proposition 215 by voters in 1996. Proposition 215 allowed doctors to recommend the use of cannabis to patients for treatment of cancer, anorexia, AIDS, chronic pain, spasticity, glaucoma, arthritis, migraine, or any other illness for which cannabis provides relief. There has not been much in the way of formal scientific study of the medicinal benefits of cannabis for certain conditions; however, a growing body of scientific research is developing in this area.

Some evidence suggests that components of cannabis—specifically, certain cannabinoids and terpenes—may have therapeutic benefits for a range of medical conditions. Tetrahydrocannabinol (THC) has been reported to provide analgesic, anti-spasmodic, antitremor, anti-inflammatory, and appetite stimulant properties (GWPharmaceuticals 2014). Cannabidiol (CBD) has been reported to provide anti-inflammatory, anticonvulsant, antioxidant, neuroprotective, and antipsychotic properties (GWPharmaceuticals 2014). Terpenes are reported to have anti-inflammatory, memory enhancement, analgesic, anti-anxiety, sleep aid, treatment of acid reflux, and anti-depressant benefits (Alchimia Blog 2014). Other reported effects of terpenes include a synergistic interaction between cannabinoids and terpenoids (amplifying the beneficial effects of CBD), inhibitory interactions, and increased assimilation of THC. Terpenes may affect the two main neurotransmitters that regulate mood and behavior, dopamine and serotonin (ProjectCBD 2016, Alchimia Blog 2014).

In early 2017, the National Academy of Sciences (NAS) published a comprehensive review of existing evidence regarding the health effects of using cannabis or its constituents. The authors reviewed more than 10,000 abstracts and studies and developed conclusions regarding the potential therapeutic effects of cannabis use, as well as adverse health effects. The NAS study concluded that there was substantial evidence that cannabis use had certain medicinal benefits for patients. In adults with chemotherapy-induced nausea and vomiting, the review found, oral cannabinoids are effective antiemetics. Adult patients with chronic pain who were treated with cannabis or cannabinoids were likely to experience a clinically significant reduction in pain symptoms. In adults with multiple sclerosis (MS)-related spasticity, the short-term use of oral cannabinoids improved patient-reported spasticity symptoms. The NAS study was unable to make definitive conclusions for other health conditions, citing inadequate information.

Pesticide Residues and Contaminants

Pesticide residues and contaminants in cannabis may lead to adverse health effects among cannabis users. Cannabis cultivators may use pesticides to control threats such as invasive pest species, spider mites, plant pathogens, fungi, and powdery mildew. MAUCRSA requires that all cannabis flowers and cannabis products be tested at a licensed testing laboratory prior to consumer sale. The regulations pertaining to laboratory testing of cannabis will dictate maximum levels of pesticide residues and other contaminants that may be present. While these regulations will help reduce human health risks due to pesticide exposure, some potential impacts could remain.

One factor that may influence health risks to cannabis users relates to the amount of cannabis that may be consumed. At present, there is no accepted industry standard “dose” for cannabis consumption, whether by inhalation, ingestion, or topical use. Consumers may smoke or vape as much cannabis as they desire or eat any quantity of edibles they see fit; there is no State standard for dosing on existing or forthcoming labeling for cannabis or cannabis products. As an example, if an edible cannabis product were permitted to be sold containing up to 2 parts per million (or micrograms [μg]) of benzene, a consumer who were to eat 4 grams of that product per day would consume 8 μg of benzene, which would exceed the No Significant Risk Level for cancer of 6.4 $\mu\text{g}/\text{day}$ established under Proposition 65 (Safe Drinking Water and Toxic Enforcement Act). Without standard dosing, it is difficult to predict levels of exposure.

Additionally, data are scarce on the effects of pyrolysis, changes in chemical form from exposure to heat, such as through smoking or vaping, on pesticides as they relate to human health. Most research on pesticide toxicity is based on oral ingestion exposure, and these data are used for determining acceptable residual tolerance levels on crops. Inhalation exposure through smoking, however, presents a different set of risks than oral ingestion. Research demonstrates that chemical residues present on cannabis transfer directly into the mainstream smoke and ultimately to the end user. Inhaled chemicals enter the bloodstream without first undergoing first-pass metabolism by the digestive and hepatic systems, as happens with ingested chemicals. As a result, inhaled chemicals are typically present at much higher levels in the body than those that are orally ingested (Voelker and Holmes 2014). Pesticides on cannabis can be transferred into cannabis smoke with efficiencies as high as 70 percent (Sullivan et al. 2013). In addition, smoking cannabis can create pyrolysis compounds with unknown toxicities (Voelker and Holmes 2014). Few data are available on human health effects from pyrolyzed, inhaled pesticide residues.

Consumers may also be at increased risk of exposure to pesticides when consuming concentrated cannabis goods because the levels of pesticides found in concentrates are higher than levels found in flowers. Levels of pesticide residue in concentrates are higher because processes used to concentrate cannabinoids (e.g., butane, pentane, carbon dioxide [CO₂] extraction) also concentrate the accompanying pesticides (Voelker and Holmes 2014). While cannabis flowers and commercially manufactured cannabis products are required to be tested for pesticides and contaminants prior to consumer sale, it is foreseeable that some consumers would be exposed to concentrated cannabis products that have not been tested if consumers purchase flowers and create their own extractions, or if residential cultivators or unlicensed producers or manufacturers create cannabis extracts for consumption.

Adverse health effects may also result from exposures to pesticides that are unlawful or unregulated. For example, licensed cannabis cultivators could use pesticide products that are

not listed in the MAUCRSA testing regulations and, therefore, might not be detected in the required cannabis testing. Observations of existing medicinal cannabis cultivation operations have indicated that some cultivators are using pesticide products not authorized for use on cannabis, such as triflumizole, cyhalothrin, thiabendazole, ethephon, and carbendazim. Non-commercial cultivators or unlicensed producers might similarly use any number of pesticide products or introduce other harmful contaminants into cannabis or cannabis products, and these individuals would generally not conduct laboratory testing to determine the concentration of substances in their products.

Health Effects of Smoke Inhalation

While all forms of cannabis consumption may expose consumers to adverse health effects associated with contaminants in cannabis and cannabis products, particular health concerns exist regarding inhalation of cannabis smoke. In 2009, “marijuana smoke” was listed on the Proposition 65 list of cancer-causing chemicals after a California Office of Environmental Health Hazard Assessment (OEHHA) Science Advisory Board declared that it had been “clearly shown through scientifically valid testing according to generally accepted principles to cause cancer” (OEHHA 2009). The report states that cannabis smoke and tobacco smoke share many of the same characteristics with regard to chemical composition and toxicological properties, including at least 33 individual constituents present in both substances that are also listed as carcinogens under Proposition 65. The OEHHA report concluded that cannabis smoke inhalation has statistically significant associations with cancers of the lung, head and neck, bladder, brain, and testis.

The American Lung Association (ALA) has openly warned the public about the dangers of smoking cannabis, advertising on its website that smoke is harmful to human health whether it is from burning wood, tobacco, or cannabis because toxins and carcinogens are released from the combustion of materials (ALA 2015). The ALA further claims that the combustion of cannabis smoke contains many of the same toxins, irritants, and carcinogens as tobacco smoke. The ALA also notes that cannabis is also commonly inhaled deep into the lungs, resulting in a higher probability that tar and chemicals could affect the lungs. Research shows that inhaling cannabis smoke can lead to conditions such as bronchitis, chronic cough, phlegm production, and a weakened immune system, which is especially dangerous to people with already compromised immune systems.

The American Cancer Society (ACS) advises against the smoking of cannabis because high tar and carcinogen concentrations pose a risk to human health (ACS 2016). According to the ACS, it has been difficult to conduct accurate studies on the impacts of cannabis because the substance has been illegal for so long; in addition, it is difficult to rule out the effects of potential tobacco use in study subjects. The ACS recommends that further research is needed to fully understand the cancer risks associated with cannabis use.

It is important to note that research into health impacts due to cannabis smoking is far from complete. For example, OEHHA and other sources acknowledge the potential for concurrent use of tobacco and cannabis is possible; as a result, the potential that adverse health outcomes may be caused by one or both of these materials and impacts cannot be solely attributed to one or the other. Also, because of the largely illicit nature of cannabis use, study subjects may not have accurately reported their consumption and, as a result, the correlation between consumption and health outcomes may not always be accurate.

The 2017 NAS study cited above examined the body of available scientific literature and found no statistically significant link between smoking cannabis and an increased risk of lung, head, and neck cancer in adults. The study did find modest evidence that cannabis use is associated with one subtype of testicular cancer. In addition, the NAS study identified some adverse health effects attributed to smoking of cannabis. In particular, smoking cannabis on a regular basis was found to be associated with chronic cough and phlegm production, and quitting cannabis smoking was likely to reduce chronic cough and phlegm production. The NAS study did not find sufficient evidence to determine whether cannabis use is associated with chronic obstructive pulmonary disorder, asthma, or worsened lung function (NAS 2017).

Note that inhalation of second-hand cannabis smoke or cannabis vapor may lead to similar outcomes. This is particularly of concern in instances where nonsmokers may have exposure, such as children being exposed to the smoke generated by adults or worker exposure in smoking or vaping lounges at retailers or microbusinesses. MAUCRSA allows for smoking and vaping lounges, and also allows for temporary event licenses to be issued allowing public consumption of cannabis at county fairs or district agricultural events.

Injury and Death

Another potential impact of cannabis consumption is the increased incidence of injury and death as a result of cannabis use, most notably from motor vehicle accidents. In 2011, motor vehicle crashes were the leading cause of death among U.S. adolescents and adults ages 16-25 years (National Highway Traffic Safety Administration [NHTSA] 2015). Among all age groups, motor vehicle crashes in 2014 resulted in more than 32,000 fatalities and more than 2 million nonfatal injuries in the United States (Centers for Disease Control [CDC] 2016, NHTSA 2016). Recent or acute cannabis consumption can slow reaction time and ability to make decisions, impair coordination, distort perception, and lead to memory loss and difficulty in problem solving (NAS 2017, CDC 2017). The NAS study found substantial evidence that cannabis use before driving increases the risk of being involved in a motor vehicle accident (NAS 2017). Recent studies indicate that the risk of impaired driving associated with cannabis in combination with alcohol appears to be greater than the risk from using either substance alone (CDC 2017).

In 2016, the American Automobile Association (AAA) Foundation for Traffic Safety published a study analyzing the prevalence of cannabis involvement in fatal crashes in Washington State between 2010 and 2014. An average of 10 percent of all drivers involved in fatal crashes during that period had detectable THC levels in their blood at the time of the crash. There was evidence that the proportion of drivers in fatal crashes who were positive for THC increased after Washington's Initiative 502 legalized recreational use of cannabis for adults aged 21 years and older; however, the increase was not immediate and appeared to have begun approximately 9 months after the effective date of Initiative 502. In 2014, both the number and proportion of drivers in fatal crashes who were positive for THC were more than double the averages from the previous 4 years (AAA 2016).

Other Adverse Effects

Potential adverse health impacts may result from unintentional consumption of cannabis, particularly by children. Children may mistake edible cannabis products (e.g., gummy bears, brownies, lollipops) for regular food and eat the products unknowingly. Small children are at

higher risk of a severe reaction than adults based on their size and weight. Because some edible products have highly concentrated amounts of cannabis compounds, the effects are more severe on a small child. In children, the most common symptoms reported after acute cannabis ingestion are lethargy, coma, inability to walk, and vomiting (NAS 2017). The NAS study found moderate evidence of a statistical association between cannabis use and increased risk of overdose injuries, including respiratory distress, among pediatric populations in states where cannabis is legal (NAS 2017).

Some studies have also suggested links between cannabis smoking by pregnant mothers and adverse effects on their offspring, including preterm birth, stillbirth, and low birth weight (Gunn 2016, National Institute on Drug Abuse [NIDA] 2017, World Health Organization [WHO] 2017). However, much of the existing literature is inconclusive. The NAS study concluded that there is substantial evidence of a statistical association between maternal cannabis smoking and lower birth weight of the offspring (NAS 2017).

There is also evidence that cannabis use may have adverse psychiatric effects in some users. Recent studies have indicated that cannabis use may increase the incidence of psychiatric disorders such as anxiety and psychosis or may increase users' risk for schizophrenia, depression, or bipolar disorder (Health Canada 2013, Wisconsin State Council on Alcohol and Other Drug Abuse 2016, NIDA 2017, WHO, 2017). The NAS study found substantial evidence of a statistical association between frequent cannabis use and the development of schizophrenia or other psychoses, with the highest risk among the most frequent users. The study also found moderate evidence that regular cannabis users diagnosed with bipolar disorder were likely to have increased symptoms of mania and hypomania. The study also noted evidence that cannabis use resulted in a small increased risk for the development of depressive disorders (NAS 2017).

Recent reports have linked heavy long-term cannabis use with a condition known as cannabinoid hyperemesis syndrome (CHS). The symptoms, which include nausea, vomiting, abdominal pain, and chills, are reported to subside within a few days of the patient ceasing cannabis use. Emergency rooms in states where cannabis has been legalized for adult use have reported an increase in CHS cases (Galli 2011, Papenfuss 2017).

Other (Non-cannabis-related) Activities with Similar Impacts

This discussion describes the types of past, existing, and probable future activities in California not related to cannabis that have resulted in, or may be expected to result in, impacts similar to those of the Proposed Program and that could combine to create cumulative impacts. Because a wide variety of activities could generate such effects, this discussion focuses broadly on projections related to population growth, development, and commerce within the state, including issues such as urbanization and other forms of land use conversion. These activities could have adverse effects related to the full range of environmental topics, from physical resources (water quality, air quality) to social resources (aesthetics, noise, traffic, exposure to hazardous substances) to biological resources (loss of natural habitats for native species).

California encompasses about 100 million acres of land surface, of which about 5 percent has been converted to urban and suburban uses (U.S. Census Bureau 2010). Table 5-2 shows the projected population changes in California counties from 2016 to 2060 (California Department of Finance [CDOF] 2013, 2016). Nearly all counties are expected to experience population growth, and some counties are expected to experience greater than 100 percent growth.

Table 5-2. Projected California Population Changes by County (2016–2060)

County	2016	2060	Change	County	2016	2060	Change
Alameda	1,627,865	1,675,011	2.9%	Orange	3,183,011	3,331,595	4.7%
Alpine	1,166	1,147	-1.6%	Placer	373,796	579,729	55.1%
Amador	37,707	45,116	19.6%	Plumas	19,879	19,471	-2.1%
Butte	224,601	341,850	52.2%	Riverside	2,347,828	4,216,816	79.6%
Calaveras	45,207	63,025	39.4%	Sacramento	1,495,297	2,191,508	46.6%
Colusa	21,948	40,179	83.1%	San Benito	56,648	86,939	53.5%
Contra Costa	1,123,429	1,585,244	41.1%	San Bernardino	2,139,570	3,433,047	60.5%
Del Norte	26,811	32,159	19.9%	San Diego	3,288,612	4,152,763	26.3%
El Dorado	183,750	297,972	62.2%	San Francisco	866,583	926,555	6.9%
Fresno	984,541	1,615,401	64.1%	San Joaquin	733,383	1,538,313	109.8%
Glenn	28,668	40,040	39.7%	San Luis Obispo	277,977	353,190	27.1%
Humboldt	135,116	147,377	9.1%	San Mateo	766,041	928,706	21.2%
Imperial	185,831	355,022	91.0%	Santa Barbara	446,717	519,034	16.2%
Inyo	18,650	23,921	28.3%	Santa Clara	1,927,888	2,198,503	14.0%
Kern	886,507	2,055,622	131.9%	Santa Cruz	275,902	309,474	12.2%
Kings	150,373	282,305	87.7%	Shasta	178,592	265,246	48.5%
Lake	64,306	110,055	71.1%	Sierra	3,203	3,876	21.0%
Lassen	30,780	41,961	36.3%	Siskiyou	44,739	52,646	17.7%
Los Angeles	10,241,335	11,562,720	12.9%	Solano	431,498	634,852	47.1%
Madera	155,349	373,929	140.7%	Sonoma	501,959	616,340	22.8%
Marin	262,274	272,275	3.8%	Stanislaus	540,214	953,580	76.5%
Mariposa	18,159	23,308	28.4%	Sutter	97,308	254,783	161.8%
Mendocino	88,378	102,106	15.5%	Tehama	63,934	109,201	70.8%
Merced	271,579	553,114	103.7%	Trinity	13,667	19,381	41.8%
Modoc	9,638	10,321	7.1%	Tulare	466,339	836,850	79.5%
Mono	13,721	20,755	51.3%	Tuolumne	54,900	63,947	16.5%
Monterey	437,178	569,459	30.3%	Ventura	856,508	1,034,651	20.8%
Napa	142,028	196,243	38.2%	Yolo	214,555	305,711	42.5%
Nevada	98,095	150,550	53.5%	Yuba	74,345	168,685	126.9%
				Total (State)	39,255,883	52,693,579	34.2%

Sources: CDOF 2013, 2016

Between 1984 and 2012, more than 1.4 million acres of agricultural land in California were converted to nonagricultural purposes. About 78 percent of this land became urbanized, while 21 percent was converted to miscellaneous other land uses (including habitat restoration) and 1 percent was converted to create new water bodies (California Department of Conservation 2015).

Similarly, between 1969 and 1998, approximately 113,000 acres of private timberland in California were converted to other uses (California Department of Forestry and Fire Protection [CAL FIRE] 2002). Restrictions on timberland conversion and regulatory programs such as the Forest Tax Reform Act of 1976, which helps keep forestlands in timber production by reducing assessed property taxes, have stabilized forestland acreage over the last two decades (U.S. Forest Service 2008). Urban development, however, continues to put pressure on landowners and land managers to convert forestlands to more profitable uses (CAL FIRE 2010).

Key outcomes of population growth, urbanization, land development, and commerce related to environmental resource topics covered in this Initial Study include the following:

- Changes in visual character and quality in various locations within the state;
- Past and future conversion of agricultural and forest lands to other land uses;
- Increased potential for emissions of construction-related and operational air pollutants and toxic air contaminants into the environment;
- Loss of habitat for native and special-status species, and effects on sensitive natural communities, including riparian areas and wetlands;
- Increased potential for releases (both intentional and unintentional) of hazardous materials into the environment, including potential for accidents (e.g., accidental spills) affecting humans and the environment;
- Creation of new point-source discharges (e.g., wastewater treatment plants, industrial activities) and non-point-source runoff (e.g., vehicles, roadways), as well as increased quantity of runoff resulting from the addition of impervious surfaces;
- Increasingly noisy environments in developing and urbanized areas;
- Increased demands for police protection, fire protection, and other public services, resulting in the need for new or expanded facilities; and
- Increased traffic and related effects on transportation infrastructure.

Resource Topics Considered and Dismissed

The Proposed Program has the potential to contribute to cumulative impacts related to the following resource topics: aesthetics; air quality; biological resources; hazards, hazardous materials, and human health; noise; public services; and transportation and traffic. As previously stated, GHG emissions are intrinsically a cumulative issue and are already addressed in Section 4.4, *Energy Use and Greenhouse Gas Emissions*; therefore, this topic is not discussed further in this chapter. All other resource topics (**Table 5-3**) have been dismissed from consideration in the analysis of cumulative impacts for one of the following reasons: either significant cumulative impacts do not exist, the Proposed Program would not have the potential to make a considerable contribution to any significant cumulative impacts, or

insufficient information exists to reach a practical and reasonable conclusion regarding these topics. As a result, these resource topics are not discussed further in this chapter.

Table 5-3. Resource Topics Dismissed from Further Consideration in the Analysis of Cumulative Impacts

Resource Topic	Rationale for Dismissal
Agriculture and Forestry Resources	<p>Construction activities and conversion of agricultural lands to nonagricultural uses would need to be considered and approved by local governments. Cannabis that is cultivated as a part of a microbusiness license is considered to be an agricultural product under Health and Safety Code section 11362.777(a) and Business and Professions Code section 26067(a). Therefore, cultivation of cannabis as part of a microbusiness license would not result in conversion of Important Farmland to nonagricultural use or conflict with a Williamson Act contract.</p> <p>Any business operation or site development on forest lands would need to be considered and approved by local authorities, and would need to comply with all State and federal regulations.</p> <p>Therefore, the Proposed Program would not have the potential to make a considerable contribution to any cumulative impacts related to agriculture or forestry resources. There would be no impact.</p>
Cultural and Paleontological Resources	<p>Information has been not found during preparation of the Initial Study to suggest that a widespread loss or degradation of significant cultural or historic resources has occurred or would occur in the future in California as a result of commercial activities conducted by cannabis businesses licensed under the Proposed Program. Rather, impacts on significant cultural and historic resources from other past, present, and probable future projects and programs would be localized and would affect only the immediate resources in question. Because cannabis businesses are subject to compliance with federal, State, and local laws regarding cultural resources, there is little likelihood for the Proposed Program to impact cultural or historical resources at any level. The activities to be carried out under the Proposed Program would have limited potential to affect cultural resources and would be highly unlikely to affect any individual cultural resource that is, or may be in the future, subject to significant cumulative impacts. For this reason, the Proposed Program would not have the potential to make a considerable contribution to any cumulative impacts related to cultural resources. There would be no impact.</p>
Geology, Soils, and Seismicity	<p>The Proposed Program would not expose individuals to increased geologic or seismic hazards, would not result in erosion or the loss of topsoil, would not construct structures on unstable soils, and would not create wastewater systems in unsuitable soils. Therefore, the Proposed Program would not have the potential to make a considerable contribution to any cumulative impacts related to geology, soils, or seismicity. There would be no impact.</p>
Hydrology and Water Quality	<p>Cannabis businesses licensed under the Proposed Program, including distribution, retail sale, testing and microbusiness manufacturing, would not cause impacts on hydrology and water quality. These businesses would generally operate indoors and would not have a direct mechanism to affect water quality. Those businesses that do generate wastewater would be required to dispose of it in accordance with applicable laws and regulations, such as those governing disposal of wastewater from laboratories. Outdoor components of these businesses, such as parking, would be subject to local stormwater management requirements. This analysis</p>

Resource Topic	Rationale for Dismissal
	<p>assumes that local jurisdictions would ensure and enforce compliance with local requirements.</p> <p>Regarding microbusiness-related cultivation operations that may be licensed by the Bureau under the Proposed Program, regulatory programs of the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs), as well as the regulatory requirements established by the California Department of Food and Agriculture (CDFA), would ensure that issues such as water diversions, use of pesticides, and site runoff would not contribute to significant impacts on hydrology and water quality.</p> <p>Therefore, the Proposed Program would not have the potential to make a considerable contribution to any cumulative impacts related to hydrology and water quality. This impact would be less than significant.</p>
Land Use and Planning	<p>The Proposed Program would not result in any permanent land use changes that could conflict with land use plans, policies, or regulations adopted to avoid or mitigate an environmental effect. All activities conducted under the Proposed Program would be required to obtain any necessary authorizations from the relevant land use authority or property owner and to comply with any applicable laws or policies specific to the area. Therefore, the Proposed Program would not have the potential to make a considerable contribution to any cumulative impacts related to land use and planning. There would be no impact.</p>
Mineral Resources	<p>No information has been found during the preparation of this Initial Study to suggest that a widespread loss or degradation of mineral resources has occurred or would occur in the future in the cumulative scenario for the Proposed Program. Rather, impacts on mineral resources from other past, present, and probable future projects and programs would be localized and would affect only the immediate resources in question. All activities conducted under the Proposed Program would be required to obtain any necessary authorizations from the relevant land use authority or property owner and to comply with any applicable laws or policies specific to the area. Local municipalities are responsible for the conservation (i.e., protection from incompatible land uses) of areas designated as having substantial potential for mineral extraction and for discouraging development that would substantially preclude the future development of mining facilities in these areas. Therefore, the Proposed Program would not have the potential to make a considerable contribution to any cumulative impacts related to mineral resources. There would be no impact.</p>
Population and Housing	<p>Information has not been found during the preparation of this Initial Study to suggest that the Proposed Program would result in any population changes, and it would not involve construction of new housing or displace existing housing. In addition, the Proposed Program would not result in construction of infrastructure or include other activities that could indirectly induce or remove an obstacle to population growth. The Proposed Program would not cause adverse effects related to population growth or housing demand. Therefore, the Proposed Program would not have the potential to make a considerable contribution to any cumulative impacts related to population and housing. This impact would be less than significant.</p>
Recreation	<p>As described above, the Proposed Program would not cause an increase in population, and therefore would not lead to population growth that would create the need for new recreational facilities and/or contribute to the deterioration or alteration of any existing recreational facilities. Licensed cannabis businesses would</p>

Resource Topic	Rationale for Dismissal
	not be located within public recreation areas and would not affect use of any recreation areas. Therefore, the Proposed Program would not have the potential to make a considerable contribution to any cumulative impacts related to recreation. There would be no impact.
Tribal Cultural Resources	Information has not been found during the preparation of the Initial Study to suggest that widespread loss or degradation of tribal cultural resources has occurred or would occur in the future in California as a result of licensed cannabis business operations. As described in Section 4.0.11, the activities to be carried out under the Proposed Program would have limited potential to affect tribal cultural resources and would not affect any individual tribal cultural resource that is, or may be in the future, subject to significant cumulative impacts. For this reason, the Proposed Program would not have the potential to make a considerable contribution to cumulative impacts related to tribal cultural resources. There would be no impact.
Utilities and Service Systems	<p>No information was identified regarding cumulative impacts related to wastewater, stormwater, and solid waste disposal at the statewide scale; any such issues would be localized. Because of the wide variety of locations throughout the state where cannabis business activities may take place under the Proposed Program, it would not be feasible to identify cumulative impacts at all localities throughout the state where licenses may be issued. This Initial Study determined that the Proposed Program would have no impact on Utilities or Service Systems for distribution, retail sale, or laboratory testing activities.</p> <p>With respect to water supply as it relates to microbusiness cultivation activities, applicants to the Proposed Program would be required to identify their source of water supply in their application. In the case of surface water supplies, the appropriate entitlements would need to be in place prior to making application for a microbusiness license; as such, the Proposed Program would not contribute to cumulative impacts related to insufficient surface water entitlements. Use of groundwater for cultivation could contribute to cumulative impacts in areas where aquifers are in a state of overdraft. However, because the locations of licensed cannabis microbusiness operations that may use groundwater as a water source are not currently known, it is not possible to determine whether (or the extent to which) they would have the potential to contribute to any such cumulative impacts.</p> <p>Other cannabis business types would typically connect to a municipal water system, which would presumably have sufficient water supplies to support the operation, thereby avoiding potential for contributions to cumulative impacts.</p> <p>For these reasons, the potential for the Proposed Program to make a considerable contribution to significant cumulative impacts related to utilities and services systems is not considered further in this Initial Study. There would be no impact.</p>

5.3.3 Cumulative Impact Analysis

Aesthetics

As discussed above in “Development of Sites for Licensed Commercial Cannabis Business Activities,” activities such as construction of new cannabis business facilities, modifications to existing facilities, construction of related ancillary facilities (e.g., residences), and other related construction work to support licensed cannabis business activities have occurred, are occurring presently, and are anticipated to continue in the future. Site development has the potential to have substantial temporary and/or permanent effects on existing scenic vistas, scenic resources, designated State scenic highways, and/or the existing visual character or quality of a particular site and its surroundings. Additionally, construction of new facilities and modifications to existing facilities could involve use of additional lighting that could create impacts on adjacent and nearby properties, residences, and/or motorists traveling on nearby roadways.

Other activities described in the cumulative setting, such as unlicensed cultivation and related site development, and population growth and development within the state in general, could lead to similar aesthetic impacts.

These activities, in combination with the cannabis business activities that would occur under the Proposed Program, could result in a potentially significant cumulative impact on aesthetic resources. The extent to which this may occur in any given location would depend on the number, type, and intensity of such activities at that location, the visual resources present in that location, and the presence and sensitivity of receptors near these resources.

As discussed in Section 4.1, *Aesthetics*, the determination of a substantial adverse impact, or in this case an adverse cumulative impact, on visual resources depends heavily on the existing visual baseline of a given location, the proposed changes from baseline associated with a particular cultivation operation, the proximity to available viewsheds and sensitive receptors, the related viewer sensitivities, and the perception and opinions of viewers regarding the aesthetic quality of the cannabis business operation. For example, while unlicensed cannabis operations could have potential impacts on aesthetic resources, these sites are typically conducted in remote areas where the activities can exist unnoticed by law enforcement and, as a result, visual sensitivity by sensitive receptors would generally be low. Details necessary to determine whether a substantial cumulative impact has occurred or may occur at a particular location is generally not available, and it would not be feasible to evaluate such a site-specific impact in this statewide evaluation.

The Proposed Program does not involve construction, modification, or replacement of cannabis business facilities. These activities themselves would not result in substantial adverse impacts on aesthetic resources. Furthermore, to the extent that the Proposed Program would result in renovations to existing buildings to meet local codes and, in the case of retail stores, to attract customers, the aesthetic effects of ongoing activities may be reduced due to compliance with local requirements designed to protect visual resources within a community. Local, site-specific CEQA review of development related to cannabis business operations would further prevent aesthetic impacts. For these reasons, the Proposed Program’s contribution to cumulative aesthetic impacts would not be considerable and would be considered **less than significant**.

Air Quality

Criteria Pollutant Emissions

Several air basins throughout the state are in nonattainment status for a variety of air pollutants. Nonattainment status is the result of a combination of emissions sources, with no single source typically of sufficient magnitude to cause nonattainment. The various emissions sources described in Section 5.3.2, “Cumulative Setting,” would contribute to such exceedances of national ambient air quality standards and/or California ambient air quality standards. As growth and development continue in the state, additional emissions would have the potential to exacerbate this condition or cause exceedances of standards in locations that are currently in attainment. Air quality plans and control programs have been developed by local air districts that are intended to maintain attainment status or improve conditions in instances of nonattainment. Implementation of these plans and programs is overseen by the California Air Resources Board, which prepares a State Implementation Plan that includes emissions reduction measures to be implemented over time related to a variety of sectors and emissions sources. Regardless, the ongoing nonattainment status for some basins/pollutants and the potential for new instances of nonattainment are considered a significant cumulative impact.

As described in the SRIA prepared for the Bureau’s proposed MCRSA regulations (UCAIC 2017), the total increase in the number of jobs across the state as a result of commercial cannabis licensing by the Bureau has been estimated in the low thousands. Accordingly, emissions sources—such as mobile-source emissions—would not substantially change under the Proposed Program. As such, the contribution of the Proposed Program to cumulative impacts related to criteria pollutant emissions and attainment status would not be considerable, and this would be considered a less than significant impact.

Toxic Air Contaminants

Exposure to toxic air contaminants (TACs) is a localized issue; cumulative impacts would be possible in instances where a receptor or group of receptors could be exposed to multiple sources of TACs. The extent to which cumulative impacts may result from TAC exposures would be based on site-specific conditions, considering all sources of TAC emissions, including those associated with cannabis business activities. Given the site-specific nature of the issue and the uncertainty regarding the exact locations where licensed cannabis business activity would occur, it is difficult to determine whether significant cumulative impacts exist or whether the Proposed Program may contribute to them. Moreover, because the overall extent of cannabis business operations is expected to remain relatively unchanged under the Proposed Program (UCAIC 2017) and licensed microbusiness cultivators would be required to implement practices that would reduce TAC emissions, such as not using generators as a main source of power, the Proposed Program’s contribution would generally not be considerable, even in instances where there were significant cumulative impacts. For these reasons, this impact is considered less than significant.

Odors

As with TACs, odors are a localized issue, and the extent to which the odors associated with cannabis businesses are considered a nuisance is a subjective determination. As such, the extent to which there may be significant cumulative impacts to which Proposed Program

activities may contribute is unclear. Based on this uncertainty, this cumulative impact and the Proposed Program's contribution, is not considered further.

Conclusion

Overall, the Proposed Program's contribution to cumulative impacts related to air quality would not be considerable and would be **less than significant**.

Biological Resources

Site development for licensed cannabis businesses has the potential for adverse impacts on biological resources, as do other types of development. As the state's population grows, pressure on biological systems is anticipated to increase, and overall impacts on biological resources are considered to be a significant cumulative impact in light of past, present, and reasonably foreseeable future activities. For site development related to cannabis businesses under the Proposed Program, such activities would often be subject to local approval and related environmental review, which would help address and reduce potential impacts on biological resources.

The cumulative impacts on biological resources from unlicensed cannabis cultivation are well documented. Impacts include unauthorized water withdrawals damaging to aquatic life, rodenticide poisoning of special-status species, and clearing of sensitive habitats (Gabriel et al. 2013, BOTEC Analysis Corporation 2013, Butsic and Brenner 2016). Unlicensed cultivation operations are generally clandestine and have not been subject to regulatory review. Unlicensed cultivation activities have resulted in significant adverse effects on biological resources throughout the state.

With respect to the Proposed Program, as discussed in Section 4.3, *Biological Resources*, licensed cannabis businesses do not have substantial potential for adverse effects on biological resources. Finally, as mentioned previously, some existing unlicensed businesses would become licensed under the Proposed Program. This would be a beneficial impact on biological resources to the extent that the unlicensed sites may have been causing adverse impacts and now would be required to comply with applicable laws and regulations protecting biological resources. In addition, some local agencies (Humboldt County is one example) have adopted or may adopt local ordinances that incentivize environmental remediation of previously unlicensed sites in environmentally sensitive areas, adding to the beneficial cumulative impact.

For these reasons, the contribution of the Proposed Program to cumulative impacts on biological resources would not be considerable, and this impact would be **less than significant**.

Hazards, Hazardous Materials, and Human Health

Cumulative Health Risks of Exposure to Chemicals Used on Cannabis, and Other Factors Related to Cannabis Consumption

The discussion of cannabis consumption in Section 5.3.2 describes a range of potential adverse and beneficial health effects that have been attributed to cannabis consumption. In addition to risks associated with cannabis, individuals are exposed to a wide variety of other

risks on a day-to-day basis. The U.S. Environmental Protection Agency's (USEPA's) conceptual approach to estimating total exposure and risk, which is termed the "risk cup," considers the aggregate exposure given all exposure pathways and methods of consumption. For example, USEPA believes that about 80 percent of a typical U.S. citizen's pesticide intake occurs through food and that the remaining 20 percent comes from drinking water and residential exposures (National Ag Safety Database n.d.).

The extent to which significant cumulative impacts exist to which the Proposed Program could contribute is difficult to determine, as the analysis would be based on individual exposures in a range of different settings and lifestyle patterns. For instance, a retail store worker at a site which also allows on-site cannabis consumption (e.g., smoking, vaping) who also directly consumes cannabis may be at increased exposure risk; similarly, a worker who does not consume cannabis may or may not be exposed to similar risks from other sources (e.g., smoking tobacco).

Furthermore, licensing cannabis business activities does not compel the consumption of cannabis or any other item that may create human health risk. Individuals are able to make their own decisions about whether to consume cannabis and cannabis products, the type of product and mode of consumption, and, with laboratory testing results, the extent to which that product contains chemicals that could pose a health concern.

Based on the uncertainties regarding the forms and levels of exposure and the fact that the Proposed Program does not compel cannabis consumption, leads to the conclusion that the Proposed Program would not make a considerable contribution to cumulative adverse health effects related to cannabis consumption. This impact would be less than significant.

Other Types of Hazardous Materials Exposure

Construction and site development for cannabis business facilities could create hazards to the public and the environment from transport, storage, use, and disposal of hazardous materials (e.g., fuel, solvents). These activities could result in accidental spills or releases of hazardous materials, as well as exposure of workers to toxic constituents, without adequate precautions.

Ongoing unlicensed cannabis cultivation activities are currently having a substantial impact related to hazards and hazardous materials. As described in Section 4.5, *Hazards, Hazardous Materials, and Human Health*, enforcement activities at unlicensed "trespass" grows have found substandard storage practices for hazardous materials (California Department of Fish and Wildlife 2014a, 2014b), and law enforcement officials have observed that toxicants are often dispersed throughout cultivation sites (Gabriel et al. 2013). Additionally, current cannabis cultivation practices in California have been found to include the illegal use of rodenticides, fungicides, herbicides, and insecticides. Such illegal and improper use, storage, and disposal of hazardous materials endangers cannabis workers and members of the public. As some unlicensed cultivators become licensed and follow requirements to comply with State and local laws for use and storage of hazardous chemicals, there will be a beneficial impact on hazards to humans and the environment.

Cannabis cultivation has the potential to create risks for firefighters and first responders responding to a fire at an indoor cultivation facility. As described in Section 4.5, indoor cultivation can include or generate several types of hazards to firefighters, such as electrical

hazards (e.g., capacitors in high-intensity grow lights); falling, tripping, and entanglement hazards (e.g., wiring, ductwork, and irrigation tubing); explosion hazards (e.g., pressurized CO₂ canisters); mold; oxygen-deficient conditions, and conditions conducive to hazardous fire behavior (e.g., flashover). In many respects, these hazards are exacerbated by the clandestine nature of many current cannabis cultivation operations, such as with noncompliance with building codes. However, the Proposed Program would reduce hazards for firefighters compared to baseline conditions. Commercial cultivators operating with a CDFA license and microbusiness cultivators under the Proposed Program would be required to comply with building, fire, and electrical codes, thereby avoiding many of the hazards currently associated with unlicensed operations.

Licenses issued by CDPH would not contribute substantially to impacts related to hazards and hazardous materials. While manufacturers may use a variety of hazardous substances, rigorous safety requirements apply to such business operations, preventing the potential for substantial adverse impacts.

As described above, population growth would increase potential for releases both intentional and unintentional hazardous materials into the environment, including potential for hazardous accidents (e.g., accidental spills) affecting the environment. This increased potential is attributable to the fact that population growth would be accompanied by construction of new buildings, which would involve use of construction equipment and materials containing hazardous materials, as well as potential development of new gas stations or other land uses that store or use hazardous materials.

The contribution of activities conducted under the Proposed Program to any cumulative impacts related to hazards and hazardous materials would not be substantial. Some unlicensed cannabis businesses, including cultivators, would become licensed, and thereby adverse environmental impacts of those operations would decrease as cultivators come into compliance with State and local laws, regulations, and environmental protection measures. In addition, some local jurisdictions (notably Humboldt County) offer incentives to cultivators for retiring and remediating existing unlicensed cultivation sites that are environmentally sensitive. As described in Section 4.5, *Hazards, Hazardous Materials, and Human Health*, cannabis business operations under the Proposed Program would be required to comply with existing laws and regulations related to hazardous materials, such as federal Occupational Safety and Health Administration and California Department of Industrial Relations, Division of Occupational Safety and Health requirements related to worker exposure to toxic materials and, in some cases, Health and Safety Code requirements for preparation of a Hazardous Materials Business Plan.

Overall, the contribution of the Proposed Program to cumulative impacts related to hazards and hazardous materials would not be substantial or considerable. Cannabis businesses under the Proposed Program would not include transport, use, or disposal of large quantities of hazardous materials, and fire risks, hazards for firefighters, and other risks would be reduced by compliance with building codes and implementation of requirements in the proposed regulations. Therefore, this impact would be **less than significant**.

Noise

Exposure to noise is a localized issue; cumulative impacts would be possible in instances where a receptor or group of receptors could be exposed to excessive noise from multiple

sources. The extent to which cumulative impacts may exist would be based on site-specific conditions, considering all noise sources, including those associated with cannabis business activities. Section 4.6, *Noise*, concludes that noise generated by cannabis businesses would not be significant. Similarly, the Draft PEIR prepared for the CDFA CalCannabis cultivation Licensing program concluded that cultivation activities would not result in significant impacts for noise. It would be speculative to conclude that the noise impacts from Proposed Program would combine with other localized noise generation to generate locally cumulative noise impacts; this would be a site-specific issue which is beyond the scope of this statewide analysis. This impact is considered **less than significant**.

Public Services

Police and Fire Protection

Site development and operation of new, expanded or otherwise modified facilities for licensed commercial cannabis businesses including cultivation and manufacturing have the potential to generate calls for service from fire and law enforcement. For example, construction equipment used during site development could generate sparks and if combined with the use of flammable materials (e.g., fuel), fire risk would increase. Similarly, cannabis businesses could be targeted by criminals due to the high value of cannabis and the current need for cannabis businesses to deal in cash, although the State's licensing requirements include provision of appropriate security measures to reduce this risk.

Unlicensed cultivation activities currently place substantial demands on law enforcement and, in some instances, fire protection services. Local, State, and federal law enforcement agencies spend considerable time and resources detecting, investigating, and eradicating unpermitted cultivation operations, as well as responding to other crimes associated with cannabis commerce. While some unlicensed cultivation activities would become licensed following Proposed Program implementation, thereby reducing demand on police and fire protection services, unlicensed activities and associated needs for service from law enforcement and fire protection are expected to continue in the future.

Population growth, in general, is anticipated to increase demand for police and fire protection services throughout the state, and will result in the need for construction of new or expanded facilities in certain locations. This need is typically addressed through general plan processes, which include planning for public services to accommodate anticipated future growth.

Overall, the existing demands on police and fire protection services associated with unlicensed cannabis businesses sites and the anticipated need for increased level of service and related facilities due to population growth throughout the state, are significantly cumulative.

However, activities under the Proposed Program may reduce the burden on police services, as cannabis businesses adopt standard and rigorous security practices. Business operations that are currently operating with a lack of regulatory frameworks may obtain licenses and increasingly comply with applicable laws and other requirements. Additionally, by creating a legal pathway for cannabis business opportunities and allowing for more legal cannabis to enter the market, the Proposed Program may reduce incentives or opportunities for criminals to engage in unlicensed cannabis cultivation and associated activities.

The Proposed Program's effect on fire protection service would likely be similar; by requiring licensed facilities to comply with building, electrical, and fire codes, and by potentially reducing the incentive or need for unlicensed indoor grow operations, the Proposed Program would reduce the likelihood of structural fires caused by cultivation activities. Indoor cultivation sites licensed through the Proposed Program would be required to have electrical systems adequate to handle the loads associated with the equipment used in this form of cultivation.

As such, the Proposed Program would make a beneficial contribution to cumulative impacts on police and fire protection by reducing demands that could lead to construction of new or expanded police or fire protection services. Therefore, this impact would be less than significant.

Other Public Services

As discussed in Section 4.7, *Public Services*, the Proposed Program would not induce growth. Therefore, cannabis-related businesses would not generally increase demand for parks, schools, or other public services. As such, the Proposed Program would not make any contribution to a cumulative impact related to the need for construction of new or expanded public facilities, and therefore there would be no impact.

Conclusion

For the reasons described above, the contribution of the Proposed Program to cumulative impacts on public services would not be considerable, and this impact would be **less than significant**.

Transportation and Traffic

Transportation infrastructure is currently strained in many parts of the state, particularly in urbanized areas. Population growth within the state is anticipated to exacerbate these conditions over time, with increased vehicle miles traveled and reduced level of service and/or failure to meet other performance standards and objectives. Development and operation of cannabis-related businesses, both licensed and unlicensed, could contribute to localized impacts on transportation and traffic, depending on the specific location, the amount of traffic generated (e.g., by workers and/or customers), and other traffic-related effects such as temporary lane closures and material/equipment deliveries during construction activities.

Local jurisdictions and regional transportation agencies typically plan for transportation infrastructure improvements to accommodate anticipated growth. However, even with these planning efforts, cumulative impacts related to transportation and traffic in the state are considered significant.

The Proposed Program's contribution to cumulative impacts on transportation and traffic would not be substantial. As described in Section 4.8, *Transportation and Traffic*, cannabis business operations do not typically employ a large number or high density of employees or involve an unusually large number of material deliveries. In certain locations, the addition of vehicle trips to and from cannabis business operations could contribute to adverse effects on affected roadway and intersection operations. However, given the uncertainty regarding the

exact locations where licensed cannabis business activity would occur, it is difficult to determine whether cumulative impacts exist at these locations or whether the Proposed Program may contribute to them. In addition, local planning processes should address such issues.

For these reasons, the Proposed Program would not make a considerable contribution to cumulative impacts on traffic and transportation, and this impact is considered **less than significant**.

5.4 Substantial Adverse Effects on Human Beings

Section 15065(a)(4) of the Guidelines requires that IS/NDs make the following mandatory finding of significance:

Could the Proposed Program cause substantial adverse effects on human beings, directly or indirectly?

The impacts of the Proposed Program would be less than significant for aesthetics, air quality; biological resources; energy use and GHG emissions, hazards, hazardous materials, and human health; noise; public services; and traffic and transportation. The Proposed Program would have no impact on geology, soils, and seismicity; mineral resources; population and housing; recreation; cultural and paleontological resources; and tribal cultural resources. Therefore, the Proposed Program would not result in adverse effects, direct or indirect, on human beings. The cumulative impact of the Proposed Program would also be less than significant.

Chapter 6

GLOSSARY AND ACRONYMS

Glossary

Action level	The threshold value that provides the criterion for determining whether a sample passes or fails an analytical test.
Adult-use cannabis	Cannabis legalized for use, under the Medicinal and Adult-Use Cannabis Regulation and Safety Act, by people over 21 years old, other than those qualified to purchase medicinal cannabis with a physician's recommendation.
Applicant	An owner of a cannabis business applying for a state license.
AUMA	Adult Use of Marijuana Act.
Batch or harvest batch	A specifically identified quantity of dried flower or trim, leaves, and other cannabis plant matter that is uniform in strain, harvested at the same time, and, if applicable, cultivated using the same pesticides and other agricultural chemicals.
Bureau	Bureau of Cannabis Control within the California Department of Consumer Affairs.
Butane hash oil (BHO)	Also known as butane honey oil, shatter, wax, or crumble. A cannabis concentrate, made by forcing pressurized butane through a vessel containing cannabis flowers, trim, or kief.
Cannabinoid	A chemical compound that is unique to and derived from cannabis.
Cannabis	All parts of the plant <i>Cannabis sativa Linnaeus</i> , <i>Cannabis indica</i> , or <i>Cannabis ruderalis</i> , whether growing or not; the seeds thereof; the resin, whether crude or purified, extracted from any part of the plant; and every compound, manufacture, salt, derivative, mixture, or preparation of the plant, its seeds, or resin. Cannabis also means the separated resin, whether crude or purified, obtained from cannabis.
	Cannabis does not include the mature stalks of the plant, fiber produced from the stalks, oil or cake made from the seeds of the plant, any other compound, manufacture, salt, derivative, mixture, or preparation of the mature stalks (except the resin extracted therefrom), fiber, oil, or cake, or the sterilized seed

	of the plant which is incapable of germination. Cannabis does not mean “industrial hemp” as defined by section 11018.5 of the Health and Safety Code.
Cannabis concentrate	Manufactured cannabis that has undergone a process to concentrate one or more of the active cannabinoids, thereby increasing the product’s potency. Resin from granular trichomes from a cannabis plant is a concentrate for purposes of this document.
Cannabis goods	Cannabis, including dried flower, and manufactured cannabis products.
Cannabis strain	A hybrid or variety of cannabis with similar or identical combinations of properties such as appearance, taste, color, smell, cannabinoid profile, and potency.
Cannabis waste	Waste that is not hazardous waste, as defined in Public Resources Code section 40191, that contains cannabis and that has been made unusable and unrecognizable in the manner prescribed by Bureau regulations.
Canopy	All of the following:
	(1) The designated area(s) at a licensed premises that will contain mature plants at any point in time;
	(2) Canopy shall be calculated in square feet and measured using clearly identifiable boundaries of all area(s) that will contain mature plants at any point in time, including all of the space(s) within the boundaries;
	(3) Canopy may be noncontiguous but each unique area included in the total canopy calculation shall be separated by an identifiable boundary such as an interior wall or by at least 10 feet of open space; and
	(4) If mature plants are being cultivated using a shelving system, the surface area of each level shall be included in the total canopy calculation.
CDFA	California Department of Food and Agriculture
CDPH	California Department of Public Health
Commercial cannabis activity	Includes the cultivation, possession, manufacture, processing, storing, laboratory testing, labeling, transporting, distribution, delivery, or sale of commercial cannabis or a commercial cannabis product.

Cultivation	Any activity involving the planting, growing, harvesting, drying, curing, grading, or trimming of cannabis.
Cultivation site	A location where commercial cannabis is planted, grown, harvested, dried, cured, graded, or trimmed, or that does all or any combination of those activities.
Cultivator	A person that conducts the planting, growing, harvesting, drying, curing, grading, or trimming of commercial cannabis.
Cultural resources	Remains and sites associated with past human activities and include prehistoric and ethnographic Native American archaeological sites, historic archaeological sites, historic buildings, elements or areas of the natural landscape that have traditional cultural significance, and paleontological (fossil) resources.
Customer	A natural person 21 years of age or over or a natural person over 18 years of age who possesses a physician's recommendation to use cannabis.
Day care center	As defined in section 1596.76 of the Health and Safety Code.
Delivery	The commercial transfer of cannabis or cannabis products to a customer. Also includes the use by a retailer of any technology platform owned and controlled by the retailer, or independently licensed under this division that enables customers to arrange for or facilitate the commercial transfer by a licensed retailer of cannabis or cannabis products.
Director	Director of the Department of Consumer Affairs.
Distribution	Procurement, sale, and transport of cannabis and cannabis products between entities licensed pursuant to division 10 of the Business and Professions Code.
Distributor	A person licensed by the Bureau of Cannabis Control to engage in the business of purchasing commercial cannabis from a licensed cultivator or commercial cannabis products from a licensed manufacturer for sale to a licensed retailer.
Dried flower	All dead cannabis that has been harvested, dried, cured, or otherwise processed, excluding leaves and stems.
Hash	Also known as "hashish." A concentrated form of kief.
Hazardous material	Any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to

	the environment if released into the workplace or the environment.
Immature plant	A cannabis plant that is not flowering.
Indoor cultivation	Cultivation of cannabis within a structure using artificial light, at a rate greater than 25 watts per square foot.
Kief	A powdery substance consisting of the trichomes (resin glands) that cover the cannabis flower. Kind Applicable type or designation regarding a particular cannabis variant or cannabis product type, including, but not limited to, strain name or other grower trademark, or growing area designation.
Labor peace agreement	An agreement between a licensee and a bona fide labor organization that, at a minimum, protects the State's proprietary interests by prohibiting labor organizations and members from engaging in picketing, work stoppages, boycotts, and any other economic interference with the applicant's business.
Laboratory	An entity that is a testing laboratory that is licensed by the Bureau to conduct sampling and analyses of commercial cannabis goods and includes the personnel, specialized apparatus, and instruments used to analyze commercial cannabis goods.
Lead agency	The public agency that has principal responsibility for carrying out or approving a project. The lead agency will decide whether an EIR or negative declaration will be required for the project and will cause the document to be prepared.
License	A state license issued under Division 10 of the Business and Professions Code, including both M- and A- licenses, and testing laboratory licenses.
Licensee	A person issued a state license by the Bureau, the California Department of Food and Agriculture, or the Office of Manufactured Cannabis Safety to engage in commercial cannabis business activity.
Licensing authority	The state agency responsible for the issuance, renewal, or reinstatement of the license, or the state agency authorized to take disciplinary action against the licensee.
Limited-access area	An area in which cannabis goods are stored or held and is only accessible to a licensee and his or her employees and contractors.

Live plants	Living commercial cannabis flowers and plants, including seeds, immature plants, and vegetative stage plants.
Local jurisdiction	A city, county, or city and county.
Local permit	(Also local license, or other authorization from a local jurisdiction) An official document issued by a local jurisdiction that specifically authorizes a person to conduct commercial cannabis business activities in the local jurisdiction.
Lot	A batch, or a specifically identified portion of a batch.
Manufacture	To compound, blend, extract, infuse, or otherwise make or prepare a cannabis product.
Manufacturer	A person that conducts the production, preparation, propagation, or compounding of cannabis or cannabis products either directly or indirectly or by extraction methods, or independently by means of chemical synthesis, or by a combination of extraction and chemical synthesis at a fixed location that packages or repackages cannabis or cannabis products or labels or re-labels its container, that holds a state license pursuant to division 10 of the Business and Professions Code. A Level 1 manufacturer is a site that manufactures cannabis products using nonvolatile solvents, or no solvents. A Level 2 manufacturer is a site that manufactures cannabis products using volatile solvents.
Mature plant	A cannabis plant that is flowering.
MCRSA	Medical Cannabis Regulation and Safety Act (formerly known as the Medical Marijuana Regulation and Safety Act).
Medicinal cannabis	(Also medicinal cannabis product) A product containing cannabis, including, but not limited to, concentrates and extractions, intended to be sold for use by medicinal cannabis patients. For the purposes of this document, medicinal cannabis does not include industrial hemp as defined in by Section 81000 of the Food and Agricultural Code or Section 11018.5 of the Health and Safety Code.
Microbusiness	A license authorizing the licensee to cultivate cannabis on an area of less than 10,000 square feet and to act as a licensed distributor, Level 1 manufacturer, and retailer under this division, provided such licensee complies with all requirements imposed by this division on licensed cultivators,

	distributors, Level 1 manufacturers, and retailers to the extent the licensee engages in such activities.
Mixed-light cultivation	Cultivation of cannabis using light deprivation and/or artificial lighting below a rate of 25 watts per square foot.
Moisture content	The percentage of water in a dry sample, by weight.
Mycotoxin	A toxic substance produced by a fungus.
Nonmanufactured cannabis product	Dried flower, shake, leaf, and pre-rolls intended to be sold for use by cannabis customers.
Nonvolatile solvent	Any solvent used in the extraction process that is not a volatile solvent. For purposes of this division, a nonvolatile solvent includes carbon dioxide used for extraction.
Nursery	A licensee that produces only clones, immature plants, seeds, and other agricultural products used specifically for the planting, propagation, and cultivation of commercial cannabis.
OMCS	Office of Manufactured Cannabis Safety, a department within CDPH, responsible for issuing manufacturing licenses for medical and adult use cannabis, as well as licenses for adult use testing laboratories.
Operation	Any act for which licensure is required under the provisions of Division 10 of the Business and Professions Code, or any commercial transfer of cannabis or cannabis products.
Outdoor cultivation	Cultivation of cannabis without the use of light deprivation and/or artificial lighting in the canopy area. Supplemental low intensity lighting is permissible only to maintain immature plants as a source for propagation.
Owner	An owner can be one or more of the following: a person with an aggregate ownership interest of 20 percent or more in the person applying for a license or a licensee, unless the interest is solely a security, lien, or encumbrance; the chief executive officer of a nonprofit or other entity; a member of the board of directors of a nonprofit; or an individual who will be participating in the direction, control, or management of the person applying for a license.
Package or packaging	Any container or wrapper that may be used for enclosing or containing any nonmanufactured cannabis product for final retail sale. The term "package" does not include any shipping container or outer wrapping used solely for the transportation of nonmanufactured cannabis products in bulk

	quantity to any licensed manufacturer, processor, or distributor.
Person	An individual, firm, partnership, joint venture, association, corporation, limited liability company, estate, trust, business trust, receiver, syndicate, or any other group or combination acting as a unit and includes the plural as well as the singular number.
Pest	<p>Any of the following things that is, or is liable to be, dangerous or detrimental to the agricultural industry of the state:</p> <ul style="list-style-type: none"> (1) Any infectious, transmissible, or contagious disease of any plant, or any disorder of any plant which manifests symptoms or behavior which the director, after investigation and hearing, finds and determines is characteristic of an infectious, transmissible, or contagious disease; (2) Any form of animal life; (3) Any form of vegetable life.
Pesticide	Any of the following: (1) any spray adjuvant; (2) any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, as defined in Food and Agricultural Code section 12754.5, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever.
Physician's recommendation	A recommendation by a physician and surgeon that a patient use cannabis, provided in accordance with the Compassionate Use Act of 1996 (Proposition 215), found at section 11362.5 of the Health and Safety Code.
Premises	The designated structure(s) and land specified in the application that are in possession of and used by the applicant or licensee to conduct the commercial cannabis activity. The premises shall be a contiguous area and may only be occupied by one licensee.
Pre-roll	Dried flower rolled in paper prior to retail sale.
Processing	All activities associated with drying, curing, grading, trimming, storing, packaging, and labeling of non-manufactured cannabis products.
Propagate	To cultivate immature plants from cuttings or seeds.

Purchaser	The customer who is engaged in a transaction with a licensee for purposes of obtaining cannabis or cannabis products.
Quality assurance	A set of operating principles that enable laboratories to produce defensible data of known accuracy and precision. Quality assurance encompasses employee training, equipment preventative maintenance procedures, calibration procedures, and quality-control testing, among other things.
Quarantine	The storage or identification of cannabis goods, to prevent distribution or transfer of the cannabis goods, in a physically separate area clearly identified for such use
Responsible agency	Public agency which proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or negative declaration. For the purposes of CEQA, the term responsible agency includes all public agencies other than the lead agency which have discretionary approval power over the project.
Retail area	A building, room, or other area upon the licensed retailer premises in which cannabis goods are sold or displayed.
Sale, sell	Includes any transaction whereby, for any consideration, title to cannabis is transferred from one person to another, and includes the delivery of cannabis or cannabis products pursuant to an order placed for the purchase of the same and soliciting or receiving an order for the same, but does not include the return of cannabis or cannabis products by a licensee to the licensee from whom such cannabis or cannabis product was purchased.
Secretary	The Secretary of the California Department of Consumer Affairs.
Smoke	To inhale, exhale, burn, or carry any lighted or heated device or pipe, or any other lighted or heated cannabis or cannabis product intended for inhalation, whether natural or synthetic, in any manner or in any form. "Smoke" includes the use of an electronic smoking device that creates an aerosol or vapor, in any manner or form, or the use of any oral smoking device for the purpose of circumventing the prohibition of smoking in a place.
State license or license	A license issued by the Bureau of Cannabis Control granting authorization to conduct commercial cannabis business activities.

Strain	A hybrid or variety of cannabis with similar or identical combinations of properties such as appearance, taste, color, smell, cannabinoid profile, and potency.
Substantially related	For the purposes of denial, suspension, or revocation of a license pursuant to Division 1.5 (commencing with section 475) of the Business and Professions Code, a crime shall be considered to be substantially related to the qualifications, functions, or duties of a licensee or owner under division 9 (commencing with section 19300) of the Business and Professions Code, if it evidences present or potential unfitness of the licensee or owner of a cannabis business license to perform the functions authorized by his or her license in a manner consistent with the public health, safety, or welfare. Such crimes or acts shall include, but not be limited to the following:
	(1) A felony conviction for the illegal possession for sale, sale, manufacture, transportation, or cultivation of a controlled substance.
	(2) A violent felony conviction, as specified in subdivision (c) of section 667.5 of the Penal Code.
	(3) A serious felony conviction, as specified in subdivision (c) of section 1192.7 of the Penal Code.
	(4) A felony conviction involving fraud, deceit, or embezzlement.
Terpene	Terpenes are volatile aromatic molecules, or oils, that are produced in the cannabis plant's resin glands, evaporate easily, and are responsible for most of the scents and smells associated with cannabis plants.
Testing laboratory	A laboratory, facility, or entity in the state, that offers or performs tests of cannabis or cannabis products, including the equipment provided by such laboratory, facility, or entity, and that is both of the following:
	(1) Accredited by an accrediting body that is independent from all other persons involved in commercial cannabis activity in the state.
	(2) Licensed by the Bureau.
Track-and-trace system	The State-approved system used to track commercial cannabis activity and movement.

Transport	The transfer of cannabis or cannabis products from the permitted business location of one licensee to the permitted business location of another licensee, for the purposes of conducting commercial cannabis activity.
Trustee agency	A State agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California.
Vaping	Also known as vaporizing. Placing cannabis flowers or oils in an electric appliance designed to heat the cannabis to a high heat but remain below the point of combustion, and inhaling the resulting vapor.
Volatile solvent	The same meaning as in section 11362.3 of the Health and Safety Code.
Water activity	A measure of the quantity of water in a product that is available and therefore capable of supporting bacteria, yeasts, and fungi. Water activity is reported in the unit Aw.
Youth center	The same meaning as in section 11353.1 of the Health and Safety Code.

Acronyms and Abbreviations

°	degrees
°C	degrees Celsius
°F	degrees Fahrenheit
µg	micrograms
µg/kg	micrograms per kilogram
µg/m³	micrograms per cubic meter
§	section
A	
AB	Assembly Bill
ACTM	Airborne Toxic Control Measure
Ag Vision	California Agricultural Vision
amsl	above mean sea level
APA	Administrative Procedures Act
APCD	air pollution control district
AQMD	air quality management district
ATCM	Airborne Toxic Control Measure
AUMA	Adult Use of Marijuana Act
A _w	measure of water activity (vapor pressure)
B	
BAAQMD	Bay Area Air Quality Management District
B&P Code	Business and Professions Code
BHO	butane hash oil, or butane honey oil
BLM	U.S. Bureau of Land Management
Bureau	Bureau of Cannabis Control
Bureau SRIA	Economic Costs and Benefits of Proposed Regulations for the Implementation of the Medical Cannabis Regulation and Safety Act Standardized Regulatory Impact Assessment
Bus. & Prof. Code	Business and Professions Code
C	
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAC	county agricultural commissioner
CAFE	Corporate Average Fuel Economy
CalARP	California Accidental Release Prevention
Cal. Code Regs.	California Code of Regulations
Cal/EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Office of Emergency Services
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health

CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	climate action plan
CAPCOA	California Air Pollution Control Officers
CARB	California Air Resources Board
CASGEM	California Statewide Groundwater Elevation Monitoring
CBD	cannabidiol
CBDA	cannabidiolic acid
CBG	cannabigerol
CBN	cannabinol
CCAA	California Clean Air Act
CCRWQCB	Central Coast Regional Water Quality Control Board
CDFA	California Department of Food and Agriculture
CDFA SRIA	Economic Impact Analysis of Medical Cannabis Cultivation Program Regulations Standardized Regulatory Impact Assessment
CDFW	California Department of Fish and Wildlife
CDOC	California Department of Conservation
CDOF	California Department of Finance
CDPH	California Department of Public Health
CDPR	California Department of Pesticide Regulation
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CH ₄	methane
CHP	California Highway Patrol
CHS	cannabinoid hyperemesis syndrome
CNEL	community noise equivalent level
CO	carbon monoxide
CO ₂	carbon dioxide
CO _{2e}	carbon dioxide equivalent
Court	U.S. Supreme Court
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Bank
CRRWQCB	Colorado River Regional Water Quality Control Board
CTR	California Toxics Rule
CUPA	Certified Uniform Program Agency
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
D	
dB	decibel
dBA	A-weighted decibels
DEA	U.S. Drug Enforcement Agency

Delta	Sacramento–San Joaquin Delta
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
E	
EIR	environmental impact report
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Endangered Species Act
F	
FAA	Federal Aviation Administration
FBI	Federal Bureau of Investigation
FE	federal endangered
Fed. Reg.	Federal Register
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
Fish and G. Code	California Fish and Game Code
FMMP	California Farmland Mapping and Monitoring Program
FP	federal proposed
FT	federal threatened
FTA	Federal Transit Administration
G	
GC-FID	gas chromatography
GC-MS	gas chromatography–mass spectrometry
GHG	greenhouse gas
Gov. Code	California Government Code
GPS	global positioning system
Guidelines	<i>Guidelines for the Implementation of CEQA</i> (Cal. Code Regs., tit. 14, §15000 et seq.)
GWP	global warming potential
H	
H ₂ S	hydrogen sulfide
HAP	hazardous air pollutant
HCP	habitat conservation plan
HFC	hydrofluorocarbon
HIIMS	Humboldt Institute for Interdisciplinary Marijuana Research
HMAP	Hazardous Materials Area Plan
HMBP	Hazardous Materials Business Plan
HMIS	Hazardous Materials Inventory Statement
HMMP	Hazardous Materials Management Plan
HS-GC-FID	gas chromatography headspace analyzer with a flame ionization detector
HPLC	high pressure liquid chromatography
HUD	U.S. Department of Housing and Urban Development

HVAC	heating, ventilating, and air conditioning
Hz	hertz
I	
IEC	International Electrotechnical Commission
IPCC	Intergovernmental Panel on Climate Change
IS/ND	initial study/ negative declaration
ISO	International Organization for Standardization
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
L	
LARWCQB	Los Angeles Regional Water Quality Control Board
LCFS	Low Carbon Fuel Standard
LC-MS/MS	liquid chromatography–mass spectrometry
LDA	light-duty auto
L _{dn}	day-night average sound level
LEandI	Law Enforcement and Investigation
LED	light-emitting diode
L _{eq}	equivalent sound level
L _{max}	maximum equivalent sound level
M	
MAUCRSA	Medicinal and Adult-Use Cannabis Regulation and Safety Act
MBTA	Migratory Bird Treaty Act
MCRSA	Medical Cannabis Regulation and Safety Act
mg	milligrams
mg/g	milligrams per gram
MPO	metropolitan planning organization
MRZ	Mineral Resource Zone
MS4	municipal separate storm sewer system
N	
N ₂ O	nitrous oxide
NAA	nonattainment area
NAAQS	National Ambient Air Quality Standards
NCCP	natural community conservation plan
NCRWQCB	North Coast Regional Water Quality Control Board
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO ₂	nitrogen dioxide
NOC	notice of completion
NOI	notice of intent
NOP	notice of preparation
NO _x	nitrogen oxides
NPS	National Park Service

O

O ₃	ozone
OBD	on-board diagnostic systems
OEHHA	California Office of Environmental Health Hazard Assessment
OPR	California Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration

P

PAP	pesticide application plan
PCA	agricultural pest control adviser
PCBs	polychlorinated biphenyl compounds
PEIR	program environmental impact report
PERP	Portable Equipment Registration Program
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
PM	particulate matter
PM _{2.5}	particulate matter with aerodynamic radius of 2.5 micrometers or less
PM ₁₀	particulate matter with aerodynamic radius of 10 micrometers or less
ppm	parts per million
Proposed Program	Commercial Cannabis Business Licensing Program
PTFE	polytetrafluoroethylene
Pub. Res. Code	California Public Resources Code
PVC	polyvinyl chloride

Q

QAC	qualified applicator certificate
QAL	qualified applicator license

R

RCRA	Resource Conservation and Recovery Act
RMP	risk management plan
ROG	reactive organic gas
RWQCB	regional water quality control board

S

SARA	Superfund Amendments and Reauthorization Act
SC	state candidate
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategies
SDG&E	San Diego Gas & Electric
SDS	Material Safety Data Sheet
SE	state endangered
sf	square feet
SF ₆	sulfur hexafluoride
SFP	state fully protected
SIP	state implementation plan

SJVAPCD	San Joaquin Valley Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO ₂	sulfur dioxide
SPoT	stream pollution trends
SRA	state responsibility area
SRIA	Standardized Regulatory Impact Assessment
SSC	state species of special concern
ST	state threatened
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
T	
TAC	toxic air contaminant
TCR	tribal cultural resource
TEA	triclopyr triethylamine salt
THC	tetrahydrocannabinol
THCA	tetrahydrocannabinolic acid
TRI	Toxic Release Inventory
U	
UCAIC	University of California Agricultural Issues Center
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USP-NF	U.S. Pharmacopeia and the National Formulary
UV	ultraviolet
V	
VOC	volatile organic compound
W	
Williamson Act	California Land Conservation Act of 1965
Y	
YSAQMD	Yolo-Solano Air Quality Management District

Chapter 7

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Chapter 8

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Chapter 2 Proposed Program Description

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Chapter 4 Environmental Analysis

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Chapter 6 Glossary and Acronyms

No references cited.

Chapter 7 Report Preparation

No references cited.

Appendix A

Medicinal and Adult-Use Cannabis Regulation and Safety Act

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Senate Bill No. 94

CHAPTER 27

An act to amend Sections 26000, 26001, 26011, 26012, 26013, 26014, 26030, 26031, 26038, 26040, 26043, 26044, 26050, 26052, 26053, 26054, 26054.2, 26055, 26057, 26058, 26060, 26061, 26063, 26065, 26066, 26070, 26070.5, 26080, 26090, 26104, 26106, 26120, 26130, 26140, 26150, 26151, 26152, 26153, 26154, 26155, 26160, 26161, 26180, 26181, 26190, 26191, 26200, 26202, 26210, and 26211 of, to amend the heading of Chapter 10 (commencing with Section 26100) and the heading of Chapter 13 (commencing with Section 26130) of Division 10 of, to amend the heading of Division 10 (commencing with Section 26000) of, to amend and renumber Section 26101 of, to add Sections 26010.5, 26011.5, 26013.5, 26046, 26047, 26051.5, 26060.1, 26062.5, 26070.1, 26121, 26131, 26132, 26133, 26134, 26135, 26156, 26162, 26162.5, 26180.5, 26190.5, and 26210.5, to, to add Chapter 6.5 (commencing with Section 26067) and Chapter 22 (commencing with Section 26220) to Division 10 of, to add and repeal Section 26050.1 of, to repeal Sections 26054.1, 26056, 26056.5, 26064, 26067, 26100, and 26103 of, to repeal Chapter 3.5 (commencing with Section 19300) of Division 8 of, to repeal Chapter 17 (commencing with Section 26170) of Division 10 of, and to repeal and add Sections 26010, 26032, 26033, 26034, 26045, 26051, 26062, 26102, and 26110 of, the Business and Professions Code, to amend Sections 1602 and 1617 of the Fish and Game Code, to amend Sections 37104, 54036, and 81010 of the Food and Agricultural Code, to amend Sections 11006.5, 11014.5, 11018, 11018.1, 11018.2, 11018.5, 11032, 11054, 11357, 11358, 11359, 11360, 11361, 11361.1, 11361.5, 11362.1, 11362.2, 11362.3, 11362.4, 11362.45, 11362.7, 11362.71, 11362.715, 11362.765, 11362.768, 11362.77, 11362.775, 11362.78, 11362.785, 11362.79, 11362.795, 11362.8, 11362.81, 11362.83, 11362.85, 11362.9, 11364.5, 11470, 11478, 11479, 11479.2, 11480, 11485, 11532, 11553, and 109925 of, to amend the heading of Article 2 (commencing with Section 11357) of Chapter 6 of Division 10 of, and to repeal Section 11362.777 of, the Health and Safety Code, to amend Sections 34010, 34011, 34012, 34013, 34014, 34015, 34016, 34018, 34019, and 34021.5 of, to amend the heading of Part 14.5 (commencing with Section 34010) of Division 2 of, and to add Section 34012.5 to, the Revenue and Taxation Code, to amend Section 23222 of, and to add Section 2429.7 to, the Vehicle Code, and to amend Sections 1831, 1847, and 13276 of the Water Code, relating to cannabis, and making an appropriation therefor, to take effect immediately, bill related to the budget.

[Approved by Governor June 27, 2017. Filed with
Secretary of State June 27, 2017.]

LEGISLATIVE COUNSEL'S DIGEST

SB 94, Committee on Budget and Fiscal Review. Cannabis: medicinal and adult use.

(1) The California Uniform Controlled Substances Act makes various acts involving marijuana a crime except as authorized by law. Under the Compassionate Use Act of 1996 and existing law commonly referred to as the Medical Marijuana Program, these authorized exceptions include exemptions for the use of marijuana for personal medical purposes by patients pursuant to physician's recommendations and exemptions for acts by those patients and their primary caregivers related to that personal medical use. The Medical Marijuana Program also provides immunity from arrest to those exempt patients or designated primary caregivers who engage in certain acts involving marijuana, up to certain limits, and who have identification cards issued pursuant to the program unless there is reasonable cause to believe that the information contained in the card is false or fraudulent, the card has been obtained by means of fraud, or the person is otherwise in violation of the law. Under existing law, a person who steals, fraudulently uses, or commits other prohibited acts with respect to those identification cards is subject to criminal penalties. Under existing law, a person 18 years of age or older who plants, cultivates, harvests, dries, or processes more than 6 living cannabis plants, or any part thereof, may be charged with a felony if specified conditions exist, including when the offense resulted in a violation of endangered or threatened species laws.

The Control, Regulate and Tax Adult of Marijuana Act (AUMA), an initiative measure enacted by the approval of Proposition 64 at the November 8, 2016, statewide general election, commencing January 1, 2018, requires those patients to possess, and county health departments or their designees to ensure that those identification cards are supported by, physician's recommendations that comply with certain requirements.

This bill would require probable cause to believe that the information on the card is false or fraudulent, the card was obtained by fraud, or the person is otherwise in violation of the law to overcome immunity from arrest to patients and primary caregivers in possession of an identification card. The bill would authorize a person 18 years of age or older who plants, cultivates, harvests, dries, or processes more than 6 living cannabis plants, or any part thereof, where that activity results in a violation of specified laws relating to the unlawful taking of fish and wildlife to be charged with a felony. By modifying the scope of a crime, this bill would impose a state-mandated local program.

(2) AUMA authorizes a person 21 years of age or older to possess and use up to 28.5 grams of marijuana and up to 8 grams of concentrated cannabis, and to possess up to 6 living marijuana plants and the marijuana produced by those plants, subject to certain restrictions, as specified. Under AUMA, these restrictions include a prohibition on manufacturing concentrated cannabis using a volatile solvent, defined as volatile organic compounds and dangerous poisons, toxins, or carcinogens, unless done in

accordance with a state license. Under AUMA, a violation of this prohibition is a crime.

This bill would change the definition of volatile solvent for these purposes to include a solvent that is or produces a flammable gas or vapor that, when present in the air in sufficient quantities, will create explosive or ignitable mixtures.

(3) The Medical Cannabis Regulation and Safety Act (MCRSA) authorizes a person who obtains both a state license under MCRSA and the relevant local license to engage in commercial medical cannabis activity pursuant to those licenses, as specified. AUMA authorizes a person who obtains a state license under AUMA to engage in commercial adult-use marijuana activity, which does not include commercial medical cannabis activity, pursuant to that license and applicable local ordinances. Both MCRSA and AUMA generally divide responsibility for state licensure and regulation between the Bureau of Marijuana Control (bureau) within the Department of Consumer Affairs, which serves as the lead state agency, the Department of Food and Agriculture, and the State Department of Public Health. AUMA requires the bureau to convene an advisory committee to advise these licensing authorities on the development of standards and regulations pursuant to the licensing provisions of AUMA, and requires the advisory committee members to include specified subject matter experts. AUMA requires the licensing authorities to begin issuing licenses to engage in commercial adult-use marijuana activity by January 1, 2018.

This bill would repeal MCRSA and include certain provisions of MCRSA in the licensing provisions of AUMA. Under the bill, these consolidated provisions would be known as the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA). The bill would rename the bureau the Bureau of Cannabis Control, would revise references to "marijuana" or "medical cannabis" in existing law to instead refer to "cannabis" or "medicinal cannabis," respectively, and would apply a definition of "cannabis" similar to the definition used in MCRSA to MAUCRSA. The bill would generally impose the same requirements on both commercial medicinal and commercial adult-use cannabis activity, with specific exceptions. The bill would make applying for and being issued more than one license contingent upon the licensed premises being separate and distinct. The bill would allow a person to test both adult-use cannabis and medicinal cannabis under a single testing laboratory license. The bill would require the protection of the public to be the highest priority for a licensing authority in exercising its licensing, regulatory, and disciplinary functions under MAUCRSA, and would require the protection of the public to be paramount whenever the protection of the public is inconsistent with other interests sought to be promoted. The bill would require the advisory committee advising the licensing authorities on the development of standards and regulations to include persons who work directly with racially, ethnically, and economically diverse populations.

(4) Under existing law, most of the types of licenses to be issued for commercial adult-use cannabis activity under AUMA correspond to types

of licenses to be issued for commercial medicinal cannabis activity under MCRSA. However, specialty cottage cultivation licenses, producing dispensary licenses, and transporter licenses are available under MCRSA but not AUMA, while microbusiness licenses and commencing January 1, 2023, large outdoor, indoor, and mixed-light cultivation licenses are available under AUMA but not MCRSA.

Under this bill, the types of licenses available for commercial adult-use cannabis activity and commercial medicinal cannabis activity would be the same. The types of licenses available under both MCRSA and AUMA would continue to be available for both kinds of activity, and specialty cottage cultivation licenses, microbusiness licenses, and commencing January 1, 2023, large outdoor, indoor, and mixed-light cultivation licenses would also be available for both kinds of activity. Producing dispensary and transporter licenses would not be available.

This bill would impose certain requirements on the transportation and delivery of cannabis and cannabis products, and would provide the California Highway Patrol authority over the safety of operations of all vehicles transporting cannabis and cannabis products. The bill would require a retailer to notify the licensing authority and the appropriate law enforcement authorities within 24 hours after discovering specified breaches of security. The bill would prohibit cannabis or cannabis products purchased by a customer from leaving a licensed retail premises unless they are placed in an opaque package.

(5) Both MCRSA and AUMA require cannabis or cannabis products to undergo quality assurance, inspection, and testing, as specified, before the cannabis or cannabis products may be offered for retail sale. Licenses for the testing of cannabis are to be issued by the bureau under MCRSA and by the State Department of Public Health under AUMA.

This bill would revise and recast those requirements to instead require distributors to store cannabis batches on their premises during testing, require testing laboratory employees to obtain samples for testing and transport those samples to testing laboratories, and require distributors to conduct a quality assurance review to ensure compliance with labeling and packing requirements, among other things, as specified. The bill would create the quality assurance compliance monitor, an employee or contractor of the bureau. The bill, commencing January 1, 2018, would authorize a licensee to sell untested cannabis or cannabis products for a limited time, as determined by the bureau, if the cannabis or cannabis products are labeled as untested and comply with other requirements determined by the bureau. The bill would also require the bureau to issue testing laboratory licenses.

(6) Both MCRSA and AUMA prohibit testing laboratory licensees from obtaining licenses to engage in any other commercial cannabis activity. MCRSA, until January 1, 2026, places certain additional limits on the combinations of medicinal cannabis license types a person may hold. AUMA prohibits large cultivation licensees from obtaining distributor or microbusiness licenses, but otherwise provides that a person may apply for

and be issued more than one license to engage in commercial adult-use cannabis activity.

The bill would apply the above-described provisions of AUMA to both adult-use cannabis licensees and medicinal cannabis licensees and would not apply MCRSA's additional limits.

(7) Both MCRSA and AUMA require applicants for state licenses to electronically submit fingerprint images and related information to the Department of Justice for the purpose of obtaining conviction and arrest information and to provide certain information and documentation in or with their applications under penalty of perjury. Although these requirements are generally similar, certain persons who are considered to be applicants subject to these requirements under MCRSA are not considered applicants under AUMA, and certain information or documentation must be provided by applicants for licenses under MCRSA or AUMA, but not both. Until January 1, 2019, AUMA authorizes licensing authorities to issue temporary licenses for a period of less than 12 months. Until December 31, 2019, AUMA prohibits licensing authorities from issuing licenses to persons who are not residents of California, as specified.

This bill would repeal that residency requirement. Under the bill, applicants for licenses under MAUCRSA would be subject to revised and recasted application requirements, and the persons subject to these requirements would also be revised. By modifying the scope of the crime of perjury, this bill would impose a state-mandated local program. The bill would also require local jurisdictions to provide information related to their regulation of commercial cannabis activity to the licensing authorities, as specified, and would require a licensing authority to take certain actions with regards to an application for license depending upon the response of the local jurisdiction. By requiring local governments to provide this information, this bill would impose a state-mandated local program. The bill, until July 1, 2019, would exempt from the California Environmental Quality Act the adoption of a specified ordinance, rule, or regulation by a local jurisdiction that requires discretionary review and approval of permits, license, or other authorizations to engage in commercial cannabis activity. The bill would also specify requirements and limitations for those temporary licenses. The bill would provide that MAUCRSA does not prohibit the issuance of a state temporary event license to a licensee authorizing onsite cannabis sales to, and consumption by, persons 21 years of age or older at a county fair or district agricultural association event, provided that certain requirements are met.

(8) MCRSA provides a city in which a state licensed facility is located with the full power and authority to enforce MCRSA and regulations promulgated by the bureau and licensing authorities under MCRSA, if delegated by the state. MCRSA requires a city with this delegated authority to assume complete responsibility for any regulatory function relating to those licensees within the city limits that would otherwise be performed by the county or any county officer or employee.

This bill would expand these provisions to provide for the state delegation of the full power and authority to enforce MAUCRSA and regulations promulgated by the bureau and other licensing authorities under MAUCRSA to cities.

(9) AUMA requires a licensing authority to deny an application if either the applicant, or the premises for which a state license is applied, do not qualify for licensure. AUMA authorizes the denial of an application for licensure or renewal of a state license if any of specified conditions are met, including, among other things, the applicant has had a license revoked under AUMA, and the failure to comply with certain requirements imposed to protect natural resources. AUMA requires licensing authorities, in determining whether to grant, deny, or renew a license to engage in commercial adult-use cannabis activity, to consider factors reasonably related to the determination, including whether it is reasonably foreseeable that issuance, denial, or renewal of the license could allow unreasonable restraints on competition by creation or maintenance of unlawful monopoly power or could result in an excessive concentration of retail, microbusiness, or nonprofit licensees, among other factors. Beginning on March 1, 2020, and annually thereafter, AUMA requires, and beginning on March 1, 2023, and annually thereafter, MCRSA requires, each licensing authority to prepare and submit to the Legislature a report containing specified information on the authority's activities concerning commercial cannabis activities and to post the report on the authority's Internet Web site.

This bill would additionally authorize the denial of an application for licensure or renewal of a state license if the applicant has a license suspended under MAUCRSA or for inability to comply with certain requirements. The bill would remove the factors referenced above from consideration of a licensing authority in making a licensing decision, except that the bureau would continue to consider if an excessive concentration of licensees exists in determining whether to grant, deny, or renew a retail license, microbusiness license, or nonprofit license. The bill would require state licensing authorities to include in the first publication of their annual reports, which would be due on March 1, 2023, a joint report regarding the state of the cannabis market in California which identifies any statutory or regulatory changes necessary to ensure that the implementation of MAUCRSA does not result in those factors occurring, as specified. The bill would require, no later than January 1, 2018, the Secretary of Business, Consumer Services, and Housing Agency or the secretary's designee to initiate work with the Legislature, the Department of Consumer Affairs, the Department of Food and Agriculture, the State Department of Public Health and any other related departments to ensure that there is a safe and viable way to collect cash payments for taxes and fees related to the regulation of cannabis activity throughout the state.

(10) AUMA establishes the Marijuana Control Appeals Panel and requires the panel to consist of 3 members appointed by the Governor and subject to confirmation by a majority vote of all of the members elected to the Senate. AUMA allows any person aggrieved by a state licensing authority

decision ordering a penalty assessment or issuing, denying, transferring, conditioning, suspending, or revoking a license to engage in commercial adult-use cannabis activity to appeal that decision to the panel. AUMA limits the panel's review of those decisions to specific inquiries. AUMA also allows a licensing authority or any person aggrieved by an order of the panel to seek judicial review of the order, as specified.

This bill would rename the panel the Cannabis Control Appeals Panel, and would require the membership of the panel to include one member appointed by the Senate Committee on Rules and one member appointed by the Speaker of the Assembly in addition to the 3 members appointed by the Governor. The bill would revise the panel's jurisdiction to include the review of appeals of state licensing authority decisions with regard to both commercial medicinal and commercial adult-use cannabis activity, and would provide for the appeal of orders of the panel to the Supreme Court and the courts of appeal, as specified. The bill would limit the judicial review of panel orders to specific inquiries and would provide that the findings and conclusions of state licensing authorities on questions of fact are final and not subject to review.

(11) AUMA prescribes various restrictions and requirements on the advertising or marketing of adult-use cannabis and adult-use cannabis products. MCRSA sets forth prohibitions on the adulteration or misbranding of medicinal cannabis products and authorizes the State Department of Public Health to take certain actions when it has evidence that a medicinal cannabis product is adulterated or misbranded. Existing law also authorizes the State Department of Public Health to issue citations and fines for violations of MCRSA or regulations adopted under MCRSA, as specified.

This bill additionally would prohibit a technology platform or an outdoor advertising company from displaying an advertisement from a licensee on an Internet Web page unless the advertisement displays the licensee's license number. The bill would generally apply those advertising and marketing restrictions, and those adulteration and misbranding prohibitions and enforcement provisions, to both medicinal and adult-use cannabis and cannabis products. The bill would also require edible cannabis products to be marked with a universal symbol, as specified. The bill would revise the State Department of Public Health's authority to issue citations and fines to include all violations of MAUCRSA and regulations adopted under MAUCRSA.

(12) Under existing law, licensing fees received by the state licensing authorities under both MCRSA and AUMA are deposited into the Marijuana Control Fund and fine and penalty moneys collected under MCRSA are generally deposited into the Medical Cannabis Fines and Penalties Account within the fund.

This bill would rename the Marijuana Control Fund the Cannabis Control Fund, would rename the Medical Cannabis Fines and Penalties Account the Cannabis Fines and Penalties Account, and would generally provide for the deposit of fine and penalty money collected under MAUCRSA into the Cannabis Fines and Penalties Account. The bill would appropriate

\$3,000,000 from the Cannabis Control Fund to the Department of the California Highway Patrol to be used for training drug recognition experts, as specified. The bill would require the bureau, in coordination with the Department of General Services, by July 1, 2018, to establish an office to collect fees and taxes in the County of Humboldt, County of Trinity, or County of Mendocino in order to ensure the safe payment and collection of cash in those counties.

(13) AUMA, commencing January 1, 2018, imposes an excise tax on purchasers of cannabis or cannabis products measured by the gross receipts of retail sale and a separate cultivation tax on harvested cannabis that enters the commercial market, as specified. A violation of the provisions relating to these taxes is a crime unless otherwise specified. AUMA requires revenues from those taxes to be deposited into the California Marijuana Tax Fund, and continuously appropriates that tax fund for specified purposes pursuant to a specified schedule. Under AUMA, this schedule includes an annual allocation to state licensing authorities for reasonable costs incurred in regulating commercial cannabis activity, to the extent those costs are not reimbursed pursuant to MCRSA and a specified provision of AUMA, and a separate allocation to the California State Auditor for reasonable costs incurred in conducting a specified performance audit that AUMA requires the California State Auditor's Office to conduct commencing January 1, 2019, and annually thereafter.

This bill would require the cannabis excise tax to be measured by the average market price, as defined, of the retail sale, instead of by the gross receipts of the retail sale. The bill would define "enters the commercial market" and other terms for the purposes of the cannabis cultivation and excise taxes and would require distributors and, in certain circumstances, manufacturers, to collect and remit the taxes, as specified. The bill would require distributors, instead of retailers and cultivators, to obtain permits from the State Board of Equalization. By modifying the scope of a crime, this bill would impose a state-mandated local program. The bill would rename the tax fund the California Cannabis Tax Fund. The bill would also transfer the performance audit to the Office of State Audits and Evaluations within the Department of Finance, would require the audit to be performed triennially instead of annually, and would transfer the allocation from the tax fund for the reasonable costs incurred in conducting that audit to the Department of Finance. By modifying the purposes for which the tax fund is continuously appropriated, the bill would make an appropriation.

(14) AUMA authorizes the Department of Food and Agriculture to issue licenses for the cultivation of adult-use cannabis beginning January 1, 2018, and to adopt regulations governing the licensing of indoor, outdoor, and mixed-light cultivation sites.

This bill would revise the department's license types to, among other things, authorize the department to license and adopt regulations governing nursery and special cottage cultivation sites.

(15) Existing law requires the State Water Resources Control Board, in consultation with the Department of Fish and Wildlife, to adopt principles

and guidelines for diversion and use of water for cannabis cultivation in areas where cannabis cultivation may have the potential to substantially affect instream flows. Existing law authorizes the State Water Resources Control Board, the Department of Fish and Wildlife, and other agencies to establish fees to cover the costs of their cannabis regulatory programs.

This bill would require an application for a license for cultivation to identify the source of water supply. The bill would require a license for cultivation to include additional requirements for compliance with the above-described provisions and to include in every license for cultivation a condition that the license is prohibited from being effective until the licensee has complied with provisions relating to a streambed alteration agreement or has received written verification from the Department of Fish and Wildlife that a streambed alteration agreement is not required. The bill would prohibit the Department of Fish and Wildlife from issuing new licenses or increasing the total number of plant identifiers within a watershed or area if the board or the Department of Food and Agriculture finds, based on substantial evidence, that cannabis cultivation is causing significant adverse impacts on the environment in a watershed or other geographic area. The bill would expand the authorization for the State Water Resources Control Board, the Department of Fish and Wildlife, and other agencies to establish fees to cover the costs of their cannabis programs, regardless of whether the programs are regulatory.

(16) AUMA requires each California regional water quality board and authorizes the State Water Resources Control Board to address discharges of waste resulting from medical cannabis cultivation and adult-use cannabis cultivation.

This bill would require the state board or the appropriate regional board to address the discharges of waste resulting from cannabis cultivation.

(17) Existing law prohibits an entity from substantially diverting or obstructing the natural flow of, or substantially changing or using any material from the bed, channel, or bank of, any river, stream, or lake, or from depositing certain material where it may pass into any river, stream, or lake, without first notifying the Department of Fish and Wildlife of that activity, and entering into a lake or streambed alteration agreement if required by the department to protect fish and wildlife resources. Existing law exempts an entity from the requirement to enter into a lake or streambed alteration agreement with the department for activities authorized by a license or renewed license for cannabis cultivation issued by the Department of Food and Agriculture for the term of the license or renewed license if the entity submits to the department the written notification, a copy of the license or renewed license, and the fee required for a lake or streambed alteration agreement, and the department determines certain requirements are met. Existing law authorizes the department to adopt regulations establishing the requirements and procedure for the issuance of a general agreement in a geographic area for a category or categories of activities related to cannabis cultivation that would be in lieu of an individual lake or streambed alteration agreement.

This bill would instead authorize the department to adopt general agreements for the cultivation of cannabis and would require the adoption or amendment of a general agreement to be done by the department as an emergency regulation. The bill would require any general agreement adopted by the department subsequent to adoption of regulations to be in lieu of an individual lake or streambed alteration agreement.

(18) AUMA requires standards developed by the Department of Pesticide Regulation, in consultation with the Department of Food and Agriculture, for the use of pesticides in cultivation, and maximum tolerances for pesticides and other foreign object residue in harvested cannabis to apply to licensed cultivators.

This bill would require the Department of Pesticide Regulation to develop guidelines for the use of pesticides in the cultivation of cannabis and residue in harvested cannabis. The bill would prohibit a cannabis cultivator from using any pesticide that has been banned for use in the state.

(19) Under existing law, the Department of Pesticide Regulation generally regulates pesticide use. A violation of those provisions and regulations adopted pursuant to those provisions is generally a misdemeanor. AUMA requires the Department of Pesticide Regulation, in consultation with the State Water Resources Control Board, to promulgate regulations that require the application of pesticides or other pest control in connection with cannabis cultivation to meet standards equivalent to certain provisions of existing law where the department generally regulates pesticide use.

This bill would instead require the Department of Pesticide Regulation to require that the application of pesticides or other pest control in connection with cannabis cultivation comply with the department's general regulation of pesticide use. Because the violation of those provisions and regulations adopted pursuant to those provisions is a crime, this bill would impose a state-mandated local program.

(20) AUMA requires the Department of Food and Agriculture, in conjunction with the bureau, to establish a certified organic designation and organic certification program for adult-use cannabis and cannabis products, as prescribed.

This bill would eliminate the role of the bureau in establishing the designation and program. The bill would require, not later than January 1, 2021, the department to establish a program for cannabis comparable to the federal National Organic Program and the California Organic Food and Farming Act. The bill would require the department to be the sole determiner of organic designation and certification, unless the federal National Organic Program authorizes organic designation and certification for cannabis, in which case the department's authority would be repealed on the following January 1. The bill would prohibit a person from representing, selling, or offering any cannabis or cannabis products as organic or with the designation or certification established by the department, except as provided.

(21) AUMA requires the bureau to establish standards for recognition of a particular appellation of origin applicable to adult-use cannabis grown or cultivated in a certain geographical area in California.

This bill would transfer this responsibility to the Department of Food and Agriculture and require the department to begin establishing standards to designate a county of origin for cannabis no later than January 1, 2018. The bill would require the department, no later than January 1, 2021, to establish a process by which licensed cultivators may establish appellations of standards, practices, and varietals applicable to cannabis grown in a certain geographical area in California.

(22) Existing law requires each licensed cultivator of adult-use cannabis to ensure that the licensed premises do not pose an unreasonable risk of fire or combustion and requires each cultivator to ensure that certain property is carefully maintained to avoid unreasonable or dangerous risk to the property or others.

This bill would repeal and replace these provisions with a requirement that specific provisions concerning building standards relating to fire and panic safety and regulations of the State Fire Marshal, including a requirement that the chief of any city, county, or city and county fire department or district providing fire protection services, or a Designated Campus Fire Marshal, and their authorized representatives, enforce these standards and regulations in their respective areas, also apply to licensees under MAUCRSA. By increasing the duties of local agencies, this bill would impose a state-mandated local program.

(23) MCRSA requires the Department of Food and Agriculture, in consultation with the bureau, to establish a track and trace program for reporting the movement of medical cannabis items throughout the distribution chain that utilizes a unique identifier and secure packaging and is capable of providing certain information. AUMA requires the Department of Food and Agriculture, in consultation with the bureau and the State Board of Equalization, to expand the track and trace program provided for under MCRSA to include the reporting of the movement of adult-use cannabis and cannabis products throughout the distribution chain and to provide the amount of cultivation tax due.

This bill would instead require the establishment of a track and trace program to be the responsibility of the Department of Food and Agriculture, in consultation with the bureau. The bill would authorize a city, county, or city and county to administer a unique identifier and associated identifying information but would prohibit this from supplanting the Department of Food and Agriculture's track and trace program.

(24) MCRSA requires the Department of Food and Agriculture, in consultation with the State Board of Equalization, to create an electronic database containing the electronic shipping manifests to facilitate the administration of the track and trace program. MCRSA requires the information received and contained in records kept by the Department of Food and Agriculture or licensing authorities for the purposes of administering the medical cannabis track and trace program to be confidential and generally prohibits information from being disclosed pursuant to the California Public Records Act.

This bill would expand this exemption to the California Public Records Act to also apply to information received in the track and trace program for reporting the movement of adult-use cannabis and cannabis products.

(25) AUMA and MCRSA require licensees to maintain records of commercial cannabis activity, as specified. Existing law requires the State Department of Public Health to establish and maintain a voluntary program for the issuance of identification cards to qualified patients who have a physician's recommendation for medical cannabis. Existing law requires the counties to process applications and maintain records for the identification card program.

Existing law, the Confidentiality of Medical Information Act, prohibits providers of health care, health care service plans, contractors, employers, and 3rd-party administrators, among others, from disclosing medical information, as defined, without the patient's written authorization, subject to certain exceptions, as specified. A violation of the act resulting in economic loss or personal injury to a patient is a misdemeanor and subjects the violating party to liability for specified damages and administrative fines and penalties.

Existing law deems information identifying the names of patients, their medical conditions, or the names of their primary caregivers, received and contained in records of the State Department of Public Health and by any county public health department to be "medical information" within the meaning of the Confidentiality of Medical Information Act, and prohibits the department or any county public health department from disclosing this information, except as specified. Existing law requires information identifying the names of patients, their medical conditions, or the names of their primary caregivers, received and contained in records kept by the Bureau of Marijuana Control for the purposes of administering MCRSA to be maintained in accordance with state law relating to patient access to his or her health records, the Confidentiality of Medical Information Act, and other state and federal laws relating to confidential patient information.

This bill would deem information contained in a physician's recommendation to use cannabis for medical purposes to be "medical information" within the meaning of the Confidentiality of Medical Information Act, and would prohibit a licensee from disclosing this information, except as specified. By expanding the scope of a crime, this bill would create a state-mandated local program.

(26) AUMA authorizes the Department of Food and Agriculture to charge a fee to cover the reasonable costs of issuing the unique identifier and monitoring, tracking, and inspecting each adult-use cannabis plant.

This bill would authorize the Secretary of Food and Agriculture to enter into a cooperative agreement with a county agricultural commissioner or other state or local agency to assist the department in implementing certain responsibilities pertaining to the cultivation of cannabis and would require the secretary to provide notice of any cooperative agreement, as prescribed. The bill requires the Department of Food and Agriculture under a cooperative agreement to provide reimbursement from the fees collected to a county

agricultural commissioner, state agency, or local agency. The bill prohibits the secretary from delegating authority to issue cultivation licenses to a county agricultural commissioner, a local agency, or another state agency.

(27) Existing law, the California Industrial Hemp Farming Act, provides for the regulation of the growing and cultivation of industrial hemp under the Department of Food and Agriculture. AUMA provided that the bureau has authority to regulate and control plants and products that fit within the definition of industrial hemp but that are produced, processed, manufactured, tested, delivered, or otherwise handled under a license issued under the provisions of AUMA.

This bill would eliminate the authority of the bureau to regulate and control industrial hemp.

(28) Existing law, the Milk and Milk Products Act of 1947, regulates the production of milk and milk products in this state. The act specifies standards for butter. The act requires a license from the Secretary of Food and Agriculture for each separate milk products plant or place of business dealing in, receiving, manufacturing, freezing, or processing milk, or any milk product, or manufacturing, freezing, or processing imitation ice cream or imitation ice milk. Existing law exempts from the act butter purchased from a licensed milk products plant or retail location that is subsequently infused or mixed with medical cannabis at the premises or location that is not required to be licensed as a milk products plant.

This bill would also exempt butter that is subsequently infused or mixed with adult-use cannabis.

(29) Existing law permits 3 or more natural persons, a majority of whom are residents of this state, who are engaged in the production of certain products, including agricultural and farm products, to form a nonprofit cooperative association for specified purposes. Existing law imposes various requirements on the formation, reorganization, operation, and dissolution on the associations.

This bill would authorize 3 or more natural persons, who are engaged in the cultivation of any cannabis product, to form an association, defined as a cannabis cooperative for specified purposes. The bill would impose similar requirements on the formation, reorganization, operation, and dissolution on these associations.

(30) Existing law specifies the duties and powers of the Commissioner of the California Highway Patrol.

This bill would require the commissioner to appoint, and serve as the chairperson of, an impaired driving task force, with specified membership, to develop recommendations for best practices, protocols, proposed legislation, and other policies that will address the issue of impaired driving, as specified. The bill would require the task force, by January 1, 2021, to report to the Legislature its policy recommendations and the steps that state agencies are taking regarding impaired driving.

(31) Existing law makes it an infraction punishable by a fine not exceeding \$100 for a person to possess not more than one ounce of cannabis

while driving a motor vehicle, as specified, unless otherwise authorized by law.

This bill would repeal that provision and instead make it an infraction punishable by a fine not exceeding \$100 for a person to possess a receptacle containing cannabis or cannabis product that has been opened, or a seal broken, or to possess loose cannabis flower not in a container, while driving a motor vehicle, as specified, unless the receptacle is in the trunk of the vehicle or the person is a qualified patient carrying a current identification card or a physician's recommendation and the cannabis or cannabis product is contained in a container or receptacle that is either sealed, resealed, or closed. By creating a new crime, this bill would impose a state-mandated local program.

(32) This bill would make a variety of conforming and related changes.

(33) This bill would provide that its provisions are severable.

(34) Existing constitutional provisions require that a statute that limits the right of access to the meetings of public bodies or the writings of public officials and agencies be adopted with findings demonstrating the interest protected by the limitation and the need for protecting that interest.

This bill would make legislative findings to that effect.

(35) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that with regard to certain mandates no reimbursement is required by this act for a specified reason.

With regard to any other mandates, this bill would provide that, if the Commission on State Mandates determines that the bill contains costs so mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.

(36) AUMA authorizes the Legislature to amend its provisions by a $\frac{2}{3}$ vote of each house if the amendment furthers its purposes and intent.

This bill would state that the bill furthers the purposes and intent of AUMA for specified reasons.

(37) This bill would declare that it is to take effect immediately as a bill providing for appropriations related to the Budget Bill.

Appropriation: yes.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares as follows:

(a) In November 1996, voters approved Proposition 215, which decriminalized the use of medicinal cannabis in California. Since the proposition was passed, most, if not all the regulation has been left to local governments.

(b) In 2015, California enacted three bills—Assembly Bill 243 (Wood, Chapter 688 of the Statutes of 2015); Assembly Bill 266 (Bonta, Chapter 689 of the Statutes of 2015); and Senate Bill 643 (McGuire, Chapter 719

of the Statutes of 2015)—that collectively established a comprehensive state regulatory framework for the licensing and enforcement of cultivation, manufacturing, retail sale, transportation, storage, delivery, and testing of medicinal cannabis in California. This regulatory scheme is known as the Medical Cannabis Regulation and Safety Act (MCRSA).

(c) In November 2016, voters approved Proposition 64, the Adult Use of Marijuana Act (AUMA). Under Proposition 64, adults 21 years of age or older may legally grow, possess, and use cannabis for nonmedicinal purposes, with certain restrictions. In addition, beginning on January 1, 2018, AUMA makes it legal to sell and distribute cannabis through a regulated business.

(d) Although California has chosen to legalize the cultivation, distribution, and use of cannabis, it remains an illegal Schedule I controlled substance under federal law. The intent of Proposition 64 and MCRSA was to ensure a comprehensive regulatory system that takes production and sales of cannabis away from an illegal market and curtails the illegal diversion of cannabis from California into other states or countries.

(e) Cannabis is cultivated in all 50 states however; the majority of domestically produced cannabis comes from California. In 2014, the United States Drug Enforcement Agency's Domestic Cannabis Eradication Suppression Program eradicated 4.3 million plants in the United States; 2.68 million of which were grown in California. Much of the cannabis grown in the state is grown for exportation purposes. To prevent illegal production and avoid illegal diversion to other states, California must place strict limits on cultivation.

(f) In order to strictly control the cultivation, processing, manufacturing, distribution, testing, and sale of cannabis in a transparent manner that allows the state to fully implement and enforce a robust regulatory system, licensing authorities must know the identity of those individuals who have a significant financial interest in a licensee, or who can direct its operation. Without this knowledge, regulators would not know if an individual who controlled one licensee also had control over another. To ensure accountability and preserve the state's ability to adequately enforce against all responsible parties the state must have access to key information.

(g) So that state entities can implement the voters' intent to issue licenses beginning January 1, 2018, while avoiding duplicative costs and inevitable confusion among licensees, regulatory agencies, and the public and ensuring a regulatory structure that prevents access to minors, protects public safety, public health and the environment, as well as maintaining local control, it is necessary to provide for a single regulatory structure for both medicinal and adult-use cannabis and provide for temporary licenses to those applicants that can show compliance with local requirements.

(h) Before denying a license and creating arbitrary barriers to entry into the legal regulated marketplace, it is the intent of the state to compile data that will inform how to best craft licensure policies that will prevent the proliferation of the illegal market while allowing a balanced regulatory scheme that allows legitimate businesses that comply with local standards

to succeed. This will also permit licensing entities to issue licenses in a more timely manner.

(i) The United States Environmental Protection Agency has not established appropriate pesticide tolerances for, or permitted the registration and lawful use of, pesticides on cannabis crops intended for human consumption pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.).

(j) The use of pesticides is not adequately regulated due to the omissions in federal law, and cannabis cultivated in California for California patients can and often does contain pesticide residues.

(k) Lawful California medical cannabis growers and caregivers urge the Department of Pesticide Regulation to provide guidance, in absence of federal guidance, on whether the pesticides currently used at most cannabis cultivation sites are actually safe for use on cannabis intended for human consumption.

SEC. 2. Chapter 3.5 (commencing with Section 19300) of Division 8 of the Business and Professions Code is repealed.

SEC. 3. The heading of Division 10 (commencing with Section 26000) of the Business and Professions Code is amended to read:

DIVISION 10. CANNABIS

SEC. 4. Section 26000 of the Business and Professions Code is amended to read:

26000. (a) This division shall be known, and may be cited, as the Medicinal and Adult-Use Cannabis Regulation and Safety Act.

(b) The purpose and intent of this division is to establish a comprehensive system to control and regulate the cultivation, distribution, transport, storage, manufacturing, processing, and sale of both of the following:

(1) Medicinal cannabis and medicinal cannabis products for patients with valid physician's recommendations.

(2) Adult-use cannabis and adult-use cannabis products for adults 21 years of age and over.

(c) In the furtherance of subdivision (b), this division sets forth the power and duties of the state agencies responsible for controlling and regulating the commercial medicinal and adult-use cannabis industry.

(d) The Legislature may, by majority vote, enact laws to implement this division, provided those laws are consistent with the purposes and intent of the Control, Regulate and Tax Adult Use of Marijuana Act.

SEC. 5. Section 26001 of the Business and Professions Code is amended to read:

26001. For purposes of this division, the following definitions shall apply:

(a) "A-license" means a state license issued under this division for cannabis or cannabis products that are intended for adults 21 years of age and over and who do not possess physician's recommendations.

(b) “A-licensee” means any person holding a license under this division for cannabis or cannabis products that are intended for adults 21 years of age and over and who do not possess physician’s recommendations.

(c) “Applicant” means an owner applying for a state license pursuant to this division.

(d) “Batch” means a specific quantity of homogeneous cannabis or cannabis product that is one of the following types:

(1) Harvest batch. “Harvest batch” means a specifically identified quantity of dried flower or trim, leaves, and other cannabis plant matter that is uniform in strain, harvested at the same time, and, if applicable, cultivated using the same pesticides and other agricultural chemicals, and harvested at the same time.

(2) Manufactured cannabis batch. “Manufactured cannabis batch” means either of the following:

(A) An amount of cannabis concentrate or extract that is produced in one production cycle using the same extraction methods and standard operating procedures.

(B) An amount of a type of manufactured cannabis produced in one production cycle using the same formulation and standard operating procedures.

(e) “Bureau” means the Bureau of Cannabis Control within the Department of Consumer Affairs, formerly named the Bureau of Marijuana Control, the Bureau of Medical Cannabis Regulation, and the Bureau of Medical Marijuana Regulation.

(f) “Cannabis” means all parts of the plant *Cannabis sativa Linnaeus*, *Cannabis indica*, or *Cannabis ruderalis*, whether growing or not; the seeds thereof; the resin, whether crude or purified, extracted from any part of the plant; and every compound, manufacture, salt, derivative, mixture, or preparation of the plant, its seeds, or resin. “Cannabis” also means the separated resin, whether crude or purified, obtained from cannabis. “Cannabis” does not include the mature stalks of the plant, fiber produced from the stalks, oil or cake made from the seeds of the plant, any other compound, manufacture, salt, derivative, mixture, or preparation of the mature stalks (except the resin extracted therefrom), fiber, oil, or cake, or the sterilized seed of the plant which is incapable of germination. For the purpose of this division, “cannabis” does not mean “industrial hemp” as defined by Section 11018.5 of the Health and Safety Code.

(g) “Cannabis accessories” has the same meaning as in Section 11018.2 of the Health and Safety Code.

(h) “Cannabis concentrate” means cannabis that has undergone a process to concentrate one or more active cannabinoids, thereby increasing the product’s potency. Resin from granular trichomes from a cannabis plant is a concentrate for purposes of this division. A cannabis concentrate is not considered food, as defined by Section 109935 of the Health and Safety Code, or a drug, as defined by Section 109925 of the Health and Safety Code.

(i) “Cannabis products” has the same meaning as in Section 11018.1 of the Health and Safety Code.

(j) “Child resistant” means designed or constructed to be significantly difficult for children under five years of age to open, and not difficult for normal adults to use properly.

(k) “Commercial cannabis activity” includes the cultivation, possession, manufacture, distribution, processing, storing, laboratory testing, packaging, labeling, transportation, delivery or sale of cannabis and cannabis products as provided for in this division.

(l) “Cultivation” means any activity involving the planting, growing, harvesting, drying, curing, grading, or trimming of cannabis.

(m) “Cultivation site” means a location where cannabis is planted, grown, harvested, dried, cured, graded, or trimmed, or a location where any combination of those activities occurs.

(n) “Customer” means a natural person 21 years of age or over or a natural person 18 years of age or older who possesses a physician’s recommendation.

(o) “Day care center” has the same meaning as in Section 1596.76 of the Health and Safety Code.

(p) “Delivery” means the commercial transfer of cannabis or cannabis products to a customer. “Delivery” also includes the use by a retailer of any technology platform owned and controlled by the retailer.

(q) “Director” means the Director of Consumer Affairs.

(r) “Distribution” means the procurement, sale, and transport of cannabis and cannabis products between licensees.

(s) “Dried flower” means all dead cannabis that has been harvested, dried, cured, or otherwise processed, excluding leaves and stems.

(t) “Edible cannabis product” means cannabis product that is intended to be used, in whole or in part, for human consumption, including, but not limited to, chewing gum, but excluding products set forth in Division 15 (commencing with Section 32501) of the Food and Agricultural Code. An edible cannabis product is not considered food, as defined by Section 109935 of the Health and Safety Code, or a drug, as defined by Section 109925 of the Health and Safety Code.

(u) “Fund” means the Cannabis Control Fund established pursuant to Section 26210.

(v) “Kind” means applicable type or designation regarding a particular cannabis variant or cannabis product type, including, but not limited to, strain name or other grower trademark, or growing area designation.

(w) “Labeling” means any label or other written, printed, or graphic matter upon a cannabis product, upon its container or wrapper, or that accompanies any cannabis product.

(x) “Labor peace agreement” means an agreement between a licensee and any bona fide labor organization that, at a minimum, protects the state’s proprietary interests by prohibiting labor organizations and members from engaging in picketing, work stoppages, boycotts, and any other economic interference with the applicant’s business. This agreement means that the applicant has agreed not to disrupt efforts by the bona fide labor organization

to communicate with, and attempt to organize and represent, the applicant's employees. The agreement shall provide a bona fide labor organization access at reasonable times to areas in which the applicant's employees work, for the purpose of meeting with employees to discuss their right to representation, employment rights under state law, and terms and conditions of employment. This type of agreement shall not mandate a particular method of election or certification of the bona fide labor organization.

(y) "License" means a state license issued under this division, and includes both an A-license and an M-license, as well as a testing laboratory license.

(z) "Licensee" means any person holding a license under this division, regardless of whether the license held is an A-license or an M-license, and includes the holder of a testing laboratory license.

(aa) "Licensing authority" means the state agency responsible for the issuance, renewal, or reinstatement of the license, or the state agency authorized to take disciplinary action against the licensee.

(ab) "Live plants" means living cannabis flowers and plants, including seeds, immature plants, and vegetative stage plants.

(ac) "Local jurisdiction" means a city, county, or city and county.

(ad) "Lot" means a batch or a specifically identified portion of a batch.

(ae) "M-license" means a state license issued under this division for commercial cannabis activity involving medicinal cannabis.

(af) "M-licensee" means any person holding a license under this division for commercial cannabis activity involving medicinal cannabis.

(ag) "Manufacture" means to compound, blend, extract, infuse, or otherwise make or prepare a cannabis product.

(ah) "Manufacturer" means a licensee that conducts the production, preparation, propagation, or compounding of cannabis or cannabis products either directly or indirectly or by extraction methods, or independently by means of chemical synthesis, or by a combination of extraction and chemical synthesis at a fixed location that packages or repackages cannabis or cannabis products or labels or relabels its container.

(ai) "Medicinal cannabis" or "medicinal cannabis product" means cannabis or a cannabis product, respectively, intended to be sold for use pursuant to the Compassionate Use Act of 1996 (Proposition 215), found at Section 11362.5 of the Health and Safety Code, by a medicinal cannabis patient in California who possesses a physician's recommendation.

(aj) "Nursery" means a licensee that produces only clones, immature plants, seeds, and other agricultural products used specifically for the propagation and cultivation of cannabis.

(ak) "Operation" means any act for which licensure is required under the provisions of this division, or any commercial transfer of cannabis or cannabis products.

(al) "Owner" means any of the following:

(1) A person with an aggregate ownership interest of 20 percent or more in the person applying for a license or a licensee, unless the interest is solely a security, lien, or encumbrance.

(2) The chief executive officer of a nonprofit or other entity.
(3) A member of the board of directors of a nonprofit.
(4) An individual who will be participating in the direction, control, or management of the person applying for a license.

(am) “Package” means any container or receptacle used for holding cannabis or cannabis products.

(an) “Person” includes any individual, firm, partnership, joint venture, association, corporation, limited liability company, estate, trust, business trust, receiver, syndicate, or any other group or combination acting as a unit, and the plural as well as the singular.

(ao) “Physician’s recommendation” means a recommendation by a physician and surgeon that a patient use cannabis provided in accordance with the Compassionate Use Act of 1996 (Proposition 215), found at Section 11362.5 of the Health and Safety Code.

(ap) “Premises” means the designated structure or structures and land specified in the application that is owned, leased, or otherwise held under the control of the applicant or licensee where the commercial cannabis activity will be or is conducted. The premises shall be a contiguous area and shall only be occupied by one licensee.

(aq) “Purchaser” means the customer who is engaged in a transaction with a licensee for purposes of obtaining cannabis or cannabis products.

(ar) “Sell,” “sale,” and “to sell” include any transaction whereby, for any consideration, title to cannabis or cannabis products is transferred from one person to another, and includes the delivery of cannabis or cannabis products pursuant to an order placed for the purchase of the same and soliciting or receiving an order for the same, but does not include the return of cannabis or cannabis products by a licensee to the licensee from whom the cannabis or cannabis product was purchased.

(as) “Testing laboratory” means a laboratory, facility, or entity in the state that offers or performs tests of cannabis or cannabis products and that is both of the following:

(1) Accredited by an accrediting body that is independent from all other persons involved in commercial cannabis activity in the state.

(2) Licensed by the bureau.

(at) “Unique identifier” means an alphanumeric code or designation used for reference to a specific plant on a licensed premises and any cannabis or cannabis product derived or manufactured from that plant.

(au) “Youth center” has the same meaning as in Section 11353.1 of the Health and Safety Code.

SEC. 6. Section 26010 of the Business and Professions Code is repealed.

SEC. 7. Section 26010 is added to the Business and Professions Code, to read:

26010. There is in the Department of Consumer Affairs the Bureau of Cannabis Control, under the supervision and control of the director. The director shall administer and enforce the provisions of this division related to the bureau.

SEC. 8. Section 26010.5 is added to the Business and Professions Code, to read:

26010.5. (a) The Governor shall appoint a chief of the bureau, subject to confirmation by the Senate, at a salary to be fixed and determined by the Director of Consumer Affairs with the approval of the Director of Finance. The chief shall serve under the direction and supervision of the Director of Consumer Affairs and at the pleasure of the Governor.

(b) Every power granted to or duty imposed upon the Director of Consumer Affairs under this division may be exercised or performed in the name of the director by a deputy or assistant director or by the chief, subject to conditions and limitations that the director may prescribe. In addition to every power granted or duty imposed under this division, the director shall have all other powers and duties generally applicable in relation to bureaus that are part of the Department of Consumer Affairs.

(c) The Director of Consumer Affairs may employ and appoint all employees necessary to properly administer the work of the bureau, in accordance with civil service laws and regulations. The Governor may also appoint a deputy chief and an assistant chief counsel to the bureau. These positions shall hold office at the pleasure of the Governor.

(d) The bureau has the power, duty, purpose, responsibility, and jurisdiction to regulate commercial cannabis activity as provided in this division.

(e) The bureau and the director shall succeed to and are vested with all the duties, powers, purposes, responsibilities, and jurisdiction formerly vested in the Bureau of Marijuana Control, also formerly known as the Bureau of Medical Cannabis Regulation and the Bureau of Medical Marijuana Regulation, under the former Medical Cannabis Regulation and Safety Act (former Chapter 3.5 (commencing with Section 19300) of Division 8).

(f) Upon the effective date of this section, whenever “Bureau of Marijuana Control,” “Bureau of Medical Cannabis Regulation,” or “Bureau of Medical Marijuana Regulation” appears in any statute, regulation, or contract, or in any other code, it shall be construed to refer to the bureau.

(g) Upon the effective date of this section, whenever any reference to the “Medical Cannabis Regulation and Safety Act,” “Medical Marijuana Regulation and Safety Act,” or former Chapter 3.5 (commencing with Section 19300) of Division 8 appears in any statute, regulation, contract, or in any other code, it shall be construed to refer to this division as it relates to medicinal cannabis and medicinal cannabis products.

SEC. 9. Section 26011 of the Business and Professions Code is amended to read:

26011. Neither the chief of the bureau nor any member of the Cannabis Control Appeals Panel established under Section 26040 shall do any of the following:

(a) Receive any commission or profit whatsoever, directly or indirectly, from any person applying for or receiving any license or permit under this division.

(b) Engage or have any interest in the sale or any insurance covering a licensee's business or premises.

(c) Engage or have any interest in the sale of equipment for use upon the premises of a licensee engaged in commercial cannabis activity.

(d) Knowingly solicit any licensee for the purchase of tickets for benefits or contributions for benefits.

(e) Knowingly request any licensee to donate or receive money, or any other thing of value, for the benefit of any person whatsoever.

SEC. 10. Section 26011.5 is added to the Business and Professions Code, to read:

26011.5. The protection of the public shall be the highest priority for all licensing authorities in exercising licensing, regulatory, and disciplinary functions under this division. Whenever the protection of the public is inconsistent with other interests sought to be promoted, the protection of the public shall be paramount.

SEC. 11. Section 26012 of the Business and Professions Code is amended to read:

26012. (a) It being a matter of statewide concern, except as otherwise authorized in this division:

(1) The bureau shall have the sole authority to create, issue, deny, renew, discipline, suspend, or revoke licenses for microbusinesses, transportation, storage unrelated to manufacturing activities, distribution, testing, and sale of cannabis and cannabis products within the state.

(2) The Department of Food and Agriculture shall administer the provisions of this division related to and associated with the cultivation of cannabis. The Department of Food and Agriculture shall have the authority to create, issue, deny, and suspend or revoke cultivation licenses for violations of this division.

(3) The State Department of Public Health shall administer the provisions of this division related to and associated with the manufacturing of cannabis products. The State Department of Public Health shall have the authority to create, issue, deny, and suspend or revoke manufacturing licenses for violations of this division.

(b) The licensing authorities shall have the authority to collect fees in connection with activities they regulate concerning cannabis. The licensing authorities may create licenses in addition to those identified in this division that the licensing authorities deem necessary to effectuate their duties under this division.

(c) For the performance of its duties, each licensing authority has the power conferred by Sections 11180 to 11191, inclusive, of the Government Code.

(d) Licensing authorities shall begin issuing licenses under this division by January 1, 2018.

SEC. 12. Section 26013 of the Business and Professions Code is amended to read:

26013. (a) Licensing authorities shall make and prescribe reasonable rules and regulations as may be necessary to implement, administer and

enforce their respective duties under this division in accordance with Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. Those rules and regulations shall be consistent with the purposes and intent of the Control, Regulate and Tax Adult Use of Marijuana Act.

(b) (1) Each licensing authority may adopt emergency regulations to implement this division.

(2) Each licensing authority may readopt any emergency regulation authorized by this section that is the same as, or substantially equivalent to, an emergency regulation previously adopted as authorized by this section. Any such readoption shall be limited to one time for each regulation.

(3) Notwithstanding any other law, the initial adoption of emergency regulations and the readoption of emergency regulations authorized by this section shall be deemed an emergency and necessary for the immediate preservation of the public peace, health, safety, or general welfare. The initial emergency regulations and the readopted emergency regulations authorized by this section shall be each submitted to the Office of Administrative Law for filing with the Secretary of State and shall remain in effect for no more than 180 days, by which time final regulations may be adopted.

(c) Regulations issued under this division shall be necessary to achieve the purposes of this division, based on best available evidence, and shall mandate only commercially feasible procedures, technology, or other requirements, and shall not unreasonably restrain or inhibit the development of alternative procedures or technology to achieve the same substantive requirements, nor shall such regulations make compliance so onerous that the operation under a cannabis license is not worthy of being carried out in practice by a reasonably prudent businessperson.

SEC. 13. Section 26013.5 is added to the Business and Professions Code, to read:

26013.5. Notice of any action of a licensing authority required by this division to be given may be signed and given by the director of the licensing authority or an authorized employee of the licensing authority and may be made personally or in the manner prescribed by Section 1013 of the Code of Civil Procedure, or in the manner prescribed by Section 124 of this code.

SEC. 14. Section 26014 of the Business and Professions Code is amended to read:

26014. (a) The bureau shall convene an advisory committee to advise the licensing authorities on the development of standards and regulations pursuant to this division, including best practices and guidelines that protect public health and safety while ensuring a regulated environment for commercial cannabis activity that does not impose such barriers so as to perpetuate, rather than reduce and eliminate, the illicit market for cannabis.

(b) The advisory committee members shall include, but not be limited to, representatives of the cannabis industry, including medicinal cannabis, representatives of labor organizations, appropriate state and local agencies, persons who work directly with racially, ethnically, and economically diverse

populations, public health experts, and other subject matter experts, including representatives from the Department of Alcoholic Beverage Control, with expertise in regulating commercial activity for adult-use intoxicating substances. The advisory committee members shall be determined by the director.

(c) Commencing on January 1, 2019, the advisory committee shall publish an annual public report describing its activities including, but not limited to, the recommendations the advisory committee made to the licensing authorities during the immediately preceding calendar year and whether those recommendations were implemented by the licensing authorities.

SEC. 15. Section 26030 of the Business and Professions Code is amended to read:

26030. Grounds for disciplinary action include, but are not limited to, all of the following:

(a) Failure to comply with the provisions of this division or any rule or regulation adopted pursuant to this division.

(b) Conduct that constitutes grounds for denial of licensure pursuant to Chapter 2 (commencing with Section 480) of Division 1.5 or discipline of a license pursuant to Chapter 3 (commencing with Section 490) of Division 1.5.

(c) Any other grounds contained in regulations adopted by a licensing authority pursuant to this division.

(d) Failure to comply with any state law including, but not limited to, the payment of taxes as required under the Revenue and Taxation Code, except as provided for in this division or other California law.

(e) Knowing violations of any state or local law, ordinance, or regulation conferring worker protections or legal rights on the employees of a licensee.

(f) Failure to comply with the requirement of a local ordinance regulating commercial cannabis activity.

(g) The intentional and knowing sale of cannabis or cannabis products by an A-licensee to a person under 21 years of age.

(h) The intentional and knowing sale of medicinal cannabis or medicinal cannabis products by an M-licensee to a person without a physician's recommendation.

(i) Failure to maintain safe conditions for inspection by a licensing authority.

(j) Failure to comply with any operating procedure submitted to the licensing authority pursuant to subdivision (b) of Section 26051.5.

(k) Failure to comply with license conditions established pursuant to subdivision (b) of Section 26060.1.

SEC. 16. Section 26031 of the Business and Professions Code is amended to read:

26031. (a) Each licensing authority may suspend, revoke, place on probation with terms and conditions, or otherwise discipline licenses issued by that licensing authority and fine a licensee, after proper notice and hearing to the licensee, if the licensee is found to have committed any of the acts or omissions constituting grounds for disciplinary action. The disciplinary

proceedings under this chapter shall be conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, and the director of each licensing authority shall have all the powers granted therein.

(b) A licensing authority may suspend or revoke a license when a local agency has notified the licensing authority that a licensee within its jurisdiction is in violation of state rules and regulations relating to commercial cannabis activities, and the licensing authority, through an investigation, has determined that the violation is grounds for suspension or revocation of the license.

(c) Each licensing authority may take disciplinary action against a licensee for any violation of this division when the violation was committed by the licensee's officers, directors, owners, agents, or employees while acting on behalf of the licensee or engaged in commercial cannabis activity.

(d) A licensing authority may recover the costs of investigation and enforcement of a disciplinary proceeding pursuant to Section 125.3 of this code.

(e) Upon suspension or revocation of a license, the licensing authority shall inform the bureau. The bureau shall then inform all other licensing authorities. Upon any other enforcement action against a licensee, the licensing authority shall notify all other licensing authorities.

SEC. 17. Section 26032 of the Business and Professions Code is repealed.

SEC. 18. Section 26032 is added to the Business and Professions Code, to read:

26032. (a) The actions of a licensee, its employees, and its agents are not unlawful under state law and shall not be an offense subject to arrest, prosecution, or other sanction under state law, or be subject to a civil fine or be a basis for seizure or forfeiture of assets under state law if they are all of the following:

- (1) Permitted pursuant to a state license.
- (2) Permitted pursuant to a local authorization, license, or permit issued by the local jurisdiction, if any.

(3) Conducted in accordance with the requirements of this division and regulations adopted pursuant to this division.

(b) The actions of a person who, in good faith, allows his or her property to be used by a licensee, its employees, and its agents, as permitted pursuant to a state license and, if required by the applicable local ordinances, a local license or permit, are not unlawful under state law and shall not be an offense subject to arrest, prosecution, or other sanction under state law, or be subject to a civil fine or be a basis for seizure or forfeiture of assets under state law.

SEC. 19. Section 26033 of the Business and Professions Code is repealed.

SEC. 20. Section 26033 is added to the Business and Professions Code, to read:

26033. (a) A qualified patient, as defined in Section 11362.7 of the Health and Safety Code, who cultivates, possesses, stores, manufactures, or transports cannabis exclusively for his or her personal medical use but who does not provide, donate, sell, or distribute cannabis to any other person

is not thereby engaged in commercial cannabis activity and is therefore exempt from the licensure requirements of this division.

(b) A primary caregiver who cultivates, possesses, stores, manufactures, transports, donates, or provides cannabis exclusively for the personal medical purposes of no more than five specified qualified patients for whom he or she is the primary caregiver within the meaning of Section 11362.7 of the Health and Safety Code, but who does not receive remuneration for these activities except for compensation in full compliance with subdivision (c) of Section 11362.765 of the Health and Safety Code, is exempt from the licensure requirements of this division.

SEC. 21. Section 26034 of the Business and Professions Code is repealed.

SEC. 22. Section 26034 is added to the Business and Professions Code, to read:

26034. All accusations against licensees shall be filed by the licensing authority within five years after the performance of the act or omission alleged as the ground for disciplinary action; provided, however, that the foregoing provision shall not constitute a defense to an accusation alleging fraud or misrepresentation as a ground for disciplinary action. The cause for disciplinary action in that case shall not be deemed to have accrued until discovery, by the licensing authority, of the facts constituting the fraud or misrepresentation, and, in that case, the accusation shall be filed within five years after that discovery.

SEC. 23. Section 26038 of the Business and Professions Code is amended to read:

26038. (a) A person engaging in commercial cannabis activity without a license required by this division shall be subject to civil penalties of up to three times the amount of the license fee for each violation, and the court may order the destruction of cannabis associated with that violation in accordance with Section 11479 of the Health and Safety Code. Each day of operation shall constitute a separate violation of this section. All civil penalties imposed and collected pursuant to this section by a licensing authority shall be deposited into the General Fund except as provided in subdivision (b). A violator shall be responsible for the cost of the destruction of cannabis associated with his or her violation.

(b) If an action for civil penalties is brought against a person pursuant to this division by the Attorney General on behalf of the people, the penalty collected shall be deposited into the General Fund. If the action is brought by a district attorney or county counsel, the penalty shall first be used to reimburse the district attorney or county counsel for the costs of bringing the action for civil penalties, with the remainder, if any, to be deposited into the General Fund. If the action is brought by a city attorney or city prosecutor, the penalty collected shall first be used to reimburse the city attorney or city prosecutor for the costs of bringing the action for civil penalties, with the remainder, if any, to be deposited into the General Fund.

(c) Notwithstanding subdivision (a), criminal penalties shall continue to apply to an unlicensed person engaging in commercial cannabis activity in violation of this division.

SEC. 24. Section 26040 of the Business and Professions Code is amended to read:

26040. (a) (1) There is established in state government a Cannabis Control Appeals Panel which shall consist of the following members:

(A) One member appointed by the Senate Committee on Rules.

(B) One member appointed by the Speaker of the Assembly.

(C) Three members appointed by the Governor and subject to confirmation by a majority vote of all of the members elected to the Senate.

(2) Each member, at the time of his or her initial appointment, shall be a resident of a different county from the one in which either of the other members resides. Members of the panel shall receive an annual salary as provided for by Chapter 6 (commencing with Section 11550) of Part 1 of Division 3 of Title 2 of the Government Code.

(b) The members of the panel may be removed from office by the Governor, and the Legislature shall have the power, by a majority vote of all members elected to each house, to remove any member from office for dereliction of duty, corruption, or incompetency.

(c) A concurrent resolution for the removal of any member of the panel may be introduced in the Legislature only if 5 Members of the Senate, or 10 Members of the Assembly, join as authors.

SEC. 25. Section 26043 of the Business and Professions Code is amended to read:

26043. (a) After proceedings pursuant to Section 26031 or 26058 or Chapter 2 (commencing with Section 480) or Chapter 3 (commencing with Section 490) of Division 1.5, any person aggrieved by the decision of a licensing authority denying the person's application for any license, denying the person's renewal of any license, placing any license on probation, imposing any condition on any license, imposing any fine on any license, assessing any penalty on any license, or canceling, suspending, revoking, or otherwise disciplining any license as provided for under this division, may appeal the licensing authority's written decision to the panel.

(b) The panel shall review the decision subject to such limitations as may be imposed by the Legislature. In such cases, the panel shall not receive evidence in addition to that considered by the licensing authority.

(c) Review by the panel of a decision of a licensing authority shall be limited to the following questions:

(1) Whether the licensing authority has proceeded without or in excess of its jurisdiction.

(2) Whether the licensing authority has proceeded in the manner required by law.

(3) Whether the decision is supported by the findings.

(4) Whether the findings are supported by substantial evidence in the light of the whole record.

SEC. 26. Section 26044 of the Business and Professions Code is amended to read:

26044. (a) In appeals where the panel finds that there is relevant evidence which, in the exercise of reasonable diligence, could not have been

produced or which was improperly excluded at the hearing before the licensing authority, it may enter an order remanding the matter to the licensing authority for reconsideration in the light of that evidence.

(b) Except as provided in subdivision (a), in all appeals, the panel shall enter an order either affirming or reversing the decision of the licensing authority. When the order reverses the decision of the licensing authority, the panel may direct the reconsideration of the matter in the light of its order and may direct the licensing authority to take such further action as is specially enjoined upon it by law, but the order shall not limit or control in any way the discretion vested by law in the licensing authority.

SEC. 27. Section 26045 of the Business and Professions Code is repealed.

SEC. 28. Section 26045 is added to the Business and Professions Code, to read:

26045. (a) No court of this state, except the Supreme Court and the courts of appeal to the extent specified in this chapter, shall have jurisdiction to review, affirm, reverse, correct, or annul any order, rule, or decision of a licensing authority or to suspend, stay, or delay the operation or execution thereof, or to restrain, enjoin, or interfere with a licensing authority in the performance of its duties, but a writ of mandate shall lie from the Supreme Court or the courts of appeal in any proper case.

(b) Any person affected by a final order of the panel, including a licensing authority, may apply to the Supreme Court or to the court of appeal for the appellate district in which the proceeding arose, for a writ of review of that final order.

(c) The application for writ of review shall be made within 30 days after filing of the final order.

(d) The provisions of the Code of Civil Procedure relating to writs of review shall, insofar as applicable, apply to proceedings in the courts as provided by this chapter. A copy of every pleading filed pursuant to this chapter shall be served on the panel, the licensing authority, and on each party who entered an appearance before the panel.

(e) No decision of a licensing authority that has been appealed to the panel and no final order of the panel shall become effective during the period in which application may be made for a writ of review, as provided by subdivision (c).

(f) The filing of a petition for, or the pendency of, a writ of review shall not of itself stay or suspend the operation of any order, rule, or decision of a licensing authority, but the court before which the petition is filed may stay or suspend, in whole or in part, the operation of the order, rule, or decision of the licensing authority subject to review, upon the terms and conditions which it by order directs.

SEC. 29. Section 26046 is added to the Business and Professions Code, to read:

26046. (a) The review by the court shall not extend further than to determine, based on the whole record of the licensing authority as certified by the panel, whether:

(1) The licensing authority has proceeded without or in excess of its jurisdiction.

(2) The licensing authority has proceeded in the manner required by law.

(3) The decision of the licensing authority is supported by the findings.

(4) The findings in the licensing authority's decision are supported by substantial evidence in the light of the whole record.

(5) There is relevant evidence which, in the exercise of reasonable diligence, could not have been produced or which was improperly excluded at the hearing before the licensing authority.

(b) Nothing in this chapter shall permit the court to hold a trial de novo, to take evidence, or to exercise its independent judgment on the evidence.

SEC. 30. Section 26047 is added to the Business and Professions Code, to read:

26047. The findings and conclusions of the licensing authority on questions of fact are conclusive and final and are not subject to review. Those questions of fact shall include ultimate facts and the findings and conclusions of the licensing authority. The panel, the licensing authority, and each party to the action or proceeding before the panel shall have the right to appear in the review proceeding. Following the hearing, the court shall enter judgment either affirming or reversing the decision of the licensing authority, or the court may remand the case for further proceedings before or reconsideration by the licensing authority.

SEC. 31. Section 26050 of the Business and Professions Code is amended to read:

26050. (a) The license classification pursuant to this division shall, at a minimum, be as follows:

(1) Type 1—Cultivation; Specialty outdoor; Small.

(2) Type 1A—Cultivation; Specialty indoor; Small.

(3) Type 1B—Cultivation; Specialty mixed-light; Small.

(4) Type 1C—Cultivation; Specialty cottage; Small.

(5) Type 2—Cultivation; Outdoor; Small.

(6) Type 2A—Cultivation; Indoor; Small.

(7) Type 2B—Cultivation; Mixed-light; Small.

(8) Type 3—Cultivation; Outdoor; Medium.

(9) Type 3A—Cultivation; Indoor; Medium.

(10) Type 3B—Cultivation; Mixed-light; Medium.

(11) Type 4—Cultivation; Nursery.

(12) Type 5—Cultivation; Outdoor; Large.

(13) Type 5A—Cultivation; Indoor; Large.

(14) Type 5B—Cultivation; Mixed-light; Large.

(15) Type 6—Manufacturer 1.

(16) Type 7—Manufacturer 2.

(17) Type 8—Testing laboratory.

(18) Type 10—Retailer.

(19) Type 11—Distributor.

(20) Type 12—Microbusiness.

(b) With the exception of testing laboratory licenses, which may be used to test cannabis and cannabis products regardless of whether they are intended for use by individuals who possess a physician's recommendation, all licenses issued under this division shall bear a clear designation indicating whether the license is for commercial adult-use cannabis activity as distinct from commercial medicinal cannabis activity by prominently affixing an "A" or "M," respectively. Examples of such a designation include, but are not limited to, "A-Type 1" or "M-Type 1." Except as specifically specified in this division, the requirements for A-licenses and M-licenses shall be the same. For testing laboratories, the bureau shall create a license that indicates a testing laboratory may test both adult-use and medicinal cannabis.

(c) A license issued pursuant to this division shall be valid for 12 months from the date of issuance. The license may be renewed annually.

(d) Each licensing authority shall establish procedures for the issuance and renewal of licenses.

SEC. 32. Section 26050.1 is added to the Business and Professions Code, to read:

26050.1. (a) Notwithstanding subdivision (c) of Section 26050, until January 1, 2019, a licensing authority may, in its sole discretion, issue a temporary license if the applicant submits all of the following:

(1) A written request to the licensing authority in a manner prescribed by the licensing authority.

(2) A copy of a valid license, permit, or other authorization, issued by a local jurisdiction, that enables the applicant to conduct commercial cannabis activity at the location requested for the temporary license.

(3) The temporary license application fee, if any, required by the licensing authority.

(b) Temporary licenses issued pursuant to this section are subject to the following conditions:

(1) Except as provided for in paragraph (4) below, the temporary license shall be valid for a period of 120 days and may be extended for additional 90-day periods at the discretion of the licensing authority. Temporary licenses shall only be eligible for an extension of the expiration date if the applicant has submitted a complete application for licensure pursuant to regulations adopted under this division.

(2) A temporary license is a conditional license and authorizes the holder thereof to engage in commercial cannabis activity as would be permitted under the privileges of the license for which the applicant has submitted an application to the licensing authority.

(3) Refusal by the licensing authority to issue or extend a temporary license shall not entitle the applicant to a hearing or appeal of the decision. Chapter 2 (commencing with Section 480) of Division 1.5 and Chapter 4 (commencing with Section 26040) of this division shall not apply to temporary licenses.

(4) A temporary license does not obligate the licensing authority to issue a nontemporary license nor does the temporary license create a vested right

in the holder to either an extension of the temporary license or to the granting of a subsequent nontemporary license.

(c) This section shall remain in effect only until January 1, 2019, and as of that date is repealed.

SEC. 33. Section 26051 of the Business and Professions Code is repealed.

SEC. 34. Section 26051 is added to the Business and Professions Code, to read:

26051. (a) The Cartwright Act, the Unfair Practices Act, the Unfair Competition Law, and the other provisions of Part 2 (commencing with Section 16600) of Division 7 apply to all licensees regulated under this division.

(b) It shall be unlawful for any person to monopolize, or attempt to monopolize, or to combine or conspire with any person or persons, to monopolize any part of the trade or commerce related to cannabis. The Attorney General shall have the sole authority to enforce the provisions of this subdivision.

(c) In determining whether to grant, deny, or renew a license for a retail license, microbusiness license, or a license issued under Section 26070.5, the bureau shall consider if an excessive concentration exists in the area where the licensee will operate. For purposes of this section “excessive concentration” applies when either of the following conditions exist:

(1) The ratio of a licensee to population in the census tract or census division in which the applicant premises are located exceeds the ratio of licensees to population in the county in which the applicant premises are located, unless denial of the application would unduly limit the development of the legal market so as to perpetuate the illegal market for cannabis or cannabis products.

(2) The ratio of retail licenses, microbusiness licenses, or licenses under Section 26070.5 to the population in the census tract, census division, or jurisdiction exceeds that allowable by local ordinance adopted under Section 26200.

SEC. 35. Section 26051.5 is added to the Business and Professions Code, to read:

26051.5. (a) An applicant for any type of state license issued pursuant to this division shall do all of the following:

(1) Require that each owner of the applicant electronically submit to the Department of Justice fingerprint images and related information required by the Department of Justice for the purpose of obtaining information as to the existence and content of a record of state or federal convictions and arrests, and information as to the existence and content of a record of state or federal convictions and arrests for which the Department of Justice establishes that the person is free on bail or on his or her own recognizance, pending trial or appeal.

(A) The Department of Justice shall provide a response to the licensing authority pursuant to paragraph (1) of subdivision (p) of Section 11105 of the Penal Code.

(B) The licensing authority shall request from the Department of Justice subsequent notification service, as provided pursuant to Section 11105.2 of the Penal Code, for applicants.

(C) The Department of Justice shall charge the applicant a fee sufficient to cover the reasonable cost of processing the requests described in this paragraph.

(2) Provide evidence of the legal right to occupy and use the proposed location and provide a statement from the landowner of real property or that landowner's agent where the commercial cannabis activity will occur, as proof to demonstrate the landowner has acknowledged and consented to permit commercial cannabis activities to be conducted on the property by the tenant applicant.

(3) Provide evidence that the proposed location is in compliance with subdivision (b) of Section 26054.

(4) Provide a statement, signed by the applicant under penalty of perjury, that the information provided is complete, true, and accurate.

(5) (A) For an applicant with 20 or more employees, provide a statement that the applicant will enter into, or demonstrate that it has already entered into, and abide by the terms of a labor peace agreement.

(B) For the purposes of this paragraph, "employee" does not include a supervisor.

(C) For the purposes of this paragraph, "supervisor" means an individual having authority, in the interest of the applicant, to hire, transfer, suspend, lay off, recall, promote, discharge, assign, reward, or discipline other employees, or responsibility to direct them or to adjust their grievances, or effectively to recommend such action, if, in connection with the foregoing, the exercise of that authority is not of a merely routine or clerical nature, but requires the use of independent judgment.

(6) Provide the applicant's valid seller's permit number issued pursuant to Part 1 (commencing with Section 6001) of Division 2 of the Revenue and Taxation Code or indicate that the applicant is currently applying for a seller's permit.

(7) Provide any other information required by the licensing authority.

(8) For an applicant seeking a cultivation license, provide a statement declaring the applicant is an "agricultural employer," as defined in the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975 (Part 3.5 (commencing with Section 1140) of Division 2 of the Labor Code), to the extent not prohibited by law.

(9) Pay all applicable fees required for licensure by the licensing authority.

(10) Provide proof of a bond to cover the costs of destruction of cannabis or cannabis products if necessitated by a violation of licensing requirements.

(b) An applicant shall also include in the application a detailed description of the applicant's operating procedures for all of the following, as required by the licensing authority:

(1) Cultivation.

(2) Extraction and infusion methods.

(3) The transportation process.

- (4) Inventory procedures.
- (5) Quality control procedures.
- (6) Security protocols.

(7) For applicants seeking licensure to cultivate, the source or sources of water the applicant will use for cultivation, as provided in subdivisions (a) to (c), inclusive, of Section 26060.1. For purposes of this paragraph, “cultivation” as used in Section 26060.1 shall have the same meaning as defined in Section 26001. The Department of Food and Agriculture shall consult with the State Water Resources Control Board and the Department of Fish and Wildlife in the implementation of this paragraph.

(c) The applicant shall also provide a complete detailed diagram of the proposed premises wherein the license privileges will be exercised, with sufficient particularity to enable ready determination of the bounds of the premises, showing all boundaries, dimensions, entrances and exits, interior partitions, walls, rooms, and common or shared entryways, and include a brief statement or description of the principal activity to be conducted therein, and, for licenses permitting cultivation, measurements of the planned canopy, including aggregate square footage and individual square footage of separate cultivation areas, if any, roads, water crossings, points of diversion, water storage, and all other facilities and infrastructure related to the cultivation.

(d) Provide a complete list of every person with a financial interest in the person applying for the license as required by the licensing authority. For purposes of this subdivision, “persons with a financial interest” does not include persons whose only interest in a licensee is an interest in a diversified mutual fund, blind trust, or similar instrument.

SEC. 36. Section 26052 of the Business and Professions Code is amended to read:

26052. (a) A licensee shall not perform any of the following acts, or permit any of the following acts to be performed by any employee, agent, or contractor of the licensee:

- (1) Make any contract in restraint of trade in violation of Section 16600.
- (2) Form a trust or other prohibited organization in restraint of trade in violation of Section 16720.

(3) Make a sale or contract for the sale of cannabis or cannabis products, or to fix a price charged therefor, or discount from, or rebate upon, that price, on the condition, agreement, or understanding that the consumer or purchaser thereof shall not use or deal in the goods, merchandise, machinery, supplies, commodities, or services of a competitor or competitors of the seller, where the effect of that sale, contract, condition, agreement, or understanding may be to substantially lessen competition or tend to create a monopoly in any line of trade or commerce.

(4) Sell any cannabis or cannabis products at less than cost for the purpose of injuring competitors, destroying competition, or misleading or deceiving purchasers or prospective purchasers.

(5) Discriminate between different sections, communities, or cities or portions thereof, or between different locations in those sections,

communities, or cities or portions thereof in this state, by selling or furnishing cannabis or cannabis products at a lower price in one section, community, or city or any portion thereof, or in one location in that section, community, or city or any portion thereof, than in another, for the purpose of injuring competitors or destroying competition.

(6) Sell any cannabis or cannabis products at less than the cost thereof to such vendor, or to give away any article or product for the purpose of injuring competitors or destroying competition.

(b) Any person who, either as director, officer, or agent of any firm or corporation, or as agent of any person, violates the provisions of this chapter, or assists or aids, directly or indirectly, in that violation is responsible therefor equally with the person, firm, or corporation for which that person acts.

(c) Any person or trade association may bring an action to enjoin and restrain any violation of this section for the recovery of damages.

SEC. 37. Section 26053 of the Business and Professions Code is amended to read:

26053. (a) All commercial cannabis activity shall be conducted between licensees, except as otherwise provided in this division.

(b) A person that holds a state testing laboratory license under this division is prohibited from licensure for any other activity, except testing, as authorized under this division. A person that holds a state testing laboratory license shall not employ an individual who is also employed by any other licensee that does not hold a state testing laboratory license.

(c) Except as provided in subdivision (b), a person may apply for and be issued more than one license under this division, provided the licensed premises are separate and distinct.

(d) Each applicant or licensee shall apply for, and if approved, shall obtain, a separate license for each location where it engages in commercial cannabis activity.

SEC. 38. Section 26054 of the Business and Professions Code is amended to read:

26054. (a) A licensee shall not sell alcoholic beverages or tobacco products on or at any premises licensed under this division.

(b) A premises licensed under this division shall not be located within a 600-foot radius of a school providing instruction in kindergarten or any grades 1 through 12, day care center, or youth center that is in existence at the time the license is issued, unless a licensing authority or a local jurisdiction specifies a different radius. The distance specified in this section shall be measured in the same manner as provided in subdivision (c) of Section 11362.768 of the Health and Safety Code unless otherwise provided by law.

(c) It shall not be a violation of state or local law for a business engaged in the manufacture of cannabis accessories to possess, transport, purchase, or otherwise obtain small amounts of cannabis or cannabis products as necessary to conduct research and development related to the cannabis accessories, provided the cannabis and cannabis products are obtained from

a person licensed under this division permitted to provide or deliver the cannabis or cannabis products.

(d) It shall not be a violation of state or local law for an agent of a licensing authority to possess, transport, or obtain cannabis or cannabis products as necessary to conduct activities reasonably related to the duties of the licensing authority.

SEC. 39. Section 26054.1 of the Business and Professions Code is repealed.

SEC. 40. Section 26054.2 of the Business and Professions Code is amended to read:

26054.2. (a) A licensing authority shall give priority in issuing licenses under this division to applicants that can demonstrate to the authority's satisfaction that the applicant operated in compliance with the Compassionate Use Act of 1996 (Section 11362.5 of the Health and Safety Code) and its implementing laws before September 1, 2016.

(b) The licensing authorities shall request that local jurisdictions identify for the licensing authorities potential applicants for licensure based on the applicants' prior operation in the local jurisdiction in compliance with state law, including the Compassionate Use Act of 1996 (Section 11362.5 of the Health and Safety Code) and its implementing laws, and any applicable local laws.

(c) In addition to or in lieu of the information described in subdivision (b), an applicant may furnish other evidence as deemed appropriate by the licensing authority to demonstrate operation in compliance with the Compassionate Use Act of 1996 (Section 11362.5 of the Health and Safety Code). The licensing authorities may accept such evidence to demonstrate eligibility for the priority provided for in subdivision (a).

(d) This section shall cease to be operative on December 31, 2019, unless otherwise provided by law.

SEC. 41. Section 26055 of the Business and Professions Code is amended to read:

26055. (a) Licensing authorities may issue state licenses only to qualified applicants.

(b) Revocation of a state license issued under this division shall terminate the ability of the licensee to operate pursuant to that license within California until a new license is obtained.

(c) A licensee shall not change or alter the premises in a manner which materially or substantially alters the premises, the usage of the premises, or the mode or character of business operation conducted from the premises, from the plan contained in the diagram on file with the application, unless and until written approval by the licensing authority has been obtained. For purposes of this section, material or substantial physical changes of the premises, or in the usage of the premises, shall include, but not be limited to, a substantial increase or decrease in the total area of the licensed premises previously diagrammed, or any other physical modification resulting in substantial change in the mode or character of business operation.

(d) Licensing authorities shall not approve an application for a state license under this division if approval of the state license will violate the provisions of any local ordinance or regulation adopted in accordance with Section 26200.

(e) An applicant may voluntarily provide proof of a license, permit, or other authorization from the local jurisdiction verifying that the applicant is in compliance with the local jurisdiction.

(f) (1) A local jurisdiction shall provide to the bureau a copy of any ordinance or regulation related to commercial cannabis activity and the name and contact information for the person who will serve as the contact for state licensing authorities regarding commercial cannabis activity within the jurisdiction. If a local jurisdiction does not provide a contact person, the bureau shall assume that the clerk of the legislative body of the local jurisdiction is the contact person.

(2) Whenever there is a change in a local ordinance or regulation adopted pursuant to Section 26200 or a change in the contact person for the jurisdiction, the local jurisdiction shall provide that information to the bureau.

(3) The bureau shall share the information required by this subdivision with the other licensing authorities.

(g) (1) The licensing authority shall deny an application for a license under this division for a commercial cannabis activity that the local jurisdiction has notified the bureau is prohibited in accordance with subdivision (f). The licensing authority shall notify the contact person for the local jurisdiction of each application denied due to the local jurisdiction's indication that the commercial cannabis activity for which a license is sought is prohibited by a local ordinance or regulation.

(2) Prior to issuing a state license under this division for any commercial cannabis activity:

(A) The licensing authority shall notify the contact person for the local jurisdiction of the receipt of an application for commercial cannabis activity within their jurisdiction.

(B) A local jurisdiction may notify the licensing authority that the applicant is not in compliance with a local ordinance or regulation. In this instance, the licensing authority shall deny the application.

(C) A local jurisdiction may notify the licensing authority that the applicant is in compliance with all applicable local ordinances and regulations. In this instance, the licensing authority may proceed with the licensing process.

(D) If the local jurisdiction does not provide notification of compliance or noncompliance with applicable local ordinances or regulations, or otherwise does not provide notification indicating that the completion of the local permitting process is still pending, within 60 business days of receiving the inquiry from a licensing authority submitted pursuant to subparagraph (A), the licensing authority shall make a rebuttable presumption that the applicant is in compliance with all local ordinances and regulations adopted in accordance with Section 26200, except as provided in subparagraphs (E) and (F).

(E) At any time after expiration of the 60-business-day period set forth in subparagraph (D), the local jurisdiction may provide written notification to the licensing authority that the applicant or licensee is not in compliance with a local ordinance or regulation adopted in accordance with Section 26200. Upon receiving this notification, the licensing authority shall not presume that the applicant or licensee has complied with all local ordinances and regulations adopted in accordance with Section 26200, and may commence disciplinary action in accordance with Chapter 3 (commencing with Section 26030). If the licensing authority does not take action against the licensee before the time of the renewal of the license, the license shall not be renewed until and unless the local jurisdiction notifies the licensing authority that the licensee is once again in compliance with local ordinances.

(F) A presumption by a licensing authority pursuant to this paragraph that an applicant has complied with all local ordinances and regulations adopted in accordance with Section 26200 shall not prevent, impair, or preempt the local government from enforcing all applicable local ordinances or regulations against the applicant, nor shall the presumption confer any right, vested or otherwise, upon the applicant to commence or continue operating in any local jurisdiction except in accordance with all local ordinances or regulations.

(3) For purposes of this section, “notification” includes written notification or access by a licensing authority to a local jurisdiction’s registry, database, or other platform designated by a local jurisdiction, containing information specified by the licensing authority, on applicants to determine local compliance.

(h) Without limiting any other statutory exemption or categorical exemption, Division 13 (commencing with Section 21000) of the Public Resources Code does not apply to the adoption of an ordinance, rule, or regulation by a local jurisdiction that requires discretionary review and approval of permits, licenses, or other authorizations to engage in commercial cannabis activity. To qualify for this exemption, the discretionary review in any such law, ordinance, rule, or regulation shall include any applicable environmental review pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code. This subdivision shall become inoperative on July 1, 2019.

(i) A local or state public agency may charge and collect a fee from a person proposing a project pursuant to subdivision (a) of Section 21089 of the Public Resources Code.

SEC. 42. Section 26056 of the Business and Professions Code is repealed.

SEC. 43. Section 26056.5 of the Business and Professions Code is repealed.

SEC. 44. Section 26056 is added to the Business and Professions Code, to read:

26056. The requirements of Sections 13143.9, 13145, and 13146 of the Health and Safety Code shall apply to all licensees.

SEC. 45. Section 26057 of the Business and Professions Code is amended to read:

26057. (a) The licensing authority shall deny an application if either the applicant, or the premises for which a state license is applied, do not qualify for licensure under this division.

(b) The licensing authority may deny the application for licensure or renewal of a state license if any of the following conditions apply:

(1) Failure or inability to comply with the provisions of this division, any rule or regulation adopted pursuant to this division, or any requirement imposed to protect natural resources, including, but not limited to, protections for instream flow, water quality, and fish and wildlife.

(2) Conduct that constitutes grounds for denial of licensure under Chapter 2 (commencing with Section 480) of Division 1.5, except as otherwise specified in this section and Section 26059.

(3) Failure to provide information required by the licensing authority.

(4) The applicant, owner, or licensee has been convicted of an offense that is substantially related to the qualifications, functions, or duties of the business or profession for which the application is made, except that if the licensing authority determines that the applicant, owner, or licensee is otherwise suitable to be issued a license, and granting the license would not compromise public safety, the licensing authority shall conduct a thorough review of the nature of the crime, conviction, circumstances, and evidence of rehabilitation of the applicant or owner, and shall evaluate the suitability of the applicant, owner, or licensee to be issued a license based on the evidence found through the review. In determining which offenses are substantially related to the qualifications, functions, or duties of the business or profession for which the application is made, the licensing authority shall include, but not be limited to, the following:

(A) A violent felony conviction, as specified in subdivision (c) of Section 667.5 of the Penal Code.

(B) A serious felony conviction, as specified in subdivision (c) of Section 1192.7 of the Penal Code.

(C) A felony conviction involving fraud, deceit, or embezzlement.

(D) A felony conviction for hiring, employing, or using a minor in transporting, carrying, selling, giving away, preparing for sale, or peddling, any controlled substance to a minor; or selling, offering to sell, furnishing, offering to furnish, administering, or giving any controlled substance to a minor.

(E) A felony conviction for drug trafficking with enhancements pursuant to Section 11370.4 or 11379.8 of the Health and Safety Code.

(5) Except as provided in subparagraphs (D) and (E) of paragraph (4) and notwithstanding Chapter 2 (commencing with Section 480) of Division 1.5, a prior conviction, where the sentence, including any term of probation, incarceration, or supervised release, is completed, for possession of, possession for sale, sale, manufacture, transportation, or cultivation of a controlled substance is not considered substantially related, and shall not be the sole ground for denial of a license. Conviction for any controlled substance felony subsequent to licensure shall be grounds for revocation of a license or denial of the renewal of a license.

(6) The applicant, or any of its officers, directors, or owners, has been subject to fines, penalties, or otherwise been sanctioned for cultivation or production of a controlled substance on public or private lands pursuant to Section 12025 or 12025.1 of the Fish and Game Code.

(7) The applicant, or any of its officers, directors, or owners, has been sanctioned by a licensing authority or a city, county, or city and county for unauthorized commercial cannabis activities, has had a license suspended or revoked under this division in the three years immediately preceding the date the application is filed with the licensing authority.

(8) Failure to obtain and maintain a valid seller's permit required pursuant to Part 1 (commencing with Section 6001) of Division 2 of the Revenue and Taxation Code.

(9) Any other condition specified in law.

SEC. 46. Section 26058 of the Business and Professions Code is amended to read:

26058. Upon the denial of any application for a license, the licensing authority shall notify the applicant in writing. Within 30 days of service of the notice, the applicant may file a written petition for a license with the licensing authority. Upon receipt of a timely filed petition, the licensing authority shall set the petition for hearing. The hearing shall be conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, and the director of each licensing authority shall have all the powers granted therein. Any appeal from a final decision of the licensing authority shall be conducted in accordance with Chapter 4 (commencing with Section 26040).

SEC. 47. Section 26060 of the Business and Professions Code is amended to read:

26060. (a) Regulations issued by the Department of Food and Agriculture governing the licensing of indoor, outdoor, nursery, special cottage, and mixed-light cultivation sites shall apply to licensed cultivators under this division. The Department of Food and Agriculture shall have the authority necessary for the implementation of the regulations it adopts pursuant to this division, including regulations governing the licensing of indoor, outdoor, mixed-light cultivation site, nursery, and special cottage cultivation.

(b) The regulations shall do all of the following:

(1) Provide that weighing or measuring devices used in connection with the sale or distribution of cannabis are required to meet standards equivalent to Division 5 (commencing with Section 12001).

(2) Require that cannabis cultivation by licensees is conducted in accordance with state and local laws.

(3) Establish procedures for the issuance and revocation of unique identifiers for activities associated with a cannabis cultivation license, pursuant to Chapter 6.5 (commencing with Section 26067). All cannabis shall be labeled with the unique identifier issued by the Department of Food and Agriculture.

(4) Prescribe standards, in consultation with the bureau, for the reporting of information as necessary related to unique identifiers pursuant to Chapter 6.5 (commencing with Section 26067).

(c) The Department of Food and Agriculture shall serve as the lead agency for purposes of the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) related to the licensing of cannabis cultivation.

(d) The Department of Pesticide Regulation shall develop guidelines for the use of pesticides in the cultivation of cannabis and residue in harvested cannabis.

(e) A cannabis cultivator shall not use any pesticide that has been banned for use in the state.

(f) The regulations promulgated by the Department of Food and Agriculture under this division shall implement the requirements of subdivision(b) of Section 26060.1.

(g) The Department of Pesticide Regulation shall require that the application of pesticides or other pest control in connection with the indoor, outdoor, nursery, specialty cottage, or mixed-light cultivation of cannabis complies with Division 6 (commencing with Section 11401) of the Food and Agricultural Code and its implementing regulations.

SEC. 48. Section 26060.1 is added to the Business and Professions Code, to read:

26060.1. (a) An application for a license for cultivation issued by the Department of Food and Agriculture shall identify the source of water supply as follows:

(1) (A) If water will be supplied by a retail water supplier, as defined in Section 13575 of the Water Code, the application shall identify the retail water supplier.

(B) Paragraphs (2) and (3) do not apply to any water subject to subparagraph (A) unless the retail water supplier has 10 or fewer customers, the applicant receives 10 percent or more of the water supplied by the retail water supplier, 25 percent or more of the water delivered by the retail water supplier is used for cannabis cultivation, or the applicant and the retail water supplier are affiliates, as defined in Section 2814.20 of Title 23 of the California Code of Regulations.

(2) If the water supply includes a diversion within the meaning of Section 5100 of the Water Code, the application shall identify the point of diversion and the maximum amount to be diverted as follows:

(A) For an application submitted before January 1, 2019, the application shall include a copy of one of the following:

(i) A small irrigation use registration certificate, permit, or license issued pursuant to Part 2 (commencing with Section 1200) of Division 2 of the Water Code that covers the diversion.

(ii) A statement of water diversion and use filed with the State Water Resources Control Board before July 1, 2017, that covers the diversion and specifies the amount of water used for cannabis cultivation.

(iii) A pending application for a permit to appropriate water, filed with the State Water Resources Control Board before July 1, 2017.

(iv) Documentation submitted to the State Water Resources Control Board before July 1, 2017, demonstrating that the diversion is subject to subdivision (a), (c), (d), or (e) of Section 5101 of the Water Code.

(v) Documentation submitted to the State Water Resources Control Board before July 1, 2017, demonstrating that the diversion is authorized under a riparian right and that no diversion occurred after January 1, 2010, and before January 1, 2017. The documentation shall be submitted on or accompany a form provided by the State Water Resources Control Board and shall include all of the information outlined in subdivisions (a) to (d), inclusive, and (e) of Section 5103 of the Water Code. The documentation shall also include a general description of the area in which the water will be used in accordance with subdivision (g) of Section 5103 of the Water Code and the year in which the diversion is planned to commence.

(B) For an application submitted after December 31, 2018, the application shall include a copy of one of the following:

(i) A small irrigation use registration certificate, permit, or license issued pursuant to Part 2 (commencing with Section 1200) of Division 2 of the Water Code that covers the diversion.

(ii) A statement of water diversion and use filed with the State Water Resources Control Board that covers the diversion and specifies the amount of water used for cannabis cultivation.

(iii) Documentation submitted to the State Water Resources Control Board demonstrating that the diversion is subject to subdivision (a), (c), (d), or (e) of Section 5101 of the Water Code.

(iv) Documentation submitted to the State Water Resources Control Board demonstrating that the diversion is authorized under a riparian right and that no diversion occurred after January 1, 2010, and in the calendar year in which the application is submitted. The documentation shall be submitted on or accompany a form provided by the State Water Resources Control Board and shall include all of the information outlined in subdivisions (a) to (d), inclusive, and (e) of Section 5103 of the Water Code. The documentation shall also include a general description of the area in which the water will be used in accordance with subdivision (g) of Section 5103 of the Water Code and the year in which the diversion is planned to commence.

(3) If water will be supplied from a groundwater extraction not subject to paragraph (2), the application shall identify the location of the extraction and the maximum amount to be diverted for cannabis cultivation in any year.

(b) The Department of Food and Agriculture shall include in any license for cultivation all of the following:

(1) Conditions requested by the Department of Fish and Wildlife and the State Water Resources Control Board to (A) ensure that individual and cumulative effects of water diversion and discharge associated with cultivation do not affect the instream flows needed for fish spawning,

migration, and rearing, and the flows needed to maintain natural flow variability; (B) ensure that cultivation does not negatively impact springs, riparian habitat, wetlands, or aquatic habitat; and (C) otherwise protect fish, wildlife, fish and wildlife habitat, and water quality. The conditions shall include, but not be limited to, the principles, guidelines, and requirements established pursuant to Section 13149 of the Water Code.

(2) Any relevant mitigation requirements the Department of Food and Agriculture identifies as part of its approval of the final environmental documentation for the cannabis cultivation licensing program as requirements that should be included in a license for cultivation. Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code does not apply to the identification of these mitigation measures. This paragraph does not reduce any requirements established pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.

(3) A condition that the license shall not be effective until the licensee has demonstrated compliance with Section 1602 of the Fish and Game Code or receives written verification from the Department of Fish and Wildlife that a streambed alteration agreement is not required.

(c) The Department of Food and Agriculture shall consult with the State Water Resources Control Board and the Department of Fish and Wildlife in the implementation of this section.

(d) Notwithstanding paragraph (1) of subdivision (b), the Department of Food and Agriculture is not responsible for verifying compliance with the conditions requested or imposed by the Department of Fish and Wildlife or the State Water Resources Control Board. The Department of Fish and Wildlife or the State Water Resources Control Board, upon finding and making the final determination of a violation of a condition included pursuant to paragraph (1) of subdivision (b), shall notify the Department of Food and Agriculture, which may take appropriate action with respect to the licensee in accordance with Chapter 3 (commencing with Section 26030).

SEC. 49. Section 26061 of the Business and Professions Code is amended to read:

26061. (a) The state cultivator license types to be issued by the Department of Food and Agriculture under this division shall include all of the following:

(1) Type 1, or “specialty outdoor,” for outdoor cultivation using no artificial lighting of less than or equal to 5,000 square feet of total canopy size on one premises, or up to 50 mature plants on noncontiguous plots.

(2) Type 1A, or “specialty indoor,” for indoor cultivation using exclusively artificial lighting of between 501 and 5,000 square feet of total canopy size on one premises.

(3) Type 1B, or “specialty mixed-light,” for cultivation using a combination of natural and supplemental artificial lighting at a maximum threshold to be determined by the licensing authority, of between 2,501 and 5,000 square feet of total canopy size on one premises.

(4) Type 1C, or “specialty cottage,” for cultivation using a combination of natural and supplemental artificial lighting at a maximum threshold to

be determined by the licensing authority, of 2,500 square feet or less of total canopy size for mixed-light cultivation, up to 25 mature plants for outdoor cultivation, or 500 square feet or less of total canopy size for indoor cultivation, on one premises.

(5) Type 2, or “small outdoor,” for outdoor cultivation using no artificial lighting between 5,001 and 10,000 square feet, inclusive, of total canopy size on one premises.

(6) Type 2A, or “small indoor,” for indoor cultivation using exclusively artificial lighting between 5,001 and 10,000 square feet, inclusive, of total canopy size on one premises.

(7) Type 2B, or “small mixed-light,” for cultivation using a combination of natural and supplemental artificial lighting at a maximum threshold to be determined by the licensing authority, between 5,001 and 10,000 square feet, inclusive, of total canopy size on one premises.

(8) Type 3, or “outdoor,” for outdoor cultivation using no artificial lighting from 10,001 square feet to one acre, inclusive, of total canopy size on one premises. The Department of Food and Agriculture shall limit the number of licenses allowed of this type.

(9) Type 3A, or “indoor,” for indoor cultivation using exclusively artificial lighting between 10,001 and 22,000 square feet, inclusive, of total canopy size on one premises. The Department of Food and Agriculture shall limit the number of licenses allowed of this type.

(10) Type 3B, or “mixed-light,” for cultivation using a combination of natural and supplemental artificial lighting at a maximum threshold to be determined by the licensing authority, between 10,001 and 22,000 square feet, inclusive, of total canopy size on one premises. The Department of Food and Agriculture shall limit the number of licenses allowed of this type.

(11) Type 4, or “nursery” for cultivation of cannabis solely as a nursery.

(b) Except as otherwise provided by law:

(1) Type 5, or “outdoor,” means for outdoor cultivation using no artificial lighting greater than one acre, inclusive, of total canopy size on one premises.

(2) Type 5A, or “indoor,” means for indoor cultivation using exclusively artificial lighting greater than 22,000 square feet, inclusive, of total canopy size on one premises.

(3) Type 5B, or “mixed-light,” means for cultivation using a combination of natural and supplemental artificial lighting at a maximum threshold to be determined by the licensing authority, greater than 22,000 square feet, inclusive, of total canopy size on one premises.

(c) No Type 5, Type 5A, or Type 5B cultivation licenses may be issued before January 1, 2023.

(d) Commencing on January 1, 2023, a Type 5, Type 5A, or Type 5B licensee may apply for and hold a Type 6 or Type 7 license and apply for and hold a Type 10 license. A Type 5, Type 5A, or Type 5B licensee shall not be eligible to apply for or hold a Type 8, Type 11, or Type 12 license.

SEC. 50. Section 26062 of the Business and Professions Code is repealed.

SEC. 51. Section 26062 is added to the Business and Professions Code, to read:

26062. (a) No later than January 1, 2021, the Department of Food and Agriculture shall establish a program for cannabis that is comparable to the National Organic Program (Section 6517 of the federal Organic Foods Production Act of 1990 (7 U.S.C. Sec. 6501 et seq.)), and the California Organic Food and Farming Act (Chapter 10 (commencing with Section 46000) of Division 17 of the Food and Agricultural Code) and Article 7 (commencing with Section 110810) of Chapter 5 of Part 5 of Division 104 of the Health and Safety Code. The Department of Food and Agriculture shall be the sole determiner of designation and certification.

(b) If at any time preceding or following the establishment of a program by the Department of Food and Agriculture pursuant to subdivision (a), the National Organic Program (Section 6517 of the federal Organic Foods Production Act of 1990 (7 U.S.C. Sec. 6501 et seq.)) authorizes organic designation and certification for cannabis, this section shall become inoperative and, as of January 1, of the following year, is repealed.

SEC. 52. Section 26062.5 is added to the Business and Professions Code, to read:

26062.5. A person shall not represent, sell, or offer for sale any cannabis or cannabis product as organic except in accordance with the National Organic Program (Section 6517 of the federal Organic Foods Production Act of 1990 (7 U.S.C. Sec. 6501 et seq.)), if applicable. A person shall not represent, sell, or offer for sale any cannabis or cannabis product with the designation or certification established by the Department of Food and Agriculture pursuant to subdivision (a) of Section 26062 except in accordance with that subdivision.

SEC. 53. Section 26063 of the Business and Professions Code is amended to read:

26063. (a) No later than January 1, 2018, the Department of Food and Agriculture shall establish standards by which a licensed cultivator may designate a county of origin for cannabis. To be eligible for the designation, 100 percent of the cannabis shall be produced within the designated county, as defined by finite political boundaries.

(1) Cannabis shall not be advertised, marketed, labeled, or sold as grown in a California county when the cannabis was not grown in that county.

(2) The name of a California county, including any similar name that is likely to mislead consumers as to the origin of the product, shall not be used in the advertising, labeling, marketing, or packaging of cannabis products unless the cannabis contained in the product was grown in that county.

(b) No later than January 1, 2021, the Department of Food and Agriculture shall establish a process by which licensed cultivators may establish appellations of standards, practices, and varietals applicable to cannabis grown in a certain geographical area in California, not otherwise specified in subdivision (a).

SEC. 54. Section 26064 of the Business and Professions Code is repealed.

SEC. 55. Section 26065 of the Business and Professions Code is amended to read:

26065. An employee engaged in the cultivation of cannabis under this division shall be subject to Wage Order No. 4-2001 of the Industrial Welfare Commission.

SEC. 56. Section 26066 of the Business and Professions Code is amended to read:

26066. Indoor and outdoor cannabis cultivation by persons and entities licensed under this division shall be conducted in accordance with state and local laws related to land conversion, current building and fire standards, grading, electricity usage, water usage, water quality, woodland and riparian habitat protection, agricultural discharges, and similar matters. State agencies, including, but not limited to, the State Board of Forestry and Fire Protection, the Department of Fish and Wildlife, the State Water Resources Control Board, the California regional water quality control boards, and traditional state law enforcement agencies, shall address environmental impacts of cannabis cultivation and shall coordinate when appropriate with cities and counties and their law enforcement agencies in enforcement efforts.

SEC. 57. Section 26067 of the Business and Professions Code is repealed.

SEC. 58. Chapter 6.5 (commencing with Section 26067) is added to Division 10 of the Business and Professions Code, to read:

CHAPTER 6.5. UNIQUE IDENTIFIERS AND TRACK AND TRACE

26067. (a) The department, in consultation with the bureau, shall establish a track and trace program for reporting the movement of cannabis and cannabis products throughout the distribution chain that utilizes a unique identifier pursuant to Section 26069, secure packaging, and is capable of providing information that captures, at a minimum, all of the following:

- (1) The licensee receiving the product.
 - (2) The transaction date.
 - (3) The cultivator from which the product originates, including the associated unique identifier pursuant to Section 26069.
- (b) (1) The department, in consultation with the State Board of Equalization, shall create an electronic database containing the electronic shipping manifests to facilitate the administration of the track and trace program, which shall include, but not be limited to, the following information:
- (A) The variety and quantity or weight of products shipped.
 - (B) The estimated times of departure and arrival.
 - (C) The variety and quantity or weight of products received.
 - (D) The actual time of departure and arrival.
 - (E) A categorization of the product.
 - (F) The license number and the unique identifier pursuant to Section 26069 issued by the licensing authority for all licensees involved in the shipping process, including, but not limited to, cultivators, manufacturers, distributors, and dispensaries.

(2) (A) The database shall be designed to flag irregularities for all licensing authorities in this division to investigate. All licensing authorities pursuant to this division may access the database and share information related to licensees under this chapter, including social security and individual taxpayer identifications notwithstanding Section 30.

(B) The department shall immediately inform the bureau upon the finding of an irregularity or suspicious finding related to a licensee, applicant, or commercial cannabis activity for investigatory purposes.

(3) Licensing authorities and state and local agencies may, at any time, inspect shipments and request documentation for current inventory.

(4) The bureau shall have 24-hour access to the electronic database administered by the department. The State Board of Equalization shall have read access to the electronic database for the purpose of taxation and regulation of cannabis and cannabis products.

(5) The department shall be authorized to enter into memoranda of understandings with licensing authorities for data sharing purposes, as deemed necessary by the department.

(6) Information received and contained in records kept by the department or licensing authorities for the purposes of administering this chapter are confidential and shall not be disclosed pursuant to the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code), except as necessary for authorized employees of the State of California or any city, county, or city and county to perform official duties pursuant to this division or a local ordinance.

(7) Upon the request of a state or local law enforcement agency, licensing authorities shall allow access to or provide information contained within the database to assist law enforcement in their duties and responsibilities pursuant to this division.

26068. (a) The department, in consultation with the bureau and the State Board of Equalization, shall ensure that the track and trace program can also track and trace the amount of the cultivation tax due pursuant to Part 14.5 (commencing with Section 34010) of Division 2 of the Revenue and Taxation Code. The track and trace program shall include an electronic seed to sale software tracking system with data points for the different stages of commercial activity, including, but not limited to, cultivation, harvest, processing, distribution, inventory, and sale.

(b) The department, in consultation with the bureau, shall ensure that licensees under this division are allowed to use third-party applications, programs, and information technology systems to comply with the requirements of the expanded track and trace program described in subdivision (a) to report the movement of cannabis and cannabis products throughout the distribution chain and communicate the information to licensing agencies as required by law.

(c) Any software, database, or other information technology system utilized by the department to implement the expanded track and trace program shall support interoperability with third-party cannabis business software applications and allow all licensee-facing system activities to be

performed through a secure application programming interface (API) or comparable technology that is well documented, bi-directional, and accessible to any third-party application that has been validated and has appropriate credentials. The API or comparable technology shall have version control and provide adequate notice of updates to third-party applications. The system should provide a test environment for third-party applications to access that mirrors the production environment.

26069. (a) The department shall establish a Cannabis Cultivation Program to be administered by the secretary. The secretary shall administer this section as it pertains to the cultivation of cannabis. For purposes of this division, cannabis is an agricultural product.

(b) A person or entity shall not cultivate cannabis without first obtaining a state license issued by the department pursuant to this section.

(c) (1) The department, in consultation with, but not limited to, the bureau, shall implement a unique identification program for cannabis. In implementing the program, the department shall consider issues including, but not limited to, water use and environmental impacts. If the State Water Resources Control Board or the Department of Fish and Wildlife finds, based on substantial evidence, that cannabis cultivation is causing significant adverse impacts on the environment in a watershed or other geographic area, the department shall not issue new licenses or increase the total number of plant identifiers within that watershed or area.

(2) (A) The department shall establish a program for the identification of permitted cannabis plants at a cultivation site during the cultivation period. A unique identifier shall be issued for each cannabis plant. The department shall ensure that unique identifiers are issued as quickly as possible to ensure the implementation of this division. The unique identifier shall be attached at the base of each plant or as otherwise required by law or regulation.

(B) Unique identifiers shall only be issued to those persons appropriately licensed by this section.

(C) Information associated with the assigned unique identifier and licensee shall be included in the trace and track program specified in Section 26067.

(D) The department may charge a fee to cover the reasonable costs of issuing the unique identifier and monitoring, tracking, and inspecting each cannabis plant.

(E) The department may promulgate regulations to implement this section.

(3) The department shall take adequate steps to establish protections against fraudulent unique identifiers and limit illegal diversion of unique identifiers to unlicensed persons.

(d) A city, county, or city and county may administer unique identifiers and associated identifying information but a city, county, or city and county's identifiers shall not supplant the department's track and trace program.

(e) (1) This section does not apply to the cultivation of cannabis in accordance with Section 11362.1 of the Health and Safety Code or the Compassionate Use Act.

(2) Subdivision (b) does not apply to persons or entities licensed under subdivision (b) of Section 26070.5.

26069.1. The secretary may enter into a cooperative agreement with a county agricultural commissioner or other state or local agency to assist the department in implementing the provisions of this division related to administration, investigation, inspection, fee collection, document management, education and outreach, distribution of individual licenses approved by the secretary, and technical assistance pertaining to the cultivation of cannabis. The department shall pay compensation under a cooperative agreement from fees collected and deposited pursuant to this division and shall provide reimbursement to a county agricultural commissioner, state, or local agency for associated costs. The secretary shall not delegate through a cooperative agreement, or otherwise, its authority to issue cultivation licenses to a county agricultural commissioner, local agency, or another state agency. The secretary shall provide notice of any cooperative agreement entered into pursuant to this section to other relevant state agencies involved in the regulation of cannabis cultivation. No cooperative agreement under this section shall relieve the department of its obligations under paragraph (2) of subdivision (a) of Section 26012 to administer the provisions of this division related to, and associated with, the cultivation of cannabis.

26069.9. For purposes of this chapter:

- (a) “Department” means the Department of Food and Agriculture.
- (b) “Secretary” means the Secretary of Food and Agriculture.

SEC. 59. Section 26070 of the Business and Professions Code is amended to read:

26070. Retailers and Distributors.

(a) State licenses to be issued by the bureau related to the sale and distribution of cannabis and cannabis products are as follows:

(1) “Retailer,” for the retail sale and delivery of cannabis or cannabis products to customers. A retailer shall have a licensed premises which is a physical location from which commercial cannabis activities are conducted. A retailer’s premises may be closed to the public. A retailer may conduct sales exclusively by delivery.

(2) “Distributor,” for the distribution of cannabis and cannabis products. A distributor licensee shall be bonded and insured at a minimum level established by the licensing authority.

(3) (A) “Microbusiness,” for the cultivation of cannabis on an area less than 10,000 square feet and to act as a licensed distributor, Level 1 manufacturer, and retailer under this division, provided such licensee can demonstrate compliance with all requirements imposed by this division on licensed cultivators, distributors, Level 1 manufacturers, and retailers to the extent the licensee engages in such activities. Microbusiness licenses that authorize cultivation of cannabis shall include the license conditions described in subdivision (b) of Section 26060.1.

(B) In coordination with each other, the licensing authorities shall establish a process by which an applicant for a microbusiness license can

demonstrate compliance with all the requirements under this division for the activities that will be conducted under the license.

(C) The bureau may enter into interagency agreements with licensing authorities to implement and enforce the provisions of this division related to microbusinesses. The costs of activities carried out by the licensing authorities as requested by the bureau pursuant to the interagency agreement shall be calculated into the application and licensing fees collected pursuant to this division, and shall provide for reimbursement to state agencies for associated costs as provided for in the interagency agreement.

(b) The bureau shall establish minimum security and transportation safety requirements for the commercial distribution and delivery of cannabis and cannabis products. The transportation of cannabis and cannabis products shall only be conducted by persons holding a distributor license under this division or employees of those persons. Transportation safety standards established by the bureau shall include, but not be limited to, minimum standards governing the types of vehicles in which cannabis and cannabis products may be distributed and delivered and minimum qualifications for persons eligible to operate such vehicles.

(c) The driver of a vehicle transporting cannabis or cannabis products shall be directly employed by a licensee authorized to transport cannabis or cannabis products.

(d) Notwithstanding any other law, all vehicles transporting cannabis and cannabis products for hire shall be required to have a valid motor carrier permit pursuant to Chapter 2 (commencing with Section 34620) of Division 14.85 of the Vehicle Code. The Department of the California Highway Patrol shall have authority over the safe operation of these vehicles, including, but not limited to, requiring licensees engaged in the transportation of cannabis or cannabis products to participate in the Basic Inspection of Terminals (BIT) program pursuant to Section 34501.12 of the Vehicle Code.

(e) Prior to transporting cannabis or cannabis products, a licensed distributor shall do both of the following:

(1) Complete an electronic shipping manifest as prescribed by the licensing authority. The shipping manifest shall include the unique identifier, pursuant to Section 26069, issued by the Department of Food and Agriculture for the original cannabis product.

(2) Securely transmit the manifest to the bureau and the licensee that will receive the cannabis product. The bureau shall inform the Department of Food and Agriculture of information pertaining to commercial cannabis activity for the purpose of the track and trace program identified in Section 26067.

(f) During transportation, the licensed distributor shall maintain a physical copy of the shipping manifest and make it available upon request to agents of the Department of Consumer Affairs and law enforcement officers.

(g) The licensee receiving the shipment shall maintain each electronic shipping manifest and shall make it available upon request to the Department of Consumer Affairs and any law enforcement officers.

(h) Upon receipt of the transported shipment, the licensee receiving the shipment shall submit to the licensing authority a record verifying receipt of the shipment and the details of the shipment.

(i) Transporting, or arranging for or facilitating the transport of, cannabis or cannabis products in violation of this chapter is grounds for disciplinary action against the license.

(j) Licensed retailers and microbusinesses, and licensed nonprofits under Section 26070.5, shall implement security measures reasonably designed to prevent unauthorized entrance into areas containing cannabis or cannabis products and theft of cannabis or cannabis products from the premises. These security measures shall include, but not be limited to, all of the following:

(1) Prohibiting individuals from remaining on the licensee's premises if they are not engaging in activity expressly related to the operations of the retailer.

(2) Establishing limited access areas accessible only to authorized personnel.

(3) Other than limited amounts of cannabis used for display purposes, samples, or immediate sale, storing all finished cannabis and cannabis products in a secured and locked room, safe, or vault, and in a manner reasonably designed to prevent diversion, theft, and loss.

(k) A retailer shall notify the licensing authority and the appropriate law enforcement authorities within 24 hours after discovering any of the following:

(1) Significant discrepancies identified during inventory. The level of significance shall be determined by the bureau.

(2) Diversion, theft, loss, or any criminal activity pertaining to the operation of the retailer.

(3) Diversion, theft, loss, or any criminal activity by any agent or employee of the retailer pertaining to the operation of the retailer.

(4) The loss or unauthorized alteration of records related to cannabis or cannabis products, registered qualifying patients, primary caregivers, or retailer employees or agents.

(5) Any other breach of security.

(l) Beginning January 1, 2018, a licensee may sell cannabis or cannabis products that have not been tested for a limited and finite time as determined by the bureau. The cannabis and cannabis products must have a label affixed to each package containing cannabis or cannabis products that clearly states "This product has not been tested as required by the Medicinal and Adult-Use Cannabis Regulation and Safety Act" and must comply with any other requirement as determined by the bureau.

SEC. 60. Section 26070.1 is added to the Business and Professions Code, to read:

26070.1. Cannabis or cannabis products purchased by a customer shall not leave a licensed retail premises unless they are placed in an opaque package.

SEC. 61. Section 26070.5 of the Business and Professions Code is amended to read:

26070.5. (a) The bureau shall, by January 1, 2020, investigate the feasibility of creating one or more classifications of nonprofit licenses under this section. The feasibility determination shall be made in consultation with the relevant licensing agencies and representatives of local jurisdictions which issue temporary licenses pursuant to subdivision (b). The bureau shall consider factors including, but not limited to, the following:

(1) Should nonprofit licensees be exempted from any or all state taxes, licensing fees and regulatory provisions applicable to other licenses in this division?

(2) Should funding incentives be created to encourage others licensed under this division to provide professional services at reduced or no cost to nonprofit licensees?

(3) Should nonprofit licenses be limited to, or prioritize those, entities previously operating on a not-for-profit basis primarily providing whole-plant cannabis and cannabis products and a diversity of cannabis strains and seed stock to low-income persons?

(b) Any local jurisdiction may issue temporary local licenses to nonprofit entities primarily providing whole-plant cannabis and cannabis products and a diversity of cannabis strains and seed stock to low-income persons so long as the local jurisdiction does all of the following:

(1) Confirms the license applicant's status as a nonprofit entity registered with the California Attorney General's Registry of Charitable Trusts and that the applicant is in good standing with all state requirements governing nonprofit entities.

(2) Licenses and regulates any such entity to protect public health and safety, and so as to require compliance with all environmental requirements in this division.

(3) Provides notice to the bureau of any such local licenses issued, including the name and location of any such licensed entity and all local regulations governing the licensed entity's operation.

(4) Certifies to the bureau that any such licensed entity will not generate annual gross revenues in excess of two million dollars (\$2,000,000).

(c) Temporary local licenses authorized under subdivision (b) shall expire after 12 months unless renewed by the local jurisdiction.

(d) The bureau may impose reasonable additional requirements on the local licenses authorized under subdivision (b).

(e) (1) No new temporary local licenses shall be issued pursuant to this section after the date the bureau determines that creation of nonprofit licenses under this division is not feasible, or if the bureau determines such licenses are feasible, after the date a licensing agency commences issuing state nonprofit licenses.

(2) If the bureau determines such licenses are feasible, no temporary license issued under subdivision (b) shall be renewed or extended after the date on which a licensing agency commences issuing state nonprofit licenses.

(3) If the bureau determines that creation of nonprofit licenses under this division is not feasible, the bureau shall provide notice of this determination to all local jurisdictions that have issued temporary licenses under subdivision (b). The bureau may, in its discretion, permit any such local jurisdiction to renew or extend on an annual basis any temporary license previously issued under subdivision (b).

SEC. 62. Section 26080 of the Business and Professions Code is amended to read:

26080. (a) This division shall not be construed to authorize or permit a licensee to transport or distribute, or cause to be transported or distributed, cannabis or cannabis products outside the state, unless authorized by federal law.

(b) A local jurisdiction shall not prevent transportation of cannabis or cannabis products on public roads by a licensee transporting cannabis or cannabis products in compliance with this division.

SEC. 63. Section 26090 of the Business and Professions Code is amended to read:

26090. (a) Deliveries, as defined in this division, may only be made by a licensed retailer or microbusiness, or a licensed nonprofit under Section 26070.5.

(b) All employees of a retailer, microbusiness, or nonprofit delivering cannabis or cannabis products shall carry a copy of the licensee's current license and a government-issued identification with a photo of the employee, such as a driver's license. The employee shall present that license and identification upon request to state and local law enforcement, employees of regulatory authorities, and other state and local agencies enforcing this division.

(c) During delivery, the licensee shall maintain a physical copy of the delivery request and shall make it available upon request of the licensing authority and law enforcement officers. The delivery request documentation shall comply with state and federal law regarding the protection of confidential medical information.

(d) A customer requesting delivery shall maintain a physical or electronic copy of the delivery request and shall make it available upon request by the licensing authority and law enforcement officers.

(e) A local jurisdiction shall not prevent delivery of cannabis or cannabis products on public roads by a licensee acting in compliance with this division and local law as adopted under Section 26200.

SEC. 64. The heading of Chapter 10 (commencing with Section 26100) of Division 10 of the Business and Professions Code is amended to read:

CHAPTER 10. TESTING LABORATORIES

SEC. 65. Section 26100 of the Business and Professions Code is repealed.

SEC. 66. Section 26101 of the Business and Professions Code is amended and renumbered to read:

26100. (a) Except as otherwise provided by law, cannabis or cannabis products shall not be sold pursuant to a license provided for under this division unless a representative sample of the cannabis or cannabis products has been tested by a licensed testing laboratory.

(b) The bureau shall develop criteria to determine which batches shall be tested. All testing of the samples shall be performed on the final form in which the cannabis or cannabis product will be consumed or used.

(c) Testing of batches to meet the requirements of this division shall only be conducted by a licensed testing laboratory.

(d) For each batch tested, the testing laboratory shall issue a certificate of analysis for selected lots at a frequency determined by the bureau with supporting data, to report both of the following:

(1) Whether the chemical profile of the sample conforms to the labeled content of compounds, including, but not limited to, all of the following, unless limited through regulation by the bureau:

- (A) Tetrahydrocannabinol (THC).
- (B) Tetrahydronannabinolic Acid (THCA).
- (C) Cannabidiol (CBD).
- (D) Cannabidiolic Acid (CBDA).
- (E) The terpenes required by the bureau in regulation.
- (F) Cannabigerol (CBG).
- (G) Cannabinol (CBN).

(H) Any other compounds or contaminants required by the bureau.

(2) That the presence of contaminants does not exceed the levels established by the bureau. In establishing the levels, the bureau shall consider the American Herbal Pharmacopoeia monograph, guidelines set by the Department of Pesticide Regulation pursuant to subdivision (d) of Section 26060, and any other relevant sources. For purposes of this paragraph, "contaminants" includes, but is not limited to, all of the following:

- (A) Residual solvent or processing chemicals.
- (B) Foreign material, including, but not limited to, hair, insects, or similar or related adulterant.
- (C) Microbiological impurities as identified by the bureau in regulation.

(e) Standards for residual levels of volatile organic compounds shall be established by the bureau.

(f) The testing laboratory shall conduct all testing required by this section in a manner consistent with general requirements for the competence of testing and calibrations activities, including sampling and using verified methods.

(g) All testing laboratories performing tests pursuant to this section shall obtain and maintain ISO/IEC 17025 accreditation as required by the bureau in regulation.

(h) If a test result falls outside the specifications authorized by law or regulation, the testing laboratory shall follow a standard operating procedure to confirm or refute the original result.

(i) A testing laboratory shall destroy the remains of the sample of medical cannabis or medical cannabis product upon completion of the analysis, as determined by the bureau through regulations.

(j) Any presale inspection, testing transfer, or transportation of cannabis products pursuant to this section shall conform to a specified chain of custody protocol and any other requirements imposed under this division.

(k) This division does not prohibit a licensee from performing testing on the licensee's premises for the purposes of quality assurance of the product in conjunction with reasonable business operations. This division also does not prohibit a licensee from performing testing on the licensee's premises of cannabis or cannabis products obtained from another licensee. Onsite testing by the licensee shall not be certified by the bureau and does not exempt the licensee from the requirements of quality assurance testing at a testing laboratory pursuant to this section.

SEC. 67. Section 26102 of the Business and Professions Code is repealed.

SEC. 68. Section 26102 is added to the Business and Professions Code, to read:

26102. A testing laboratory shall not be licensed by the bureau unless the laboratory meets all of the following:

(a) Complies with any other requirements specified by the bureau.

(b) Notifies the bureau within one business day after the receipt of notice of any kind that its accreditation has been denied, suspended, or revoked.

(c) Has established standard operating procedures that provide for adequate chain of custody controls for samples transferred to the testing laboratory for testing.

SEC. 69. Section 26103 of the Business and Professions Code is repealed.

SEC. 70. Section 26104 of the Business and Professions Code is amended to read:

26104. (a) A licensed testing laboratory shall, in performing activities concerning cannabis and cannabis products, comply with the requirements and restrictions set forth in applicable law and regulations.

(b) The bureau shall develop procedures to do all of the following:

(1) Ensure that testing of cannabis and cannabis products occurs prior to distribution to retailers, microbusinesses, or nonprofits licensed under Section 26070.5.

(2) Specify how often licensees shall test cannabis and cannabis products, and that the cost of testing cannabis shall be borne by the licensed cultivators and the cost of testing cannabis products shall be borne by the licensed manufacturer, and that the costs of testing cannabis and cannabis products shall be borne by a nonprofit licensed under Section 26070.5.

(3) Require destruction of harvested batches whose testing samples indicate noncompliance with health and safety standards required by the bureau, unless remedial measures can bring the cannabis or cannabis products into compliance with quality assurance standards as specified by law and implemented by the bureau.

(4) Ensure that a testing laboratory employee takes the sample of cannabis or cannabis products from the distributor's premises for testing required by

this division and that the testing laboratory employee transports the sample to the testing laboratory.

(c) Except as provided in this division, a testing laboratory shall not acquire or receive cannabis or cannabis products except from a licensee in accordance with this division, and shall not distribute, sell, deliver, transfer, transport, or dispense cannabis or cannabis products, from the licensed premises from which the cannabis or cannabis products were acquired or received. All transfer or transportation shall be performed pursuant to a specified chain of custody protocol.

(d) A testing laboratory may receive and test samples of cannabis or cannabis products from a qualified patient or primary caregiver only if the qualified patient or primary caregiver presents the qualified patient's valid physician's recommendation for cannabis for medicinal purposes. A testing laboratory shall not certify samples from a qualified patient or primary caregiver for resale or transfer to another party or licensee. All tests performed by a testing laboratory for a qualified patient or primary caregiver shall be recorded with the name of the qualified patient or primary caregiver and the amount of cannabis or cannabis product received.

SEC. 71. Section 26106 of the Business and Professions Code is amended to read:

26106. Standards for the production, packaging, and labeling of all cannabis products developed by the State Department of Public Health apply to all licensed manufacturers and microbusinesses, and nonprofits licensed under Section 26070.5, unless otherwise specified by the State Department of Public Health.

SEC. 72. Section 26110 of the Business and Professions Code is repealed.

SEC. 73. Section 26110 is added to the Business and Professions Code, to read:

26110. (a) Cannabis batches are subject to quality assurance and testing prior to sale at a retailer, microbusiness, or nonprofit licensed under Section 26070.5, except for immature cannabis plants and seeds, as provided for in this division.

(b) A licensee that holds a valid distributor license may act as the distributor for the licensee's cannabis and cannabis products.

(c) The distributor shall store, as determined by the bureau, the cannabis batches on the premises of the distributor before testing and continuously until either of the following occurs:

(1) The cannabis batch passes the testing requirements pursuant to this division and is transported to a licensed retailer.

(2) The cannabis batch fails the testing requirements pursuant to this division and is destroyed or transported to a manufacturer for remediation as allowed by the bureau or the Department of Public Health.

(d) The distributor shall arrange for a testing laboratory to obtain a representative sample of each cannabis batch at the distributor's licensed premises. After obtaining the sample, the testing laboratory representative shall maintain custody of the sample and transport it to the testing laboratory.

(e) Upon issuance of a certificate of analysis by the testing laboratory that the cannabis batch has passed the testing requirements pursuant to this division, the distributor shall conduct a quality assurance review before distribution to ensure the labeling and packaging of the cannabis and cannabis products conform to the requirements of this division.

(f) (1) There shall be a quality assurance compliance monitor who is an employee or contractor of the bureau and who shall not hold a license in any category or own or have an ownership interest in a licensee or the premises of a licensee.

(2) The quality assurance compliance monitor shall conduct random quality assurance reviews at a distributor's licensed premises before distribution to ensure the labeling and packaging of the cannabis and cannabis products conform to the requirements of this division.

(3) The quality assurance compliance monitor shall have access to all records and test results required of a licensee by law in order to conduct quality assurance analysis and to confirm test results. All records of inspection and verification by the quality assurance compliance monitor shall be provided to the bureau. Failure to comply shall be noted by the quality assurance compliance monitor for further investigation. Violations shall be reported to the bureau. The quality assurance compliance monitor shall also verify the tax payments collected and paid under Sections 34011 and 34012 of the Revenue and Tax Code are accurate. The monitor shall also have access to the inputs and assumptions in the track and trace system and shall be able to verify the accuracy of those and that they are commensurate with the tax payments.

(g) After testing, all cannabis and cannabis products fit for sale may be transported only from the distributor's premises to the premises of a licensed retailer, microbusiness, or nonprofit.

(h) A licensee is not required to sell cannabis or cannabis products to a distributor and may directly contract for sale with a licensee authorized to sell cannabis and cannabis products to purchasers.

(i) A distributor performing services pursuant to this section may collect a fee from the licensee for the services provided. The fee may include, but is not limited to, the costs incurred for laboratory testing. A distributor may also collect applicable state or local taxes and fees.

(j) This section does not prohibit a licensee from performing testing on the licensee's premises for the purposes of quality assurance of the product in conjunction with reasonable business operations. The testing conducted on the licensee's premises by the licensee does not meet the testing requirements pursuant to this division.

SEC. 74. Section 26120 of the Business and Professions Code is amended to read:

26120. (a) Prior to delivery or sale at a retailer, cannabis and cannabis products shall be labeled and placed in a resealable, tamper-evident, child-resistant package and shall include a unique identifier for the purposes of identifying and tracking cannabis and cannabis products.

(b) Packages and labels shall not be made to be attractive to children.

(c) All cannabis and cannabis product labels and inserts shall include the following information prominently displayed in a clear and legible fashion in accordance with the requirements, including font size, prescribed by the bureau or the State Department of Public Health:

(1) The following statements, in bold print:

(A) For cannabis: “GOVERNMENT WARNING: THIS PACKAGE CONTAINS CANNABIS, A SCHEDULE I CONTROLLED SUBSTANCE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS. CANNABIS MAY ONLY BE POSSESSED OR CONSUMED BY PERSONS 21 YEARS OF AGE OR OLDER UNLESS THE PERSON IS A QUALIFIED PATIENT. CANNABIS USE WHILE PREGNANT OR BREASTFEEDING MAY BE HARMFUL. CONSUMPTION OF CANNABIS IMPAIRS YOUR ABILITY TO DRIVE AND OPERATE MACHINERY. PLEASE USE EXTREME CAUTION.”

(B) For cannabis products: “GOVERNMENT WARNING: THIS PRODUCT CONTAINS CANNABIS, A SCHEDULE I CONTROLLED SUBSTANCE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS. CANNABIS PRODUCTS MAY ONLY BE POSSESSED OR CONSUMED BY PERSONS 21 YEARS OF AGE OR OLDER UNLESS THE PERSON IS A QUALIFIED PATIENT. THE INTOXICATING EFFECTS OF CANNABIS PRODUCTS MAY BE DELAYED UP TO TWO HOURS. CANNABIS USE WHILE PREGNANT OR BREASTFEEDING MAY BE HARMFUL. CONSUMPTION OF CANNABIS PRODUCTS IMPAIRS YOUR ABILITY TO DRIVE AND OPERATE MACHINERY. PLEASE USE EXTREME CAUTION.”

(2) For packages containing only dried flower, the net weight of cannabis in the package.

(3) Identification of the source and date of cultivation, the type of cannabis or cannabis product and the date of manufacturing and packaging.

(4) The appellation of origin, if any.

(5) List of pharmacologically active ingredients, including, but not limited to, tetrahydrocannabinol (THC), cannabidiol (CBD), and other cannabinoid content, the THC and other cannabinoid amount in milligrams per serving, servings per package, and the THC and other cannabinoid amount in milligrams for the package total.

(6) A warning if nuts or other known allergens are used.

(7) Information associated with the unique identifier issued by the Department of Food and Agriculture.

(8) For a medicinal cannabis product sold at a retailer, the statement “FOR MEDICAL USE ONLY.”

(9) Any other requirement set by the bureau or the State Department of Public Health.

(d) Only generic food names may be used to describe the ingredients in edible cannabis products.

(e) In the event the Attorney General determines that cannabis is no longer a Schedule I controlled substance under federal law, the label

prescribed in subdivision (c) shall no longer require a statement that cannabis is a Schedule I controlled substance.

SEC. 75. Section 26121 is added to the Business and Professions Code, to read:

26121. (a) A cannabis product is misbranded if it is any of the following:

(1) Manufactured, packed, or held in this state in a manufacturing premises not duly licensed as provided in this division.

(2) Its labeling is false or misleading in any particular.

(3) Its labeling or packaging does not conform to the requirements of Section 26120 or any other labeling or packaging requirement established pursuant to this division.

(b) It is unlawful for any person to manufacture, sell, deliver, hold, or offer for sale a cannabis product that is misbranded.

(c) It is unlawful for any person to misbrand a cannabis product.

(d) It is unlawful for any person to receive in commerce a cannabis product that is misbranded or to deliver or offer for delivery any such cannabis product.

SEC. 76. The heading of Chapter 13 (commencing with Section 26130) of Division 10 of the Business and Professions Code is amended to read:

CHAPTER 13. MANUFACTURERS AND CANNABIS PRODUCTS

SEC. 77. Section 26130 of the Business and Professions Code is amended to read:

26130. (a) The State Department of Public Health shall promulgate regulations governing the licensing of cannabis manufacturers and standards for the manufacturing, packaging, and labeling of all manufactured cannabis products. Licenses to be issued are as follows:

(1) "Manufacturing Level 1," for sites that manufacture cannabis products using nonvolatile solvents, or no solvents. A Manufacturing Level 1 M-Type 6 licensee shall only manufacture cannabis products for sale by a retailer with an M-Type 10 license.

(2) "Manufacturing Level 2," for sites that manufacture cannabis products using volatile solvents. A Manufacturing Level 2 M-Type 7 licensee shall only manufacture cannabis products for sale by a retailer with an M-Type 10 license.

(b) For purposes of this section, "volatile solvents" shall have the same meaning as in paragraph (3) of subdivision (d) of Section 11362.3 of the Health and Safety Code, unless otherwise provided by law or regulation.

(c) Edible cannabis products shall be:

(1) Not designed to be appealing to children or easily confused with commercially sold candy or foods that do not contain cannabis.

(2) Produced and sold with a standardized concentration of cannabinoids not to exceed ten (10) milligrams tetrahydrocannabinol (THC) per serving.

(3) Delineated or scored into standardized serving sizes if the cannabis product contains more than one serving and is an edible cannabis product in solid form.

(4) Homogenized to ensure uniform disbursement of cannabinoids throughout the product.

(5) Manufactured and sold under sanitation standards established by the State Department of Public Health, in consultation with the bureau, that are similar to the standards for preparation, storage, handling, and sale of food products.

(6) Provided to customers with sufficient information to enable the informed consumption of the product, including the potential effects of the cannabis product and directions as to how to consume the cannabis product, as necessary.

(7) Marked with a universal symbol, as determined by the State Department of Public Health through regulation.

(d) Cannabis, including concentrated cannabis, included in a cannabis product manufactured in compliance with law is not considered an adulterant under state law.

SEC. 78. Section 26131 is added to the Business and Professions Code, to read:

26131. (a) A cannabis product is adulterated if it is any of the following:

(1) It has been produced, prepared, packed, or held under unsanitary conditions in which it may have become contaminated with filth or in which it may have been rendered injurious.

(2) It consists in whole or in part of any filthy, putrid, or decomposed substance.

(3) It bears or contains any poisonous or deleterious substance that may render it injurious to users under the conditions of use suggested in the labeling or under conditions as are customary or usual.

(4) It bears or contains a substance that is restricted or limited under this division or regulations promulgated pursuant to this division and the level of substance in the product exceeds the limits specified pursuant to this division or in regulation.

(5) Its concentrations differ from, or its purity or quality is below, that which it is represented to possess.

(6) The methods, facilities, or controls used for its manufacture, packing, or holding do not conform to, or are not operated or administered in conformity with, practices established by regulations adopted under this division to ensure that the cannabis product meets the requirements of this division as to safety and has the concentrations it purports to have and meets the quality and purity characteristics that it purports or is represented to possess.

(7) Its container is composed, in whole or in part, of any poisonous or deleterious substance that may render the contents injurious to health.

(8) It is an edible cannabis product and a substance has been mixed or packed with it after testing by a testing laboratory so as to reduce its quality

or concentration or if any substance has been substituted, wholly or in part, for the edible cannabis product.

(b) It is unlawful for a person to manufacture, sell, deliver, hold, or offer for sale a cannabis product that is adulterated.

(c) It is unlawful for a person to adulterate a cannabis product.

(d) It is unlawful for a person to receive in commerce a cannabis product that is adulterated or to deliver or proffer for delivery any such cannabis product.

SEC. 79. Section 26132 is added to the Business and Professions Code, to read:

26132. (a) When the State Department of Public Health has evidence that a cannabis product is adulterated or misbranded, the department shall notify the manufacturer.

(b) The State Department of Public Health may order a manufacturer to immediately cease distribution of a cannabis product and recall the product if the department determines both of the following:

(1) The manufacture, distribution, or sale of the cannabis product creates or poses an immediate and serious threat to human life or health.

(2) Other procedures available to the State Department of Public Health to remedy or prevent the occurrence of the situation would result in an unreasonable delay.

(c) The State Department of Public Health shall provide the manufacturer an opportunity for an informal proceeding on the matter, as determined by the department, within five days, on the actions required by the order and on why the product should not be recalled. Following the proceeding, the order shall be affirmed, modified, or set aside as determined appropriate by the State Department of Public Health.

(d) The State Department of Public Health's powers set forth in this section expressly include the power to order movement, segregation, isolation, or destruction of cannabis products, as well as the power to hold those products in place.

(e) If the State Department of Public Health determines it is necessary, it may issue the mandatory recall order and may use all appropriate measures to obtain reimbursement from the manufacturer for any and all costs associated with these orders. All funds obtained by the State Department of Public Health from these efforts shall be deposited into a fee account specific to the State Department of Public Health, to be established in the Cannabis Control Fund, and will be available for use by the department upon appropriation by the Legislature.

(f) It is unlawful for any person to move or allow to be moved a cannabis product subject to an order issued pursuant to this section unless that person has first obtained written authorization from the State Department of Public Health.

SEC. 80. Section 26133 is added to the Business and Professions Code, to read:

26133. (a) If the State Department of Public Health finds or has probable cause to believe that a cannabis product is adulterated or misbranded within

the meaning of this division or the sale of the cannabis product would be in violation of this division, the department shall affix to the cannabis product, or component thereof, a tag or other appropriate marking. The State Department of Public Health shall give notice that the cannabis product is, or is suspected of being, adulterated or misbranded, or the sale of the cannabis would be in violation of this division and has been embargoed and that no person shall remove or dispose of the cannabis product by sale or otherwise until permission for removal or disposal is given by the State Department of Public Health or a court.

(b) It is unlawful for a person to remove, sell, or dispose of a detained or embargoed cannabis product without written permission of the State Department of Public Health or a court. A violation of this subdivision is punishable by a fine of not more than ten thousand dollars (\$10,000).

(c) If the adulteration or misbranding can be corrected by proper labeling or additional processing of the cannabis product and all of the provisions of this division can be complied with, the licensee or owner may request the State Department of Public Health to remove the tag or other marking. If, under the supervision of the State Department of Public Health, the adulteration or misbranding has been corrected, the department may remove the tag or other marking.

(d) If the State Department of Public Health finds that a cannabis product that is embargoed is not adulterated or misbranded, or that its sale is not otherwise in violation of this division, the State Department of Public Health may remove the tag or other marking.

(e) The cannabis product may be destroyed by the owner pursuant to a corrective action plan approved by the State Department of Public Health and under the supervision of the department. The cannabis product shall be destroyed at the expense of the licensee or owner.

(f) A proceeding for condemnation of a cannabis product under this section shall be subject to appropriate notice to, and the opportunity for a hearing with regard to, the person affected in accordance with Section 26016.

(g) Upon a finding by the administrative law judge that the cannabis product is adulterated or misbranded, or that its sale is otherwise in violation of this division, the administrative law judge may direct the cannabis product to be destroyed at the expense of the licensee or owner. The administrative law judge may also direct a licensee or owner of the affected cannabis product to pay fees and reasonable costs, including the costs of storage and testing, incurred by the bureau or the State Department of Public Health in investigating and prosecuting the action taken pursuant to this section.

(h) When, under the supervision of the State Department of Public Health, the adulteration or misbranding has been corrected by proper labeling or additional processing of the cannabis and cannabis product and when all provisions of this division have been complied with, and after costs, fees, and expenses have been paid, the State Department of Public Health may release the embargo and remove the tag or other marking.

(i) The State Department of Public Health may condemn a cannabis product under provisions of this division. The cannabis product shall be destroyed at the expense of the licensee or owner.

SEC. 81. Section 26134 is added to the Business and Professions Code, to read:

26134. (a) The State Department of Public Health may issue a citation, which may contain an order of abatement and an order to pay an administrative fine assessed by the department if the licensee is in violation of this division or any regulation adopted pursuant to it.

(1) Citations shall be in writing and shall describe with particularity the nature of the violation, including specific reference to the law determined to have been violated.

(2) If appropriate, the citation shall contain an order of abatement fixing a reasonable time for abatement of the violation.

(3) The administrative fine assessed by the State Department of Public Health shall not exceed five thousand dollars (\$5,000) for each violation, unless a different fine amount is expressly provided by this division. In assessing a fine, the department shall give due consideration to the appropriateness of the amount of the fine with respect to factors such as the gravity of the violation, the good faith of the licensee, and the history of previous violations.

(4) A citation issued or a fine assessed pursuant to this section shall notify the licensee that if the licensee desires a hearing to contest the finding of a violation, that hearing shall be requested by written notice to the State Department of Public Health within 30 days of the date of issuance of the citation or fine. If a hearing is not requested pursuant to this section, payment of any fine shall not constitute an admission of the violation charged. Hearings shall be held pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

(5) Failure of a licensee to pay a fine within 30 days of the date of assessment of the fine, unless assessment of the fine or the citation is being appealed, may result in further legal action being taken by the State Department of Public Health. If a licensee does not contest a citation or pay the fine, the full amount of the fine shall be added to the fee for renewal of the license. A license shall not be renewed without payment of the renewal fee, including the amount of the fine.

(6) A citation may be issued without the assessment of an administrative fine.

(7) The State Department of Public Health may limit the assessment of administrative fines to only particular violations of this division and establish any other requirement for implementation of the citation system by regulation.

(b) Notwithstanding any other law, if a fine is paid to satisfy an assessment based on the finding of a violation, payment of the fine shall be represented as satisfactory resolution of the matter for purposes of public disclosure.

SEC. 82. Section 26135 is added to the Business and Professions Code, to read:

26135. A peace officer, including a peace officer within the State Department of Public Health or the bureau, may seize cannabis and cannabis products in any of the following circumstances:

(a) The cannabis or cannabis product is subject to recall or embargo by any licensing authority.

(b) The cannabis or cannabis product is subject to destruction pursuant to this division.

(c) The cannabis or cannabis product is seized related to an investigation or disciplinary action for violation of this division.

SEC. 83. Section 26140 of the Business and Professions Code is amended to read:

26140. (a) An A-licensee shall not:

(1) Sell cannabis or cannabis products to persons under 21 years of age.

(2) Allow any person under 21 years of age on its premises.

(3) Employ or retain persons under 21 years of age.

(4) Sell or transfer cannabis or cannabis products unless the person to whom the cannabis or cannabis product is to be sold first presents documentation which reasonably appears to be a valid government-issued identification card showing that the person is 21 years of age or older.

(b) Persons under 21 years of age may be used by peace officers in the enforcement of this division and to apprehend licensees, or employees or agents of licensees, or other persons who sell or furnish cannabis to minors. Notwithstanding any provision of law, any person under 21 years of age who purchases or attempts to purchase any cannabis while under the direction of a peace officer is immune from prosecution for that purchase or attempt to purchase cannabis. Guidelines with respect to the use of persons under 21 years of age as decoys shall be adopted and published by the bureau in accordance with the rulemaking portion of the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code).

(c) Notwithstanding subdivision (a), an M-licensee may:

(1) Allow on the premises any person 18 years of age or older who possesses a valid government-issued identification card and either a valid physician's recommendation or a valid county-issued identification card under Section 11362.712 of the Health and Safety Code.

(2) Sell cannabis, cannabis products, and cannabis accessories to a person 18 years of age or older who possesses a valid government-issued identification card and either a valid physician's recommendation or a valid county-issued identification card under Section 11362.712 of the Health and Safety Code.

SEC. 84. Section 26150 of the Business and Professions Code is amended to read:

26150. For purposes of this chapter:

(a) "Advertise" means the publication or dissemination of an advertisement.

(b) "Advertisement" includes any written or verbal statement, illustration, or depiction which is calculated to induce sales of cannabis or cannabis products, including any written, printed, graphic, or other material, billboard, sign, or other outdoor display, public transit card, other periodical literature, publication, or in a radio or television broadcast, or in any other media; except that such term shall not include:

(1) Any label affixed to any cannabis or cannabis products, or any individual covering, carton, or other wrapper of that container that constitutes a part of the labeling under provisions of this division.

(2) Any editorial or other reading material, such as a news release, in any periodical or publication or newspaper for the publication of which no money or valuable consideration is paid or promised, directly or indirectly, by any licensee, and which is not written by or at the direction of the licensee.

(c) "Advertising sign" is any sign, poster, display, billboard, or any other stationary or permanently affixed advertisement promoting the sale of cannabis or cannabis products which are not cultivated, manufactured, distributed, or sold on the same lot.

(d) "Health-related statement" means any statement related to health, and includes statements of a curative or therapeutic nature that, expressly or by implication, suggest a relationship between the consumption of cannabis or cannabis products and health benefits, or effects on health.

(e) "Market" or "Marketing" means any act or process of promoting or selling cannabis or cannabis products, including, but not limited to, sponsorship of sporting events, point-of-sale advertising, and development of products specifically designed to appeal to certain demographics.

SEC. 85. Section 26151 of the Business and Professions Code is amended to read:

26151. (a) (1) All advertisements and marketing shall accurately and legibly identify the licensee responsible for its content, by adding, at a minimum, the licensee's license number.

(2) A technology platform shall not display an advertisement by a licensee on an Internet Web page unless the advertisement displays the license number of the licensee.

(3) An outdoor advertising company subject to the Outdoor Advertising Act (Chapter 2 (commencing with Section 5200) of Division 3) shall not display an advertisement by a licensee unless the advertisement displays the license number of the licensee.

(b) Any advertising or marketing placed in broadcast, cable, radio, print, and digital communications shall only be displayed where at least 71.6 percent of the audience is reasonably expected to be 21 years of age or older, as determined by reliable, up-to-date audience composition data.

(c) Any advertising or marketing involving direct, individualized communication or dialogue controlled by the licensee shall utilize a method of age affirmation to verify that the recipient is 21 years of age or older before engaging in that communication or dialogue controlled by the licensee. For purposes of this section, that method of age affirmation may

include user confirmation, birth date disclosure, or other similar registration method.

(d) All advertising shall be truthful and appropriately substantiated.

SEC. 86. Section 26152 of the Business and Professions Code is amended to read:

26152. A licensee shall not do any of the following:

(a) Advertise or market in a manner that is false or untrue in any material particular, or that, irrespective of falsity, directly, or by ambiguity, omission, or inference, or by the addition of irrelevant, scientific, or technical matter, tends to create a misleading impression.

(b) Publish or disseminate advertising or marketing containing any statement concerning a brand or product that is inconsistent with any statement on the labeling thereof.

(c) Publish or disseminate advertising or marketing containing any statement, design, device, or representation which tends to create the impression that the cannabis originated in a particular place or region, unless the label of the advertised product bears an appellation of origin, and such appellation of origin appears in the advertisement.

(d) Advertise or market on a billboard or similar advertising device located on an Interstate Highway or on a State Highway which crosses the California border.

(e) Advertise or market cannabis or cannabis products in a manner intended to encourage persons under 21 years of age to consume cannabis or cannabis products.

(f) Publish or disseminate advertising or marketing that is attractive to children.

(g) Advertise or market cannabis or cannabis products on an advertising sign within 1,000 feet of a day care center, school providing instruction in kindergarten or any grades 1 through 12, playground, or youth center.

SEC. 87. Section 26153 of the Business and Professions Code is amended to read:

26153. A licensee shall not give away any amount of cannabis or cannabis products, or any cannabis accessories, as part of a business promotion or other commercial activity.

SEC. 88. Section 26154 of the Business and Professions Code is amended to read:

26154. A licensee shall not include on the label of any cannabis or cannabis product or publish or disseminate advertising or marketing containing any health-related statement that is untrue in any particular manner or tends to create a misleading impression as to the effects on health of cannabis consumption.

SEC. 89. Section 26155 of the Business and Professions Code is amended to read:

26155. (a) The provisions of subdivision (g) of Section 26152 shall not apply to the placement of advertising signs inside a licensed premises and which are not visible by normal unaided vision from a public place, provided that such advertising signs do not advertise cannabis or cannabis products

in a manner intended to encourage persons under 21 years of age to consume cannabis or cannabis products.

(b) This chapter does not apply to any noncommercial speech.

SEC. 90. Section 26156 is added to the Business and Professions Code, to read:

26156. The requirements of Section 5272 apply to this division.

SEC. 91. Section 26160 of the Business and Professions Code is amended to read:

26160. (a) A licensee shall keep accurate records of commercial cannabis activity.

(b) All records related to commercial cannabis activity as defined by the licensing authorities shall be maintained for a minimum of seven years.

(c) Licensing authorities may examine the records of a licensee and inspect the premises of a licensee as the licensing authority, or a state or local agency, deems necessary to perform its duties under this division. All inspections and examinations of records shall be conducted during standard business hours of the licensed facility or at any other reasonable time. Licensees shall provide and deliver records to the licensing authority upon request.

(d) Licensees shall keep records identified by the licensing authorities on the premises of the location licensed. The licensing authorities may make any examination of the records of any licensee. Licensees shall also provide and deliver copies of documents to the licensing authority upon request.

(e) A licensee, or its agent or employee, that refuses, impedes, obstructs, or interferes with an inspection of the premises or records of the licensee pursuant to this section, has engaged in a violation of this division.

(f) If a licensee, or an agent or employee of a licensee, fails to maintain or provide the records required pursuant to this section, the licensee shall be subject to a citation and fine of up to thirty thousand dollars (\$30,000) per individual violation.

SEC. 92. Section 26161 of the Business and Professions Code is amended to read:

26161. (a) Every sale or transport of cannabis or cannabis products from one licensee to another licensee must be recorded on a sales invoice or receipt. Sales invoices and receipts may be maintained electronically and must be filed in such manner as to be readily accessible for examination by employees of the licensing authorities or State Board of Equalization and shall not be commingled with invoices covering other commodities.

(b) Each sales invoice required by subdivision (a) shall include the name and address of the seller and shall include the following information:

(1) Name and address of the purchaser.

(2) Date of sale and invoice number.

(3) Kind, quantity, size, and capacity of packages of cannabis or cannabis products sold.

(4) The cost to the purchaser, together with any discount applied to the price as shown on the invoice.

(5) The place from which transport of the cannabis or cannabis product was made unless transport was made from the premises of the licensee.

(6) Any other information specified by the licensing authority.

SEC. 93. Section 26162 is added to the Business and Professions Code, to read:

26162. (a) Information identifying the names of patients, their medical conditions, or the names of their primary caregivers received and contained in records kept by the office or licensing authorities for the purposes of administering this chapter are confidential and shall not be disclosed pursuant to the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code), except as necessary for authorized employees of the State of California or any city, county, or city and county to perform official duties pursuant to this chapter, or a local ordinance.

(b) Information identifying the names of patients, their medical conditions, or the names of their primary caregivers received and contained in records kept by the bureau for the purposes of administering this chapter shall be maintained in accordance with Chapter 1 (commencing with Section 123100) of Part 1 of Division 106 of the Health and Safety Code, Part 2.6 (commencing with Section 56) of Division 1 of the Civil Code, and other state and federal laws relating to confidential patient information.

(c) Nothing in this section precludes the following:

(1) Employees of the bureau or any licensing authorities notifying state or local agencies about information submitted to the agency that the employee suspects is falsified or fraudulent.

(2) Notifications from the bureau or any licensing authorities to state or local agencies about apparent violations of this chapter or applicable local ordinance.

(3) Verification of requests by state or local agencies to confirm licenses and certificates issued by the regulatory authorities or other state agency.

(4) Provision of information requested pursuant to a court order or subpoena issued by a court or an administrative agency or local governing body authorized by law to issue subpoenas.

(d) Information shall not be disclosed by any state or local agency beyond what is necessary to achieve the goals of a specific investigation, notification, or the parameters of a specific court order or subpoena.

SEC. 94. Section 26162.5 is added to the Business and Professions Code, to read:

26162.5. Information contained in a physician's recommendation issued in accordance with Article 25 (commencing with Section 2525) of Chapter 5 of Division 2 and received by a licensee, including, but not limited to, the name, address, or social security number of the patient, the patient's medical condition, or the name of the patient's primary caregiver is hereby deemed "medical information" within the meaning of the Confidentiality of Medical Information Act (Part 2.6 (commencing with Section 56) of Division 1 of the Civil Code) and shall not be disclosed by a licensee except as necessary for authorized employees of the State of California or any city, county, or

city and county to perform official duties pursuant to this chapter, or a local ordinance.

SEC. 95. Chapter 17 (commencing with Section 26170) of Division 10 of the Business and Professions Code is repealed.

SEC. 96. Section 26180 of the Business and Professions Code is amended to read:

26180. Each licensing authority shall establish a scale of application, licensing, and renewal fees, based upon the cost of enforcing this division, as follows:

(a) Each licensing authority shall charge each licensee a licensure and renewal fee, as applicable. The licensure and renewal fee shall be calculated to cover the costs of administering this division. The licensure fee may vary depending upon the varying costs associated with administering the various regulatory requirements of this division as they relate to the nature and scope of the different licensure activities, including, but not limited to, the track and trace program required pursuant to Section 26067, but shall not exceed the reasonable regulatory costs to the licensing authority.

(b) The total fees assessed pursuant to this division shall be set at an amount that will fairly and proportionately generate sufficient total revenue to fully cover the total costs of administering this division.

(c) All license fees shall be set on a scaled basis by the licensing authority, dependent on the size of the business.

(d) The licensing authority shall deposit all fees collected in a fee account specific to that licensing authority, to be established in the Cannabis Control Fund. Moneys in the licensing authority fee accounts shall be used, upon appropriation by the Legislature, by the designated licensing authority for the administration of this division.

SEC. 97. Section 26180.5 is added to the Business and Professions Code, to read:

26180.5. No later than January 1, 2018, the Secretary of Business, Consumer Services, and Housing or his or her designee shall initiate work with the Legislature, the Department of Consumer Affairs, the Department of Food and Agriculture, the State Department of Public Health, and any other related departments to ensure that there is a safe and viable way to collect cash payments for taxes and fees related to the regulation of cannabis activity throughout the state.

SEC. 98. Section 26181 of the Business and Professions Code is amended to read:

26181. The State Water Resources Control Board, the Department of Fish and Wildlife, and other agencies may establish fees to cover the costs of their cannabis programs.

SEC. 99. Section 26190 of the Business and Professions Code is amended to read:

26190. Beginning on March 1, 2023, and on or before March 1 of each year thereafter, each licensing authority shall prepare and submit to the Legislature an annual report on the authority's activities, in compliance with Section 9795 of the Government Code, and post the report on the authority's

Internet Web site. The report shall include, but not be limited to, the following information for the previous fiscal year:

(a) The amount of funds allocated and spent by the licensing authority for cannabis licensing, enforcement, and administration.

(b) The number of state licenses issued, renewed, denied, suspended, and revoked, by state license category.

(c) The average time for processing state license applications, by state license category.

(d) The number of appeals from the denial of state licenses or other disciplinary actions taken by the licensing authority and the average time spent on these appeals.

(e) The number of complaints submitted by citizens or representatives of cities or counties regarding licensees, provided as both a comprehensive statewide number and by geographical region.

(f) The number and type of enforcement activities conducted by the licensing authorities and by local law enforcement agencies in conjunction with the licensing authorities.

(g) The number, type, and amount of penalties, fines, and other disciplinary actions taken by the licensing authorities.

(h) A detailed list of the petitions for regulatory relief or rulemaking changes received by the licensing authorities from licensees requesting modifications of the enforcement of rules under this division.

(i) (1) For the first publication of the reports, the licensing authorities shall provide a joint report to the Legislature regarding the state of the cannabis market in California. This report shall identify any statutory or regulatory changes necessary to ensure that the implementation of this division does not do any of the following:

(A) Allow unreasonable restraints on competition by creation or maintenance of unlawful monopoly power.

(B) Perpetuate the presence of an illegal market for cannabis or cannabis products in the state or out of the state.

(C) Encourage underage use or adult abuse of cannabis or cannabis products, or illegal diversion of cannabis or cannabis products out of the state.

(D) Result in an excessive concentration of licensees in a given city, county, or both.

(E) Present an unreasonable risk of minors being exposed to cannabis or cannabis products.

(F) Result in violations of any environmental protection laws.

(2) For purposes of this subdivision, “excessive concentration” means when the premises for a retail license, microbusiness license, or a license issued under Section 26070.5 is located in an area where either of the following conditions exist:

(A) The ratio of licensees to population in a census tract or census division exceeds the ratio of licensees to population in the county in which the census tract or census division is located, unless reduction of that ratio would unduly

limit the development of the legal market so as to perpetuate the illegal market for cannabis or cannabis products.

(B) The ratio of retail licenses, microbusiness licenses, or licenses under Section 26070.5 to population in the census tract, division, or jurisdiction exceeds that allowable by local ordinance adopted under Section 26200.

SEC. 100. Section 26190.5 is added to the Business and Professions Code, to read:

26190.5. The bureau shall contract with the California Cannabis Research Program, known as the Center for Medicinal Cannabis Research, and formerly known as the California Marijuana Research Program, authorized pursuant to Section 11362.9 of the Health and Safety Code, to develop a study that identifies the impact that cannabis has on motor skills.

SEC. 101. Section 26191 of the Business and Professions Code is amended to read:

26191. (a) Commencing January 1, 2019, and by January 1 triennially thereafter, the Office of State Audits and Evaluations within the Department of Finance shall conduct a performance audit of the bureau's activities under this division, and shall report its findings to the bureau and the Legislature by July 1 of that same year. The report shall include, but not be limited to, the following:

- (1) The actual costs of the program.
- (2) The overall effectiveness of enforcement programs.

(3) Any report submitted pursuant to this section shall be submitted in compliance with Section 9795 of the Government Code.

(b) The Legislature shall provide sufficient funds to the Department of Finance to conduct the triennial audit required by this section.

SEC. 102. Section 26200 of the Business and Professions Code is amended to read:

26200. (a) (1) This division shall not be interpreted to supersede or limit the authority of a local jurisdiction to adopt and enforce local ordinances to regulate businesses licensed under this division, including, but not limited to, local zoning and land use requirements, business license requirements, and requirements related to reducing exposure to secondhand smoke, or to completely prohibit the establishment or operation of one or more types of businesses licensed under this division within the local jurisdiction.

(2) This division shall not be interpreted to supersede or limit existing local authority for law enforcement activity, enforcement of local zoning requirements or local ordinances, or enforcement of local license, permit, or other authorization requirements.

(b) This division shall not be interpreted to require a licensing authority to undertake local law enforcement responsibilities, enforce local zoning requirements, or enforce local licensing, permitting, or other authorization requirements.

(c) A local jurisdiction shall notify the bureau upon revocation of any local license, permit, or authorization for a licensee to engage in commercial cannabis activity within the local jurisdiction. Within 10 days of notification,

the bureau shall inform the relevant licensing authorities. Within 60 days of being so informed by the bureau, the relevant licensing authorities shall begin the process to determine whether a license issued to the licensee should be suspended or revoked pursuant to Chapter 3 (commencing with Section 26030).

(d) For facilities issued a state license that are located within the incorporated area of a city, the city shall have full power and authority to enforce this division and the regulations promulgated by the bureau or any licensing authority, if delegated by the state. Notwithstanding Sections 101375, 101400, and 101405 of the Health and Safety Code or any contract entered into pursuant thereto, or any other law, the city shall assume complete responsibility for any regulatory function pursuant to this division within the city limits that would otherwise be performed by the county or any county officer or employee, including a county health officer, without liability, cost, or expense to the county.

(e) This division does not prohibit the issuance of a state temporary event license to a licensee authorizing onsite cannabis sales to, and consumption by, persons 21 years of age or older at a county fair or district agricultural association event, provided that the activities, at a minimum, comply with the requirements of paragraphs (1) to (3), inclusive, of subdivision (g), that all participants are licensed under this division, and that the activities are otherwise consistent with regulations promulgated and adopted by the bureau governing state temporary event licenses. These temporary event licenses shall only be issued in local jurisdictions that authorize such events.

(f) This division, or any regulations promulgated thereunder, shall not be deemed to limit the authority or remedies of a city, county, or city and county under any provision of law, including, but not limited to, Section 7 of Article XI of the California Constitution.

(g) Notwithstanding paragraph (1) of subdivision (a) of Section 11362.3 of the Health and Safety Code, a local jurisdiction may allow for the smoking, vaporizing, and ingesting of cannabis or cannabis products on the premises of a retailer or microbusiness licensed under this division if all of the following are met:

(1) Access to the area where cannabis consumption is allowed is restricted to persons 21 years of age and older.

(2) Cannabis consumption is not visible from any public place or nonage-restricted area.

(3) Sale or consumption of alcohol or tobacco is not allowed on the premises.

SEC. 103. Section 26202 of the Business and Professions Code is amended to read:

26202. (a) A local jurisdiction may enforce this division and the regulations promulgated by any licensing authority if delegated the power to do so by the licensing authority.

(b) A licensing authority shall implement the delegation of enforcement authority in subdivision (a) through an agreement between the licensing

authority and the local jurisdiction to which enforcement authority is to be delegated.

SEC. 104. Section 26210 of the Business and Professions Code is amended to read:

26210. (a) The Marijuana Control Fund, formerly known as the Medical Cannabis Regulation and Safety Act Fund and the Medical Marijuana Regulation and Safety Act Fund, is hereby renamed the Cannabis Control Fund. Notwithstanding Section 16305.7 of the Government Code, the fund shall include any interest and dividends earned on moneys in the fund.

(b) Upon the effective date of this section, whenever “Marijuana Control Fund,” “Medical Cannabis Regulation and Safety Act Fund,” or “Medical Marijuana Regulation and Safety Act Fund” appears in any statute, regulation, or contract, or in any other code, it shall be construed to refer to the Cannabis Control Fund.

(c) Any General Fund or special fund loan that was used to establish and support the regulatory activities of the state licensing entities pursuant to former Section 19351 shall be repaid by the initial proceeds from fees collected pursuant to this division or any rule or regulation adopted pursuant to this division, by January 1, 2022. Should the initial proceeds from fees not be sufficient to repay the loan, moneys from the Cannabis Fines and Penalties Account shall be made available to the bureau, by appropriation of the Legislature, to repay the loan.

(d) The Medical Cannabis Fines and Penalties Account established in former Section 19351 is hereby renamed the Cannabis Fines and Penalties Account.

SEC. 105. Section 26210.5 is added to the Business and Professions Code, to read:

26210.5. By July 1, 2018, the bureau, in coordination with the Department of General Services, shall establish an office to collect fees and taxes in the County of Humboldt, County of Trinity, or County of Mendocino in order to ensure the safe payment and collection of cash in those counties.

SEC. 106. Section 26211 of the Business and Professions Code is amended to read:

26211. (a) Funds for the initial establishment and support of the regulatory activities under this division, including the public information program described in subdivision (c), and for the activities of the State Board of Equalization under Part 14.5 (commencing with Section 34010) of Division 2 of the Revenue and Taxation Code until July 1, 2017, or until the 2017 Budget Act is enacted, whichever occurs later, shall be advanced from the General Fund and shall be repaid by the initial proceeds from fees collected pursuant to this division, any rule or regulation adopted pursuant to this division, or revenues collected from the tax imposed by Sections 34011 and 34012 of the Revenue and Taxation Code, by January 1, 2025.

(1) Funds advanced pursuant to this subdivision shall be appropriated to the bureau, which shall distribute the moneys to the appropriate licensing authorities, as necessary to implement the provisions of this division, and to the State Board of Equalization, as necessary, to implement the provisions

of Part 14.5 (commencing with Section 34010) of Division 2 of the Revenue and Taxation Code.

(2) Within 45 days of November 9, 2016, the date this section became operative:

(A) The Director of Finance shall determine an amount of the initial advance from the General Fund to the Cannabis Control Fund that does not exceed thirty million dollars (\$30,000,000); and

(B) There shall be advanced a sum of five million dollars (\$5,000,000) from the General Fund to the State Department of Health Care Services to provide for the public information program described in subdivision (c).

(b) Notwithstanding subdivision (a), the Legislature shall provide sufficient funds to the Cannabis Control Fund to support the activities of the bureau, state licensing authorities under this division, and the State Board of Equalization to support its activities under Part 14.5 (commencing with Section 34010) of Division 2 of the Revenue and Taxation Code. It is anticipated that this funding will be provided annually beginning on July 1, 2017.

(c) The State Department of Health Care Services shall establish and implement a public information program no later than September 1, 2017. This public information program shall, at a minimum, describe the provisions of the Control, Regulate and Tax Adult Use of Marijuana Act of 2016, the scientific basis for restricting access of cannabis and cannabis products to persons under the age of 21 years, describe the penalties for providing access to cannabis and cannabis products to persons under the age of 21 years, provide information regarding the dangers of driving a motor vehicle, boat, vessel, aircraft, or other vehicle used for transportation while impaired from cannabis use, the potential harms of using cannabis while pregnant or breastfeeding, and the potential harms of overusing cannabis or cannabis products.

SEC. 107. Chapter 22 (commencing with Section 26220) is added to Division 10 of the Business and Professions Code, to read:

CHAPTER 22. CANNABIS COOPERATIVE ASSOCIATIONS

Article 1. Definitions

26220. Unless the context otherwise requires, the definitions in this article govern the construction of this chapter.

26220.1. “Association” means any cannabis cooperative that is organized pursuant to this chapter. An association shall be deemed incorporated pursuant to this chapter, or organized pursuant to this chapter and shall be deemed a cultivator of a cannabis product within the meaning of this chapter, if it is functioning under, or is subject to, the provisions of this chapter, irrespective of whether it was originally incorporated pursuant to those provisions or was incorporated under other provisions.

26220.2. “Member” includes members of associations without capital stock and holders of common stock in associations that are organized with shares of stock.

26220.3. “Cannabis product” includes any cannabis associated with a licensed cultivator.

Article 2. General Provisions

26222. The purpose of this chapter is to do all of the following:

(a) Promote, foster, and encourage the intelligent and orderly marketing of cannabis product through cooperation.

(b) Eliminate speculation and waste.

(c) Make the distribution of cannabis product as direct as can be efficiently done.

(d) Stabilize the marketing of cannabis product.

(e) Satisfy the conditions of Section 26052.

26222.1. An exemption under law that applies to a cannabis product in the possession, or under the control, of the individual cultivator, shall apply similarly and completely to the cannabis product that is delivered by its cultivator members that are in the possession, or under the control, of the association.

26222.2. A person, firm, corporation, or association, that is hereafter organized or doing business in this state, may not use the word “cannabis cooperative” as part of its corporate name or other business name or title for producers’ cooperative marketing activities, unless it has complied with this chapter.

26222.3. An association that is organized pursuant to this chapter shall not conspire in restraint of trade, or serve as an illegal monopoly, attempt to lessen competition, or to fix prices in violation of law of this state.

26222.4. The marketing contracts and agreements between an association that is organized pursuant to this chapter and its members and any agreements authorized in this chapter shall not result in restraint of trade, or violation of law of this state.

26222.5. The General Corporation Law (Division 1 (commencing with Section 100) of Title 1 of the Corporations Code) applies to each association that is organized pursuant to this chapter, except where those provisions are in conflict with or inconsistent with the express provisions of this chapter. For the purpose of associations organized without shares of stock, the members shall be deemed to be “shareholders” as the term is used in the General Corporation Law.

26222.6. (a) Except as provided in subdivision (c), Chapter 7 (commencing with Section 1500) of Title 10 of Part 3 of the Code of Civil Procedure does not apply to a proprietary interest in an association organized in accordance with this chapter. A proprietary interest that would otherwise escheat to the state pursuant to Chapter 7 (commencing with Section 1500)

of Title 10 of Part 3 of the Code of Civil Procedure shall instead become the property of the association.

(b) Notwithstanding subdivision (a), no proprietary interest shall become the property of the association under this section unless all of the following requirements are satisfied:

(1) At least 60 days' prior notice of the proposed transfer of the proprietary interest to the association is given to the affected member by first-class or certified mail to the last address of the member shown on the association's records, and by publication in a newspaper of general circulation in the county in which the member last resided as shown on the association's records. Notice given pursuant to this paragraph constitutes actual notice.

(2) No written notice objecting to the transfer is received by the association from the affected member or, if the member is deceased, from the member's heirs or the executor or executrix of the estate, prior to the date of the proposed transfer.

(c) "Proprietary interest" means and includes any membership, membership certificate, membership share, share certificate, or equity or dividend certificate of any class representing a proprietary interest in, and issued by, the association together with all accrued and unpaid earnings, dividends, and patronage distributions relating thereto.

Article 3. Purposes

26223. (a) Three or more natural persons, who are engaged in the cultivation of any cannabis product, may form an association pursuant to this chapter for the purpose of engaging in any activity in connection with any of the following:

(1) The cultivation, marketing, or selling of the cannabis products of its members.

(2) The growing, harvesting, curing, drying, trimming, packing, grading, storing, or handling of any product of its members.

(3) The manufacturing, selling, or supplying to its members of machinery, equipment, or supplies.

(4) The financing of the activities that are specified by this section.

(b) Members of a cannabis cooperative shall be disclosed to the licensing authority before the application is processed.

(c) Members of a cannabis cooperative formed pursuant to this chapter shall be limited to cultivators who only hold a single Type 1 or Type 2 license.

(d) Collectively, members of a cannabis cooperative shall not grow more than four acres of total canopy size of cultivation throughout the state during the period that the respective licensees are valid.

(e) No member of a cooperative formed pursuant to this section shall be licensed to operate a cannabis business in another state or country.

Article 4. Articles of Incorporation

26224. The articles of incorporation of an association shall show that the signers of the articles of incorporation are engaged in the cultivation of cannabis products, and that they propose to incorporate an association pursuant to this chapter, and shall state all of the following:

- (a) The name of the association.
- (b) The purposes for which it is formed.
- (c) The city, county, or city and county where the principal office for the transaction of business of the association is to be located.
- (d) The number of directors of the association, which shall not be less than three, and the names and addresses of the persons who are to serve as first directors. If it is desired that the first directors shall serve for terms of different lengths, the term for which each person so named to serve shall also be stated.
- (e) If organized without shares of stock, whether the voting power and the property rights and interest of each member are equal or unequal. If voting power and property rights and interest of each member are unequal, the general rule or rules that are applicable to all members by which the voting power and the property rights and interests, respectively, of each member may be and are determined and fixed shall also be stated.
- (f) (1) If organized with shares of stock, the number of shares that may be issued and if the shares are to have a par value, the par value of each share, and the aggregate par value of all shares. If the shares are to be without par value, it shall be so stated.
(2) If the shares of stock are to be classified, a description of the classes of shares and a statement of the number of shares of each kind or class and the nature and extent of the preferences, rights, privileges, and restrictions that are granted to or imposed upon the holders of the respective classes of stock. Except as to the matters and things so stated, no distinction shall exist between the classes of stock or the holders of them. One class of stock shall always be known as common stock, and voting power may be restricted to holders of common stock.

26224.1. Articles of incorporation shall be signed, acknowledged, and filed in the manner that is prescribed by the general laws of this state for domestic corporations.

26224.2. The articles of incorporation of any association may be amended in the manner and for the purposes which are authorized by the General Corporation Law, Division 1 (commencing with Section 100) of Title 1 of the Corporations Code.

Article 5. Bylaws

26225. Each association shall, within 30 days after its incorporation, adopt for its government and management, a code of bylaws, consistent with this chapter. The vote or written assent of shareholders or members

that hold at least a majority of the voting power is necessary to adopt the bylaws and is effectual to repeal or amend a bylaw, or to adopt an additional bylaw. The power to repeal and amend the bylaws, and adopt new bylaws, may, by a similar vote, or similar written assent, be delegated to the board of directors, which authority may, by a similar vote, or similar written assent, be revoked.

26225.1. The bylaws may prescribe the time, place, and manner of calling and conducting its meetings. Meetings of members or stockholders shall be held at the place as provided in the bylaws, or, if no provision is made, in the city, county, or city and county where the principal place of business is located at a place designated by the board of directors. Meetings of the board of directors may be held at any place within or without the state that is fixed by a quorum of the board of directors unless otherwise provided in the articles of incorporation or bylaws.

26225.2. The bylaws may prescribe the number of stockholders, directors, or members that constitutes a quorum.

26225.3. The bylaws may prescribe the following:

(a) The right of members or stockholders to vote by proxy or by mail or both, and the conditions, manner, form, and effects of those votes.

(b) The right of members or stockholders to cumulate their votes and the prohibition, if any, of cumulative voting.

26225.4. (a) The bylaws may prescribe the qualifications, compensation, duties, and term of office of directors and officers and the time of their election.

(b) The number of directors set forth in the articles of incorporation shall be either a fixed number or a variable number. If a fixed number, it shall not be less than three, and if a variable number, the stated minimum shall not be less than three and the stated maximum shall not be greater than two times the stated minimum minus one.

(c) The number of directors may also be set forth in the bylaws either as a fixed number or as a variable number subject to the same limitations as in subdivision (b). After shares have been issued or members have been admitted, any adoption or amendment of the bylaw provision shall be approved by the outstanding shares as provided in Section 152 of the Corporations Code.

(d) In the event of an inconsistency between an article provision referred to in subdivision (b) and a bylaw provision referred to in subdivision (c), the provision more recently adopted or amended shall prevail.

(e) If a variable number of directors is set forth in the articles of incorporation or the bylaws, the exact number of directors shall be fixed, within the limits specified, by approval of the board of directors or the shareholders as provided in Section 153 of the Corporations Code in the manner designated in the bylaws.

26225.5. The bylaws may prescribe penalties for violations of the bylaws.

26225.6. The bylaws may prescribe the amount of entrance, organization, and membership fees, if any, the manner and method of collection of the fees, and the purposes for which they may be used.

26225.7. The bylaws may prescribe the amount that each member or stockholder shall be required to pay annually, or from time to time, if at all, to carry on the business of the association, the charge, if any, to be paid by each member or stockholder for services that are rendered by the association to him, the time of payment and the manner of collection, and the marketing contract between the association and its members or stockholders that every member or stockholder may be required to sign.

26225.8. The bylaws may prescribe the amount of dividends, if any, that may be declared on the stock or membership capital. To the extent that dividends are payable out of the excess of association income over association expenses attributable to business transacted with or for members, dividends shall not exceed 8 percent per annum.

26225.9. The bylaws may prescribe any of the following:

(a) The number and qualification of members or stockholders of the association and the conditions precedent to membership or ownership of common stock.

(b) The method, time, and manner of permitting members to withdraw or the holders of common stock to transfer their stock.

(c) The manner of assignment and transfer of the interest of members, and of the shares of common stock.

(d) The conditions under which, and time when, membership of a member shall cease.

(e) The automatic suspension of the rights of a member when he or she ceases to be eligible to membership in the association.

(f) The mode, manner, and effect of the expulsion of a member.

26225.95. (a) The bylaws may prescribe any of the following:

(1) The manner of determining the value of a member's interest and provision for its purchase by the association upon the death or withdrawal of a member or upon the expulsion of a member or forfeiture of his or her membership, or at the option of the association, the purchase at a price fixed by conclusive appraisal by the board of directors.

(2) The conditions and terms for the repurchase by the association from its stockholders of their stock upon their disqualification as stockholders.

(b) If a member is expelled and the bylaws do not provide any procedure or penalty for expulsion, the board of directors shall equitably and conclusively appraise his or her property interest in the association and shall fix the amount of his or her property interest in money, which shall be paid to him or her within one year after such expulsion.

Article 6. Directors and Management

26226. The affairs of the association shall be managed by a board of not less than three directors who are elected by the members or stockholders.

26226.1. The bylaws may provide that the territory in which the association has members shall be divided into districts and that directors shall be elected from the several districts. If the bylaws divides the territory

into districts for the election of directors, the bylaws shall specify the number of directors to be elected by each district and the manner and method of reapportioning the directors and of redistricting the territory covered by the association.

26226.2. The bylaws may provide that primary elections shall be held to nominate directors. If the bylaws provide that the territory in which the association has members shall be divided into districts, the bylaws may also provide that the results of the primary elections in the various districts shall be final and shall be ratified at the annual meeting of the association.

26226.3. The bylaws may provide that the territory in which the association has members shall be divided into districts, and that the directors shall be elected by representatives or advisers, who themselves have been elected by the members or stockholders from the several territorial districts. If the bylaws divide the territory into districts for the election of representatives or advisers who elect the directors, the bylaws shall specify the number of representatives or advisers to be elected by each district and the manner and method of reapportioning the representatives or advisers and of redistricting the territory that is covered by the association.

26226.4. The bylaws may provide that one or more directors may be chosen by a public official or commission or by the other directors selected by the members. The director shall represent primarily the interest of the general public in the association. The director shall have the same powers and rights as other directors. These directors shall not number more than one-fifth of the entire number of directors.

26226.5. The bylaws may provide for an executive committee and may allot to the committee all the functions and powers of the board of directors, subject to the general direction and control of the board.

26226.6. An association may provide a fair remuneration for the time that is actually spent by its officers and directors in its service and for the service of the members of its executive committee.

26226.7. If a vacancy on the board of directors occurs, except by expiration of term, the remaining members of the board, by a majority vote, shall fill the vacancy, unless the bylaws provide for an election of directors by districts. If the bylaws provide for an election of directors by districts, the vacancy shall be filled either by the election of a director from the district in which the vacancy occurs or by the board of directors calling a special meeting of the members or stockholders in that district to fill the vacancy.

26226.8. (a) The directors shall elect a president, one or more vice presidents, a secretary, a treasurer, and such other officers as may be prescribed by the bylaws. Any two or more offices, except those of president and secretary, may be held by the same person.

(b) The treasurer may be a bank or a depository and, as such, shall not be considered as an officer, but as a function of the board of directors. In such case, the secretary shall perform the usual accounting duties of the treasurer, except that the funds shall be deposited only as and where authorized by the board of directors.

26226.9. (a) A member may bring charges against an officer or director by filing them in writing with the secretary of the association, together with a petition that is signed by 5 percent of the members, which requests the removal of the officer or director in question. The removal shall be voted upon at the next regular or special meeting of the association and, by a vote of a majority of the members, the association may remove the officer or director and fill the vacancy. The director or officer, against whom the charges have been brought, shall be informed in writing of the charges previous to the meeting and shall have an opportunity at the meeting to be heard in person or by counsel and to present witnesses. The person bringing the charges against him or her shall have the same opportunity.

(b) If the bylaws provide for election of directors by districts with primary elections in each district, the petition for removal of a director shall be signed by 20 percent of the members that reside in the district from which the director was elected. The board of directors shall call a special meeting of the members who reside in that district to consider the removal of the director. By a vote of the majority of the members of that district at the special meeting, the director in question shall be removed from office.

Article 7. Powers

26227. An association may engage in any activity in connection with the growing, harvesting, curing, drying, trimming, packing, grading, storing, or handling of any cannabis product that is produced or delivered to it by its members; or any activity in connection with the purchase, hiring, or use by its members of supplies, machinery, or equipment, or in the financing of any such activities; or in any one or more of the activities that are specified in this section with a valid license.

26227.1. An association may borrow without limitation as to the amount of corporate indebtedness or liability and may make advances to members.

26227.2. An association may act as the agent or representative of any member or members in any of the activities specified in Section 26226.2 or 26226.3.

26227.3. An association may purchase or otherwise acquire, hold, own, and exercise all rights of ownership in, sell, transfer, pledge, or guarantee the payment of dividends or interest on, or the retirement or redemption of, shares of the capital stock or bonds of an association that is engaged in any related activity or in the growing, harvesting, curing, drying, trimming, packing, grading, storing, or handling of a cannabis product that is handled by the association.

26227.4. An association may establish reserves and invest the funds of the reserves in bonds or in other property as may be provided in the bylaws.

26227.5. An association may buy, hold, and exercise all privileges of ownership over such real or personal property as may be necessary or convenient for the conduct and operation of, or incidental to, the business of the association.

26227.6. An association may levy assessments in the manner and in the amount as may be provided in its bylaws.

26227.7. An association may do any of the following anywhere:

(a) That which is necessary, suitable, or proper for the accomplishment of a purpose, or the attainment of an object, that is enumerated in this article.

(b) That which is conducive to, or expedient for, the interest or benefit of the association.

(c) Contract accordingly.

(d) Exercise and possess all powers, rights, and privileges that are necessary or incidental to the purposes for which the association is organized or to the activities in which it is engaged.

(e) Exercise any other rights, powers, and privileges that are granted by the laws of this state to ordinary corporations, except such as are inconsistent with the express provisions of this chapter.

26227.75. An association may use or employ any of its facilities for any purpose, provided the proceeds that arise from such use and employment shall go to reduce the cost of operation for its members. The cannabis products that are handled for, or the services, machinery, equipment, or supplies or facilities that are furnished to, nonmembers shall not, however, exceed in value the cannabis products that are handled for, or the services, merchandise, or facilities that are supplied to, members during the same period.

26227.8. (a) An association may organize, form, operate, own, control, have an interest in, own stock of, or be a member of any other association, with or without capital stock, that is engaged in growing, harvesting, curing, drying, trimming, packing, grading, storing, or handling of any cannabis product that is handled by the association, or the byproducts of the cannabis product.

(b) Any two or more associations that are organized pursuant to this section may be merged into one constituent association or consolidated into a new association. The merger or consolidation shall be made in the manner that is prescribed by the general laws of the state that cover domestic corporations.

26227.9. (a) Any association may, upon resolution adopted by its board of directors, enter into all necessary and proper contracts and agreements and make all necessary and proper stipulations and arrangements with another cannabis cooperative or association that is formed in this or in any other state for the cannabis cooperative and more economical carrying on of its business or any part of its business.

(b) Any two or more associations may, by agreement between them, unite in employing and using, or may separately employ and use, the same personnel, methods, means, and agencies for carrying on and conducting their respective business.

Article 8. Financial Provisions

26228. An association is not subject in any manner to the terms of the Corporate Securities Law (Division 1 (commencing with Section 25000) of Title 4 of the Corporations Code), and any association may issue its membership certificates or stock or other securities as provided in this chapter without the necessity of any qualification under that law.

26228.1. If an association issues nonpar value stock, the issuance of the stock shall be governed by the terms of all general laws that cover the issuance of nonpar value stock in domestic corporations.

26228.2. If an association with preferred shares of stock purchases the stock or any property, or any interest in any property of any person, it may discharge the obligations that are so incurred, wholly or in part, by exchanging for the acquired interest, shares of its preferred stock to an amount that at par value would equal the fair market value of the stock or interest so purchased, as determined by the board of directors. In that case, the transfer to the association of the stock or interest that is purchased is equivalent to payment in cash for the shares of stock that are issued.

26228.3. The board of directors of every association shall cause to be sent to the members of the association not later than 120 days after the close of the fiscal or calendar year an annual report of the operations of the association, unless the report is expressly dispensed with in the bylaws. If required by the bylaws, interim reports of the operations of the association for the three-month, six-month, or nine-month periods of the current fiscal year of the association shall be furnished to the members of the association. Such annual report and any such interim reports shall include a balance sheet as of such closing date. Such financial statement shall be prepared from, and be in accordance with, the books. It shall be prepared in a form that is sanctioned by sound accounting practice for the association or approved by a duly certified public accountant or a public accountant.

Article 9. Members

26229. Under the terms and conditions that are prescribed in the bylaws adopted by it, an association may admit as members or issue common stock only to persons engaged in the cultivation of a cannabis product that is to be handled by or through the association.

26229.1. If a member of a nonstock association is other than a natural person, the member may be represented by any individual, associate, officer, or manager or member of it, who is duly authorized in writing.

26229.2. Any association may become a member or stockholder of any other association.

26229.3. If a member of an association that is established without shares of stock has paid his membership fee in full, he or she shall receive a certificate of membership.

26229.4. An association shall not issue a certificate for stock to a member until it has been fully paid for. The promissory notes of the members may be accepted by the association as full or partial payment. The association shall hold the stock as security for the payment of the note, but the retention as security does not affect the member's right to vote.

26229.5. An association, in its bylaws, may limit the amount of common stock that any member may own.

26229.6. The bylaws shall prohibit the transfer of the common stock or membership certificates of the associations to a person that is not qualified to be a shareholder or member as specified in this chapter. These restrictions shall be printed upon every certificate of stock or membership that is subject to them.

26229.7. The association may, at any time, as specified in the bylaws, except when the debts of the association exceed 50 percent of its assets, buy in or purchase its common stock at the book value of the common stock, as conclusively determined by the board of directors, and pay for it in cash within one year thereafter.

26229.8. A member or stockholder is not liable for the debts of the association to an amount that exceeds the sum that remains unpaid on his membership fee or his subscription to the capital stock, including any unpaid balance on any promissory note that is given in payment of the membership fee or the subscription to the capital stock.

Article 10. Marketing Contracts

26230. The association and its members may make and execute marketing contracts that require the members to sell, for any period of time, but not over 15 years, all or a specified part of a cannabis product exclusively to or through the association, or a facility that is created by the association. If the members contract a sale to the association, title to the cannabis product passes absolutely and unreservedly, except for recorded liens, to the association upon delivery or at another specified time that is expressly and definitely agreed in the contract.

26230.1. Notwithstanding any provisions of the Civil Code, a contract that is entered into by a member or stockholder of an association that provides for the delivery to the association of a cannabis product that is produced or acquired by the member or stockholder may be specifically enforced by the association to secure the delivery to it of the cannabis product.

26230.2. The bylaws or a marketing contract may fix, as liquidated damages, specific sums to be paid by the member or stockholder to the association upon the breach by him or her of any provision of the marketing contract regarding the sale or delivery or withholding of a cannabis product and may provide that the member will pay all costs, premiums for bonds, expenses, and fees, if any action is brought upon the contract by the association. These provisions are valid and enforceable in the courts of this

state. The clauses that provide for liquidated damages are enforceable as such and shall not be regarded as penalties.

26230.3. If there is a breach or threatened breach of a marketing contract by a member, the association shall be entitled to an injunction to prevent the further breach of the contract and to a decree of specific performance of the contract. Pending the adjudication of the action and upon filing a verified complaint that shows the breach or threatened breach, and upon filing a sufficient bond, the association shall be entitled to a temporary restraining order and preliminary injunction against the member.

Article 11. Reorganization of Corporations Organized Pursuant to Other Laws

26231. A corporation that is organized or existing pursuant to any law except Title 23 (commencing with Section 653aa) of Part 4 of Division 1 of the Civil Code may be brought under the provisions of this chapter by amending its articles of incorporation, in the manner that is prescribed by the general corporation laws, to conform to this chapter. If a corporation amends its articles of incorporation to conform to this chapter, it shall be deemed to be organized and existing pursuant to, and entitled to the benefit of, and subject to this chapter for all purposes and as fully as though it had been originally organized pursuant to this chapter.

26231.1. Articles of incorporation shall be deemed to conform to this chapter within the meaning of Section 26231 if it clearly appears from the articles of incorporation that the corporation desires to be subject to, and to be organized, exist, and function pursuant to this chapter.

26231.2. If the amended articles conform, as provided in Section 26231.1, provisions in the articles of incorporation that appeared in the original articles or some previous amended articles, are ineffective if, and to the extent that, they are inapplicable to, or inconsistent with, this chapter.

SEC. 108. Section 1602 of the Fish and Game Code is amended to read:

1602. (a) An entity shall not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless all of the following occur:

(1) The department receives written notification regarding the activity in the manner prescribed by the department. The notification shall include, but is not limited to, all of the following:

- (A) A detailed description of the project's location and a map.
- (B) The name, if any, of the river, stream, or lake affected.
- (C) A detailed project description, including, but not limited to, construction plans and drawings, if applicable.
- (D) A copy of any document prepared pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.

(E) A copy of any other applicable local, state, or federal permit or agreement already issued.

(F) Any other information required by the department.

(2) The department determines the notification is complete in accordance with Chapter 4.5 (commencing with Section 65920) of Division 1 of Title 7 of the Government Code, irrespective of whether the activity constitutes a development project for the purposes of that chapter.

(3) The entity pays the applicable fees, pursuant to Section 1609.

(4) One of the following occurs:

(A) (i) The department informs the entity, in writing, that the activity will not substantially adversely affect an existing fish or wildlife resource, and that the entity may commence the activity without an agreement, if the entity conducts the activity as described in the notification, including any measures in the notification that are intended to protect fish and wildlife resources.

(ii) Each region of the department shall log the notifications of activities where no agreement is required. The log shall list the date the notification was received by the department, a brief description of the proposed activity, and the location of the activity. Each item shall remain on the log for one year. Upon written request by any person, a regional office shall send the log to that person monthly for one year. A request made pursuant to this clause may be renewed annually.

(B) The department determines that the activity may substantially adversely affect an existing fish or wildlife resource and issues a final agreement to the entity that includes reasonable measures necessary to protect the resource, and the entity conducts the activity in accordance with the agreement.

(C) A panel of arbitrators issues a final agreement to the entity in accordance with subdivision (b) of Section 1603, and the entity conducts the activity in accordance with the agreement.

(D) The department does not issue a draft agreement to the entity within 60 days from the date notification is complete, and the entity conducts the activity as described in the notification, including any measures in the notification that are intended to protect fish and wildlife resources.

(b) (1) If an activity involves the routine maintenance and operation of water supply, drainage, flood control, or waste treatment and disposal facilities, notice to and agreement with the department shall not be required after the initial notification and agreement, unless the department determines either of the following:

(A) The work described in the agreement has substantially changed.

(B) Conditions affecting fish and wildlife resources have substantially changed, and those resources are adversely affected by the activity conducted under the agreement.

(2) This subdivision applies only if notice to, and agreement with, the department was attained prior to January 1, 1977, and the department has been provided a copy of the agreement or other proof of the existence of the agreement that satisfies the department, if requested.

(c) Notwithstanding subdivision (a), the department is not required to determine whether the notification is complete or otherwise process the notification until the department has received the applicable fees.

(d) (1) Notwithstanding subdivision (a), an entity shall not be required to obtain an agreement with the department pursuant to this chapter for activities authorized by a license or renewed license for cannabis cultivation issued by the Department of Food and Agriculture for the term of the license or renewed license if all of the following occur:

(A) The entity submits all of the following to the department:

(i) The written notification described in paragraph (1) of subdivision (a).

(ii) A copy of the license or renewed license for cannabis cultivation issued by the Department of Food and Agriculture that includes the requirements specified in Section 26060.1 of the Business and Professions Code.

(iii) The fee specified in paragraph (3) of subdivision (a).

(B) The department determines in its sole discretion that compliance with the requirements specified in Section 26060.1 of the Business and Professions Code that are included in the license will adequately protect existing fish and wildlife resources that may be substantially adversely affected by the cultivation without the need for additional measures that the department would include in a draft streambed alteration agreement in accordance with Section 1603.

(C) The department notifies the entity in writing that the exemption applies to the cultivation authorized by the license or renewed license.

(2) The department shall notify the entity in writing whether the exemption in paragraph (1) applies to the cultivation authorized by the license or renewed license within 60 days from the date that the notification is complete and the fee has been paid.

(3) If an entity receives an exemption pursuant to this subdivision and fails to comply with any of the requirements described in Section 26060.1 of the Business and Professions Code that are included in the license, the failure shall constitute a violation under this section, and the department shall notify the Department of Food and Agriculture of any enforcement action taken.

(e) It is unlawful for any entity to violate this chapter.

SEC. 109. Section 1617 of the Fish and Game Code is amended to read:

1617. (a) The department may adopt general agreements for the cultivation of cannabis.

(b) Any general agreement adopted by the department subsequent to adoption of regulations under this section shall be in lieu of an individual agreement described in subparagraph (B) of paragraph (4) of subdivision (a) of Section 1602.

(c) Subparagraph (D) of paragraph (4) of subdivision (a) of Section 1602 and all other time periods to process agreements specified in this chapter do not apply to the issuance of a general agreement adopted by the department pursuant to this section.

(d) Any general agreement issued by the department pursuant to this section is a final agreement and is not subject to Section 1603 or 1604.

(e) The department shall charge a fee for a general agreement adopted by the department under this section in accordance with Section 1609.

(f) If the department adopts or amends a general agreement under this section, it shall do so as an emergency regulation. An emergency regulation adopted pursuant to this section, and any amendments to it, shall be adopted by the department in accordance with Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. The adoption of these regulations is an emergency and shall be considered by the Office of Administrative Law as necessary for the immediate preservation of the public peace, health and safety, and general welfare. Notwithstanding Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, an emergency regulation adopted by the department, or any amendments to it made by the department pursuant to this section, shall stay in effect until revised by the department.

(g) Regulations adopted pursuant to this section, and any amendment thereto, shall not be subject to Division 13 (commencing with Section 21000) of the Public Resources Code.

SEC. 110. Section 37104 of the Food and Agricultural Code is amended to read:

37104. Notwithstanding Section 26001 of the Business and Professions Code, butter purchased from a licensed milk products plant or retail location that is subsequently infused or mixed with medicinal or adult-use cannabis at the premises or location that is not subject to licensing as a milk product plant is exempt from the provisions of this division.

SEC. 111. Section 54036 of the Food and Agricultural Code is amended to read:

54036. A person, firm, corporation, or association, that is hereafter organized or doing business in this state, may not use the word "cooperative" as part of its corporate name or other business name or title for producers' cooperative marketing activities, unless it has complied with this chapter or is otherwise authorized by Chapter 22 (commencing with Section 26220) of Division 10 of the Business and Professions Code.

SEC. 112. Section 81010 of the Food and Agricultural Code is amended to read:

81010. This division, and Section 221 shall become operative on January 1, 2017.

SEC. 113. Section 11006.5 of the Health and Safety Code is amended to read:

11006.5. "Concentrated cannabis" means the separated resin, whether crude or purified, obtained from cannabis.

SEC. 114. Section 11014.5 of the Health and Safety Code is amended to read:

11014.5. (a) "Drug paraphernalia" means all equipment, products and materials of any kind which are designed for use or marketed for use, in planting, propagating, cultivating, growing, harvesting, manufacturing,

compounding, converting, producing, processing, preparing, testing, analyzing, packaging, repackaging, storing, containing, concealing, injecting, ingesting, inhaling, or otherwise introducing into the human body a controlled substance in violation of this division. It includes, but is not limited to:

(1) Kits designed for use or marketed for use in planting, propagating, cultivating, growing, or harvesting of any species of plant which is a controlled substance or from which a controlled substance can be derived.

(2) Kits designed for use or marketed for use in manufacturing, compounding, converting, producing, processing, or preparing controlled substances.

(3) Isomerization devices designed for use or marketed for use in increasing the potency of any species of plant which is a controlled substance.

(4) Testing equipment designed for use or marketed for use in identifying, or in analyzing the strength, effectiveness, or purity of controlled substances.

(5) Scales and balances designed for use or marketed for use in weighing or measuring controlled substances.

(6) Containers and other objects designed for use or marketed for use in storing or concealing controlled substances.

(7) Hypodermic syringes, needles, and other objects designed for use or marketed for use in parenterally injecting controlled substances into the human body.

(8) Objects designed for use or marketed for use in ingesting, inhaling, or otherwise introducing cannabis, cocaine, hashish, or hashish oil into the human body, such as:

- (A) Carburetion tubes and devices.
- (B) Smoking and carburetion masks.

(C) Roach clips, meaning objects used to hold burning material, such as a cannabis cigarette, that has become too small or too short to be held in the hand.

- (D) Miniature cocaine spoons, and cocaine vials.
- (E) Chamber pipes.
- (F) Carburetor pipes.
- (G) Electric pipes.
- (H) Air-driven pipes.
- (I) Chillums.
- (J) Bongs.
- (K) Ice pipes or chillers.

(b) For the purposes of this section, the phrase "marketed for use" means advertising, distributing, offering for sale, displaying for sale, or selling in a manner which promotes the use of equipment, products, or materials with controlled substances.

(c) In determining whether an object is drug paraphernalia, a court or other authority may consider, in addition to all other logically relevant factors, the following:

(1) Statements by an owner or by anyone in control of the object concerning its use.

(2) Instructions, oral or written, provided with the object concerning its use for ingesting, inhaling, or otherwise introducing a controlled substance into the human body.

(3) Descriptive materials accompanying the object which explain or depict its use.

(4) National and local advertising concerning its use.

(5) The manner in which the object is displayed for sale.

(6) Whether the owner, or anyone in control of the object, is a legitimate supplier of like or related items to the community, such as a licensed distributor or dealer of tobacco products.

(7) Expert testimony concerning its use.

(d) If any provision of this section or the application thereof to any person or circumstance is held invalid, it is the intent of the Legislature that the invalidity shall not affect other provisions or applications of the section which can be given effect without the invalid provision or application and to this end the provisions of this section are severable.

SEC. 115. Section 11018 of the Health and Safety Code is amended to read:

11018. “Cannabis” means all parts of the plant Cannabis sativa L., whether growing or not; the seeds thereof; the resin extracted from any part of the plant; and every compound, manufacture, salt, derivative, mixture, or preparation of the plant, its seeds or resin. It does not include either of the following:

(a) Industrial hemp, as defined in Section 11018.5.

(b) The weight of any other ingredient combined with cannabis to prepare topical or oral administrations, food, drink, or other product.

SEC. 116. Section 11018.1 of the Health and Safety Code is amended to read:

11018.1. “Cannabis products” means cannabis that has undergone a process whereby the plant material has been transformed into a concentrate, including, but not limited to, concentrated cannabis, or an edible or topical product containing cannabis or concentrated cannabis and other ingredients.

SEC. 117. Section 11018.2 of the Health and Safety Code is amended to read:

11018.2. “Cannabis accessories” means any equipment, products or materials of any kind which are used, intended for use, or designed for use in planting, propagating, cultivating, growing, harvesting, manufacturing, compounding, converting, producing, processing, preparing, testing, analyzing, packaging, repackaging, storing, smoking, vaporizing, or containing cannabis, or for ingesting, inhaling, or otherwise introducing cannabis or cannabis products into the human body.

SEC. 118. Section 11018.5 of the Health and Safety Code is amended to read:

11018.5. (a) “Industrial hemp” means a fiber or oilseed crop, or both, that is limited to types of the plant Cannabis sativa L. having no more than

three-tenths of 1 percent tetrahydrocannabinol (THC) contained in the dried flowering tops, whether growing or not; the seeds of the plant; the resin extracted from any part of the plant; and every compound, manufacture, salt, derivative, mixture, or preparation of the plant, its seeds or resin produced therefrom.

(b) Industrial hemp shall not be subject to the provisions of this division or of Division 10 (commencing with Section 26000) of the Business and Professions Code, but instead shall be regulated by the Department of Food and Agriculture in accordance with the provisions of Division 24 (commencing with Section 81000) of the Food and Agricultural Code, inclusive.

SEC. 119. Section 11032 of the Health and Safety Code is amended to read:

11032. If reference is made to the term "narcotics" in any law not in this division, unless otherwise expressly provided, it means those controlled substances classified in Schedules I and II, as defined in this division. If reference is made to "restricted dangerous drugs" not in this division, unless otherwise expressly provided, it means those controlled substances classified in Schedules III and IV. If reference is made to the term "marijuana" in any law not in this division, unless otherwise expressly provided, it means cannabis as defined in this division.

SEC. 120. Section 11054 of the Health and Safety Code is amended to read:

11054. (a) The controlled substances listed in this section are included in Schedule I.

(b) Opiates. Unless specifically excepted or unless listed in another schedule, any of the following opiates, including their isomers, esters, ethers, salts, and salts of isomers, esters, and ethers whenever the existence of those isomers, esters, ethers, and salts is possible within the specific chemical designation:

- (1) Acetylmethadol.
- (2) Allylprodine.
- (3) Alphacetylmethadol (except levoalphacetylmethadol, also known as levo-alpha-acetylmethadol, levomethadyl acetate, or LAAM).
- (4) Alphameprodine.
- (5) Alphamethadol.
- (6) Benzethidine.
- (7) Betacetylmethadol.
- (8) Betameprodine.
- (9) Betamethadol.
- (10) Betaprodine.
- (11) Clonitazene.
- (12) Dextromoramide.
- (13) Diamppromide.
- (14) Diethylthiambutene.
- (15) Difenoxin.
- (16) Dimenoxadol.

- (17) Dimepheptanol.
- (18) Dimethylthiambutene.
- (19) Dioxaphetyl butyrate.
- (20) Dipipanone.
- (21) Ethylmethylthiambutene.
- (22) Etonitazene.
- (23) Etoxeridine.
- (24) Furethidine.
- (25) Hydroxypethidine.
- (26) Ketobemidone.
- (27) Levomoramide.
- (28) Levophenacylmorphan.
- (29) Morpheridine.
- (30) Noracymethadol.
- (31) Norlevorphanol.
- (32) Normethadone.
- (33) Norpipanone.
- (34) Phenadoxone.
- (35) Phenampromide.
- (36) Phenomorphan.
- (37) Phenoperidine.
- (38) Piritramide.
- (39) Proheptazine.
- (40) Properidine.
- (41) Propiram.
- (42) Racemoramide.
- (43) Tilidine.
- (44) Trimeperidine.
- (45) Any substance which contains any quantity of acetyl fentanyl (N-[1-phenethyl-4-piperidinyl] acetanilide) or a derivative thereof.
- (46) Any substance which contains any quantity of the thiophene analog of acetyl fentanyl (N-[1-[2-(2-thienyl)ethyl]-4-piperidinyl] acetanilide) or a derivative thereof.
- (47) 1-Methyl-4-Phenyl-4-Propionoxypiperidine (MPPP).
- (48) 1-(2-Phenethyl)-4-Phenyl-4-Acetyloxy piperidine (PEPAP).
- (c) Opium derivatives. Unless specifically excepted or unless listed in another schedule, any of the following opium derivatives, its salts, isomers, and salts of isomers whenever the existence of those salts, isomers, and salts of isomers is possible within the specific chemical designation:
 - (1) Acetorphine.
 - (2) Acetyl dihydrocodeine.
 - (3) Benzylmorphine.
 - (4) Codeine methylbromide.
 - (5) Codeine-N-Oxide.
 - (6) Cyprenorphine.
 - (7) Desomorphine.
 - (8) Dihydromorphine.

- (9) Drotebanol.
- (10) Etorphine (except hydrochloride salt).
- (11) Heroin.
- (12) Hydromorphenol.
- (13) Methyldesorophine.
- (14) Methylidihydromorphine.
- (15) Morphine methylbromide.
- (16) Morphine methylsulfonate.
- (17) Morphine-N-Oxide.
- (18) Myrophine.
- (19) Nicocodeine.
- (20) Nicomorphine.
- (21) Normorphine.
- (22) Pholcodine.
- (23) Thebacon.

(d) Hallucinogenic substances. Unless specifically excepted or unless listed in another schedule, any material, compound, mixture, or preparation, which contains any quantity of the following hallucinogenic substances, or which contains any of its salts, isomers, and salts of isomers whenever the existence of those salts, isomers, and salts of isomers is possible within the specific chemical designation (for purposes of this subdivision only, the term "isomer" includes the optical, position, and geometric isomers):

- (1) 4-bromo-2,5-dimethoxy-amphetamine—Some trade or other names: 4-bromo-2,5-dimethoxy-alpha-methylphenethylamine; 4-bromo-2,5-DMA.
- (2) 2,5-dimethoxyamphetamine—Some trade or other names: 2,5-dimethoxy-alpha-methylphenethylamine; 2,5-DMA.
- (3) 4-methoxyamphetamine—Some trade or other names: 4-methoxy-alpha-methylphenethylamine, paramethoxyamphetamine, PMA.
- (4) 5-methoxy-3,4-methylenedioxy-amphetamine.
- (5) 4-methyl-2,5-dimethoxy-amphetamine—Some trade or other names: 4-methyl-2,5-dimethoxy-alpha-methylphenethylamine; "DOM"; and "STP."
- (6) 3,4-methylenedioxy amphetamine.
- (7) 3,4,5-trimethoxy amphetamine.
- (8) Bufotenine—Some trade or other names: 3-(beta-dimethylaminoethyl)-5-hydroxyindole; 3-(2-dimethylaminoethyl)-5-indolol; N,N-dimethylserotonin, 5-hydroxy-N,N-dimethyltryptamine; mappine.
- (9) Diethyltryptamine—Some trade or other names: N,N-Diethyltryptamine; DET.
- (10) Dimethyltryptamine—Some trade or other names: DMT.
- (11) Ibogaine—Some trade or other names: 7-Ethyl-6,6beta, 7,8,9,10,12,13-octahydro-2-methoxy-6,9-methano-5H-pyrido [1',2':1,2] azepino [5,4-b] indole; Tabernantheiboga.
- (12) Lysergic acid diethylamide.
- (13) Cannabis.
- (14) Mescaline.

(15) Peyote—Meaning all parts of the plant presently classified botanically as *Lophophora williamsii* Lemaire, whether growing or not, the seeds thereof, any extract from any part of the plant, and every compound, manufacture, salts, derivative, mixture, or preparation of the plant, its seeds or extracts (interprets 21 U.S.C. Sec. 812(c), Schedule 1(c)(12)).

(16) N-ethyl-3-piperidyl benzilate.

(17) N-methyl-3-piperidyl benzilate.

(18) Psilocybin.

(19) Psilocyn.

(20) Tetrahydrocannabinols. Synthetic equivalents of the substances contained in the plant, or in the resinous extractives of *Cannabis*, sp. and/or synthetic substances, derivatives, and their isomers with similar chemical structure and pharmacological activity such as the following: delta 1 cis or trans tetrahydrocannabinol, and their optical isomers; delta 6 cis or trans tetrahydrocannabinol, and their optical isomers; delta 3,4 cis or trans tetrahydrocannabinol, and its optical isomers.

Because nomenclature of these substances is not internationally standardized, compounds of these structures, regardless of numerical designation of atomic positions covered.

(21) Ethylamine analog of phencyclidine—Some trade or other names: N-ethyl-1-phenylcyclohexylamine, (1-phenylcyclohexyl) ethylamine, N-(1-phenylcyclohexyl) ethylamine, cyclohexamine, PCE.

(22) Pyrrolidine analog of phencyclidine—Some trade or other names: 1-(1-phenylcyclohexyl)-pyrrolidine, PCP, PHP.

(23) Thiophene analog of phencyclidine—Some trade or other names: 1-[1-(2 thienyl)-cyclohexyl]-piperidine, 2-thienyl analog of phencyclidine, TPCP, TCP.

(e) Depressants. Unless specifically excepted or unless listed in another schedule, any material, compound, mixture, or preparation which contains any quantity of the following substances having a depressant effect on the central nervous system, including its salts, isomers, and salts of isomers whenever the existence of those salts, isomers, and salts of isomers is possible within the specific chemical designation:

(1) Mecloqualone.

(2) Methaqualone.

(3) Gamma hydroxybutyric acid (also known by other names such as GHB; gamma hydroxy butyrate; 4-hydroxybutyrate; 4-hydroxybutanoic acid; sodium oxybate; sodium oxybutyrate), including its immediate precursors, isomers, esters, ethers, salts, and salts of isomers, esters, and ethers, including, but not limited to, gammabutyrolactone, for which an application has not been approved under Section 505 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. Sec. 355).

(f) Unless specifically excepted or unless listed in another schedule, any material, compound, mixture, or preparation which contains any quantity of the following substances having a stimulant effect on the central nervous system, including its isomers:

(1) Cocaine base.

- (2) Fenethylline, including its salts.
- (3) N-Ethylamphetamine, including its salts.

SEC. 121. The heading of Article 2 (commencing with Section 11357) of Chapter 6 of Division 10 of the Health and Safety Code is amended to read:

Article 2. Cannabis

SEC. 122. Section 11357 of the Health and Safety Code is amended to read:

11357. (a) Except as authorized by law, possession of not more than 28.5 grams of cannabis, or not more than four grams of concentrated cannabis, or both, shall be punished or adjudicated as follows:

(1) Persons under the age of 18 are guilty of an infraction and shall be required to:

(A) Upon a finding that a first offense has been committed, complete four hours of drug education or counseling and up to 10 hours of community service over a period not to exceed 60 days.

(B) Upon a finding that a second offense or subsequent offense has been committed, complete six hours of drug education or counseling and up to 20 hours of community service over a period not to exceed 90 days.

(2) Persons at least 18 years of age but less than 21 years of age are guilty of an infraction and punishable by a fine of not more than one hundred dollars (\$100).

(b) Except as authorized by law, possession of more than 28.5 grams of cannabis, or more than four grams of concentrated cannabis, shall be punished as follows:

(1) Persons under the age of 18 who possess more than 28.5 grams of cannabis or more than four grams of concentrated cannabis, or both, are guilty of an infraction and shall be required to:

(A) Upon a finding that a first offense has been committed, complete eight hours of drug education or counseling and up to 40 hours of community service over a period not to exceed 90 days.

(B) Upon a finding that a second or subsequent offense has been committed, complete 10 hours of drug education or counseling and up to 60 hours of community service over a period not to exceed 120 days.

(2) Persons 18 years of age or over who possess more than 28.5 grams of cannabis, or more than four grams of concentrated cannabis, or both, shall be punished by imprisonment in a county jail for a period of not more than six months or by a fine of not more than five hundred dollars (\$500), or by both that fine and imprisonment.

(c) Except as authorized by law, a person 18 years of age or over who possesses not more than 28.5 grams of cannabis, or not more than four grams of concentrated cannabis, upon the grounds of, or within, any school providing instruction in kindergarten or any of grades 1 to 12, inclusive,

during hours the school is open for classes or school-related programs is guilty of a misdemeanor and shall be punished as follows:

(1) A fine of not more than two hundred fifty dollars (\$250), upon a finding that a first offense has been committed.

(2) A fine of not more than five hundred dollars (\$500), or by imprisonment in a county jail for a period of not more than 10 days, or both, upon a finding that a second or subsequent offense has been committed.

(d) Except as authorized by law, a person under the age of 18 who possesses not more than 28.5 grams of cannabis, or not more than four grams of concentrated cannabis, upon the grounds of, or within, any school providing instruction in kindergarten or any of grades 1 to 12, inclusive, during hours the school is open for classes or school-related programs is guilty of an infraction and shall be punished in the same manner provided in paragraph (1) of subdivision (b).

SEC. 123. Section 11358 of the Health and Safety Code is amended to read:

11358. Each person who plants, cultivates, harvests, dries, or processes cannabis plants, or any part thereof, except as otherwise provided by law, shall be punished as follows:

(a) Each person under the age of 18 who plants, cultivates, harvests, dries, or processes any cannabis plants shall be punished in the same manner provided in paragraph (1) of subdivision (b) of Section 11357.

(b) Each person at least 18 years of age but less than 21 years of age who plants, cultivates, harvests, dries, or processes not more than six living cannabis plants shall be guilty of an infraction and a fine of not more than one hundred dollars (\$100).

(c) Each person 18 years of age or over who plants, cultivates, harvests, dries, or processes more than six living cannabis plants shall be punished by imprisonment in a county jail for a period of not more than six months or by a fine of not more than five hundred dollars (\$500), or by both that fine and imprisonment.

(d) Notwithstanding subdivision (c), a person 18 years of age or over who plants, cultivates, harvests, dries, or processes more than six living cannabis plants, or any part thereof, except as otherwise provided by law, may be punished by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code if any of the following conditions exist:

(1) The person has one or more prior convictions for an offense specified in clause (iv) of subparagraph (C) of paragraph (2) of subdivision (e) of Section 667 of the Penal Code or for an offense requiring registration pursuant to subdivision (c) of Section 290 of the Penal Code.

(2) The person has two or more prior convictions under subdivision (c).

(3) The offense resulted in any of the following:

(A) Violation of Section 1052 of the Water Code relating to illegal diversion of water.

(B) Violation of Section 13260, 13264, 13272, or 13387 of the Water Code relating to discharge of water.

(C) Violation of Section 5650 or 5652 of the Fish and Game Code relating to waters of the state.

(D) Violation of Section 1602 of the Fish and Game Code relating to rivers, streams, and lakes.

(E) Violation of Section 374.8 of the Penal Code relating to hazardous substances or Section 25189.5, 25189.6, or 25189.7 of the Health and Safety Code relating to hazardous waste.

(F) Violation of Section 2080 of the Fish and Game Code relating to endangered and threatened species or Section 3513 of the Fish and Game Code relating to the Migratory Bird Treaty Act, or Section 2000 of the Fish and Game Code relating to the unlawful taking of fish and wildlife.

(G) Intentionally or with gross negligence causing substantial environmental harm to public lands or other public resources.

SEC. 124. Section 11359 of the Health and Safety Code is amended to read:

11359. Every person who possesses for sale any cannabis, except as otherwise provided by law, shall be punished as follows:

(a) Every person under the age of 18 who possesses cannabis for sale shall be punished in the same manner provided in paragraph (1) of subdivision (b) of Section 11357.

(b) Every person 18 years of age or over who possesses cannabis for sale shall be punished by imprisonment in a county jail for a period of not more than six months or by a fine of not more than five hundred dollars (\$500), or by both such fine and imprisonment.

(c) Notwithstanding subdivision (b), a person 18 years of age or over who possesses cannabis for sale may be punished by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code if:

(1) The person has one or more prior convictions for an offense specified in clause (iv) of subparagraph (C) of paragraph (2) of subdivision (e) of Section 667 of the Penal Code or for an offense requiring registration pursuant to subdivision (c) of Section 290 of the Penal Code;

(2) The person has two or more prior convictions under subdivision (b); or

(3) The offense occurred in connection with the knowing sale or attempted sale of cannabis to a person under the age of 18 years.

(d) Notwithstanding subdivision (b), a person 21 years of age or over who possesses cannabis for sale may be punished by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code if the offense involves knowingly hiring, employing, or using a person 20 years of age or younger in unlawfully cultivating, transporting, carrying, selling, offering to sell, giving away, preparing for sale, or peddling any cannabis.

SEC. 125. Section 11360 of the Health and Safety Code is amended to read:

11360. (a) Except as otherwise provided by this section or as authorized by law, every person who transports, imports into this state, sells, furnishes, administers, or gives away, or offers to transport, import into this state, sell,

furnish, administer, or give away, or attempts to import into this state or transport any cannabis shall be punished as follows:

(1) Persons under the age of 18 years shall be punished in the same manner as provided in paragraph (1) of subdivision (b) of Section 11357.

(2) Persons 18 years of age or over shall be punished by imprisonment in a county jail for a period of not more than six months or by a fine of not more than five hundred dollars (\$500), or by both such fine and imprisonment.

(3) Notwithstanding paragraph (2), a person 18 years of age or over may be punished by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code for a period of two, three, or four years if:

(A) The person has one or more prior convictions for an offense specified in clause (iv) of subparagraph (C) of paragraph (2) of subdivision (e) of Section 667 of the Penal Code or for an offense requiring registration pursuant to subdivision (c) of Section 290 of the Penal Code;

(B) The person has two or more prior convictions under paragraph (2);

(C) The offense involved the knowing sale, attempted sale, or the knowing offer to sell, furnish, administer, or give away cannabis to a person under the age of 18 years; or

(D) The offense involved the import, offer to import, or attempted import into this state, or the transport for sale, offer to transport for sale, or attempted transport for sale out of this state, of more than 28.5 grams of cannabis or more than four grams of concentrated cannabis.

(b) Except as authorized by law, every person who gives away, offers to give away, transports, offers to transport, or attempts to transport not more than 28.5 grams of cannabis, other than concentrated cannabis, is guilty of an infraction and shall be punished by a fine of not more than one hundred dollars (\$100). In any case in which a person is arrested for a violation of this subdivision and does not demand to be taken before a magistrate, that person shall be released by the arresting officer upon presentation of satisfactory evidence of identity and giving his or her written promise to appear in court, as provided in Section 853.6 of the Penal Code, and shall not be subjected to booking.

(c) For purposes of this section, "transport" means to transport for sale.

(d) This section does not preclude or limit prosecution for any aiding and abetting or conspiracy offenses.

SEC. 126. Section 11361 of the Health and Safety Code is amended to read:

11361. (a) A person 18 years of age or over who hires, employs, or uses a minor in unlawfully transporting, carrying, selling, giving away, preparing for sale, or peddling any cannabis, who unlawfully sells, or offers to sell, any cannabis to a minor, or who furnishes, administers, or gives, or offers to furnish, administer, or give any cannabis to a minor under 14 years of age, or who induces a minor to use cannabis in violation of law shall be punished by imprisonment in the state prison for a period of three, five, or seven years.

(b) A person 18 years of age or over who furnishes, administers, or gives, or offers to furnish, administer, or give, any cannabis to a minor 14 years of age or older in violation of law shall be punished by imprisonment in the state prison for a period of three, four, or five years.

SEC. 127. Section 11361.1 of the Health and Safety Code is amended to read:

11361.1. (a) The drug education and counseling requirements under Sections 11357, 11358, 11359, and 11360 shall be:

(1) Mandatory, unless the court finds that such drug education or counseling is unnecessary for the person, or that a drug education or counseling program is unavailable;

(2) Free to participants, and shall consist of at least four hours of group discussion or instruction based on science and evidence-based principles and practices specific to the use and abuse of cannabis and other controlled substances.

(b) For good cause, the court may grant an extension of time not to exceed 30 days for a person to complete the drug education and counseling required under Sections 11357, 11358, 11359, and 11360.

SEC. 128. Section 11361.5 of the Health and Safety Code is amended to read:

11361.5. (a) Records of any court of this state, any public or private agency that provides services upon referral under Section 1000.2 of the Penal Code, or of any state agency pertaining to the arrest or conviction of any person for a violation of Section 11357 or subdivision (b) of Section 11360, or pertaining to the arrest or conviction of any person under the age of 18 for a violation of any provision of this article except Section 11357.5, shall not be kept beyond two years from the date of the conviction, or from the date of the arrest if there was no conviction, except with respect to a violation of subdivision (d) of Section 11357, or any other violation by a person under the age of 18 occurring upon the grounds of, or within, any school providing instruction in kindergarten or any of grades 1 to 12, inclusive, during hours the school is open for classes or school-related programs, the records shall be retained until the offender attains the age of 18 years at which time the records shall be destroyed as provided in this section. Any court or agency having custody of the records, including the statewide criminal databases, shall provide for the timely destruction of the records in accordance with subdivision (c), and those records shall also be purged from the statewide criminal databases. As used in this subdivision, "records pertaining to the arrest or conviction" shall include records of arrests resulting in the criminal proceeding and records relating to other offenses charged in the accusatory pleading, whether the defendant was acquitted or charges were dismissed. The two-year period beyond which records shall not be kept pursuant to this subdivision shall not apply to any person who is, at the time at which this subdivision would otherwise require record destruction, incarcerated for an offense subject to this subdivision. For such persons, the two-year period shall commence from the date the person is released from custody. The requirements of this subdivision do

not apply to records of any conviction occurring prior to January 1, 1976, or records of any arrest not followed by a conviction occurring prior to that date, or records of any arrest for an offense specified in subdivision (c) of Section 1192.7, or subdivision (c) of Section 667.5 of the Penal Code.

(b) This subdivision applies only to records of convictions and arrests not followed by conviction occurring prior to January 1, 1976, for any of the following offenses:

(1) Any violation of Section 11357 or a statutory predecessor thereof.

(2) Unlawful possession of a device, contrivance, instrument, or paraphernalia used for unlawfully smoking cannabis, in violation of Section 11364, as it existed prior to January 1, 1976, or a statutory predecessor thereof.

(3) Unlawful visitation or presence in a room or place in which cannabis is being unlawfully smoked or used, in violation of Section 11365, as it existed prior to January 1, 1976, or a statutory predecessor thereof.

(4) Unlawfully using or being under the influence of cannabis, in violation of Section 11550, as it existed prior to January 1, 1976, or a statutory predecessor thereof.

Any person subject to an arrest or conviction for those offenses may apply to the Department of Justice for destruction of records pertaining to the arrest or conviction if two or more years have elapsed since the date of the conviction, or since the date of the arrest if not followed by a conviction. The application shall be submitted upon a form supplied by the Department of Justice and shall be accompanied by a fee, which shall be established by the department in an amount which will defray the cost of administering this subdivision and costs incurred by the state under subdivision (c), but which shall not exceed thirty-seven dollars and fifty cents (\$37.50). The application form may be made available at every local police or sheriff's department and from the Department of Justice and may require that information which the department determines is necessary for purposes of identification.

The department may request, but not require, the applicant to include a self-administered fingerprint upon the application. If the department is unable to sufficiently identify the applicant for purposes of this subdivision without the fingerprint or without additional fingerprints, it shall so notify the applicant and shall request the applicant to submit any fingerprints which may be required to effect identification, including a complete set if necessary, or, alternatively, to abandon the application and request a refund of all or a portion of the fee submitted with the application, as provided in this section. If the applicant fails or refuses to submit fingerprints in accordance with the department's request within a reasonable time which shall be established by the department, or if the applicant requests a refund of the fee, the department shall promptly mail a refund to the applicant at the address specified in the application or at any other address which may be specified by the applicant. However, if the department has notified the applicant that election to abandon the application will result in forfeiture of a specified amount which is a portion of the fee, the department may retain a portion

of the fee which the department determines will defray the actual costs of processing the application, provided the amount of the portion retained shall not exceed ten dollars (\$10).

Upon receipt of a sufficient application, the Department of Justice shall destroy records of the department, if any, pertaining to the arrest or conviction in the manner prescribed by subdivision (c) and shall notify the Federal Bureau of Investigation, the law enforcement agency which arrested the applicant, and, if the applicant was convicted, the probation department which investigated the applicant and the Department of Motor Vehicles, of the application.

(c) Destruction of records of arrest or conviction pursuant to subdivision (a) or (b) shall be accomplished by permanent obliteration of all entries or notations upon the records pertaining to the arrest or conviction, and the record shall be prepared again so that it appears that the arrest or conviction never occurred. However, where (1) the only entries upon the record pertain to the arrest or conviction and (2) the record can be destroyed without necessarily effecting the destruction of other records, then the document constituting the record shall be physically destroyed.

(d) Notwithstanding subdivision (a) or (b), written transcriptions of oral testimony in court proceedings and published judicial appellate reports are not subject to this section. Additionally, no records shall be destroyed pursuant to subdivision (a) if the defendant or a codefendant has filed a civil action against the peace officers or law enforcement jurisdiction which made the arrest or instituted the prosecution and if the agency which is the custodian of those records has received a certified copy of the complaint in the civil action, until the civil action has finally been resolved. Immediately following the final resolution of the civil action, records subject to subdivision (a) shall be destroyed pursuant to subdivision (c) if more than two years have elapsed from the date of the conviction or arrest without conviction.

SEC. 129. Section 11362.1 of the Health and Safety Code is amended to read:

11362.1. (a) Subject to Sections 11362.2, 11362.3, 11362.4, and 11362.45, but notwithstanding any other provision of law, it shall be lawful under state and local law, and shall not be a violation of state or local law, for persons 21 years of age or older to:

(1) Possess, process, transport, purchase, obtain, or give away to persons 21 years of age or older without any compensation whatsoever, not more than 28.5 grams of cannabis not in the form of concentrated cannabis;

(2) Possess, process, transport, purchase, obtain, or give away to persons 21 years of age or older without any compensation whatsoever, not more than eight grams of cannabis in the form of concentrated cannabis, including as contained in cannabis products;

(3) Possess, plant, cultivate, harvest, dry, or process not more than six living cannabis plants and possess the cannabis produced by the plants;

(4) Smoke or ingest cannabis or cannabis products; and

(5) Possess, transport, purchase, obtain, use, manufacture, or give away cannabis accessories to persons 21 years of age or older without any compensation whatsoever.

(b) Paragraph (5) of subdivision (a) is intended to meet the requirements of subsection (f) of Section 863 of Title 21 of the United States Code (21 U.S.C. Sec. 863(f)) by authorizing, under state law, any person in compliance with this section to manufacture, possess, or distribute cannabis accessories.

(c) Cannabis and cannabis products involved in any way with conduct deemed lawful by this section are not contraband nor subject to seizure, and no conduct deemed lawful by this section shall constitute the basis for detention, search, or arrest.

SEC. 130. Section 11362.2 of the Health and Safety Code is amended to read:

11362.2. (a) Personal cultivation of cannabis under paragraph (3) of subdivision (a) of Section 11362.1 is subject to the following restrictions:

(1) A person shall plant, cultivate, harvest, dry, or process plants in accordance with local ordinances, if any, adopted in accordance with subdivision (b).

(2) The living plants and any cannabis produced by the plants in excess of 28.5 grams are kept within the person's private residence, or upon the grounds of that private residence (e.g., in an outdoor garden area), are in a locked space, and are not visible by normal unaided vision from a public place.

(3) Not more than six living plants may be planted, cultivated, harvested, dried, or processed within a single private residence, or upon the grounds of that private residence, at one time.

(b) (1) A city, county, or city and county may enact and enforce reasonable regulations to regulate the actions and conduct in paragraph (3) of subdivision (a) of Section 11362.1.

(2) Notwithstanding paragraph (1), a city, county, or city and county shall not completely prohibit persons engaging in the actions and conduct under paragraph (3) of subdivision (a) of Section 11362.1 inside a private residence, or inside an accessory structure to a private residence located upon the grounds of a private residence that is fully enclosed and secure.

(3) Notwithstanding paragraph (3) of subdivision (a) of Section 11362.1, a city, county, or city and county may completely prohibit persons from engaging in actions and conduct under paragraph (3) of subdivision (a) of Section 11362.1 outdoors upon the grounds of a private residence.

(4) Paragraph (3) shall become inoperative upon a determination by the California Attorney General that adult use of cannabis is lawful in the State of California under federal law, and an act taken by a city, county, or city and county under paragraph (3) is unenforceable upon the date of that determination by the Attorney General.

(5) For purposes of this section, "private residence" means a house, an apartment unit, a mobile home, or other similar dwelling.

SEC. 131. Section 11362.3 of the Health and Safety Code is amended to read:

11362.3. (a) Section 11362.1 does not permit any person to:

(1) Smoke or ingest cannabis or cannabis products in a public place, except in accordance with Section 26200 of the Business and Professions Code.

(2) Smoke cannabis or cannabis products in a location where smoking tobacco is prohibited.

(3) Smoke cannabis or cannabis products within 1,000 feet of a school, day care center, or youth center while children are present at the school, day care center, or youth center, except in or upon the grounds of a private residence or in accordance with Section 26200 of the Business and Professions Code and only if such smoking is not detectable by others on the grounds of the school, day care center, or youth center while children are present.

(4) Possess an open container or open package of cannabis or cannabis products while driving, operating, or riding in the passenger seat or compartment of a motor vehicle, boat, vessel, aircraft, or other vehicle used for transportation.

(5) Possess, smoke, or ingest cannabis or cannabis products in or upon the grounds of a school, day care center, or youth center while children are present.

(6) Manufacture concentrated cannabis using a volatile solvent, unless done in accordance with a license under Division 10 (commencing with Section 26000) of the Business and Professions Code.

(7) Smoke or ingest cannabis or cannabis products while driving, operating a motor vehicle, boat, vessel, aircraft, or other vehicle used for transportation.

(8) Smoke or ingest cannabis or cannabis products while riding in the passenger seat or compartment of a motor vehicle, boat, vessel, aircraft, or other vehicle used for transportation except as permitted on a motor vehicle, boat, vessel, aircraft, or other vehicle used for transportation that is operated in accordance with Section 26200 of the Business and Professions Code and while no persons under 21 years of age are present.

(b) For purposes of this section, the following definitions apply:

(1) “Day care center” has the same meaning as in Section 1596.76.

(2) “Smoke” means to inhale, exhale, burn, or carry any lighted or heated device or pipe, or any other lighted or heated cannabis or cannabis product intended for inhalation, whether natural or synthetic, in any manner or in any form. “Smoke” includes the use of an electronic smoking device that creates an aerosol or vapor, in any manner or in any form, or the use of any oral smoking device for the purpose of circumventing the prohibition of smoking in a place.

(3) “Volatile solvent” means a solvent that is or produces a flammable gas or vapor that, when present in the air in sufficient quantities, will create explosive or ignitable mixtures.

(4) “Youth center” has the same meaning as in Section 11353.1.

(c) Nothing in this section shall be construed or interpreted to amend, repeal, affect, restrict, or preempt laws pertaining to the Compassionate Use Act of 1996.

SEC. 132. Section 11362.4 of the Health and Safety Code is amended to read:

11362.4. (a) A person who engages in the conduct described in paragraph (1) of subdivision (a) of Section 11362.3 is guilty of an infraction punishable by no more than a one-hundred-dollar (\$100) fine; provided, however, that persons under the age of 18 shall instead be required to complete four hours of a drug education program or counseling, and up to 10 hours of community service, over a period not to exceed 60 days once the drug education program or counseling and community service opportunity are made available to the person.

(b) A person who engages in the conduct described in paragraphs (2), (3), or (4) of subdivision (a) of Section 11362.3 is guilty of an infraction punishable by no more than a two-hundred-fifty-dollar (\$250) fine, unless such activity is otherwise permitted by state and local law; provided, however, that persons under the age of 18 shall instead be required to complete four hours of drug education or counseling, and up to 20 hours of community service, over a period not to exceed 90 days once the drug education program or counseling and community service opportunity are made available to the person.

(c) A person who engages in the conduct described in paragraph (5) of subdivision (a) of Section 11362.3 shall be subject to the same punishment as provided under subdivision (c) or (d) of Section 11357.

(d) A person who engages in the conduct described in paragraph (6) of subdivision (a) of Section 11362.3 shall be subject to punishment under Section 11379.6.

(e) A person who violates the restrictions in subdivision (a) of Section 11362.2 is guilty of an infraction punishable by no more than a two-hundred-fifty-dollar (\$250) fine.

(f) Notwithstanding subdivision (e), a person under the age of 18 who violates the restrictions in subdivision (a) of Section 11362.2 shall be punished under subdivision (a) of Section 11358.

(g) (1) The drug education program or counseling hours required by this section shall be mandatory unless the court makes a finding that such a program or counseling is unnecessary for the person or that a drug education program or counseling is unavailable.

(2) The drug education program required by this section for persons under the age of 18 shall be free to participants and provide at least four hours of group discussion or instruction based on science and evidence-based principles and practices specific to the use and abuse of cannabis and other controlled substances.

(h) Upon a finding of good cause, the court may extend the time for a person to complete the drug education or counseling, and community service required under this section.

SEC. 133. Section 11362.45 of the Health and Safety Code is amended to read:

11362.45. Section 11362.1 does not amend, repeal, affect, restrict, or preempt:

(a) Laws making it unlawful to drive or operate a vehicle, boat, vessel, or aircraft, while smoking, ingesting, or impaired by, cannabis or cannabis products, including, but not limited to, subdivision (e) of Section 23152 of the Vehicle Code, or the penalties prescribed for violating those laws.

(b) Laws prohibiting the sale, administering, furnishing, or giving away of cannabis, cannabis products, or cannabis accessories, or the offering to sell, administer, furnish, or give away cannabis, cannabis products, or cannabis accessories to a person younger than 21 years of age.

(c) Laws prohibiting a person younger than 21 years of age from engaging in any of the actions or conduct otherwise permitted under Section 11362.1.

(d) Laws pertaining to smoking or ingesting cannabis or cannabis products on the grounds of, or within, any facility or institution under the jurisdiction of the Department of Corrections and Rehabilitation or the Division of Juvenile Justice, or on the grounds of, or within, any other facility or institution referenced in Section 4573 of the Penal Code.

(e) Laws providing that it would constitute negligence or professional malpractice to undertake any task while impaired from smoking or ingesting cannabis or cannabis products.

(f) The rights and obligations of public and private employers to maintain a drug and alcohol free workplace or require an employer to permit or accommodate the use, consumption, possession, transfer, display, transportation, sale, or growth of cannabis in the workplace, or affect the ability of employers to have policies prohibiting the use of cannabis by employees and prospective employees, or prevent employers from complying with state or federal law.

(g) The ability of a state or local government agency to prohibit or restrict any of the actions or conduct otherwise permitted under Section 11362.1 within a building owned, leased, or occupied by the state or local government agency.

(h) The ability of an individual or private entity to prohibit or restrict any of the actions or conduct otherwise permitted under Section 11362.1 on the individual's or entity's privately owned property.

(i) Laws pertaining to the Compassionate Use Act of 1996.

SEC. 134. Section 11362.7 of the Health and Safety Code is amended to read:

11362.7. For purposes of this article, the following definitions shall apply:

(a) "Attending physician" means an individual who possesses a license in good standing to practice medicine or osteopathy issued by the Medical Board of California or the Osteopathic Medical Board of California and who has taken responsibility for an aspect of the medical care, treatment, diagnosis, counseling, or referral of a patient and who has conducted a medical examination of that patient before recording in the patient's medical

record the physician's assessment of whether the patient has a serious medical condition and whether the medical use of cannabis is appropriate.

(b) "Department" means the State Department of Public Health.

(c) "Person with an identification card" means an individual who is a qualified patient who has applied for and received a valid identification card pursuant to this article.

(d) "Primary caregiver" means the individual, designated by a qualified patient, who has consistently assumed responsibility for the housing, health, or safety of that patient, and may include any of the following:

(1) In a case in which a qualified patient or person with an identification card receives medical care or supportive services, or both, from a clinic licensed pursuant to Chapter 1 (commencing with Section 1200) of Division 2, a health care facility licensed pursuant to Chapter 2 (commencing with Section 1250) of Division 2, a residential care facility for persons with chronic life-threatening illness licensed pursuant to Chapter 3.01 (commencing with Section 1568.01) of Division 2, a residential care facility for the elderly licensed pursuant to Chapter 3.2 (commencing with Section 1569) of Division 2, a hospice, or a home health agency licensed pursuant to Chapter 8 (commencing with Section 1725) of Division 2, the owner or operator, or no more than three employees who are designated by the owner or operator, of the clinic, facility, hospice, or home health agency, if designated as a primary caregiver by that qualified patient or person with an identification card.

(2) An individual who has been designated as a primary caregiver by more than one qualified patient or person with an identification card, if every qualified patient or person with an identification card who has designated that individual as a primary caregiver resides in the same city or county as the primary caregiver.

(3) An individual who has been designated as a primary caregiver by a qualified patient or person with an identification card who resides in a city or county other than that of the primary caregiver, if the individual has not been designated as a primary caregiver by any other qualified patient or person with an identification card.

(e) A primary caregiver shall be at least 18 years of age, unless the primary caregiver is the parent of a minor child who is a qualified patient or a person with an identification card or the primary caregiver is a person otherwise entitled to make medical decisions under state law pursuant to Section 6922, 7002, 7050, or 7120 of the Family Code.

(f) "Qualified patient" means a person who is entitled to the protections of Section 11362.5, but who does not have an identification card issued pursuant to this article.

(g) "Identification card" means a document issued by the department that identifies a person authorized to engage in the medical use of cannabis and the person's designated primary caregiver, if any.

(h) "Serious medical condition" means all of the following medical conditions:

(1) Acquired immune deficiency syndrome (AIDS).

- (2) Anorexia.
- (3) Arthritis.
- (4) Cachexia.
- (5) Cancer.
- (6) Chronic pain.
- (7) Glaucoma.
- (8) Migraine.

(9) Persistent muscle spasms, including, but not limited to, spasms associated with multiple sclerosis.

(10) Seizures, including, but not limited to, seizures associated with epilepsy.

- (11) Severe nausea.

- (12) Any other chronic or persistent medical symptom that either:

(A) Substantially limits the ability of the person to conduct one or more major life activities as defined in the federal Americans with Disabilities Act of 1990 (Public Law 101-336).

(B) If not alleviated, may cause serious harm to the patient's safety or physical or mental health.

(i) "Written documentation" means accurate reproductions of those portions of a patient's medical records that have been created by the attending physician, that contain the information required by paragraph (2) of subdivision (a) of Section 11362.715, and that the patient may submit as part of an application for an identification card.

SEC. 135. Section 11362.71 of the Health and Safety Code is amended to read:

11362.71. (a) (1) The department shall establish and maintain a voluntary program for the issuance of identification cards to qualified patients who satisfy the requirements of this article and voluntarily apply to the identification card program.

(2) The department shall establish and maintain a 24-hour, toll-free telephone number that will enable state and local law enforcement officers to have immediate access to information necessary to verify the validity of an identification card issued by the department, until a cost-effective Internet Web-based system can be developed for this purpose.

(b) Every county health department, or the county's designee, shall do all of the following:

(1) Provide applications upon request to individuals seeking to join the identification card program.

(2) Receive and process completed applications in accordance with Section 11362.72.

- (3) Maintain records of identification card programs.

(4) Utilize protocols developed by the department pursuant to paragraph (1) of subdivision (d).

(5) Issue identification cards developed by the department to approved applicants and designated primary caregivers.

(c) The county board of supervisors may designate another health-related governmental or nongovernmental entity or organization to perform the

functions described in subdivision (b), except for an entity or organization that cultivates or distributes cannabis.

(d) The department shall develop all of the following:

(1) Protocols that shall be used by a county health department or the county's designee to implement the responsibilities described in subdivision (b), including, but not limited to, protocols to confirm the accuracy of information contained in an application and to protect the confidentiality of program records.

(2) Application forms that shall be issued to requesting applicants.

(3) An identification card that identifies a person authorized to engage in the medical use of cannabis and an identification card that identifies the person's designated primary caregiver, if any. The two identification cards developed pursuant to this paragraph shall be easily distinguishable from each other.

(e) No person or designated primary caregiver in possession of a valid identification card shall be subject to arrest for possession, transportation, delivery, or cultivation of medicinal cannabis in an amount established pursuant to this article, unless there is probable cause to believe that the information contained in the card is false or falsified, the card has been obtained by means of fraud, or the person is otherwise in violation of the provisions of this article.

(f) It shall not be necessary for a person to obtain an identification card in order to claim the protections of Section 11362.5.

SEC. 136. Section 11362.715 of the Health and Safety Code is amended to read:

11362.715. (a) A person who seeks an identification card shall pay the fee, as provided in Section 11362.755, and provide all of the following to the county health department or the county's designee on a form developed and provided by the department:

(1) The name of the person and proof of his or her residency within the county.

(2) Written documentation by the attending physician in the person's medical records stating that the person has been diagnosed with a serious medical condition and that the medicinal use of cannabis is appropriate.

(3) The name, office address, office telephone number, and California medical license number of the person's attending physician.

(4) The name and the duties of the primary caregiver.

(5) A government-issued photo identification card of the person and of the designated primary caregiver, if any. If the applicant is a person under 18 years of age, a certified copy of a birth certificate shall be deemed sufficient proof of identity.

(b) If the person applying for an identification card lacks the capacity to make medical decisions, the application may be made by the person's legal representative, including, but not limited to, any of the following:

(1) A conservator with authority to make medical decisions.

(2) An attorney-in-fact under a durable power of attorney for health care or surrogate decisionmaker authorized under another advanced health care directive.

(3) Any other individual authorized by statutory or decisional law to make medical decisions for the person.

(c) The legal representative described in subdivision (b) may also designate in the application an individual, including himself or herself, to serve as a primary caregiver for the person, provided that the individual meets the definition of a primary caregiver.

(d) The person or legal representative submitting the written information and documentation described in subdivision (a) shall retain a copy thereof.

SEC. 137. Section 11362.765 of the Health and Safety Code is amended to read:

11362.765. (a) Subject to the requirements of this article, the individuals specified in subdivision (b) shall not be subject, on that sole basis, to criminal liability under Section 11357, 11358, 11359, 11360, 11366, 11366.5, or 11570. This section does not authorize the individual to smoke or otherwise consume cannabis unless otherwise authorized by this article, nor shall anything in this section authorize any individual or group to cultivate or distribute cannabis for profit.

(b) Subdivision (a) shall apply to all of the following:

(1) A qualified patient or a person with an identification card who transports or processes cannabis for his or her own personal medical use.

(2) A designated primary caregiver who transports, processes, administers, delivers, or gives away cannabis for medical purposes, in amounts not exceeding those established in subdivision (a) of Section 11362.77, only to the qualified patient of the primary caregiver, or to the person with an identification card who has designated the individual as a primary caregiver.

(3) An individual who provides assistance to a qualified patient or a person with an identification card, or his or her designated primary caregiver, in administering medicinal cannabis to the qualified patient or person or acquiring the skills necessary to cultivate or administer cannabis for medical purposes to the qualified patient or person.

(c) A primary caregiver who receives compensation for actual expenses, including reasonable compensation incurred for services provided to an eligible qualified patient or person with an identification card to enable that person to use cannabis under this article, or for payment for out-of-pocket expenses incurred in providing those services, or both, shall not, on the sole basis of that fact, be subject to prosecution or punishment under Section 11359 or 11360.

SEC. 138. Section 11362.768 of the Health and Safety Code is amended to read:

11362.768. (a) This section shall apply to individuals specified in subdivision (b) of Section 11362.765.

(b) No medicinal cannabis cooperative, collective, dispensary, operator, establishment, or provider who possesses, cultivates, or distributes medicinal

cannabis pursuant to this article shall be located within a 600-foot radius of a school.

(c) The distance specified in this section shall be the horizontal distance measured in a straight line from the property line of the school to the closest property line of the lot on which the medicinal cannabis cooperative, collective, dispensary, operator, establishment, or provider is to be located without regard to intervening structures.

(d) This section shall not apply to a medicinal cannabis cooperative, collective, dispensary, operator, establishment, or provider that is also a licensed residential medical or elder care facility.

(e) This section shall apply only to a medicinal cannabis cooperative, collective, dispensary, operator, establishment, or provider that is authorized by law to possess, cultivate, or distribute medicinal cannabis and that has a storefront or mobile retail outlet which ordinarily requires a local business license.

(f) Nothing in this section shall prohibit a city, county, or city and county from adopting ordinances or policies that further restrict the location or establishment of a medicinal cannabis cooperative, collective, dispensary, operator, establishment, or provider.

(g) This section does not preempt local ordinances, adopted prior to January 1, 2011, that regulate the location or establishment of a medicinal cannabis cooperative, collective, dispensary, operator, establishment, or provider.

(h) For the purposes of this section, “school” means any public or private school providing instruction in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in private homes.

SEC. 139. Section 11362.77 of the Health and Safety Code is amended to read:

11362.77. (a) A qualified patient or primary caregiver may possess no more than eight ounces of dried cannabis per qualified patient. In addition, a qualified patient or primary caregiver may also maintain no more than six mature or 12 immature cannabis plants per qualified patient.

(b) If a qualified patient or primary caregiver has a physician’s recommendation that this quantity does not meet the qualified patient’s medical needs, the qualified patient or primary caregiver may possess an amount of cannabis consistent with the patient’s needs.

(c) Counties and cities may retain or enact medicinal cannabis guidelines allowing qualified patients or primary caregivers to exceed the state limits set forth in subdivision (a).

(d) Only the dried mature processed flowers of female cannabis plant or the plant conversion shall be considered when determining allowable quantities of cannabis under this section.

(e) A qualified patient or a person holding a valid identification card, or the designated primary caregiver of that qualified patient or person, may possess amounts of cannabis consistent with this article.

SEC. 140. Section 11362.775 of the Health and Safety Code is amended to read:

11362.775. (a) Subject to subdivision (d), qualified patients, persons with valid identification cards, and the designated primary caregivers of qualified patients and persons with identification cards, who associate within the State of California in order collectively or cooperatively to cultivate cannabis for medicinal purposes, shall not solely on the basis of that fact be subject to state criminal sanctions under Section 11357, 11358, 11359, 11360, 11366, 11366.5, or 11570.

(b) A collective or cooperative that operates pursuant to this section and manufactures medicinal cannabis products shall not, solely on the basis of that fact, be subject to state criminal sanctions under Section 11379.6 if the collective or cooperative abides by all of the following requirements:

(1) The collective or cooperative does either or both of the following:

(A) Utilizes only manufacturing processes that are either solventless or that employ only nonflammable, nontoxic solvents that are generally recognized as safe pursuant to the federal Food, Drug, and Cosmetic Act (21 U.S.C. Sec. 301 et seq.).

(B) Utilizes only manufacturing processes that use solvents exclusively within a closed-loop system that meets all of the following requirements:

(i) The system uses only solvents that are generally recognized as safe pursuant to the federal Food, Drug, and Cosmetic Act (21 U.S.C. Sec. 301 et seq.).

(ii) The system is designed to recapture and contain solvents during the manufacturing process, and otherwise prevent the off-gassing of solvents into the ambient atmosphere to mitigate the risks of ignition and explosion during the manufacturing process.

(iii) A licensed engineer certifies that the system was commercially manufactured, safe for its intended use, and built to codes of recognized and generally accepted good engineering practices, including, but not limited to, the American Society of Mechanical Engineers (ASME), the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), or OSHA Nationally Recognized Testing Laboratories (NRTLs).

(iv) The system has a certification document that contains the signature and stamp of a professional engineer and the serial number of the extraction unit being certified.

(2) The collective or cooperative receives and maintains approval from the local fire official for the closed-loop system, other equipment, the extraction operation, and the facility.

(3) The collective or cooperative meets required fire, safety, and building code requirements in one or more of the following:

(A) The California Fire Code.

(B) The National Fire Protection Association (NFPA) standards.

(C) International Building Code (IBC).

(D) The International Fire Code (IFC).

(E) Other applicable standards, including complying with all applicable fire, safety, and building codes in processing, handling, and storage of solvents or gasses.

(4) The collective or cooperative is in possession of a valid seller's permit issued by the State Board of Equalization.

(5) The collective or cooperative is in possession of a valid local license, permit, or other authorization specific to the manufacturing of medicinal cannabis products, and in compliance with any additional conditions imposed by the city or county issuing the local license, permit, or other authorization.

(c) For purposes of this section, "manufacturing" means compounding, converting, producing, deriving, processing, or preparing, either directly or indirectly by chemical extraction or independently by means of chemical synthesis, medicinal cannabis products.

(d) This section shall remain in effect only until one year after the Bureau of Cannabis Control posts a notice on its Internet Web site that the licensing authorities have commenced issuing licenses pursuant to the Medicinal and Adult-Use Cannabis Regulation and Safety Act (Division 10 (commencing with Section 26000) of the Business and Professions Code).

(e) This section is repealed one year after the date upon which the notice is posted pursuant to subdivision (d).

SEC. 141. Section 11362.777 of the Health and Safety Code is repealed.

SEC. 142. Section 11362.78 of the Health and Safety Code is amended to read:

11362.78. A state or local law enforcement agency or officer shall not refuse to accept an identification card issued pursuant to this article unless the state or local law enforcement agency or officer has probable cause to believe that the information contained in the card is false or fraudulent, or the card is being used fraudulently.

SEC. 143. Section 11362.785 of the Health and Safety Code is amended to read:

11362.785. (a) Nothing in this article shall require any accommodation of medicinal use of cannabis on the property or premises of a place of employment or during the hours of employment or on the property or premises of a jail, correctional facility, or other type of penal institution in which prisoners reside or persons under arrest are detained.

(b) Notwithstanding subdivision (a), a person shall not be prohibited or prevented from obtaining and submitting the written information and documentation necessary to apply for an identification card on the basis that the person is incarcerated in a jail, correctional facility, or other penal institution in which prisoners reside or persons under arrest are detained.

(c) This article does not prohibit a jail, correctional facility, or other penal institution in which prisoners reside or persons under arrest are detained, from permitting a prisoner or a person under arrest who has an identification card, to use cannabis for medicinal purposes under circumstances that will not endanger the health or safety of other prisoners or the security of the facility.

(d) This article does not require a governmental, private, or any other health insurance provider or health care service plan to be liable for a claim for reimbursement for the medicinal use of cannabis.

SEC. 144. Section 11362.79 of the Health and Safety Code is amended to read:

11362.79. This article does not authorize a qualified patient or person with an identification card to engage in the smoking of medicinal cannabis under any of the following circumstances:

(a) In a place where smoking is prohibited by law.

(b) In or within 1,000 feet of the grounds of a school, recreation center, or youth center, unless the medicinal use occurs within a residence.

(c) On a schoolbus.

(d) While in a motor vehicle that is being operated.

(e) While operating a boat.

SEC. 145. Section 11362.795 of the Health and Safety Code is amended to read:

11362.795. (a) (1) Any criminal defendant who is eligible to use cannabis pursuant to Section 11362.5 may request that the court confirm that he or she is allowed to use medicinal cannabis while he or she is on probation or released on bail.

(2) The court's decision and the reasons for the decision shall be stated on the record and an entry stating those reasons shall be made in the minutes of the court.

(3) During the period of probation or release on bail, if a physician recommends that the probationer or defendant use medicinal cannabis, the probationer or defendant may request a modification of the conditions of probation or bail to authorize the use of medicinal cannabis.

(4) The court's consideration of the modification request authorized by this subdivision shall comply with the requirements of this section.

(b) (1) Any person who is to be released on parole from a jail, state prison, school, road camp, or other state or local institution of confinement and who is eligible to use medicinal cannabis pursuant to Section 11362.5 may request that he or she be allowed to use medicinal cannabis during the period he or she is released on parole. A parolee's written conditions of parole shall reflect whether or not a request for a modification of the conditions of his or her parole to use medicinal cannabis was made, and whether the request was granted or denied.

(2) During the period of the parole, where a physician recommends that the parolee use medicinal cannabis, the parolee may request a modification of the conditions of the parole to authorize the use of medicinal cannabis.

(3) Any parolee whose request to use medicinal cannabis while on parole was denied may pursue an administrative appeal of the decision. Any decision on the appeal shall be in writing and shall reflect the reasons for the decision.

(4) The administrative consideration of the modification request authorized by this subdivision shall comply with the requirements of this section.

SEC. 146. Section 11362.8 of the Health and Safety Code is amended to read:

11362.8. A professional licensing board shall not impose a civil penalty or take other disciplinary action against a licensee based solely on the fact that the licensee has performed acts that are necessary or appropriate to carry out the licensee's role as a designated primary caregiver to a person who is a qualified patient or who possesses a lawful identification card issued pursuant to Section 11362.72. However, this section shall not apply to acts performed by a physician relating to the discussion or recommendation of the medical use of cannabis to a patient. These discussions or recommendations, or both, shall be governed by Section 11362.5.

SEC. 147. Section 11362.81 of the Health and Safety Code is amended to read:

11362.81. (a) A person specified in subdivision (b) shall be subject to the following penalties:

(1) For the first offense, imprisonment in the county jail for no more than six months or a fine not to exceed one thousand dollars (\$1,000), or both.

(2) For a second or subsequent offense, imprisonment in the county jail for no more than one year, or a fine not to exceed one thousand dollars (\$1,000), or both.

(b) Subdivision (a) applies to any of the following:

(1) A person who fraudulently represents a medical condition or fraudulently provides any material misinformation to a physician, county health department or the county's designee, or state or local law enforcement agency or officer, for the purpose of falsely obtaining an identification card.

(2) A person who steals or fraudulently uses any person's identification card in order to acquire, possess, cultivate, transport, use, produce, or distribute cannabis.

(3) A person who counterfeits, tampers with, or fraudulently produces an identification card.

(4) A person who breaches the confidentiality requirements of this article to information provided to, or contained in the records of, the department or of a county health department or the county's designee pertaining to an identification card program.

(c) In addition to the penalties prescribed in subdivision (a), a person described in subdivision (b) may be precluded from attempting to obtain, or obtaining or using, an identification card for a period of up to six months at the discretion of the court.

(d) In addition to the requirements of this article, the Attorney General shall develop and adopt appropriate guidelines to ensure the security and nondiversion of cannabis grown for medicinal use by patients qualified under the Compassionate Use Act of 1996.

SEC. 148. Section 11362.83 of the Health and Safety Code is amended to read:

11362.83. Nothing in this article shall prevent a city or other local governing body from adopting and enforcing any of the following:

(a) Adopting local ordinances that regulate the location, operation, or establishment of a medicinal cannabis cooperative or collective.

(b) The civil and criminal enforcement of local ordinances described in subdivision (a).

(c) Enacting other laws consistent with this article.

SEC. 149. Section 11362.85 of the Health and Safety Code is amended to read:

11362.85. Upon a determination by the California Attorney General that the federal schedule of controlled substances has been amended to reclassify or declassify cannabis, the Legislature may amend or repeal the provisions of this code, as necessary, to conform state law to such changes in federal law.

SEC. 150. Section 11362.9 of the Health and Safety Code is amended to read:

11362.9. (a) (1) It is the intent of the Legislature that the state commission objective scientific research by the premier research institute of the world, the University of California, regarding the efficacy and safety of administering cannabis as part of medical treatment. If the Regents of the University of California, by appropriate resolution, accept this responsibility, the University of California shall create a program, to be known as the California Cannabis Research Program. Whenever "California Marijuana Research Program" appears in any statute, regulation, or contract, or in any other code, it shall be construed to refer to the California Cannabis Research Program.

(2) The program shall develop and conduct studies intended to ascertain the general medical safety and efficacy of cannabis and, if found valuable, shall develop medical guidelines for the appropriate administration and use of cannabis. The studies may include studies to ascertain the effect of cannabis on motor skills.

(b) The program may immediately solicit proposals for research projects to be included in the cannabis studies. Program requirements to be used when evaluating responses to its solicitation for proposals, shall include, but not be limited to, all of the following:

(1) Proposals shall demonstrate the use of key personnel, including clinicians or scientists and support personnel, who are prepared to develop a program of research regarding cannabis' general medical efficacy and safety.

(2) Proposals shall contain procedures for outreach to patients with various medical conditions who may be suitable participants in research on cannabis.

(3) Proposals shall contain provisions for a patient registry.

(4) Proposals shall contain provisions for an information system that is designed to record information about possible study participants, investigators, and clinicians, and deposit and analyze data that accrues as part of clinical trials.

(5) Proposals shall contain protocols suitable for research on cannabis, addressing patients diagnosed with acquired immunodeficiency syndrome

(AIDS) or human immunodeficiency virus (HIV), cancer, glaucoma, or seizures or muscle spasms associated with a chronic, debilitating condition. The proposal may also include research on other serious illnesses, provided that resources are available and medical information justifies the research.

(6) Proposals shall demonstrate the use of a specimen laboratory capable of housing plasma, urine, and other specimens necessary to study the concentration of cannabinoids in various tissues, as well as housing specimens for studies of toxic effects of cannabis.

(7) Proposals shall demonstrate the use of a laboratory capable of analyzing cannabis, provided to the program under this section, for purity and cannabinoid content and the capacity to detect contaminants.

(c) In order to ensure objectivity in evaluating proposals, the program shall use a peer review process that is modeled on the process used by the National Institutes of Health, and that guards against funding research that is biased in favor of or against particular outcomes. Peer reviewers shall be selected for their expertise in the scientific substance and methods of the proposed research, and their lack of bias or conflict of interest regarding the applicants or the topic of an approach taken in the proposed research. Peer reviewers shall judge research proposals on several criteria, foremost among which shall be both of the following:

(1) The scientific merit of the research plan, including whether the research design and experimental procedures are potentially biased for or against a particular outcome.

(2) Researchers' expertise in the scientific substance and methods of the proposed research, and their lack of bias or conflict of interest regarding the topic of, and the approach taken in, the proposed research.

(d) If the program is administered by the Regents of the University of California, any grant research proposals approved by the program shall also require review and approval by the research advisory panel.

(e) It is the intent of the Legislature that the program be established as follows:

(1) The program shall be located at one or more University of California campuses that have a core of faculty experienced in organizing multidisciplinary scientific endeavors and, in particular, strong experience in clinical trials involving psychopharmacologic agents. The campuses at which research under the auspices of the program is to take place shall accommodate the administrative offices, including the director of the program, as well as a data management unit, and facilities for storage of specimens.

(2) When awarding grants under this section, the program shall utilize principles and parameters of the other well-tested statewide research programs administered by the University of California, modeled after programs administered by the National Institutes of Health, including peer review evaluation of the scientific merit of applications.

(3) The scientific and clinical operations of the program shall occur, partly at University of California campuses, and partly at other postsecondary institutions, that have clinicians or scientists with expertise to conduct the

required studies. Criteria for selection of research locations shall include the elements listed in subdivision (b) and, additionally, shall give particular weight to the organizational plan, leadership qualities of the program director, and plans to involve investigators and patient populations from multiple sites.

(4) The funds received by the program shall be allocated to various research studies in accordance with a scientific plan developed by the Scientific Advisory Council. As the first wave of studies is completed, it is anticipated that the program will receive requests for funding of additional studies. These requests shall be reviewed by the Scientific Advisory Council.

(5) The size, scope, and number of studies funded shall be commensurate with the amount of appropriated and available program funding.

(f) All personnel involved in implementing approved proposals shall be authorized as required by Section 11604.

(g) Studies conducted pursuant to this section shall include the greatest amount of new scientific research possible on the medical uses of, and medical hazards associated with, cannabis. The program shall consult with the Research Advisory Panel analogous agencies in other states, and appropriate federal agencies in an attempt to avoid duplicative research and the wasting of research dollars.

(h) The program shall make every effort to recruit qualified patients and qualified physicians from throughout the state.

(i) The cannabis studies shall employ state-of-the-art research methodologies.

(j) The program shall ensure that all cannabis used in the studies is of the appropriate medical quality and shall be obtained from the National Institute on Drug Abuse or any other federal agency designated to supply cannabis for authorized research. If these federal agencies fail to provide a supply of adequate quality and quantity within six months of the effective date of this section, the Attorney General shall provide an adequate supply pursuant to Section 11478.

(k) The program may review, approve, or incorporate studies and research by independent groups presenting scientifically valid protocols for medical research, regardless of whether the areas of study are being researched by the committee.

(l) (1) To enhance understanding of the efficacy and adverse effects of cannabis as a pharmacological agent, the program shall conduct focused controlled clinical trials on the usefulness of cannabis in patients diagnosed with AIDS or HIV, cancer, glaucoma, or seizures or muscle spasms associated with a chronic, debilitating condition. The program may add research on other serious illnesses, provided that resources are available and medical information justifies the research. The studies shall focus on comparisons of both the efficacy and safety of methods of administering the drug to patients, including inhalational, tinctural, and oral, evaluate possible uses of cannabis as a primary or adjunctive treatment, and develop further information on optimal dosage, timing, mode of administration, and variations in the effects of different cannabinoids and varieties of cannabis.

(2) The program shall examine the safety of cannabis in patients with various medical disorders, including cannabis's interaction with other drugs, relative safety of inhalation versus oral forms, and the effects on mental function in medically ill persons.

(3) The program shall be limited to providing for objective scientific research to ascertain the efficacy and safety of cannabis as part of medical treatment, and should not be construed as encouraging or sanctioning the social or recreational use of cannabis.

(m) (1) Subject to paragraph (2), the program shall, prior to any approving proposals, seek to obtain research protocol guidelines from the National Institutes of Health and shall, if the National Institutes of Health issues research protocol guidelines, comply with those guidelines.

(2) If, after a reasonable period of time of not less than six months and not more than a year has elapsed from the date the program seeks to obtain guidelines pursuant to paragraph (1), no guidelines have been approved, the program may proceed using the research protocol guidelines it develops.

(n) In order to maximize the scope and size of the cannabis studies, the program may do any of the following:

(1) Solicit, apply for, and accept funds from foundations, private individuals, and all other funding sources that can be used to expand the scope or timeframe of the cannabis studies that are authorized under this section. The program shall not expend more than 5 percent of its General Fund allocation in efforts to obtain money from outside sources.

(2) Include within the scope of the cannabis studies other cannabis research projects that are independently funded and that meet the requirements set forth in subdivisions (a) to (c), inclusive. In no case shall the program accept any funds that are offered with any conditions other than that the funds be used to study the efficacy and safety of cannabis as part of medical treatment. Any donor shall be advised that funds given for purposes of this section will be used to study both the possible benefits and detriments of cannabis and that he or she will have no control over the use of these funds.

(o) (1) Within six months of the effective date of this section, the program shall report to the Legislature, the Governor, and the Attorney General on the progress of the cannabis studies.

(2) Thereafter, the program shall issue a report to the Legislature every six months detailing the progress of the studies. The interim reports required under this paragraph shall include, but not be limited to, data on all of the following:

- (A) The names and number of diseases or conditions under study.
- (B) The number of patients enrolled in each study by disease.
- (C) Any scientifically valid preliminary findings.

(p) If the Regents of the University of California implement this section, the President of the University of California shall appoint a multidisciplinary Scientific Advisory Council, not to exceed 15 members, to provide policy guidance in the creation and implementation of the program. Members shall be chosen on the basis of scientific expertise. Members of the council shall

serve on a voluntary basis, with reimbursement for expenses incurred in the course of their participation. The members shall be reimbursed for travel and other necessary expenses incurred in their performance of the duties of the council.

(q) No more than 10 percent of the total funds appropriated may be used for all aspects of the administration of this section.

(r) This section shall be implemented only to the extent that funding for its purposes is appropriated by the Legislature in the annual Budget Act.

SEC. 151. Section 11364.5 of the Health and Safety Code is amended to read:

11364.5. (a) Except as authorized by law, no person shall maintain or operate any place of business in which drug paraphernalia is kept, displayed or offered in any manner, sold, furnished, transferred or given away unless such drug paraphernalia is completely and wholly kept, displayed or offered within a separate room or enclosure to which persons under the age of 18 years not accompanied by a parent or legal guardian are excluded. Each entrance to such a room or enclosure shall be signposted in reasonably visible and legible words to the effect that drug paraphernalia is kept, displayed or offered in such room or enclosure and that minors, unless accompanied by a parent or legal guardian, are excluded.

(b) Except as authorized by law, no owner, manager, proprietor or other person in charge of any room or enclosure, within any place of business, in which drug paraphernalia is kept, displayed or offered in any manner, sold, furnished, transferred or given away shall permit or allow any person under the age of 18 years to enter, be in, remain in or visit such room or enclosure unless that minor person is accompanied by one of his or her parents or by his or her legal guardian.

(c) Unless authorized by law, no person under the age of 18 years shall enter, be in, remain in, or visit any room or enclosure in any place of business in which drug paraphernalia is kept, displayed or offered in any manner, sold, furnished, transferred, or given away unless accompanied by one of his or her parents or by his or her legal guardian.

(d) As used in this section, “drug paraphernalia” means all equipment, products, and materials of any kind which are intended for use or designed for use, in planting, propagating, cultivating, growing, harvesting, manufacturing, compounding, converting, producing, processing, preparing, testing, analyzing, packaging, repackaging, storing, containing, concealing, injecting, ingesting, inhaling, or otherwise introducing into the human body a controlled substance. “Drug paraphernalia” includes, but is not limited to, all of the following:

(1) Kits intended for use or designed for use in planting, propagating, cultivating, growing, or harvesting of any species of plant which is a controlled substance or from which a controlled substance can be derived.

(2) Kits intended for use or designed for use in manufacturing, compounding, converting, producing, processing, or preparing controlled substances.

(3) Isomerization devices intended for use or designed for use in increasing the potency of any species of plant which is a controlled substance.

(4) Testing equipment intended for use or designed for use in identifying, or in analyzing the strength, effectiveness, or purity of controlled substances.

(5) Scales and balances intended for use or designed for use in weighing or measuring controlled substances.

(6) Diluents and adulterants, such as quinine hydrochloride, mannitol, mannite, dextrose, and lactose, intended for use or designed for use in cutting controlled substances.

(7) Separation gins and sifters intended for use or designed for use in removing twigs and seeds from, or in otherwise cleaning or refining, cannabis.

(8) Blenders, bowls, containers, spoons, and mixing devices intended for use or designed for use in compounding controlled substances.

(9) Capsules, balloons, envelopes, and other containers intended for use or designed for use in packaging small quantities of controlled substances.

(10) Containers and other objects intended for use or designed for use in storing or concealing controlled substances.

(11) Hypodermic syringes, needles, and other objects intended for use or designed for use in parenterally injecting controlled substances into the human body.

(12) Objects intended for use or designed for use in ingesting, inhaling, or otherwise introducing cannabis, cocaine, hashish, or hashish oil into the human body, such as the following:

(A) Metal, wooden, acrylic, glass, stone, plastic, or ceramic pipes with or without screens, permanent screens, hashish heads, or punctured metal bowls.

(B) Water pipes.

(C) Carburetion tubes and devices.

(D) Smoking and carburetion masks.

(E) Roach clips, meaning objects used to hold burning material, such as a cannabis cigarette that has become too small or too short to be held in the hand.

(F) Miniature cocaine spoons, and cocaine vials.

(G) Chamber pipes.

(H) Carburetor pipes.

(I) Electric pipes.

(J) Air-driven pipes.

(K) Chillums.

(L) Bongs.

(M) Ice pipes or chillers.

(e) In determining whether an object is drug paraphernalia, a court or other authority may consider, in addition to all other logically relevant factors, the following:

(1) Statements by an owner or by anyone in control of the object concerning its use.

(2) Prior convictions, if any, of an owner, or of anyone in control of the object, under any state or federal law relating to any controlled substance.

(3) Direct or circumstantial evidence of the intent of an owner, or of anyone in control of the object, to deliver it to persons whom he or she knows, or should reasonably know, intend to use the object to facilitate a violation of this section. The innocence of an owner, or of anyone in control of the object, as to a direct violation of this section shall not prevent a finding that the object is intended for use, or designed for use, as drug paraphernalia.

(4) Instructions, oral or written, provided with the object concerning its use.

(5) Descriptive materials, accompanying the object which explain or depict its use.

(6) National and local advertising concerning its use.

(7) The manner in which the object is displayed for sale.

(8) Whether the owner, or anyone in control of the object, is a legitimate supplier of like or related items to the community, such as a licensed distributor or dealer of tobacco products.

(9) The existence and scope of legitimate uses for the object in the community.

(10) Expert testimony concerning its use.

(f) This section shall not apply to any of the following:

(1) Any pharmacist or other authorized person who sells or furnishes drug paraphernalia described in paragraph (11) of subdivision (d) upon the prescription of a physician, dentist, podiatrist, or veterinarian.

(2) Any physician, dentist, podiatrist, or veterinarian who furnishes or prescribes drug paraphernalia described in paragraph (11) of subdivision (d) to his or her patients.

(3) Any manufacturer, wholesaler, or retailer licensed by the California State Board of Pharmacy to sell or transfer drug paraphernalia described in paragraph (11) of subdivision (d).

(g) Notwithstanding any other provision of law, including Section 11374, violation of this section shall not constitute a criminal offense, but operation of a business in violation of the provisions of this section shall be grounds for revocation or nonrenewal of any license, permit, or other entitlement previously issued by a city, county, or city and county for the privilege of engaging in such business and shall be grounds for denial of any future license, permit, or other entitlement authorizing the conduct of such business or any other business, if the business includes the sale of drug paraphernalia.

SEC. 152. Section 11470 of the Health and Safety Code is amended to read:

11470. The following are subject to forfeiture:

(a) All controlled substances which have been manufactured, distributed, dispensed, or acquired in violation of this division.

(b) All raw materials, products, and equipment of any kind which are used, or intended for use, in manufacturing, compounding, processing, delivering, importing, or exporting any controlled substance in violation of this division.

(c) All property except real property or a boat, airplane, or any vehicle which is used, or intended for use, as a container for property described in subdivision (a) or (b).

(d) All books, records, and research products and materials, including formulas, microfilm, tapes, and data which are used, or intended for use, in violation of this division.

(e) The interest of any registered owner of a boat, airplane, or any vehicle other than an implement of husbandry, as defined in Section 36000 of the Vehicle Code, which has been used as an instrument to facilitate the manufacture of, or possession for sale or sale of 14.25 grams or more of heroin, or a substance containing 14.25 grams or more of heroin, or 14.25 grams or more of a substance containing heroin, or 28.5 grams or more of Schedule I controlled substances except cannabis, peyote, or psilocybin; 10 pounds dry weight or more of cannabis, peyote, or psilocybin; or 28.5 grams or more of cocaine, as specified in paragraph (6) of subdivision (b) of Section 11055, cocaine base as specified in paragraph (1) of subdivision (f) of Section 11054, or methamphetamine; or a substance containing 28.5 grams or more of cocaine, as specified in paragraph (6) of subdivision (b) of Section 11055, cocaine base as specified in paragraph (1) of subdivision (f) of Section 11054, or methamphetamine; or 57 grams or more of a substance containing cocaine, as specified in paragraph (6) of subdivision (b) of Section 11055, cocaine base as specified in paragraph (1) of subdivision (f) of Section 11054, or methamphetamine; or 28.5 grams or more of Schedule II controlled substances. An interest in a vehicle which may be lawfully driven on the highway with a class C, class M1, or class M2 license, as prescribed in Section 12804.9 of the Vehicle Code, shall not be forfeited under this subdivision if there is a community property interest in the vehicle by a person other than the defendant and the vehicle is the sole class C, class M1, or class M2 vehicle available to the defendant's immediate family.

(f) All moneys, negotiable instruments, securities, or other things of value furnished or intended to be furnished by any person in exchange for a controlled substance, all proceeds traceable to such an exchange, and all moneys, negotiable instruments, or securities used or intended to be used to facilitate any violation of Section 11351, 11351.5, 11352, 11355, 11359, 11360, 11378, 11378.5, 11379, 11379.5, 11379.6, 11380, 11382, or 11383 of this code, or Section 182 of the Penal Code, or a felony violation of Section 11366.8 of this code, insofar as the offense involves manufacture, sale, possession for sale, offer for sale, or offer to manufacture, or conspiracy to commit at least one of those offenses, if the exchange, violation, or other conduct which is the basis for the forfeiture occurred within five years of the seizure of the property, or the filing of a petition under this chapter, or the issuance of an order of forfeiture of the property, whichever comes first.

(g) The real property of any property owner who is convicted of violating Section 11366, 11366.5, or 11366.6 with respect to that property. However, property which is used as a family residence or for other lawful purposes, or which is owned by two or more persons, one of whom had no knowledge of its unlawful use, shall not be subject to forfeiture.

(h) (1) Subject to the requirements of Section 11488.5 and except as further limited by this subdivision to protect innocent parties who claim a property interest acquired from a defendant, all right, title, and interest in any personal property described in this section shall vest in the state upon commission of the act giving rise to forfeiture under this chapter, if the state or local governmental entity proves a violation of Section 11351, 11351.5, 11352, 11355, 11359, 11360, 11378, 11378.5, 11379, 11379.5, 11379.6, 11380, 11382, or 11383 of this code, or Section 182 of the Penal Code, or a felony violation of Section 11366.8 of this code, insofar as the offense involves the manufacture, sale, possession for sale, offer for sale, offer to manufacture, or conspiracy to commit at least one of those offenses, in accordance with the burden of proof set forth in paragraph (1) of subdivision (i) of Section 11488.4 or, in the case of cash or negotiable instruments in excess of twenty-five thousand dollars (\$25,000), paragraph (4) of subdivision (i) of Section 11488.4.

(2) The operation of the special vesting rule established by this subdivision shall be limited to circumstances where its application will not defeat the claim of any person, including a bona fide purchaser or encumbrancer who, pursuant to Section 11488.5, 11488.6, or 11489, claims an interest in the property seized, notwithstanding that the interest in the property being claimed was acquired from a defendant whose property interest would otherwise have been subject to divestment pursuant to this subdivision.

SEC. 153. Section 11478 of the Health and Safety Code is amended to read:

11478. Cannabis may be provided by the Attorney General to the heads of research projects which have been registered by the Attorney General, and which have been approved by the research advisory panel pursuant to Section 11480.

The head of the approved research project shall personally receipt for such quantities of cannabis and shall make a record of their disposition. The receipt and record shall be retained by the Attorney General. The head of the approved research project shall also, at intervals and in the manner required by the research advisory panel, report the progress or conclusions of the research project.

SEC. 154. Section 11479 of the Health and Safety Code is amended to read:

11479. Notwithstanding Sections 11473 and 11473.5, at any time after seizure by a law enforcement agency of a suspected controlled substance, except in the case of growing or harvested cannabis, that amount in excess of 10 pounds in gross weight may be destroyed without a court order by the chief of the law enforcement agency or a designated subordinate. In the case of growing or harvested cannabis, that amount in excess of two pounds, or the amount of cannabis a medicinal cannabis patient or designated caregiver is authorized to possess by ordinance in the city or county where the cannabis was seized, whichever is greater, may be destroyed without a court order by the chief of the law enforcement agency or a designated subordinate.

Destruction shall not take place pursuant to this section until all of the following requirements are satisfied:

(a) At least five random and representative samples have been taken, for evidentiary purposes, from the total amount of suspected controlled substances to be destroyed. These samples shall be in addition to the 10 pounds required above. When the suspected controlled substance consists of growing or harvested cannabis plants, at least one 2-pound sample or a sample in the amount of medicinal cannabis a medicinal cannabis patient or designated caregiver is authorized to possess by ordinance in the city or county where the cannabis was seized, whichever is greater, shall be retained. This sample may include stalks, branches, or leaves. In addition, five representative samples of leaves or buds shall be retained for evidentiary purposes from the total amount of suspected controlled substances to be destroyed.

(b) Photographs and videos have been taken that reasonably and accurately demonstrate the total amount of the suspected controlled substance to be destroyed.

(c) The gross weight of the suspected controlled substance has been determined, either by actually weighing the suspected controlled substance or by estimating that weight after dimensional measurement of the total suspected controlled substance.

(d) The chief of the law enforcement agency has determined that it is not reasonably possible to preserve the suspected controlled substance in place, or to remove the suspected controlled substance to another location. In making this determination, the difficulty of transporting and storing the suspected controlled substance to another site and the storage facilities may be taken into consideration.

Subsequent to any destruction of a suspected controlled substance pursuant to this section, an affidavit shall be filed within 30 days in the court that has jurisdiction over any pending criminal proceedings pertaining to that suspected controlled substance, reciting the applicable information required by subdivisions (a), (b), (c), and (d) together with information establishing the location of the suspected controlled substance, and specifying the date and time of the destruction. In the event that there are no criminal proceedings pending that pertain to that suspected controlled substance, the affidavit may be filed in any court within the county that would have jurisdiction over a person against whom those criminal charges might be filed.

SEC. 155. Section 11479.2 of the Health and Safety Code is amended to read:

11479.2. Notwithstanding the provisions of Sections 11473, 11473.5, 11474, 11479, and 11479.1, at any time after seizure by a law enforcement agency of a suspected controlled substance, except cannabis, any amount, as determined by the court, in excess of 57 grams may, by court order, be destroyed by the chief of a law enforcement agency or a designated subordinate. Destruction shall not take place pursuant to this section until all of the following requirements are satisfied:

(a) At least five random and representative samples have been taken, for evidentiary purposes, from the total amount of suspected controlled substances to be destroyed. Those samples shall be in addition to the 57 grams required above and each sample shall weigh not less than one gram at the time the sample is collected.

(b) Photographs have been taken which reasonably demonstrate the total amount of the suspected controlled substance to be destroyed.

(c) The gross weight of the suspected controlled substance has been determined, either by actually weighing the suspected controlled substance or by estimating such weight after dimensional measurement of the total suspected controlled substance.

(d) In cases involving controlled substances suspected of containing cocaine or methamphetamine, an analysis has determined the qualitative and quantitative nature of the suspected controlled substance.

(e) The law enforcement agency with custody of the controlled substance sought to be destroyed has filed a written motion for the order of destruction in the court which has jurisdiction over any pending criminal proceeding in which a defendant is charged by accusatory pleading with a crime specifically involving the suspected controlled substance sought to be destroyed. The motion shall, by affidavit of the chief of the law enforcement agency or designated subordinate, recite the applicable information required by subdivisions (a), (b), (c), and (d), together with information establishing the location of the suspected controlled substance and the title of any pending criminal proceeding as defined in this subdivision. The motion shall bear proof of service upon all parties to any pending criminal proceeding. No motion shall be made when a defendant is without counsel until the defendant has entered his or her plea to the charges.

(f) The order for destruction shall issue pursuant to this section upon the motion and affidavit in support of the order, unless within 20 days after application for the order, a defendant has requested, in writing, a hearing on the motion. Within 10 days after the filing of that request, or a longer period of time upon good cause shown by either party, the court shall conduct a hearing on the motion in which each party to the motion for destruction shall be permitted to call and examine witnesses. The hearing shall be recorded. Upon conclusion of the hearing, if the court finds that the defendant would not be prejudiced by the destruction, it shall grant the motion and make an order for destruction. In making the order, the court shall ensure that the representative samples to be retained are of sufficient quantities to allow for qualitative analyses by both the prosecution and the defense. Any order for destruction pursuant to this section shall include the applicable information required by subdivisions (a), (b), (c), (d), and (e) and the name of the agency responsible for the destruction. Unless waived, the order shall provide for a 10-day delay prior to destruction in order to allow expert analysis of the controlled substance by the defense.

Subsequent to any destruction of a suspected controlled substance pursuant to this section, an affidavit shall be filed within 30 days in the court which

ordered destruction stating the location of the retained, suspected controlled substance and specifying the date and time of destruction.

This section does not apply to seizures involving hazardous chemicals or controlled substances in mixture or combination with hazardous chemicals.

SEC. 156. Section 11480 of the Health and Safety Code is amended to read:

11480. (a) The Legislature finds that there is a need to encourage further research into the nature and effects of cannabis and hallucinogenic drugs and to coordinate research efforts on such subjects.

(b) There is a Research Advisory Panel that consists of a representative of the State Department of Health Services, a representative of the California State Board of Pharmacy, the State Public Health Officer, a representative of the Attorney General, a representative of the University of California who shall be a pharmacologist, a physician, or a person holding a doctorate degree in the health sciences, a representative of a private university in this state who shall be a pharmacologist, a physician, or a person holding a doctorate degree in the health sciences, a representative of a statewide professional medical society in this state who shall be engaged in the private practice of medicine and shall be experienced in treating controlled substance dependency, a representative appointed by and serving at the pleasure of the Governor who shall have experience in drug abuse, cancer, or controlled substance research and who is either a registered nurse, licensed pursuant to Chapter 6 (commencing with Section 2700) of Division 2 of the Business and Professions Code, or other health professional. The Governor shall annually designate the private university and the professional medical society represented on the panel. Members of the panel shall be appointed by the heads of the entities to be represented, and they shall serve at the pleasure of the appointing power.

(c) The Research Advisory Panel shall appoint two special members to the Research Advisory Panel, who shall serve at the pleasure of the Research Advisory Panel only during the period Article 6 (commencing with Section 11260) of Chapter 5 remains effective. The additional members shall be physicians and surgeons, and who are board certified in oncology, ophthalmology, or psychiatry.

(d) The panel shall annually select a chairperson from among its members.

(e) The panel may hold hearings on, and in other ways study, research projects concerning cannabis or hallucinogenic drugs in this state. Members of the panel shall serve without compensation, but shall be reimbursed for any actual and necessary expenses incurred in connection with the performance of their duties.

(f) The panel may approve research projects, which have been registered by the Attorney General, into the nature and effects of cannabis or hallucinogenic drugs, and shall inform the Attorney General of the head of the approved research projects that are entitled to receive quantities of cannabis pursuant to Section 11478.

(g) The panel may withdraw approval of a research project at any time, and when approval is withdrawn shall notify the head of the research project to return any quantities of cannabis to the Attorney General.

(h) The panel shall report annually to the Legislature and the Governor those research projects approved by the panel, the nature of each research project, and, where available, the conclusions of the research project.

SEC. 157. Section 11485 of the Health and Safety Code is amended to read:

11485. Any peace officer of this state who, incident to a search under a search warrant issued for a violation of Section 11358 with respect to which no prosecution of a defendant results, seizes personal property suspected of being used in the planting, cultivation, harvesting, drying, processing, or transporting of cannabis, shall, if the seized personal property is not being held for evidence or destroyed as contraband, and if the owner of the property is unknown or has not claimed the property, provide notice regarding the seizure and manner of reclamation of the property to any owner or tenant of real property on which the property was seized. In addition, this notice shall be posted at the location of seizure and shall be published at least once in a newspaper of general circulation in the county in which the property was seized. If, after 90 days following the first publication of the notice, no owner appears and proves his or her ownership, the seized personal property shall be deemed to be abandoned and may be disposed of by sale to the public at public auction as set forth in Article 1 (commencing with Section 2080) of Chapter 4 of Title 6 of Part 4 of Division 3 of the Civil Code, or may be disposed of by transfer to a government agency or community service organization. Any profit from the sale or transfer of the property shall be expended for investigative services with respect to crimes involving cannabis.

SEC. 158. Section 11532 of the Health and Safety Code is amended to read:

11532. (a) It is unlawful for any person to loiter in any public place in a manner and under circumstances manifesting the purpose and with the intent to commit an offense specified in Chapter 6 (commencing with Section 11350) and Chapter 6.5 (commencing with Section 11400).

(b) Among circumstances that may be considered in determining whether a person has the requisite intent to engage in drug-related activity are that the person:

- (1) Acts as a "look-out."
- (2) Transfers small objects or packages for currency in a furtive fashion.
- (3) Tries to conceal himself or herself or any object that reasonably could be involved in an unlawful drug-related activity.
- (4) Uses signals or language indicative of summoning purchasers of illegal drugs.
- (5) Repeatedly beckons to, stops, attempts to stop, or engages in conversations with passersby, whether on foot or in a motor vehicle, indicative of summoning purchasers of illegal drugs.

(6) Repeatedly passes to or receives from passersby, whether on foot or in a motor vehicle, money or small objects.

(7) Is under the influence of a controlled substance or possesses narcotic or drug paraphernalia. For the purposes of this paragraph, “narcotic or drug paraphernalia” means any device, contrivance, instrument, or apparatus designed or marketed for the use of smoking, injecting, ingesting, or consuming cannabis, hashish, PCP, or any controlled substance, including, but not limited to, roach clips, cigarette papers, and rollers designed or marketed for use in smoking a controlled substance.

(8) Has been convicted in any court within this state, within five years prior to the arrest under this chapter, of any violation involving the use, possession, or sale of any of the substances referred to in Chapter 6 (commencing with Section 11350) or Chapter 6.5 (commencing with Section 11400), or has been convicted of any violation of those provisions or substantially similar laws of any political subdivision of this state or of any other state.

(9) Is currently subject to any order prohibiting his or her presence in any high drug activity geographic area.

(10) Has engaged, within six months prior to the date of arrest under this section, in any behavior described in this subdivision, with the exception of paragraph (8), or in any other behavior indicative of illegal drug-related activity.

(c) The list of circumstances set forth in subdivision (b) is not exclusive. The circumstances set forth in subdivision (b) should be considered particularly salient if they occur in an area that is known for unlawful drug use and trafficking, or if they occur on or in premises that have been reported to law enforcement as a place suspected of unlawful drug activity. Any other relevant circumstances may be considered in determining whether a person has the requisite intent. Moreover, no one circumstance or combination of circumstances is in itself determinative of intent. Intent must be determined based on an evaluation of the particular circumstances of each case.

SEC. 159. Section 11553 of the Health and Safety Code is amended to read:

11553. The fact that a person is or has been, or is suspected of being, a user of cannabis is not alone sufficient grounds upon which to invoke Section 11551 or 11552.

This section shall not be construed to limit the discretion of a judge to invoke Section 11551 or 11552 if the court has reason to believe a person is or has been a user of narcotics or drugs other than cannabis.

SEC. 160. Section 109925 of the Health and Safety Code is amended to read:

109925. (a) “Drug” means any of the following:

- (1) An article recognized in an official compendium.
- (2) An article used or intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in human beings or any other animal.

(3) An article other than food, that is used or intended to affect the structure or any function of the body of human beings or any other animal.

(4) An article used or intended for use as a component of an article designated in paragraphs (1) to (3), inclusive.

(b) The term “drug” does not include any device.

(c) Any food for which a claim (as described in Sections 403(r)(1)(B) (21 U.S.C. Sec. 343(r)(1)(B)) and 403(r)(3) (21 U.S.C. Sec. 343(r)(3)) or Sections 403(r)(1)(B) (21 U.S.C. Sec. 343(r)(1)(B)) and 403(r)(5)(D) (21 U.S.C. Sec. 343(r)(5)(D)) of the federal act), is made in accordance with the requirements set forth in Section 403(r) (21 U.S.C. Sec. 343(r)) of the federal act, is not a drug under subdivision (b) solely because the label or labeling contains such a claim.

(d) Cannabis product, including any cannabis product intended for external use, is not a drug.

SEC. 161. The heading of Part 14.5 (commencing with Section 34010) of Division 2 of the Revenue and Taxation Code is amended to read:

PART 14.5. CANNABIS TAX

SEC. 162. Section 34010 of the Revenue and Taxation Code is amended to read:

34010. For purposes of this part:

(a) “Arm’s length transaction” shall mean a sale entered into in good faith and for valuable consideration that reflects the fair market value in the open market between two informed and willing parties, neither under any compulsion to participate in the transaction.

(b) “Average market price” shall mean:

(1) In an arm’s length transaction, the average market price means the average retail price determined by the wholesale cost of the cannabis or cannabis products sold or transferred to a cannabis retailer, plus a mark-up, as determined by the board on a biannual basis in six-month intervals.

(2) In a nonarm’s length transaction, the average market price means the cannabis retailer’s gross receipts from the retail sale of the cannabis or cannabis products.

(c) “Board” shall mean the State Board of Equalization or its successor agency.

(d) “Bureau” shall mean the Bureau of Cannabis Control within the Department of Consumer Affairs.

(e) “Tax Fund” means the California Cannabis Tax Fund created by Section 34018.

(f) “Cannabis” shall have the same meaning as set forth in Section 11018 of the Health and Safety Code and shall also mean medicinal cannabis.

(g) “Cannabis products” shall have the same meaning as set forth in Section 11018.1 of the Health and Safety Code and shall also mean medicinal concentrates and medicinal cannabis products.

(h) “Cannabis flowers” shall mean the dried flowers of the cannabis plant as defined by the board.

(i) “Cannabis leaves” shall mean all parts of the cannabis plant other than cannabis flowers that are sold or consumed.

(j) “Cannabis retailer” shall mean a person required to be licensed as a retailer, microbusiness, or nonprofit pursuant to Division 10 (commencing with Section 26000) of the Business and Professions Code.

(k) “Cultivator” shall mean all persons required to be licensed to cultivate cannabis pursuant to Division 10 (commencing with Section 26000) of the Business and Professions Code.

(l) “Distributor” shall mean a person required to be licensed as a distributor pursuant to Division 10 (commencing with Section 26000) of the Business and Professions Code.

(m) “Enters the commercial market” shall mean cannabis or cannabis product that has completed and complies with all quality assurance, inspection, and testing, as described in Section 26110 of the Business and Professions Code.

(n) “Gross receipts” shall have the same meaning as set forth in Section 6012.

(o) “Microbusiness” shall have the same meaning as set forth in paragraph (3) of subdivision (a) of Section 26070 of the Business and Professions Code.

(p) “Nonprofit” shall have the same meaning as set forth in Section 26070.5 of the Business and Professions Code.

(q) “Person” shall have the same meaning as set forth in Section 6005.

(r) “Retail sale” shall have the same meaning as set forth in Section 6007.

(s) “Sale” and “purchase” shall mean any change of title or possession, exchange, or barter, conditional or otherwise, in any manner or by any means whatsoever, for consideration.

(t) “Transfer” shall mean to grant, convey, hand over, assign, sell, exchange, or barter, in any manner or by any means, with or without consideration.

(u) “Unprocessed cannabis” shall include cannabis flowers, cannabis leaves, or other categories of harvested cannabis, categories for unprocessed or frozen cannabis or immature plants, or cannabis that is shipped directly to manufacturers.

SEC. 163. Section 34011 of the Revenue and Taxation Code is amended to read:

34011. (a) Effective January 1, 2018, a cannabis excise tax shall be imposed upon purchasers of cannabis or cannabis products sold in this state at the rate of 15 percent of the average market price of any retail sale by a cannabis retailer. A purchaser’s liability for the cannabis excise tax is not extinguished until the cannabis excise tax has been paid to this state except that an invoice, receipt, or other document from a cannabis retailer given to the purchaser pursuant to this subdivision is sufficient to relieve the purchaser from further liability for the tax to which the invoice, receipt, or other document refers. Each cannabis retailer shall provide a purchaser with

an invoice, receipt, or other document that displays the cannabis excise tax separately from the list price, the price advertised in the premises, the marked price, or other price and includes a statement that reads: “The cannabis cultivation and excise taxes are included in the total amount of this invoice.”

(b) (1) A distributor in an arm's length transaction shall collect the cannabis excise tax from the cannabis retailer on or before 90 days after the sale or transfer of cannabis or cannabis product to the cannabis retailer. A distributor in a nonarm's length transaction shall collect the cannabis excise tax from the cannabis retailer on or before 90 days after the sale or transfer of cannabis or cannabis product to the cannabis retailer, or at the time of retail sale by the cannabis retailer, whichever is earlier. A distributor shall report and remit the cannabis excise tax to the board pursuant to Section 34015. A cannabis retailer shall be responsible for collecting the cannabis excise tax from the purchaser and remitting the cannabis excise tax to the distributor in accordance with rules and procedures established under law and any regulations adopted by the board.

(2) A distributor shall provide an invoice, receipt, or other similar document to the cannabis retailer that identifies the licensee receiving the product, the distributor from which the product originates, including the associated unique identifier, the amount of cannabis excise tax, and any other information deemed necessary by the board. The board may authorize other forms of documentation under this paragraph.

(c) The excise tax imposed by this section shall be in addition to the sales and use tax imposed by the state and local governments.

(d) Gross receipts from the sale of cannabis or cannabis products for purposes of assessing the sales and use tax under Part 1 (commencing with Section 6001) shall include the tax levied pursuant to this section.

(e) Cannabis or cannabis products shall not be sold to a purchaser unless the excise tax required by law has been paid by the purchaser at the time of sale.

(f) The sales and use taxes imposed by Part 1 (commencing with Section 6001) shall not apply to retail sales of medicinal cannabis, medicinal cannabis concentrate, edible medicinal cannabis products, or topical cannabis as those terms are defined in Division 10 (commencing with Section 26000) of the Business and Professions Code when a qualified patient or primary caregiver for a qualified patient provides his or her card issued under Section 11362.71 of the Health and Safety Code and a valid government-issued identification card.

SEC. 164. Section 34012 of the Revenue and Taxation Code is amended to read:

34012. (a) Effective January 1, 2018, there is hereby imposed a cultivation tax on all harvested cannabis that enters the commercial market upon all cultivators. The tax shall be due after the cannabis is harvested and enters the commercial market.

(1) The tax for cannabis flowers shall be nine dollars and twenty-five cents (\$9.25) per dry-weight ounce.

(2) The tax for cannabis leaves shall be set at two dollars and seventy-five cents (\$2.75) per dry-weight ounce.

(b) The board may adjust the tax rate for cannabis leaves annually to reflect fluctuations in the relative price of cannabis flowers to cannabis leaves.

(c) The board may from time to time establish other categories of harvested cannabis, categories for unprocessed or frozen cannabis or immature plants, or cannabis that is shipped directly to manufacturers. These categories shall be taxed at their relative value compared with cannabis flowers.

(d) The board may prescribe by regulation a method and manner for payment of the cultivation tax that utilizes tax stamps or state-issued product bags that indicate that all required tax has been paid on the product to which the tax stamp is affixed or in which the cannabis is packaged.

(e) The tax stamps and product bags shall be of the designs, specifications, and denominations as may be prescribed by the board and may be purchased by any licensee under Division 10 (commencing with Section 26000) of the Business and Professions Code.

(f) Subsequent to the establishment of a tax stamp program, the board may by regulation provide that cannabis shall not be removed from a licensed cultivation facility or transported on a public highway unless in a state-issued product bag bearing a tax stamp in the proper denomination.

(g) The tax stamps and product bags shall be capable of being read by a scanning or similar device and must be traceable utilizing the track and trace system pursuant to Section 26068 of the Business and Professions Code.

(h) Cultivators shall be responsible for payment of the tax pursuant to regulations adopted by the board. A cultivator's liability for the tax is not extinguished until the tax has been paid to this state except that an invoice, receipt, or other document from a distributor or manufacturer given to the cultivator pursuant to paragraph (3) is sufficient to relieve the cultivator from further liability for the tax to which the invoice, receipt, or other document refers. Cannabis shall not be sold unless the tax has been paid as provided in this part.

(1) A distributor shall collect the cultivation tax from a cultivator upon entry into the commercial market. This paragraph shall not apply where a cultivator is not required to send, and does not send, the harvested cannabis to a distributor.

(2) (A) A manufacturer shall collect the cultivation tax from a cultivator on the first sale or transfer of unprocessed cannabis by a cultivator to a manufacturer. The manufacturer shall remit the cultivation tax collected on the cannabis product sold or transferred to a distributor for quality assurance, inspection, and testing, as described in Section 26110 of the Business and Professions Code. All cultivation tax applicable to a unique identifier shall be paid upon the first sale or transfer of cannabis or cannabis product with an associated unique identifier. This paragraph shall not apply where a distributor collects the cultivation tax from a cultivator pursuant to paragraph (1).

(B) Notwithstanding subparagraph (A), the board may prescribe a substitute method and manner for collection and remittance of the cultivation tax under this paragraph, including a method and manner for collection of the cultivation tax by a distributor.

(3) A distributor or manufacturer shall provide to the cultivator, and a distributor that collects the cultivation tax from a manufacturer pursuant to paragraph (2) shall provide to the manufacturer, an invoice, receipt, or other similar document that identifies the licensee receiving the product, the cultivator from which the product originates, including the associated unique identifier, the amount of cultivation tax, and any other information deemed necessary by the board. The board may authorize other forms of documentation under this paragraph.

(4) The board may adopt regulations prescribing procedures for the refund of cultivation tax collected on cannabis or cannabis product that fails quality assurance, inspection, and testing as described in Section 26110 of the Business and Professions Code.

(i) All cannabis removed from a cultivator's premises, except for plant waste, shall be presumed to be sold and thereby taxable under this section.

(j) The tax imposed by this section shall be imposed on all cannabis cultivated in the state pursuant to rules and regulations promulgated by the board, but shall not apply to cannabis cultivated for personal use under Section 11362.1 of the Health and Safety Code or cultivated by a qualified patient or primary caregiver in accordance with the Compassionate Use Act of 1996 (Section 11362.5 of the Health and Safety Code).

(k) Beginning January 1, 2020, the rates set forth in subdivisions (a), (b), and (c) shall be adjusted by the board annually thereafter for inflation.

(l) The Department of Food and Agriculture is not responsible for enforcing any provisions of the cultivation tax.

SEC. 165. Section 34012.5 is added to the Revenue and Taxation Code, to read:

34012.5. (a) The cultivation tax and cannabis excise tax required to be collected by the distributor, or required to be collected by the manufacturer pursuant to paragraph (2) of subdivision (h) of Section 34012, and any amount unreturned to the cultivator or cannabis retailer that is not tax but was collected from the cultivator or cannabis retailer under the representation by the distributor or the manufacturer that it was tax constitute debts owed by the distributor or the manufacturer to this state.

(b) A distributor or manufacturer that has collected any amount of tax in excess of the amount of tax imposed by this part and actually due from a cultivator or cannabis retailer, may refund such amount to the cultivator or cannabis retailer, even though such tax amount has already been paid over to the board and no corresponding credit or refund has yet been secured. The distributor or manufacturer may claim credit for that overpayment against the amount of tax imposed by this part that is due upon any other quarterly return, providing that credit is claimed in a return dated no later than three years from the date of overpayment.

(c) Any tax collected from a cultivator or cannabis retailer that has not been remitted to the board shall be deemed a debt owed to the State of California by the person required to collect and remit the tax.

SEC. 166. Section 34013 of the Revenue and Taxation Code is amended to read:

34013. (a) The board shall administer and collect the taxes imposed by this part pursuant to the Fee Collection Procedures Law (Part 30 (commencing with Section 55001)). For purposes of this part, the references in the Fee Collection Procedures Law to “fee” shall include the taxes imposed by this part, and references to “feepayer” shall include a person required to pay or collect the taxes imposed by this part.

(b) The board may prescribe, adopt, and enforce regulations relating to the administration and enforcement of this part, including, but not limited to, collections, reporting, refunds, and appeals.

(c) The board shall adopt necessary rules and regulations to administer the taxes in this part. Such rules and regulations may include methods or procedures to tag cannabis or cannabis products, or the packages thereof, to designate prior tax payment.

(d) Until January 1, 2019, the board may prescribe, adopt, and enforce any emergency regulations as necessary to implement, administer, and enforce its duties under this division. Any emergency regulation prescribed, adopted, or enforced pursuant to this section shall be adopted in accordance with Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, and, for purposes of that chapter, including Section 11349.6 of the Government Code, the adoption of the regulation is an emergency and shall be considered by the Office of Administrative Law as necessary for the immediate preservation of the public peace, health and safety, and general welfare. Notwithstanding any other provision of law, the emergency regulations adopted by the board may remain in effect for two years from adoption.

(e) Any person required to be licensed pursuant to Division 10 (commencing with Section 26000) of the Business and Professions Code who fails to pay the taxes imposed under this part shall, in addition to owing the taxes not paid, be subject to a penalty of at least one-half the amount of the taxes not paid, and shall be subject to having its license revoked pursuant to Section 26031 of the Business and Professions Code.

(f) The board may bring such legal actions as are necessary to collect any deficiency in the tax required to be paid, and, upon the board’s request, the Attorney General shall bring the actions.

SEC. 167. Section 34014 of the Revenue and Taxation Code is amended to read:

34014. (a) All distributors must obtain a separate permit from the board pursuant to regulations adopted by the board. No fee shall be charged to any person for issuance of the permit. Any person required to obtain a permit who engages in business as a distributor without a permit or after a permit has been canceled, suspended, or revoked, and each officer of any corporation which so engages in business, is guilty of a misdemeanor.

(b) The board may require every licensed distributor, retailer, cultivator, microbusiness, nonprofit, or other person required to be licensed, to provide security to cover the liability for taxes imposed by state law on cannabis produced or received by the retailer, cultivator, microbusiness, nonprofit, or other person required to be licensed in accordance with procedures to be established by the board. Notwithstanding anything herein to the contrary, the board may waive any security requirement it imposes for good cause, as determined by the board. “Good cause” includes, but is not limited to, the inability of a distributor, retailer, cultivator, microbusiness, nonprofit, or other person required to be licensed to obtain security due to a lack of service providers or the policies of service providers that prohibit service to a cannabis business. A person may not commence or continue any business or operation relating to cannabis cultivation until any surety required by the board with respect to the business or operation has been properly prepared, executed, and submitted under this part.

(c) In fixing the amount of any security required by the board, the board shall give consideration to the financial hardship that may be imposed on licensees as a result of any shortage of available surety providers.

SEC. 168. Section 34015 of the Revenue and Taxation Code is amended to read:

34015. (a) Unless otherwise prescribed by the board pursuant to subdivision (c), the excise tax and cultivation tax imposed by this part is due and payable to the board quarterly on or before the last day of the month following each quarterly period of three months. On or before the last day of the month following each quarterly period, a return for the preceding quarterly period shall be filed with the board by each distributor using electronic media. Returns shall be authenticated in a form or pursuant to methods as may be prescribed by the board. If the cultivation tax is paid by stamp pursuant to subdivision (d) of Section 34012 the board may by regulation determine when and how the tax shall be paid.

(b) The board may require every person engaged in the cultivation, distribution, manufacturing, retail sale of cannabis or cannabis products, or any other person required to be licensed pursuant to Division 10 (commencing with Section 26000) of the Business and Professions Code to file, on or before the 25th day of each month, a report using electronic media respecting the person’s inventory, purchases, and sales during the preceding month and any other information as the board may require to carry out the purposes of this part. Reports shall be authenticated in a form or pursuant to methods as may be prescribed by the board.

(c) The board may adopt regulations prescribing the due date for returns and remittances of excise tax collected by a distributor in an arm’s length transaction pursuant to subdivision (b) of Section 34011.

(d) The board may make examinations of the books and records of any person licensed, or required to be licensed, pursuant to Division 10 (commencing with Section 26000) of the Business and Professions Code, as it may deem necessary in carrying out this part.

SEC. 169. Section 34016 of the Revenue and Taxation Code is amended to read:

34016. (a) Any peace officer or board employee granted limited peace officer status pursuant to paragraph (6) of subdivision (a) of Section 830.11 of the Penal Code, upon presenting appropriate credentials, is authorized to enter any place as described in paragraph (3) and to conduct inspections in accordance with the following paragraphs, inclusive.

(1) Inspections shall be performed in a reasonable manner and at times that are reasonable under the circumstances, taking into consideration the normal business hours of the place to be entered.

(2) Inspections may be at any place at which cannabis or cannabis products are sold to purchasers, cultivated, or stored, or at any site where evidence of activities involving evasion of tax may be discovered.

(3) Inspections shall be conducted no more than once in a 24-hour period.

(b) Any person who fails or refuses to allow an inspection shall be guilty of a misdemeanor. Each offense shall be punished by a fine not to exceed five thousand dollars (\$5,000), or imprisonment not exceeding one year in a county jail, or both the fine and imprisonment. The court shall order any fines assessed be deposited in the California Cannabis Tax Fund.

(c) Upon discovery by the board or a law enforcement agency that a licensee or any other person possesses, stores, owns, or has made a retail sale of cannabis or cannabis products, without evidence of tax payment or not contained in secure packaging, the board or the law enforcement agency shall be authorized to seize the cannabis or cannabis products. Any cannabis or cannabis products seized by a law enforcement agency or the board shall within seven days be deemed forfeited and the board shall comply with the procedures set forth in Sections 30436 through 30449, inclusive.

(d) Any person who renders a false or fraudulent report is guilty of a misdemeanor and subject to a fine not to exceed one thousand dollars (\$1,000) for each offense.

(e) Any violation of any provisions of this part, except as otherwise provided, is a misdemeanor and is punishable as such.

(f) All moneys remitted to the board under this part shall be credited to the California Cannabis Tax Fund.

SEC. 170. Section 34018 of the Revenue and Taxation Code is amended to read:

34018. (a) The California Cannabis Tax Fund is hereby created in the State Treasury. The Tax Fund shall consist of all taxes, interest, penalties, and other amounts collected and paid to the board pursuant to this part, less payment of refunds.

(b) Notwithstanding any other law, the California Cannabis Tax Fund is a special trust fund established solely to carry out the purposes of the Control, Regulate and Tax Adult Use of Marijuana Act and all revenues deposited into the Tax Fund, together with interest or dividends earned by the fund, are hereby continuously appropriated for the purposes of the Control, Regulate and Tax Adult Use of Marijuana Act without regard to fiscal year

and shall be expended only in accordance with the provisions of this part and its purposes.

(c) Notwithstanding any other law, the taxes imposed by this part and the revenue derived therefrom, including investment interest, shall not be considered to be part of the General Fund, as that term is used in Chapter 1 (commencing with Section 16300) of Part 2 of Division 4 of the Government Code, shall not be considered General Fund revenue for purposes of Section 8 of Article XVI of the California Constitution and its implementing statutes, and shall not be considered “moneys” for purposes of subdivisions (a) and (b) of Section 8 of Article XVI of the California Constitution and its implementing statutes.

SEC. 171. Section 34019 of the Revenue and Taxation Code is amended to read:

34019. (a) Beginning with the 2017–18 fiscal year, the Department of Finance shall estimate revenues to be received pursuant to Sections 34011 and 34012 and provide those estimates to the Controller no later than June 15 of each year. The Controller shall use these estimates when disbursing funds pursuant to this section. Before any funds are disbursed pursuant to subdivisions (b), (c), (d), and (e) of this section, the Controller shall disburse from the Tax Fund to the appropriate account, without regard to fiscal year, the following:

(1) Reasonable costs incurred by the board for administering and collecting the taxes imposed by this part; provided, however, such costs shall not exceed 4 percent of tax revenues received.

(2) Reasonable costs incurred by the bureau, the Department of Consumer Affairs, the Department of Food and Agriculture, and the State Department of Public Health for implementing, administering, and enforcing Division 10 (commencing with Section 26000) of the Business and Professions Code to the extent those costs are not reimbursed pursuant to Section 26180 of the Business and Professions Code. This paragraph shall remain operative through the 2022–23 fiscal year.

(3) Reasonable costs incurred by the Department of Fish and Wildlife, the State Water Resources Control Board, and the Department of Pesticide Regulation for carrying out their respective duties under Division 10 (commencing with Section 26000) of the Business and Professions Code to the extent those costs are not otherwise reimbursed.

(4) Reasonable costs incurred by the Controller for performing duties imposed by the Control, Regulate and Tax Adult Use of Marijuana Act, including the audit required by Section 34020.

(5) Reasonable costs incurred by the Department of Finance for conducting the performance audit pursuant to Section 26191 of the Business and Professions Code.

(6) Reasonable costs incurred by the Legislative Analyst’s Office for performing duties imposed by Section 34017.

(7) Sufficient funds to reimburse the Division of Labor Standards Enforcement and the Division of Occupational Safety and Health within the Department of Industrial Relations and the Employment Development

Department for the costs of applying and enforcing state labor laws to licensees under Division 10 (commencing with Section 26000) of the Business and Professions Code.

(b) The Controller shall next disburse the sum of ten million dollars (\$10,000,000) to a public university or universities in California annually beginning with the 2018–19 fiscal year until the 2028–29 fiscal year to research and evaluate the implementation and effect of the Control, Regulate and Tax Adult Use of Marijuana Act, and shall, if appropriate, make recommendations to the Legislature and Governor regarding possible amendments to the Control, Regulate and Tax Adult Use of Marijuana Act. The recipients of these funds shall publish reports on their findings at a minimum of every two years and shall make the reports available to the public. The bureau shall select the universities to be funded. The research funded pursuant to this subdivision shall include but not necessarily be limited to:

(1) Impacts on public health, including health costs associated with cannabis use, as well as whether cannabis use is associated with an increase or decrease in use of alcohol or other drugs.

(2) The impact of treatment for maladaptive cannabis use and the effectiveness of different treatment programs.

(3) Public safety issues related to cannabis use, including studying the effectiveness of the packaging and labeling requirements and advertising and marketing restrictions contained in the act at preventing underage access to and use of cannabis and cannabis products, and studying the health-related effects among users of varying potency levels of cannabis and cannabis products.

(4) Cannabis use rates, maladaptive use rates for adults and youth, and diagnosis rates of cannabis-related substance use disorders.

(5) Cannabis market prices, illicit market prices, tax structures and rates, including an evaluation of how to best tax cannabis based on potency, and the structure and function of licensed cannabis businesses.

(6) Whether additional protections are needed to prevent unlawful monopolies or anti-competitive behavior from occurring in the adult-use cannabis industry and, if so, recommendations as to the most effective measures for preventing such behavior.

(7) The economic impacts in the private and public sectors, including, but not necessarily limited to, job creation, workplace safety, revenues, taxes generated for state and local budgets, and criminal justice impacts, including, but not necessarily limited to, impacts on law enforcement and public resources, short and long term consequences of involvement in the criminal justice system, and state and local government agency administrative costs and revenue.

(8) Whether the regulatory agencies tasked with implementing and enforcing the Control, Regulate and Tax Adult Use of Marijuana Act are doing so consistent with the purposes of the act, and whether different agencies might do so more effectively.

(9) Environmental issues related to cannabis production and the criminal prohibition of cannabis production.

(10) The geographic location, structure, and function of licensed cannabis businesses, and demographic data, including race, ethnicity, and gender, of license holders.

(11) The outcomes achieved by the changes in criminal penalties made under the Control, Regulate and Tax Adult Use of Marijuana Act for cannabis-related offenses, and the outcomes of the juvenile justice system, in particular, probation-based treatments and the frequency of up-charging illegal possession of cannabis or cannabis products to a more serious offense.

(c) The Controller shall next disburse the sum of three million dollars (\$3,000,000) annually to the Department of the California Highway Patrol beginning with the 2018–19 fiscal year until the 2022–23 fiscal year to establish and adopt protocols to determine whether a driver is operating a vehicle while impaired, including impairment by the use of cannabis or cannabis products, and to establish and adopt protocols setting forth best practices to assist law enforcement agencies. The department may hire personnel to establish the protocols specified in this subdivision. In addition, the department may make grants to public and private research institutions for the purpose of developing technology for determining when a driver is operating a vehicle while impaired, including impairment by the use of cannabis or cannabis products.

(d) The Controller shall next disburse the sum of ten million dollars (\$10,000,000) beginning with the 2018–19 fiscal year and increasing ten million dollars (\$10,000,000) each fiscal year thereafter until the 2022–23 fiscal year, at which time the disbursement shall be fifty million dollars (\$50,000,000) each year thereafter, to the Governor's Office of Business and Economic Development, in consultation with the Labor and Workforce Development Agency and the State Department of Social Services, to administer a community reinvestments grants program to local health departments and at least 50 percent to qualified community-based nonprofit organizations to support job placement, mental health treatment, substance use disorder treatment, system navigation services, legal services to address barriers to reentry, and linkages to medical care for communities disproportionately affected by past federal and state drug policies. The office shall solicit input from community-based job skills, job placement, and legal service providers with relevant expertise as to the administration of the grants program. In addition, the office shall periodically evaluate the programs it is funding to determine the effectiveness of the programs, shall not spend more than 4 percent for administrative costs related to implementation, evaluation, and oversight of the programs, and shall award grants annually, beginning no later than January 1, 2020.

(e) The Controller shall next disburse the sum of two million dollars (\$2,000,000) annually to the University of California San Diego Center for Medicinal Cannabis Research to further the objectives of the center, including the enhanced understanding of the efficacy and adverse effects of cannabis as a pharmacological agent.

(f) By July 15 of each fiscal year beginning in the 2018–19 fiscal year, the Controller shall, after disbursing funds pursuant to subdivisions (a), (b), (c), (d), and (e), disburse funds deposited in the Tax Fund during the prior fiscal year into sub-trust accounts, which are hereby created, as follows:

(1) Sixty percent shall be deposited in the Youth Education, Prevention, Early Intervention and Treatment Account, and disbursed by the Controller to the State Department of Health Care Services for programs for youth that are designed to educate about and to prevent substance use disorders and to prevent harm from substance use. The State Department of Health Care Services shall enter into interagency agreements with the State Department of Public Health and the State Department of Education to implement and administer these programs. The programs shall emphasize accurate education, effective prevention, early intervention, school retention, and timely treatment services for youth, their families and caregivers. The programs may include, but are not limited to, the following components:

(A) Prevention and early intervention services including outreach, risk survey and education to youth, families, caregivers, schools, primary care health providers, behavioral health and substance use disorder service providers, community and faith-based organizations, foster care providers, juvenile and family courts, and others to recognize and reduce risks related to substance use, and the early signs of problematic use and of substance use disorders.

(B) Grants to schools to develop and support student assistance programs, or other similar programs, designed to prevent and reduce substance use, and improve school retention and performance, by supporting students who are at risk of dropping out of school and promoting alternatives to suspension or expulsion that focus on school retention, remediation, and professional care. Schools with higher than average dropout rates should be prioritized for grants.

(C) Grants to programs for outreach, education, and treatment for homeless youth and out-of-school youth with substance use disorders.

(D) Access and linkage to care provided by county behavioral health programs for youth, and their families and caregivers, who have a substance use disorder or who are at risk for developing a substance use disorder.

(E) Youth-focused substance use disorder treatment programs that are culturally and gender competent, trauma-informed, evidence-based and provide a continuum of care that includes screening and assessment (substance use disorder as well as mental health), early intervention, active treatment, family involvement, case management, overdose prevention, prevention of communicable diseases related to substance use, relapse management for substance use and other cooccurring behavioral health disorders, vocational services, literacy services, parenting classes, family therapy and counseling services, medication-assisted treatments, psychiatric medication and psychotherapy. When indicated, referrals must be made to other providers.

(F) To the extent permitted by law and where indicated, interventions shall utilize a two-generation approach to addressing substance use disorders

with the capacity to treat youth and adults together. This would include supporting the development of family-based interventions that address substance use disorders and related problems within the context of families, including parents, foster parents, caregivers and all their children.

(G) Programs to assist individuals, as well as families and friends of drug using young people, to reduce the stigma associated with substance use including being diagnosed with a substance use disorder or seeking substance use disorder services. This includes peer-run outreach and education to reduce stigma, anti-stigma campaigns, and community recovery networks.

(H) Workforce training and wage structures that increase the hiring pool of behavioral health staff with substance use disorder prevention and treatment expertise. Provide ongoing education and coaching that increases substance use treatment providers' core competencies and trains providers on promising and evidenced-based practices.

(I) Construction of community-based youth treatment facilities.

(J) The departments may contract with each county behavioral health program for the provision of services.

(K) Funds shall be allocated to counties based on demonstrated need, including the number of youth in the county, the prevalence of substance use disorders among adults, and confirmed through statistical data, validated assessments, or submitted reports prepared by the applicable county to demonstrate and validate need.

(L) The departments shall periodically evaluate the programs they are funding to determine the effectiveness of the programs.

(M) The departments may use up to 4 percent of the moneys allocated to the Youth Education, Prevention, Early Intervention and Treatment Account for administrative costs related to implementation, evaluation, and oversight of the programs.

(N) If the Department of Finance ever determines that funding pursuant to cannabis taxation exceeds demand for youth prevention and treatment services in the state, the departments shall provide a plan to the Department of Finance to provide treatment services to adults as well as youth using these funds.

(O) The departments shall solicit input from volunteer health organizations, physicians who treat addiction, treatment researchers, family therapy and counseling providers, and professional education associations with relevant expertise as to the administration of any grants made pursuant to this paragraph.

(2) Twenty percent shall be deposited in the Environmental Restoration and Protection Account, and disbursed by the Controller as follows:

(A) To the Department of Fish and Wildlife and the Department of Parks and Recreation for the cleanup, remediation, and restoration of environmental damage in watersheds affected by cannabis cultivation and related activities including, but not limited to, damage that occurred prior to enactment of this part, and to support local partnerships for this purpose. The Department of Fish and Wildlife and the Department of Parks and Recreation may distribute a portion of the funds they receive from the Environmental

Restoration and Protection Account through grants for purposes specified in this paragraph.

(B) To the Department of Fish and Wildlife and the Department of Parks and Recreation for the stewardship and operation of state-owned wildlife habitat areas and state park units in a manner that discourages and prevents the illegal cultivation, production, sale, and use of cannabis and cannabis products on public lands, and to facilitate the investigation, enforcement, and prosecution of illegal cultivation, production, sale, and use of cannabis or cannabis products on public lands.

(C) To the Department of Fish and Wildlife to assist in funding the watershed enforcement program and multiagency taskforce established pursuant to subdivisions (b) and (c) of Section 12029 of the Fish and Game Code to facilitate the investigation, enforcement, and prosecution of these offenses and to ensure the reduction of adverse impacts of cannabis cultivation, production, sale, and use on fish and wildlife habitats throughout the state.

(D) For purposes of this paragraph, the Secretary of the Natural Resources Agency shall determine the allocation of revenues between the departments. During the first five years of implementation, first consideration should be given to funding purposes specified in subparagraph (A).

(E) Funds allocated pursuant to this paragraph shall be used to increase and enhance activities described in subparagraphs (A), (B), and (C), and not replace allocation of other funding for these purposes. Accordingly, annual General Fund appropriations to the Department of Fish and Wildlife and the Department of Parks and Recreation shall not be reduced below the levels provided in the Budget Act of 2014 (Chapter 25 of the Statutes of 2014).

(3) Twenty percent shall be deposited into the State and Local Government Law Enforcement Account and disbursed by the Controller as follows:

(A) To the Department of the California Highway Patrol for conducting training programs for detecting, testing and enforcing laws against driving under the influence of alcohol and other drugs, including driving under the influence of cannabis. The department may hire personnel to conduct the training programs specified in this subparagraph.

(B) To the Department of the California Highway Patrol to fund internal California Highway Patrol programs and grants to qualified nonprofit organizations and local governments for education, prevention, and enforcement of laws related to driving under the influence of alcohol and other drugs, including cannabis; programs that help enforce traffic laws, educate the public in traffic safety, provide varied and effective means of reducing fatalities, injuries, and economic losses from collisions; and for the purchase of equipment related to enforcement of laws related to driving under the influence of alcohol and other drugs, including cannabis.

(C) To the Board of State and Community Corrections for making grants to local governments to assist with law enforcement, fire protection, or other local programs addressing public health and safety associated with the

implementation of the Control, Regulate and Tax Adult Use of Marijuana Act. The board shall not make any grants to local governments which have banned the cultivation, including personal cultivation under paragraph (3) of subdivision (b) of Section 11362.2 of the Health and Safety Code, or retail sale of cannabis or cannabis products pursuant to Section 26200 of the Business and Professions Code or as otherwise provided by law.

(D) For purposes of this paragraph, the Department of Finance shall determine the allocation of revenues between the agencies; provided, however, beginning in the 2022–23 fiscal year the amount allocated pursuant to subparagraph (A) shall not be less than ten million dollars (\$10,000,000) annually and the amount allocated pursuant to subparagraph (B) shall not be less than forty million dollars (\$40,000,000) annually. In determining the amount to be allocated before the 2022–23 fiscal year pursuant to this paragraph, the Department of Finance shall give initial priority to subparagraph (A).

(g) Funds allocated pursuant to subdivision (f) shall be used to increase the funding of programs and purposes identified and shall not be used to replace allocation of other funding for these purposes.

(h) Effective July 1, 2028, the Legislature may amend this section by majority vote to further the purposes of the Control, Regulate and Tax Adult Use of Marijuana Act, including allocating funds to programs other than those specified in subdivisions (d) and (f). Any revisions pursuant to this subdivision shall not result in a reduction of funds to accounts established pursuant to subdivisions (d) and (f) in any subsequent year from the amount allocated to each account in the 2027–28 fiscal year. Prior to July 1, 2028, the Legislature may not change the allocations to programs specified in subdivisions (d) and (f).

SEC. 172. Section 34021.5 of the Revenue and Taxation Code is amended to read:

34021.5. (a) (1) A county may impose a tax on the privilege of cultivating, manufacturing, producing, processing, preparing, storing, providing, donating, selling, or distributing cannabis or cannabis products by a licensee operating under Division 10 (commencing with Section 26000) of the Business and Professions Code.

(2) The board of supervisors shall specify in the ordinance proposing the tax the activities subject to the tax, the applicable rate or rates, the method of apportionment, if necessary, and the manner of collection of the tax. The tax may be imposed for general governmental purposes or for purposes specified in the ordinance by the board of supervisors.

(3) In addition to any other method of collection authorized by law, the board of supervisors may provide for the collection of the tax imposed pursuant to this section in the same manner, and subject to the same penalties and priority of lien, as other charges and taxes fixed and collected by the county. A tax imposed pursuant to this section is a tax and not a fee or special assessment. The board of supervisors shall specify whether the tax applies throughout the entire county or within the unincorporated area of the county.

(4) The tax authorized by this section may be imposed upon any or all of the activities set forth in paragraph (1), as specified in the ordinance, regardless of whether the activity is undertaken individually, collectively, or cooperatively, and regardless of whether the activity is for compensation or gratuitous, as determined by the board of supervisors.

(b) A tax imposed pursuant to this section shall be subject to applicable voter approval requirements imposed by law.

(c) This section is declaratory of existing law and does not limit or prohibit the levy or collection of any other fee, charge, or tax, or a license or service fee or charge upon, or related to, the activities set forth in subdivision (a) as otherwise provided by law. This section shall not be construed as a limitation upon the taxing authority of a county as provided by law.

(d) This section shall not be construed to authorize a county to impose a sales or use tax in addition to the sales and use taxes imposed under an ordinance conforming to the provisions of Sections 7202 and 7203 of this code.

SEC. 173. Section 2429.7 is added to the Vehicle Code, to read:

2429.7. (a) The commissioner shall appoint an impaired driving task force to develop recommendations for best practices, protocols, proposed legislation, and other policies that will address the issue of impaired driving, including driving under the influence of cannabis and controlled substances. The task force shall also examine the use of technology, including field testing technologies and validated field sobriety tests, to identify drivers under the influence of prescription drugs, cannabis, and controlled substances. The task force shall include, but is not limited to, the commissioner, who shall serve as chairperson, and at least one member from each of the following:

- (1) The Office of Traffic Safety.
- (2) The National Highway Traffic Safety Administration.
- (3) Local law enforcement.
- (4) District attorneys.
- (5) Public defenders.
- (6) California Association of Crime Laboratory Directors.
- (7) California Attorneys for Criminal Justice.

(8) The California Cannabis Research Program, known as the Center for Medicinal Cannabis Research, authorized pursuant to Section 11362.9 of the Health and Safety Code.

(9) An organization that represents medicinal cannabis patients.

(10) Licensed physicians with expertise in substance abuse disorder treatment.

(11) Researchers with expertise in identifying impairment caused by prescription medications and controlled substances.

(12) Nongovernmental organizations committed to social justice issues.

(13) A nongovernmental organization that focuses on improving roadway safety.

(b) The members of the task force shall serve at the pleasure of the commissioner and without compensation.

(c) The task force members shall be free of economic relationships with any company that profits from the sale of technologies or equipment that is intended to identify impairment. Members and their organizations shall not receive pay from, grants from, or any form of financial support from companies or entities that sell such technologies or equipment.

(d) The task force shall make recommendations regarding prevention of impaired driving, means of identifying impaired driving, and responses to impaired driving that reduce reoccurrence, including, but not limited to, evidence-based approaches that do not rely on incarceration.

(e) The task force shall make recommendations regarding how to best capture data to evaluate the impact that cannabis legalization is having on roadway safety.

(f) By January 1, 2021, the task force shall report to the Legislature its policy recommendations and the steps state agencies are taking regarding impaired driving. The report shall be submitted in compliance with Section 9795 of the Government Code.

SEC. 174. Section 23222 of the Vehicle Code is amended to read:

23222. (a) No person shall have in his or her possession on his or her person, while driving a motor vehicle upon a highway or on lands, as described in subdivision (b) of Section 23220, any bottle, can, or other receptacle, containing any alcoholic beverage which has been opened, or a seal broken, or the contents of which have been partially removed.

(b) (1) Except as authorized by law, every person who has in his or her possession on his or her person, while driving a motor vehicle upon a highway or on lands, as described in subdivision (b) of Section 23220, any receptacle containing any cannabis or cannabis products, as defined by Section 11018.1 of the Health and Safety Code, which has been opened or has a seal broken, or loose cannabis flower not in a container, is guilty of an infraction punishable by a fine of not more than one hundred dollars (\$100).

(2) Paragraph (1) does not apply to a person who has a receptacle containing cannabis or cannabis products that has been opened, has a seal broken, or the contents of which have been partially removed, or to a person who has loose cannabis flower not in a container, if the receptacle or loose cannabis flower not in a container is in the trunk of the vehicle.

(c) Subdivision (b) does not apply to a qualified patient or person with an identification card, as defined in Section 11362.7 of the Health and Safety Code, if both of the following apply:

(1) The person is carrying a current identification card or a physician's recommendation.

(2) The cannabis or cannabis product is contained in a container or receptacle that is either sealed, resealed, or closed.

SEC. 175. Section 1831 of the Water Code is amended to read:

1831. (a) When the board determines that any person is violating, or threatening to violate, any requirement described in subdivision (d), the

board may issue an order to that person to cease and desist from that violation.

(b) The cease and desist order shall require that person to comply forthwith or in accordance with a time schedule set by the board.

(c) The board may issue a cease and desist order only after notice and an opportunity for hearing pursuant to Section 1834.

(d) The board may issue a cease and desist order in response to a violation or threatened violation of any of the following:

(1) The prohibition set forth in Section 1052 against the unauthorized diversion or use of water subject to this division.

(2) Any term or condition of a permit, license, certification, or registration issued under this division.

(3) Any decision or order of the board issued under this part, Section 275, Chapter 11 (commencing with Section 10735) of Part 2.74 of Division 6, or Article 7 (commencing with Section 13550) of Chapter 7 of Division 7, in which decision or order the person to whom the cease and desist order will be issued, or a predecessor in interest to that person, was named as a party directly affected by the decision or order.

(4) A regulation adopted under Section 1058.5.

(5) Any extraction restriction, limitation, order, or regulation adopted or issued under Chapter 11 (commencing with Section 10735) of Part 2.74 of Division 6.

(6) Any diversion or use of water for cannabis cultivation if any of paragraphs (1) to (5), inclusive, or any of the following applies:

(A) A license is required, but has not been obtained, under Chapter 6 (commencing with Section 26060) or Chapter 7 (commencing with Section 26070) of Division 10 of the Business and Professions Code.

(B) The diversion is not in compliance with an applicable limitation or requirement established by the board or the Department of Fish and Wildlife under Section 13149.

(C) The diversion or use is not in compliance with a requirement imposed under paragraphs (1) and (2) of subdivision (b) of Section 26060.1 of, and paragraph (3) of subdivision (a) of Section 26070 of, the Business and Professions Code.

(e) This article does not alter the regulatory authority of the board under other provisions of law.

SEC. 176. Section 1847 of the Water Code is amended to read:

1847. (a) A person or entity may be liable for a violation of any of the requirements of subdivision (b) in an amount not to exceed the sum of the following:

(1) Five hundred dollars (\$500), plus two hundred fifty dollars (\$250) for each additional day on which the violation continues if the person fails to correct the violation within 30 days after the board has called the violation to the attention of that person.

(2) Two thousand five hundred dollars (\$2,500) for each acre-foot of water diverted or used in violation of the applicable requirement.

(b) Liability may be imposed for any of the following violations:

(1) Violation of a principle, guideline, or requirement established by the board or the Department of Fish and Wildlife under Section 13149.

(2) Failure to submit information, or making a material misstatement in information submitted, under Section 26060.1 of the Business and Professions Code.

(3) Violation of any requirement imposed under subdivision (b) of Section 26060.1 of the Business and Professions Code.

(4) Diversion or use of water for cannabis cultivation for which a license is required, but has not been obtained, under Chapter 6 (commencing with Section 26060) or Chapter 7 (commencing with Section 26070) of Division 10 of the Business and Professions Code.

(c) Civil liability may be imposed by the superior court. The Attorney General, upon the request of the board, shall petition the superior court to impose, assess, and recover those sums.

(d) Civil liability may be imposed administratively by the board pursuant to Section 1055.

SEC. 177. Section 13276 of the Water Code is amended to read:

13276. (a) The multiagency task force, the Department of Fish and Wildlife and state board pilot project to address the Environmental Impacts of Cannabis Cultivation, assigned to respond to the damages caused by cannabis cultivation on public and private lands in California, shall continue its enforcement efforts on a permanent basis and expand them to a statewide level to ensure the reduction of adverse impacts of cannabis cultivation on water quality and on fish and wildlife throughout the state.

(b) The state board or the appropriate regional board shall address discharges of waste resulting from cannabis cultivation under Division 10 of the Business and Professions Code and associated activities, including by adopting a general permit, establishing waste discharge requirements, or taking action pursuant to Section 13269. In addressing these discharges, the state board or the regional board shall include conditions to address items that include, but are not limited to, all of the following:

(1) Site development and maintenance, erosion control, and drainage features.

(2) Stream crossing installation and maintenance.

(3) Riparian and wetland protection and management.

(4) Soil disposal.

(5) Water storage and use.

(6) Irrigation runoff.

(7) Fertilizers and soil.

(8) Pesticides and herbicides.

(9) Petroleum products and other chemicals.

(10) Cultivation-related waste.

(11) Refuse and human waste.

(12) Cleanup, restoration, and mitigation.

SEC. 178. The amount of three million dollars (\$3,000,000) is hereby appropriated from the Cannabis Control Fund to the Department of the California Highway Patrol to be used to for training drug recognition experts.

Program costs may include, but are not limited to, training, overtime, and backfill of state and local law enforcement officers to attend training.

SEC. 179. The provisions of this act are severable. If any provision of this act or its application is held invalid, that invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.

SEC. 180. The Legislature finds and declares that Sections 58 and 93 of this act, which add Sections 26067 and 26162 to the Business and Professions Code, impose a limitation on the public's right of access to the meetings of public bodies or the writings of public officials and agencies within the meaning of Section 3 of Article I of the California Constitution. Pursuant to that constitutional provision, the Legislature makes the following findings to demonstrate the interest protected by this limitation and the need for protecting that interest:

In order to protect public safety and prevent the diversion of cannabis to the illegal market, it is necessary for that information to be confidential.

SEC. 181. No reimbursement is required by this act pursuant to Section 6 of Article XIIIIB of the California Constitution for certain costs that may be incurred by a local agency or school district because, in that regard, this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

However, if the Commission on State Mandates determines that this act contains other costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.

SEC. 182. The Legislature finds and declares that this act furthers the purposes and intent of the Control, Regulate and Tax Adult Use of Marijuana Act by accomplishing all of the following:

(a) Taking adult-use cannabis production and sales out of the hands of the illegal market and bringing them under a regulatory structure that prevents access by minors and protects public safety, public health, and the environment.

(b) Strictly controlling the cultivation, processing, manufacture, distribution, testing, and sale of adult-use cannabis through a system of state licensing, regulation, and enforcement.

(c) Allowing local governments to enforce state laws and regulations for adult-use cannabis businesses if that authority is delegated to them by the state, and enact additional local requirements for adult-use cannabis businesses, but not require that they do so for an adult-use cannabis business to be issued a state license and be legal under state law.

(d) Requiring track and trace management procedures to track adult-use cannabis from cultivation to sale.

(e) Requiring licensed adult-use cannabis businesses to follow strict environmental and product safety standards as a condition of maintaining their license.

(f) Denying access to cannabis by persons younger than 21 years of age who are not medicinal cannabis patients.

(g) Preventing the illegal production or distribution of cannabis.

(h) Preventing the illegal diversion of cannabis from California to other states or countries or to the illegal market.

(i) Reducing barriers to entry into the legal, regulated market.

(j) Allowing industrial hemp to be grown as an agricultural product, and for agricultural or academic research, and regulated separately from the strains of cannabis with higher delta-9 tetrahydrocannabinol concentrations.

SEC. 183. This act is a bill providing for appropriations related to the Budget Bill within the meaning of subdivision (e) of Section 12 of Article IV of the California Constitution, has been identified as related to the budget in the Budget Bill, and shall take effect immediately.

Appendix B

[Link to CDFA Draft PEIR](#)

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DOCUMENT AVAILABILITY:

The Draft PEIR and supporting documents are available for download from CDFA's CalCannabis Cultivation Licensing website: calcannabis.cdfa.ca.gov. Hard copies of the document can be reviewed at CDFA's offices in Sacramento (address shown below). To arrange to view documents at CDFA's offices during business hours, call (916) 263-0801. The document can also be reviewed electronically at libraries throughout the state that serve as document repositories; for a full list of locations, refer to the CalCannabis Cultivation Licensing website. USB drives containing the document are available on request by phoning (510) 986-1852 or emailing calcannabis.peir@cdfa.ca.gov. Printed copies are also available at cost plus postage, upon request, by phoning (510) 986-1852 or emailing calcannabis.peir@cdfa.ca.gov.

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Appendix C

Summary of Existing and Proposed Local Cannabis Business Regulations

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Table C-1: Summary of County Ordinances (as of August 17, 2017)

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
Alameda	Dispensaries allowed. Cultivation prohibited.	Ordinance No. 2005-52; Ordinance No. 2005-25	Dispensaries <ul style="list-style-type: none"> • May not be located within 1,000 feet of another dispensary or a school, public park, playground, drug recovery facility, or recreation center. • Must be located within a commercial or industrial zone or their equivalent. • May not be open for business between hours of 9 pm and 9 am, or, if within 1,000 feet of a school, may not be open during the 1.5-hour period immediately following cessation of classes. • No smoking, ingesting or consuming cannabis on the premises. • Must provide adequate security on the premises, including lighting and alarms. • Must provide litter removal services twice each day on and in front of the premises. • Must comply with county building, zoning and health codes.
Alpine	Cannabis activities prohibited.		
Amador	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Butte	Dispensaries not permitted. Cultivation is allowed, as follows: Medical: Varies based on lot size; lots over 10 acres may designate 150 square feet to cultivation. Non-Medical: No more than six plants.	Butte County Code, Chapter 34A (Medical); Butte County Code, Chapter 34C (Non-Medical)	Cultivation – All Types <ul style="list-style-type: none"> • Cultivation is prohibited within 1,000 feet of a school or similar facility, 600 feet if a school bus stop, and 100 feet from an occupied residential structure on an adjacent parcel. Subject to setback requirements based on size of parcel. • Cultivation is prohibited in any location where plants are visible from a public right of way. Outdoor grows must be fully enclosed by a solid and opaque fence at least 6 feet in height. • Cultivation must have permitted permanent water well connection or connection to a municipal water source. No illegal discharges of water. • Cultivation must be connected to municipalities' sewer system or have a County-inspected and permitted sewage disposal system. • Chemicals used in cultivation and/or harvest must be used, stored, and disposed of in accordance with applicable laws. • Cultivation not permitted in commercial, industrial, or public zones. Cultivation – Nonmedical

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
			<ul style="list-style-type: none"> Any accessory structure must (1) comply with the Building Code; (2) be secure against unauthorized entry; (3) be accessible only through one or more lockable doors; (4) be constructed of approved building materials; (5) contain a ventilation and filtration systems to control odor; (6) be located in the rear yard area of a legal parcel or premises; (7) maintain appropriate setbacks. Installation of electrical fixtures, plumbing, or ventilation/filtration systems, for the purpose of modifying an existing structure to meet the requirements of an accessory structure, shall require a Building Permit.
Calaveras	Dispensaries allowed with medical cannabis dispensary administrative use permit. Cultivation subject to tiered licensing system based on type of cultivation and size of operation.	Ordinance No. 2830 (2005); Ordinance No. 3069 (May 10, 2016)	<p>Dispensaries</p> <ul style="list-style-type: none"> Must be located in the CP professional office zoning district. No cannabis shall be smoked, ingested or otherwise consumed on the premises. Must provide adequate security on premises, including lighting/alarms. Building must comply with all applicable local, state and federal rules, regulations, and laws. If providing cannabis in the form of food, must obtain and maintain the appropriate permits from county environmental health department. May not be located within 1,000 feet of another medical cannabis dispensary, a school, or public park. <p>Cultivation</p> <ul style="list-style-type: none"> Must at all times ensure the health and safety of employees, visitors, and neighbors; protect the environment from harm to streams, fish, and wildlife; ensure the security of the medical cannabis; and safeguard against diversion of cannabis for non-medical purposes. Must comply with all federal, state, and local laws. Must comply with all laws and regulations related to use, storage, and disposal of hazardous materials or wastes, including but limited to pesticides. Must comply with all laws relating to housing, sanitation, and health and safety of agricultural workers employed at the site. Must demonstrate compliance with Central Valley Water Quality Control Board regulations. Outdoor and mixed light sites must be set back at least 75 feet from any

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
			property line, and 1,000 feet from any parcel containing a "sensitive use." <ul style="list-style-type: none"> • Cultivation subject to zoning restrictions. • Indoor cultivation area must be lawful, permitted structure that is securely locked and enclosed by four walls and a roof that prevents public viewing. • Outdoor and mixed light grow areas must be fully enclosed by a six-foot tall fence of a material and strength to prevent unauthorized access and public viewing. • Reasonable screening from public view and from the view of parcels containing a "sensitive use" must be provided. • All outdoor lighting must be shield to prevent light trespass into the night sky and glare onto adjoining parcels or rights-of-way. • Any generator used in cultivation must be housed in an insulated shed; set back 75 feet from the property line, and in compliance with the county's noise ordinance.
Colusa	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Contra Costa	Cannabis activities prohibited.		
Del Norte	Cannabis activities prohibited.		
El Dorado	Medical marijuana distribution facilities and cultivation are permitted. Size of outdoor cultivation area restricted based on zoning district (200 to 600 square feet).	Ordinance Nos. 4999 and 5000 (September 24, 2013)	Medical Marijuana Distribution Facility <ul style="list-style-type: none"> • Must be located within a commercial zone district. • Must comply with State law, including, but not limited to, the Medical Marijuana Program Act. Cultivation <ul style="list-style-type: none"> • Cultivation must be screened from public view, and secured by a minimum six-foot high solid fence with locked gates. • Must not be located within 1,000 feet from school, park, or similar facility. Must be set back 50 to 100 feet from any property line depending on zoning. • Must have legal water source. No illicit discharges or off-site drift of chemicals. • Must be connected to public sewer or have an approved sewage system. • Must use and dispose of chemicals in accordance with applicable laws. • Cultivation must not adversely affect health or safety of nearby residents due to dust, noise, smoke, or odors.
Fresno	Cannabis activities prohibited.		

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
Glenn	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Humboldt	Dispensaries not permitted. Cultivation is allowed, subject to tiered permit system allowing up to 1 acre outdoors, 22,000 square feet for mixed-light, and 10,000 square feet indoors.	Ordinance No. 2559 (September 13, 2016)	<p>Cultivation</p> <ul style="list-style-type: none"> • Outdoor, mixed-light, and indoor commercial cultivation subject to zoning restrictions (generally limited to areas zoned for agriculture but may be allowed in other zones with clearance certificate or use permit). • Electrical power for indoor cultivation shall be provided by on-grid power 100% renewable source, on-site net zero energy renewable source, or with purchase of carbon offsets of any portion of power not from renewable sources. • Cultivation sites must be set back 30 feet from any property line and 600 feet from any school, church, or similar land use. • Must comply with applicable Regional Water Quality Control Board orders and any Streambed Alteration Agreement. • Where surface water diversion provides any part of the water supply for irrigation of cannabis cultivation, applicant shall either (1) consent to forebear from any such diversion during the period from May 15th to October 31st of each year and establish on-site water storage for retention of wet season flows sufficient to provide adequate irrigation water for the size of the area to be cultivated, or (2) submit a water management plan prepared by a qualified person, such as a licensed engineer or hydrologist. • Water is to be sourced locally (on-site). Trucked water shall not be allowed. • Must refrain from improper storage or use of any fuels, fertilizer, pesticide, or hazardous substance. Fuel shall be stored and handled in compliance with applicable state and local laws. Any uses of pesticide products shall be in compliance with State pesticide laws and regulations. • Must maintain noise below acceptable standards. Noise produced by a generator used for cultivation shall not be audible by humans from neighboring residences. Where applicable, permittees must show sound levels will not result in the harassment of Marbled Murrelet or Spotted Owl species. • Must shield light sources and comply with International Dark Sky Association standards. • Cultivators must comply with all applicable federal, state, and local laws and regulations governing California Agricultural Employers, including

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
			federal and state wage and hour laws, Cal/OSHA, and OSHA.
Imperial	No cannabis ordinance has been adopted.		
Inyo	Commercial cannabis ordinance pending.		
Kern	Dispensaries allowed. Commercial cultivation is prohibited.	Ordinance No. G-8299 (June 5, 2012)	<p>Dispensaries</p> <ul style="list-style-type: none"> May not be established in any zone district other than the M-2 PD (Medium Industrial – Precise Development Combining District) and M-3 PD (Heavy Industrial – Precise Development Combining District). May not be located within one mile of any school, daycare, park, or church. May not be located within one mile of any other dispensary. No cannabis may be smoked, ingested, or consumed on the premises. No edible products may be distributed or sold on the premises. May not operate between hours of 8 pm and 10 am. May not be located in any temporary or portable structure. Trash dumpsters shall be enclosed by a screening enclosure so as not to be accessible to the public. Off-street parking shall be provided at ratio of one parking space per 250 square feet of gross floor area. Entire exterior grounds shall be lighted such that all areas are visible. No residential structure may be converted for use as a dispensary.
Kings	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Lake	Dispensaries not permitted. Cultivation is allowed subject to following limitations. Indoor Cultivation: 100 square feet. Outdoor Cultivation: 6 mature or 12 immature plants;	Ordinance No. 2997; County Code, Article 72	<p>Indoor Cultivation:</p> <ul style="list-style-type: none"> Lighting must not exceed 1,200 watts. Cultivation areas must have ventilation and filtration systems to prevent odors or mold. Ventilation and filtration systems, along with any plumbing improvements, shall be installed with valid electrical and plumbing permits issued and inspected by the Lake County Building and Safety Division. <p>Outdoor Cultivation:</p> <ul style="list-style-type: none"> Prohibited on any parcel that is located within a Community Growth Boundary as designated by the Lake County General Plan, and on any parcel that is 1 acre or smaller and located outside of any designated Community Growth Boundary.

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
	collectives may cultivate up to 48 mature or 72 immature plants, provided that cultivation is conducted on a parcel that is a minimum of 20 acres and located within the "A" Agriculture zoning district.		<ul style="list-style-type: none"> Must not be located 1,000 feet from schools, parks, or other similar land uses, and must be setback 75 feet from any property line. Cultivation sites must not be located within 100 feet of any spring, creek, or water feature. Must have a legal water source, and must not allow illicit discharges or off-site drift. Use of hazardous materials is prohibited in cultivation except for limited quantities below State threshold levels of 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas. Any hazardous materials stored shall maintain a minimum setback distance of 100 feet from any private drinking water well, spring, etc. and 200 feet from any public water supply well. Cultivation must be screened from public view by a fully enclosed solid fence of minimum of 8 feet in height, with locked gates.
Lassen	Cannabis activities prohibited.		
Los Angeles	Must obtain license from county to operate a dispensary. Cultivation is prohibited.	Ordinance 2006-0036 (2006)	<p>Dispensaries</p> <ul style="list-style-type: none"> Must ensure absence of loitering. Must provide an adequate security system including cameras and alarms, and have at least one security guard present at all times during business hours.
Madera	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Marin	Dispensaries are permitted with dispensary license. Outdoor cultivation of marijuana and all cannabis activities that would require a state license prohibited.	Ordinance No. 3639 (2015); Ordinance No. 3664 (2017)	<p>Dispensaries</p> <ul style="list-style-type: none"> May only be located within commercial designated areas of the county's general plan. Must be located in a highly visible location that provides good views of the dispensary entrance, windows, and premises from the public street. May not be located within 800 feet of a youth-oriented facility, or within any residential zoned parcel. Entrance into the dispensary shall be locked at all times with entry strictly controlled. Security personnel shall be employed to monitor site activity, control loitering and site access. Must have an air treatment system to prevent off-site odors.

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
			<ul style="list-style-type: none"> Must have security plans, and install security cameras/alarm systems. Dispensary operator must take all reasonable steps to discourage and correct objectionable conditions that constitute a nuisance in parking areas, sidewalks, alleys, and areas surrounding the premises and adjacent properties during business hours.
Mariposa	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Mendocino	Dispensaries not permitted. Cultivation is allowed subject to tiered licensing system subject to zoning requirements allowing up to 10,000 sq. ft. of cultivation area.	Ordinance No. 4356 (May 17, 2016); Ordinance No. 4381 (April 4, 2017); Ordinance No. 4383 (May 2, 2017)	<p>Cultivation</p> <ul style="list-style-type: none"> Cultivation prohibited within 1,000 feet of a school or similar facility. Outdoors or mixed-light cultivation prohibited within 100 feet of any residence. Cultivation prohibited in any location where the marijuana plants are visible from the public right-of-way. Indoor or mixed-light cultivation must rely on the electrical grid or some form of alternative energy source. Indoor or mixed-light cultivation may not rely on diesel generator as primary source of power. If generator is used, it must meet noise standards and have electrical wiring of sufficient capacity and installed in such a way as to provide for minimum safety standards. Cultivation must not subject residents of neighboring parcels to objectionable odors. Light assistance for outdoor cultivation must not exceed 35 watts per one sq. ft. of growing area. All lights shielded and downcast. Must not exceed applicable noise standards. May not utilize water that has been or is illegally diverted. Must comply with all statutes, regulations, and requirements of the SWRCB, Division of Water Rights. Must not create erosion or result in contaminated runoff. Must establish and maintain enrollment in Tier 1, 2, or 3 with the NCRWQCB Order No. 2015-0023. Outdoor cultivation must be contained within wildlife exclusionary fencing that includes a lockable gate. All buildings where marijuana is cultivated or stored must be properly secured to prevent unauthorized entry. Fuel, fertilizer, pesticide, etc. must be stored in secured and locked structure or device. Any use of pesticides must be consistent with state law and regulations. May not remove any commercial tree species for purpose of developing cannabis cultivation site.

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
			<ul style="list-style-type: none"> • Must maintain applicable “defensible space” protocols and distances around structures, as established by CAL FIRE. • Indoor or mixed-light cultivation must be equipped with filtered ventilation systems or other effective odor control mechanism to control cannabis odors.
Merced	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Modoc	Commercial cannabis activities prohibited.		
Mono	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Monterey	Commercial medical cannabis activities (dispensaries, cultivation, testing facilities, transportation and distribution) allowed with permit. Cultivation canopy area varies based on type and size of facility; outdoor cultivation may cultivate up to 1 acre, while mixed light may cultivate up to 22,000 square feet.	Ordinance No. 5270 (July 12, 2016)	<p><i>Dispensaries, Testing Facilities, and Transportation and Distribution</i></p> <ul style="list-style-type: none"> • Must be located in zoning district that specifically provides for this use. • May not be located within 600 feet of any school, public park, or drug recovery facility, or within 1,500 feet of another dispensary. • Must implement and maintain sufficient security measures to deter and prevent unauthorized entrance into areas containing cannabis. Security measures may include prevention of loitering, establishing limited access areas, storage of cannabis in secured and locked areas, installing security cameras, and providing for on-site security personnel. • Dispensaries may not operate outside of the hours of 8 am to 8 pm. • Alternative fuel vehicles shall be provided as part of the cannabis transportation fleet. <p><i>Cultivation</i></p> <ul style="list-style-type: none"> • Only allowed in Light Industrial (LI), Heavy Industrial (HI), Agricultural Industrial (AI), or Farmland zones. • In no case shall a building intended for residential use be used for cultivation. • May not be located within 600 feet of a school, public park, or drug recovery facility. • Water conservation measures, water capture systems, or grey water systems shall be incorporated in cultivation operations to minimize use of water where feasible. • On-site renewable energy generation shall be required for all indoor cultivation activities. Renewable energy systems shall be designed to have a generation potential equal to or greater than one half of the anticipated energy demand.

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
			<ul style="list-style-type: none"> • Cannabis plants shall not be visible from offsite. • Odor prevention devices and techniques shall be incorporated to ensure that odors are not detectable off-site. • Cannabis must be stored in a secured and locked safe room, safe or vault, and in a manner to prevent diversion, theft, and loss. Appropriate security measures, including lighting and alarms, must be employed. • Permittee shall comply with all applicable federal, state, and local laws, including County building, zoning, and health codes. • Must follow all pesticide use requirements of local, state, and federal law. • Must follow all local, state, and federal requirements for waste disposal. • Use of hazardous, flammable, or explosive substances is prohibited. • Pesticides and fertilizers shall be properly labeled and stored to avoid contamination through erosion, leakage, or inadvertent damage from rodents, pests, or wildlife.
Napa	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Nevada	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Orange	No cannabis ordinance has been adopted.		
Placer	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Plumas	Commercial cannabis ordinance pending.		
Riverside	Cannabis activities prohibited.		
Sacramento	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
San Benito	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
San Bernardino	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
San Diego	Cannabis collectives allowed with operating certificate. Cultivation prohibited.	Ordinance No. 10224 (December 25, 2012); Ordinance No. 10120 (March 3, 2011); Ordinance No. 10060 (July 30, 2010)	Collectives <ul style="list-style-type: none"> • Must have adequate alarm systems, closed circuit video monitoring. • Must have intrusion-resistant windows, roofs, and skylights. • Cannabis may not be visible from any location off the property. • Exterior lighting must be in compliance with applicable codes and regulations (e.g., San Diego Light Pollution Code). • Must have approved fire suppression systems. • Exterior lighting must comply with applicable regulations. • Must conform to parking requirements of zoning ordinance, • Entrances, exits, and doors must be designed to prevent unauthorized entry. • May not operate between hours of 8 pm and 8 am. • Must have present at all times during business hours a licensed, uniformed security guard.
San Francisco	Dispensaries are permitted with medical cannabis dispensary permit.	Ordinance No. 25-09 (February 13, 2009); Ordinance No. 318-08 (December 19, 2008); Ordinance No. 225-07 (December 2, 2007); Ordinance No. 275-05 (November 30, 2005)	Dispensaries <ul style="list-style-type: none"> • May not be located in a Small-Scale Neighborhood Commercial District, a Moderate Scale Neighborhood Commercial District, a Moderate Scale Neighborhood Commercial District, or a Neighborhood Commercial Shopping Center District. • No medical cannabis may be smoked, ingested, or otherwise consumed in the public right-of-way within fifty (50) feet of dispensary. • Must provide and maintain adequate security on the premises, including lighting and alarms. • Must provide disabled access. • May not operate between the hours of 10 pm and 8 am the next day. • Any cultivation of cannabis on the premises of a dispensary must be conducted indoors.
San Joaquin	Cannabis activities prohibited.		
San Luis Obispo	Dispensaries are allowed. Cultivation prohibited.	Ordinance No. 3114	Dispensaries <ul style="list-style-type: none"> • Must be located in Commercial Retail or Commercial Service land use categories and outside of the Central Business District, a minimum of 1,000 feet from any school, library, park, playground, or youth center. • Hours of operation are limited to 11 am to 6 pm.

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
			<ul style="list-style-type: none"> Must have a security plan that includes lighting, security video cameras, alarm systems, and secure area for medical cannabis storage.
San Mateo	Commercial cannabis activities not permitted.		
Santa Barbara	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Santa Clara	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Santa Cruz	<p>Medical cannabis businesses are permitted provided owner has obtained valid seller's permit from the California State Board of Equalization by January 10, 2014. Cultivation is allowed subject to following licensing system:</p> <p>Category (A) Cottage Garden License – Allows cultivation of up to 200 square feet of garden canopy;</p> <p>Category (B) Level One Cultivator License – Allows cultivation of up to 500 square feet of garden canopy.</p>	Ordinance 5192 (2014); Ordinance No. 5216 (2015)	<p>Medical Cannabis Businesses</p> <ul style="list-style-type: none"> May not remain open and/or operating between 10 pm and 8 am. No cannabis may be consumed on the premises including any area used for parking any vehicle. No cannabis may be visible from the exterior of the premises. May not have lighting visible from exterior of premises during non-business hours, except that reasonably required security. Must be located in a zone district designated as PA (Professional and Administrative Offices, C-1 (Neighborhood Commercial), C-2 (Community Commercial), C-4 (Commercial Services), or C-T (Tourist Commercial). Must provide litter and graffiti removal services for the premises on daily basis. May not be located within 600 feet of a school or another medical cannabis business. After January 10, 2014, may not be located within 300 feet of any parcel zoned RA (Single-Family Residential and Agriculture); RR (Single-Family Residential, Rural); R-1 (Single-Family Residential, Urban/Rural); RB (Single-Family Residential, Oceanfront/Urban; or RM (Multiple-Family Residential). <p>Cottage Garden Licenses</p> <ul style="list-style-type: none"> Must not be located within the urban area defined by either the urban services line or the rural services line. May not cultivate cannabis within 600 feet of a habitable structure on neighboring parcel, municipal boundary, perennial stream, school, or park. Cultivation must not be visible from any adjacent public right-of-way. <p>Level One Cultivator Licenses</p> <ul style="list-style-type: none"> All cottage garden restrictions described above apply.

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
			<ul style="list-style-type: none"> • Must be located in a zone district designated as SU (Special Use), TP (Timber Production), CA (Commercial Agriculture), A (Agriculture), AP (Agriculture Preserve) or RA (Residential Agriculture). <p>All License Types</p> <ul style="list-style-type: none"> • For indoor cultivation, must be able to provide written certification from licensed electrician that cultivation location has all necessary electrical permits required by California Building Codes. • For outdoor cultivation, must enclose the cultivation area by opaque fence at least six feet in height, and secure area by a locked gate to prevent unauthorized entry. • Must comply with all requirements of County Code Title 16, Environmental and Resource Protection, and requirements of other code titles related to water conservation, water wells, and water systems. • May not use a generator, hazardous materials, or flammable products in cultivation. • Must contain all irrigation runoff, fertilizer, and contaminants on site. • May not use water from any water source that is not located on the parcel on which cultivation is taking place. • For indoor cultivation, must use a commercial air scrubbing device that prevents cannabis odors from escaping the structure where cultivation takes place. • May not possess, store, or use any firearm on parcel where cultivation takes place.
Shasta	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Sierra	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Siskiyou	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Solano	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
Sonoma	Dispensaries are allowed with permit. Cultivation is permitted. Outdoor maximum cultivation area is one acre; indoor/mixed-light is 22,000 square feet.	Ordinance No. 6187 (December 13, 2016); Ordinance No. 6189 (December 20, 2016)	<p>Dispensaries</p> <ul style="list-style-type: none"> Must operate in permanently constructed structure and may not operate from a vehicle or non-permanent structure. No cannabis shall be smoked, ingested, or otherwise consumed on the premises or in the public right of way within 25 feet of facility. Employees of a dispensary delivering medical cannabis shall carry a copy of the dispensary's current permit, and a copy of the delivery request. <p>Cultivation</p> <ul style="list-style-type: none"> All indoor, greenhouse, and mixed-light operations must be equipped with odor control filtration and ventilation system(s) to control odors, humidity, and mold. All cultivation sites must utilize dust control measures on access roads and all ground disturbing activities. Electrical power for indoor and mixed-light cultivation shall be provided by any combination of the following: (i) on-grid power with one hundred percent renewable source; (ii) on-site zero net energy renewable source; or (iii) purchase of carbon offsets of any portion of power not from renewable sources. The use of generators is prohibited except for temporary use in emergencies. All cultivation operations that utilize hazardous materials shall comply with all applicable local and state laws and regulations and maintain permits with appropriate agencies. Cultivators must comply with all applicable federal, state, and local laws and regulations related to occupational safety, including CAL/OSHA, OSHA, and the California Agricultural Labor Relations Act. Must develop waste management plan. All garbage and refuse must be stored in appropriate, sealed containers. Must develop waste water management plan identifying the amount of waste water, excess irrigation and domestic wastewater anticipated, as well as disposal. Cultivation must comply with BMPs issued by the Agricultural Commissioner and submit verification of compliance with the Waste Discharge Requirements of the applicable RWQCB. Excess irrigation water or effluent must be directed to a sanitary sewer, septic, irrigation, greywater, or bio-retention treatment system. All domestic waste for employees must be

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
			<p>disposed of in a permanent sanitary sewer or on-site septic system demonstrated to have adequate capacity.</p> <ul style="list-style-type: none"> Must have adequate on-site water supply, such as municipal water connection, recycled water, surface water right, or well water. Trucked water is not allowed. Groundwater wells used for cultivation must be equipped with a meter or sounding tube or other water level sounding device. Groundwater monitoring reports must be submitted to County Permit Department annually.
Stanislaus	Cannabis activities prohibited.		
Sutter	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Tehama	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Trinity	Dispensaries not permitted. Cultivation is allowed.	Ordinance No. 315-816 (August 10, 2016); Ordinance No. 315.EXT(A1) (December 21, 2016)	<p>Cultivation</p> <ul style="list-style-type: none"> May not be located within 1,000 feet of a youth-oriented facility, a school, any church, or residential treatment facility, or within 500 feet of a school bus stop. Cultivation is not permitted in any location where cannabis plants are visible from the public right-of-way. May not be located within the Trinity County jurisdiction of the Whiskeytown-Shasta-Trinity National Recreation Area or within the boundaries of the Ruth Lake Community Service District. Not permitted in Timber Production Zones (TPZ), with certain limited exceptions. May not be located in Residential 1 (R1), Residential 2 (R2), or Residential 3 (R3) Zones. May not exceed the noise level standards as set forth in the County General Plan. Must comply with all State laws regarding surface water. May not use water that has been or is illegally diverted from any stream, creek, river, or water source. Must not create erosion or result in contaminated runoff into any stream, creek, river, or body of water. If property has more than a 35% slope, must apply for Tier 2 of the NCRWQCB Order 2015-0023. Outdoor cultivation must be contained within Wildlife Exclusionary Fencing, with lockable gate.

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
			<ul style="list-style-type: none"> • All buildings used for cultivation must be properly secured to prevent unauthorized entry. • Any fuel, fertilizer, pesticide, fungicide, rodenticide, herbicide or other substance toxic to wildlife, children, or pets must be stored in secured, locked structure or device. • Must comply with applicable state and local laws related to hazardous materials and wastes, and Hazardous Materials program administered by Trinity County Environmental Health Division. • Rodenticides requiring a California Restricted Materials permit are not permitted. • All lighting associated with cultivation shall be downcast, shielded, and/or screened to keep light from emanating off-site or into the sky. • Cultivation must comply with CAL FIRE, CDFW and any other resource agency having jurisdiction.
Tulare	Distribution is allowed. Cannabis collectives are allowed but may not accept compensation.	Ordinance No. 3396 (December 10, 2009)	<p>Distribution</p> <ul style="list-style-type: none"> • Exterior of the structure must be compatible in appearance with surrounding area, and maintained so as to prevent blight and deterioration. • Structure must include an alarm system that is monitored at all times for security purposes, and must have security lighting. • Building must be secured from public access, • Structure shall be designed to restrict smell, odor, smoke, or other airborne odors and smells related to marijuana from being transmitted to an adjoining property or public areas.
Tuolumne	Commercial cannabis activities prohibited. Cultivation for personal use allowed.		
Ventura	Ventura County prohibits the operation of medical cannabis dispensaries, and the manufacturing, processing, storage or sales of medical cannabis or medical cannabis products. However, the code states that this prohibition does not apply to the delivery and transport of medical cannabis and does not apply to uses by a qualified patient or primary caregiver for which a permit is not required.		

County	License Types / Cultivation Amount	Applicable Ordinance	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
Yolo	Dispensaries are not permitted. Cultivation is allowed up to one acre.	Ordinance No. 1467 (April 21, 2016); Ordinance No. 1473 (November 24, 2016); Ordinance No. 1483 (February 9, 2017); Ordinance 1485 (March 9, 2017)	<p>Cultivation</p> <ul style="list-style-type: none"> • Outdoor cultivation is prohibited within 1,000 feet of a school or similar land use, or within 75 feet of any occupied residence on separate parcel. • Cultivation area must be fully enclosed by an opaque fence at least 6 feet in height, which is adequately secured by a locked gate. Evidence of cultivation shall not be visible from the public right-of-way. • Use of light assistance for outdoor cultivation shall not exceed 600 watts per 100 square feet of growing area. • All lights used for cultivation shall be shielded and downcast. • May not use water that has been illegally diverted from any stream, creek, river, ditch, or any other body or source of water. • All buildings where marijuana is stored shall be properly secured to prevent unauthorized entry. • Outdoor cultivation must be in compliance with Central Valley Regional Water Quality Control Board Order No. R5-2015-0133.
Yuba	Commercial cannabis activity not permitted.		

Table C-2. Summary of Ordinances in the Ten Largest California Cities (by population) (as of August 17, 2017)

City	License Types / Cultivation Amount	Applicable Ordinance (Date Adopted)	Operating Requirements <small>Note: Requirements are selected and summarized. See ordinance for full details.</small>
Los Angeles	Medical cannabis businesses, including those that may cultivate marijuana, are prohibited, but are provided immunity from enforcement; no limits on the number of plants that may be grown are apparently specified in the ordinance.	Ordinance No. 182,580 (June 20, 2013)	<p>Medical Cannabis Businesses</p> <ul style="list-style-type: none"> • May not remain open or operate between hours of 8 pm and 10 am. • Marijuana may not be visible from exterior of the premises. • May not illuminate any portion of its premises during the closure hours by lighting that is visible from the exterior of the premises, except such lighting as is reasonably utilized for the security of the premises. • May not provide ingress or egress to the business immediately adjacent to any land zoned residential. Must be separated from a residential zone by a public thoroughfare with a minimum roadway width of 80 feet. • May not be located within 1,000 feet of a school, or within 600 feet of a public park, library, church, or similar land use.
San Diego	Medical cannabis outlets are allowed with permit. Cultivation not permitted.	Ordinance No. 20460 N.S. (February 6, 2015) Ordinance No. 20043 N.S. (April 27, 2011); Ordinance No. 20795 (April 12, 2017)	<p>Medical Marijuana Outlets</p> <ul style="list-style-type: none"> • City may at any time have medical marijuana tested for pesticides, mold, mildew, and/or bacteria, and make such testing results available to consumers. • All persons transporting medical cannabis shall do so in accordance with state law.
San Jose	Ordinance regulates medical marijuana collectives; no plant/amount limits apparently specified. Collectives may not operate for profit. Indoor cultivation allowed at collectives or dedicated cultivation site, but outdoor cultivation is prohibited.	Ordinance No. 29421 (July 18, 2014) Ordinance No. 29664 (January 5, 2016) Ordinance No. 29805	<p>Medical Cannabis Collectives</p> <ul style="list-style-type: none"> • Must register with the City, obtain zoning code verification certificate, and obtain all required site development permits and building permits. • Only allowed in Light Industrial, Heavy Industrial, Combined Industrial/Commercial, Industrial Park, and Downtown Primary Commercial (2nd story only). • Must have security system, including video cameras and alarm system, and have at least one security personnel on duty 24 hours per day. • Must have separate fire and burglar alarm systems. • Exterior lighting must not result in glare.

City	License Types / Cultivation Amount	Applicable Ordinance (Date Adopted)	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
			<ul style="list-style-type: none"> • Medical cannabis must be stored in completely enclosed, secure structure. • May not possess firearm on premises without obtaining applicable license and providing information to city manager and chief of police. • May not be open to the public between hours of 9 pm and 9 am. • Must keep property and adjacent areas clear of trash, litter, and debris. • Cultivation must employ proper storage of chemicals and fertilizers. • No cultivation may be visible with the naked eye from any public or private property. • All water used in cultivation must be legally obtained and applied in accordance with state and local laws. • Must install air scrubbers/purification systems to prevent odor.
San Francisco	<i>See City and County of San Francisco information in Table C-1.</i>		
Fresno	Dispensaries are allowed. Cultivation prohibited.	Ordinance No. 2015-39 (January 9, 2016)	<p>Dispensaries</p> <ul style="list-style-type: none"> • Only allowed in a zone district designated for medical offices and only if consistent with state and federal law.
Sacramento	Dispensaries allowed with medical marijuana dispensary permit and conditional use permit. Cultivation allowed subject to tiered permit system as follows: Class A, for indoor cultivation of less than or equal to 5,000 sq. ft. of total canopy; Class B, for indoor cultivation of between	Ordinance No. 2013-0020; Ordinance No. 2013-0007; Ordinance No. 2016-0051	<p>Dispensaries</p> <ul style="list-style-type: none"> • May not be located within 1,000 feet of any other medical marijuana dispensary. • May not be located within 300 feet of any existing residential zone. • May not be located within 600 feet of any childcare center, child care, youth-oriented facility, church, substance abuse center, cinema, or tobacco retailer. • May not be located within 1,000 feet of any school or park. • Off-street parking shall be required as required for retail stores. • Application for a conditional use permit shall include a floor plan, site plan, neighborhood context map, and a security and lighting plan. <p>Cultivation</p> <ul style="list-style-type: none"> • Outdoor cultivation prohibited. • All entrances into buildings on the cultivation site must be locked

City	License Types / Cultivation Amount	Applicable Ordinance (Date Adopted)	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
	5,001 and 10,000 sq. ft. of total canopy; Class C, for indoor cultivation of between 10,001 and 22,000 sq. ft. of total canopy.		<p>at all times.</p> <ul style="list-style-type: none"> • Cultivation site must employ security requirements, including surveillance cameras, and alarm system. • Must prevent odors from escaping the buildings on cultivation site such that odor can be detected outside of buildings. • Must maintain the exterior of the cultivation site, including any parking lots under control of permittee, free of litter, debris, and trash. • Must properly store and dispose of all waste generated on the cultivation site, including chemical and organic waste, in accordance with all applicable laws and regulations.
Long Beach	Medical cannabis businesses allowed. Cultivation prohibited.	Ordinance of Measure MM (November 8, 2016)	<p>Medical Marijuana Businesses</p> <ul style="list-style-type: none"> • May not be located in an area zoned exclusively for residential use, or within 1,000 feet of a school or public beach, or within 600 feet of a public park or library. • All cannabis intended for disposal shall be unusable and unrecognizable prior to removal from the business. • May not have a drive through lane or drive up window. • No cannabis may be smoked, eaten or otherwise consumed within business. • All distribution, sales, and storage of marijuana shall occur within an enclosed area and not be visible from exterior of business. • Must have an odor-absorbing ventilation and exhaust system to ensure odors are not detected outside premises. • Windows and roof hatches must be secured so as to prevent unauthorized entry. • Must implement sufficient security measures to both deter and prevent unauthorized entrance and theft, including video surveillance. • Must use a safe for storage of processed marijuana and cash. • Must install and use a fire and burglar alarm system. • Must retain and maintain a security guard or patrol at all hours of operation.

City	License Types / Cultivation Amount	Applicable Ordinance (Date Adopted)	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
Oakland	Medical cannabis dispensaries allowed with business permit. Cultivation allowed subject to canopy/cultivation area restrictions set forth in state law.	Ordinance No. 12077 (1998); Ordinance No. 13370 (May 17, 2016); Ordinance No. 13425 (March 28, 2017)	<p>Medical Cannabis Distribution Program</p> <ul style="list-style-type: none"> The quantity of cannabis transported and the method, timing, and distance of the transportation must be reasonably related to the medical needs of qualified patients. <p>Medical Cannabis Dispensaries</p> <ul style="list-style-type: none"> Must obtain business permit, except hospitals, research facilities, and similar facilities. Must obtain onsite consumption permit if intend to allow persons to consume cannabis on premises of dispensary. Must maintain staff comprised of at least 50% Oakland residents and 25% Oakland residents in census tracts identified as having high unemployment. Dispensaries that hire and retain formerly incarcerated Oakland residents may apply for tax credit or license fee reduction. <p>Cultivation</p> <ul style="list-style-type: none"> Must be located in area where “light manufacturing industrial,” “research and development,” or their equivalent use, is permitted by right under the Oakland Planning Code. Cultivation may not occur within 600 feet of any school No cannabis or cannabis odors shall be detectable by sight or smell outside of a permitted facility. Permitted facilities must install security cameras capable of documenting activity inside and outside the facility, as determined by the Oakland Police Department. Permitted facilities must implement a community beautification plan to reduce illegal dumping, littering, graffiti, and blight and promote beautification of the adjacent community.
Bakersfield	Cannabis activities prohibited.		
Anaheim	Cannabis activities prohibited.		

**Table C-3. Summary of Regulations in Other States that Have Passed Legislation Authorizing Adult Use of Cannabis
(as of August 17, 2017)**

State or Federal District	Applicable Code Section	Operating Requirements <small>Note: Requirements are selected and summarized. See ordinance for full details.</small>
Alaska	3 AAC 306	<p><i>Marijuana Establishments</i></p> <ul style="list-style-type: none"> • May not be located within 500 feet of a school, recreation or youth center, religious facility, or correctional facility. • Must comply with local zoning laws. • Application for license must include applicant's operating plan, including plans for security, inventory tracking of all marijuana, waste disposal, and transportation and delivery of marijuana. • Must have exterior lighting, security alarm system, video monitoring, and policies and procedures to prevent diversion of marijuana and loitering. Must use commercial grade door locks on all exterior entry points. • Must meet health and safety requirements, including general cleanliness, precautions to avoid contamination, prevention of odors and attraction of pests, proper waste disposal, etc. • During transport, marijuana must be in sealed package/container and in locked, secure storage compartment. Vehicle transporting marijuana must travel directly to its destination. • Retail stores may not operate between hours of 5 am and 8 am. • Testing facilities must operate in compliance with each applicable public health, fire, and safety code and ordinance of the state and local government in which licensed premises are located.
Colorado	<p><i>Medical Marijuana:</i> 1 CCR 212-1</p> <p><i>Recreational/Retail Marijuana:</i> 1 CCR 212-2</p>	<p><i>Medical and Recreational/Retail Establishments</i></p> <ul style="list-style-type: none"> • Must have a security alarm system, video surveillance system, and commercial-grade locks at all point of ingress and egress. • Liquid waste must be disposed of in compliance with all applicable federal, state, and local laws and regulations. • Hazardous waste must be disposed of in accordance with applicable laws. • Marijuana waste must be made unrecognizable prior to disposal. • May not sell marijuana or marijuana products at any time other than between the hours of 8 am and 12 am. • May not permit consumption of marijuana on the premises. • Must maintain sanitary conditions.

State or Federal District	Applicable Code Section	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
Maine	10-144 CMR Chapter 122	<p><i>Registered Dispensaries</i></p> <ul style="list-style-type: none"> • Must implement appropriate security measures to deter and prevent unauthorized entrance into areas containing marijuana and theft. Security measures must include, but not be limited to: (1) on-site parking; (2) exterior security lighting; (3) intrusion detection device or system of devices; (4) electronic monitoring and video camera recording; (5) consistent and systematic prevention of loitering. • May not be located within 500 feet of a preexisting school.
Massachusetts	105 CMR 725	<p><i>Registered Marijuana Dispensaries</i></p> <ul style="list-style-type: none"> • Must maintain sanitary conditions. • All toxic items must be identified and stored in a manner that protects against contamination of marijuana. • Dispensary storage areas shall be maintained free of pests. • All waste must be stored, secured, and managed in accordance with applicable state and local laws. • Liquid waste containing marijuana or by-products of marijuana processed must be disposed of in compliance with state requirements, including those related to surface water, groundwater, and sewer system discharge permitting programs. • Marijuana may not be consumed on the premises. • Must have security and alarm system, including duress alarm and video surveillance. <p><i>Transportation</i></p> <ul style="list-style-type: none"> • Transported marijuana must be stored in secure, locked storage compartment. • Must ensure that all delivery times and routes are randomized. • Each vehicle used for transport of marijuana shall have a GPS monitoring device that is monitored by the dispensary during transport. • Must immediately notify appropriate law enforcement after discovering discrepancies during inventory, diversion, theft, loss, alarm activation or any other breach of security.

State or Federal District	Applicable Code Section	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
Nevada	NAC Chapter 453A	<p>Medical Marijuana Establishments</p> <ul style="list-style-type: none"> Must report any vehicle accident, loss, or theft of marijuana that occurs during transport of marijuana. Must have security equipment/systems, including exterior lighting, video surveillance, etc. Must maintain policies and procedures that prevent loitering. May only operate during the hours authorized by the local government in which the establishment is located.
Oregon	<i>Medical Marijuana:</i> OAR 333-008 <i>Recreational Marijuana:</i> OAR 845-025	<p>Medical Marijuana Dispensaries</p> <ul style="list-style-type: none"> May not be located in an area zoned for residential use, or within 1,000 feet of a school or another dispensary. May not permit consumption of marijuana on premises. Must be equipped with security and surveillance system. <p>Recreational Marijuana Licensed Premises</p> <ul style="list-style-type: none"> May not be located on federal property or at the same physical location or address as a medical marijuana facility. May not be located within 1,000 feet of a school or in an area that is zoned exclusively for residential use. May not permit consumption of marijuana on the premises. May not maintain a noisy, disorderly or insanitary establishment or supply adulterated marijuana items. May not sell any marijuana through a drive-up window. Must ensure that commercial-grade locks are installed on every external door. Must ensure that all marijuana items are kept in a safe or vault, and that all points of ingress/egress are securely locked. Must have an alarm system and video surveillance equipment. Must contact any utility provider to ensure compliance with any local ordinance or utility requirements, such as water use, sewer system discharge, or electrical use. Must maintain sanitary conditions. <p>Recreational Marijuana Producers</p> <ul style="list-style-type: none"> May only use pesticides in accordance with ORS Chapter 634 and OAR 603, Division 57. May only use fertilizer, agricultural amendments, agricultural minerals and lime products in accordance with ORS Chapter 633.

State or Federal District	Applicable Code Section	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
		<ul style="list-style-type: none"> Must maintain on the premises the material safety data sheet(s) for all pesticides, fertilizers, or other agricultural chemicals used in production of cannabis. <p>Recreational Marijuana Retailers</p> <ul style="list-style-type: none"> May only operate between the hours of 7 am and 10 pm. Retailers may only make deliveries before 9 pm and may not make deliveries between 9 pm and 8 am. Retailer may not carry or transport more than a total of \$3000 in retail worth of marijuana designated for delivery. All marijuana items must be kept in a lock-box securely affixed inside delivery motor vehicle. Retailer may only deliver to locations within the city or unincorporated area in which the licensee is licensed.
Washington	WAC Chapter 314-55	<p>Marijuana Retailers</p> <ul style="list-style-type: none"> Internet sales and delivery of product to customers is prohibited. May not have more than four months of their average inventory on their premises at any given time. Must have a security alarm system and video surveillance system. May not permit any disorderly person to remain on the licensed premises. May not permit consumption of marijuana on the premises. <p>Transportation</p> <ul style="list-style-type: none"> Marijuana must be kept in a locked, safe and secure storage compartment during transport of marijuana. Any vehicle transporting marijuana must travel directly from shipping licensee to receiving licensee, making no unnecessary stops.
District of Columbia	DCMR Title 22-C	<p>Medical Marijuana Dispensaries</p> <ul style="list-style-type: none"> May not be located within 300 feet of a school or recreation center. Deliveries of medical marijuana are not permitted. May not permit the consumption of marijuana on the premises. May not permit marijuana or paraphernalia to be visible from any public or other property not owned by the dispensary. May operate at any time except between the hours of 9 pm and 7 am. Must keep all marijuana in a separate storage area which is securely closed and locked during all non-operating hours.

State or Federal District	Applicable Code Section	Operating Requirements Note: Requirements are selected and summarized. See ordinance for full details.
		<ul style="list-style-type: none"> • Must report any stolen or lost marijuana by filing a police report within 24 hours of becoming aware of loss. • Must maintain video surveillance system and professionally-monitored robbery and burglary alarm system. • Must have exterior security lighting. Lighting must be hooded or oriented so as to deflect light away from adjacent properties.

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Appendix D

Air Quality Technical Appendix

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D. Air Quality Technical Information

Table D-1. 1-Hour Ozone Air Monitoring Values for California Air Basins

Air Basin	# Exceedances (State)			Maximum (State), ppm		
	2014	2015	2016	2014	2015	2016
Great Basin Valleys	0	0	0	0.08	0.076	0.085
Lake County	0	1	0	0.074	0.107	0.068
Lake Tahoe	0	0	0	0.076	0.077	0.073
Mojave Desert	31	31	25	0.137	0.132	0.132
Mountain Counties	1	9	9	0.104	0.111	0.112
North Central Coast	0	0	1	0.083	0.079	0.101
North Coast	0	0	0	0.07	0.076	0.072
Northeast Plateau	0	0	0	0.082	0.076	0.092
Sacramento Valley	12	9	6	0.116	0.122	0.115
Salton Sea	14	6	6	0.108	0.106	0.108
San Diego	3	3	6	0.100	0.098	0.104
San Francisco Bay Area	3	7	5	0.097	0.106	0.109
San Joaquin Valley	48	47	28	0.128	0.135	0.131
South Central Coast	3	1	2	0.112	0.096	0.111
South Coast	74	71	70	0.141	0.144	0.163

Notes: “ – ” indicates that data were insufficient or unavailable. An exceedance value of zero indicates that no exceedances occurred. ppm = parts per million.

Source: CARB 2017

Table D-2. 8-Hour Ozone Air Monitoring Values for California Air Basins

Air Basin	# Exceedances (National)			Maximum (National), ppm			# Exceedances (State)			Maximum (State), ppm		
	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Great Basin Valleys	0	0	5	0.075	0.073	0.078	3	5	5	0.076	0.074	0.079
Lake County	0	0	0	0.068	0.063	0.062	0	0	0	0.068	0.064	0.063
Lake Tahoe	0	0	0	0.068	0.068	0.068	0	0	0	0.069	0.068	0.069
Mojave Desert	26	25	65	0.10	0.105	0.109	128	105	70	0.1	0.106	0.11
Mountain Counties	3	7	45	0.09	0.092	0.097	69	48	46	0.09	0.093	0.097
North Central Coast	0	0	5	0.075	0.068	0.078	4	0	5	0.076	0.068	0.078
North Coast	0	0	0	0.064	0.063	0.066	0	0	0	0.064	0.064	0.066
Northeast Plateau	0	0	0	0.065	0.066	0.068	0	0	0	0.066	0.067	0.069
Sacramento Valley	23	18	42	0.088	0.1	0.099	49	40	42	0.088	0.1	0.1
Salton Sea	12	5	46	0.093	0.092	0.092	71	58	48	0.094	0.093	0.092
San Diego	12	13	29	0.087	0.084	0.091	36	36	30	0.088	0.085	0.091
San Francisco Bay Area	5	7	15	0.08	0.084	0.087	10	12	15	0.081	0.085	0.087
San Joaquin Valley	86	82	87	0.104	0.11	0.101	128	99	91	0.105	0.11	0.101
South Central Coast	3	0	7	0.089	0.078	0.088	29	19	11	0.089	0.078	0.088
South Coast	92	81	106	0.11	0.127	0.121	129	115	108	0.111	0.128	0.122

Notes: “–” indicates that data were insufficient or unavailable. An exceedance value of zero indicates that no exceedances occurred. ppm = parts per million.

Source: CARB 2017

Table D-3. PM₁₀ Air Monitoring Values for California Air Basins

Air Basin	# Exceedances (National)			Maximum (National), µg/m ³			# Exceedances (State)			Maximum (State), µg/m ³		
	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Great Basin Valleys	26.7	29.5	39.1	2,618	4,103	6,510	20.3	20.3	14.2	931	677	214
Lake County	-	-	0	35.2	61.1	39.4	0	6.1	0	35.2	61.1	37.2
Lake Tahoe	-	0	0	69.9	122.3	40.9	2	-	0	58.6	100.9	35
Mojave Desert	1	0	2	305.8	145.5	246.9	12.6	6.1	18.9	171	74.9	203.5
Mountain Counties	-	3	0	80	300.6	62.5	-	5	0	56.8	297.1	56.7
North Central Coast	0	0	0	99.2	72.6	71.4	-	-	-	-	-	-
North Coast	0	0	0	104.7	58.1	53.6	0	2	0	45.6	57.6	45
Northeast Plateau	0	0	-	90.6	65.5	-	-	6.1	-	82.9	59.6	-
Sacramento Valley	0	0	-	105.7	114.6	88.5	13.2	25.2	12.2	106.4	118	88.9
Salton Sea	-	-	-	471.8	381	468.9	183.7	128.2	108.2	477.6	382	265.8
San Diego	0	0	0	59	136	79	0	61	54.1	58	136	79
San Francisco Bay Area	0	0	0	57.8	58.8	40	3.1	3	0	61.3	58	41
San Joaquin Valley	8.4	0	0	430.1	143.3	152.2	138.8	121.4	157.9	419.5	140.3	133
South Central Coast	1.9	0	9.5	165.3	149.3	436.1	88.3	69.2	77.1	166.3	154	264
South Coast	1	6.6	-	157.2	188	277	2014 12	2015 12	-	131	180	171
							8.5	3.8				

Notes: “-” indicates that data were insufficient or unavailable. An exceedance value of zero indicates that no exceedances occurred. µg/m³ = micrograms per cubic meter.

Source: CARB 2017

Table D-4. PM_{2.5} Monitoring Values for California Air Basins

Air Basin	# Exceedances (National)			Maximum (National), µg/m ³			# Exceedances (State)			Maximum (State), µg/m ³		
	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Great Basin Valleys	7	3.2	4.1	161	130.2	56.8	-	-	-	161	130.2	56.8
Lake County	0	6.1	0	17.1	57.7	9.3	-	-	-	17.1	57.7	9.3
Lake Tahoe	-	-	-	-	-	-	-	-	-	145.5	71.5	26.5
Mojave Desert	6.9	6.6	2	42	50.2	64.8	-	-	-	42	50.2	64.8
Mountain Counties	39.5	4	24.3	65.5	270.1	57.2	-	-	-	275.4	270.1	70.5
North Central Coast	0	1	11.9	49.6	43.2	104.7	-	-	-	49.6	43.2	104.7
North Coast	0	4.2	0	33	73.4	20	-	-	-	25.3	303.2	33.6
Northeast Plateau	-	-	0	71.9	51	25.1	-	-	-	71.9	51	25.1
Sacramento Valley	4	8.7	3.3	190.2	109.8	46.8	-	-	-	190.2	109.8	57.5
Salton Sea	9.9	3.5	5.9	51.7	87.1	57.9	-	-	-	58.9	102.7	57.9
San Diego	1	0	0	77.5	33.5	34.4	-	-	-	82.3	62.5	42.1
San Francisco Bay Area	2	3.3	0	60.4	49.4	26.5	-	-	-	60.4	49.4	26.5
San Joaquin Valley	40.4	38	25.5	107.2	107.8	66.4	-	-	-	107.2	111.9	66.4
South Central Coast	2	1	0	43	36	35.3	-	-	-	43	36	35.3
South Coast	-	17.6	7.3	73.6	70.3	110.5	-	-	-	74.7	86.5	110.5

Notes: “ – ” indicates that data were insufficient or available. An exceedance value of zero indicates that no exceedances occurred. µg/m³ = micrograms per cubic meter.

Source: CARB 2017

Table D-5. California Ambient Air Quality Standards – Area Designations by Air Basin

Air Basin	O ₃				PM ₁₀			PM _{2.5}			CO			NO ₂			SO ₂			Lead			Sulfates			H ₂ S		
	N	NA-T	U	A	N	U	A	N	U	A	N	U	A	N	U	A	N	U	A	N	U	A	N	U	A	N	U	A
Great Basin Valleys	x ¹				x			x			x ²			x			x			x			x			x ²		
Lake County			x		x			x			x			x			x			x			x			x		
Lake Tahoe		x			x			x			x			x			x			x			x			x		
Mojave Desert	x				x			x ³			x ⁴			x			x			x			x			x ³		
Mountain Counties	x ⁵				x ⁶			x ⁷			x ⁸			x			x			x			x			x ⁹		
North Central Coast		x			x			x			x ¹⁰			x			x			x			x			x		
North Coast			x		x ¹¹			x			x ¹²			x			x			x			x			x		x ¹³
Northeast Plateau			x		x ¹⁴			x			x			x			x			x			x			x		x
Sacramento Valley	x ¹⁵				x			x ¹⁶			x ¹⁷			x			x			x			x			x		x
Salton Sea	x				x			x ¹⁸			x			x			x			x			x			x		x
San Diego	x				x			x			x			x			x			x			x			x		x
San Francisco Bay Area	x				x			x			x			x			x			x			x			x		x
San Joaquin Valley	x				x			x			x ¹⁹			x			x			x			x			x		x
South Central Coast	x				x			x ²⁰			x			x			x			x			x			x		x ²¹
South Coast	x				x			x			x			x			x			x			x			x		x

Notes:

N = Nonattainment; NA-T = Nonattainment-Transition; U = Unclassified; A = Attainment

¹ Great Basin Valleys Air Basin is classified as N for Inyo and Mono Counties and U for Alpine County for O₃.² Great Basin Valleys Air Basin is classified as A for Inyo and Mono Counties and U for Alpine County for CO and H₂S.³ Mojave Desert Air Basin is classified as N for San Bernardino County and U for all other regions of the air basin for PM_{2.5} and H₂S.⁴ Mojave Desert Air Basin is classified as A for San Bernardino and Los Angeles Counties and U for all other regions of the air basin for CO.⁵ Mountain Counties Air Basin is classified as N for all counties within the air basin except Plumas and Sierra Counties, which are classified as U, for O₃.⁶ Mountain Counties Air Basin is classified as N for all counties within the air basin except Amador and Tuolumne Counties, which are classified as U, for PM₁₀.⁷ Mountain Counties Air Basin is classified as U for all counties within the air basin except Plumas County, which is classified as N, for PM_{2.5}.

⁸ Mountain Counties Air Basin is classified as U for all counties within the air basin except Plumas and Tuolumne Counties, which are classified as A, for CO.

⁹ Mountain Counties Air Basin is classified as U for all counties within the air basin except Amador County, which is classified as N, for H₂S.

¹⁰ North Central Coast Air Basin is classified as A for Monterey County and U for San Benito and Santa Cruz Counties for CO.

¹¹ North Coast Air Basin is classified as A for Del Norte, Sonoma, and Trinity Counties and N for the remainder of the air basin for PM₁₀.

¹² North Coast Air Basin is classified as U for all counties within the air basin except Humboldt and Mendocino Counties, which are classified as A, for CO.

¹³ North Coast Air Basin is classified as U for all counties within the air basin except Humboldt and Sonoma Counties, which are classified as A, for H₂S.

¹⁴ Northeast Plateau Air Basin is classified as A for Siskiyou County and N for the remainder of the air basin for PM₁₀.

¹⁵ Sacramento Valley Air Basin is classified as N for Butte, Placer Sacramento, Shasta, Solano, Tehama, and Yolo Counties; Colusa and Glenn Counties are classified as A; and the remainder of the air basin is classified as NA-T, for O₃.

¹⁶ Within the Sacramento Valley Air Basin, Butte County is classified as N; Colusa, Glenn, Placer, Sacramento, Shasta, Sutter, and Yuba Counties are classified as A; and the remainder of the air basin is classified as U, for PM_{2.5}.

¹⁷ Within the Sacramento Valley Air Basin, Butte, Placer, Sacramento, Solano, Sutter, and Yolo Counties are classified as A, and the remainder of the air basin is classified as U for CO.

¹⁸ Salton Sea Air Basin is classified as N for Imperial County and A for the remainder of the air basin for PM_{2.5}.

¹⁹ San Joaquin Valley Air Basin is classified as A for Fresno, Kern, San Joaquin, Stanislaus, and Tulare Counties, and the remainder of the air basin is classified as U for CO.

²⁰ South Central Air Basin is classified as A for San Luis Obispo and Ventura Counties and U for Santa Barbara County for PM_{2.5}.

²¹ South Central Air Basin is classified as A for San Luis Obispo and Santa Barbara Counties, and Ventura County is classified as U for H₂S.

Source: CARB 2016

Table D-6. NAAQS Attainment Status by Air Basin

Air Basin	O ₃		PM ₁₀			PM _{2.5}		CO		NO ₂		SO ₂		Lead	
	N	U/A	N	U	A	N	U/A	N	U/A	N	U/A	N	U/A	N	U/A
Great Basin Valleys	X		X ⁵			X		X		X		X		X	
Lake County	X		X			X		X		X		X		X	
Lake Tahoe	X		X			X		X		X		X		X	
Mojave Desert	X ¹		X ⁶			X		X		X		X		X	
Mountain Counties	X ²		X			X ⁸		X		X		X		X	
North Central Coast	X		X			X		X		X		X		X	
North Coast	X		X			X		X		X		X		X	
Northeast Plateau	X		X			X		X		X		X		X	
Sacramento Valley	X ³		X ⁷			X		X		X		X		X	
Salton Sea	X		X			X ⁹		X		X		X		X	
San Diego	X		X			X		X		X		X		X	
San Francisco Bay Area	X		X			X		X		X		X		X	
San Joaquin Valley	X			X	X			X		X		X		X	
South Central Coast	X ⁴		X			X		X		X		X		X	
South Coast	X			X	X			X		X		X		X ¹⁰	

Notes:

N = Nonattainment; NA-T = Nonattainment-Transition; U = Unclassified; A = Attainment

All PM_{2.5} attainment status designations were based on the annual standard.

¹ Mojave Desert Air Basin is classified as N for all but eastern portions of San Bernardino and Riverside Counties for O₃.

² Mountain Counties Air Basin is classified as N for Nevada, Placer, El Dorado, Calaveras, and Mariposa Counties and unclassified/attainment (U/A) for Plumas, Sierra, Amador, and Tuolumne Counties for O₃.

³ Sacramento Valley Air Basin is classified as N for Butte, Sutter, Placer, Sacramento, Yolo, and Solano Counties and U/A for all other areas for O₃.

⁴ South Central Coast Air Basin is classified as N for Ventura County and the eastern portion of San Luis Obispo County and U/A for all other areas for O₃.

⁵ Great Basin Valleys Air Basin is classified as N for portions of Mono and Inyo Counties and U/A for all other areas for PM₁₀.

⁶ Mojave Desert Air Basin is classified as N for San Bernardino, Riverside, and portions of Kern Counties and U/A for all other areas for PM₁₀.

⁷ Sacramento Valley Air Basin is classified as N for Sacramento County and U for all other counties for PM₁₀.

⁸ Mountain Counties Air Basin is classified as N for part of Plumas County and U/A for all other areas for PM_{2.5}.

⁹ Salton Sea Air Basin is classified as N for a portion of Imperial County and U for all other areas for PM_{2.5}.

¹⁰ South Coast Air Basin is classified as N for a portion of Los Angeles County and U/A for all other areas for lead.

Sources: USEPA 2016a, 2016b

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