

**INITIAL STATEMENT OF REASONS
FOR PROPOSED BUILDING STANDARDS
OF THE DIVISION OF STATE ARCHITECT
REGARDING THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11**

(DSA SS/CC 03-21)

The Administrative Procedure Act (APA) requires that an Initial Statement of Reasons be available to the public upon request when rulemaking action is being undertaken. The following information required by the APA pertains to this rulemaking action:

STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS

Government Code Section 11346.2(b)(1) requires a statement of specific purpose of each adoption, amendment, or repeal and the problem the agency intends to address and the rationale for the determination by the agency that each adoption, amendment, or repeal is reasonably necessary to carry out the purpose and address the problem for which it is proposed. The statement shall enumerate the benefits anticipated from the regulatory action, including the benefits or goals provided in the authorizing statute.

Item 1

A definition for automatic load management (ALMS) is needed to clarify the purpose of ALMS in the regulations provided for electric vehicle charging. The use of ALMS manages supply load to share electrical supply, provides for energy savings and incentivizes the installation of electric vehicle service equipment (EVSE) without increasing panel capacity. This proposed definition is being coordinated with other state agencies that are also proposing similar amendments.

CAC Recommendation (if applicable):

Forthcoming

Agency Response:

Forthcoming

Item 2

A definition for EV capable will eliminate redundant language defining an EV capable space in Chapter 5. This proposed definition is being coordinated with other state agencies that are also proposing similar amendments.

CAC Recommendation (if applicable):

Forthcoming

Agency Response:

Forthcoming

Item 3

BSC-CG is proposing a definition for NONWATER URINAL WITH DRAIN CLEANSING ACTION is needed because it is being used in new proposed code language. The proposed definitions will align with the current International Code Council definitions in the 2021 Uniform Plumbing Code which will add consistency between California and model code language.

BSC-CG is proposing to repeal the definition for URINAL, HYBRID, because it is proposed to no longer be used in regulatory language in the 2022 edition of the California Green Building Standards Code.

While the Division of the State Architect does not propose language at this time that contains regulatory requirements for a non-water urinal with drain cleansing action, nor has it previously adopted language that includes regulatory requirements for hybrid urinals, it does fully co-adopt all the definitions in Section 202 that are proposed for adoption by the California Building Standards Commission.

CAC Recommendation (if applicable):

Forthcoming

Agency Response:

Forthcoming

Item 4

BSC-CG is proposing a definition for OFF-STREET PARKING SPACES is needed because it is being used in new proposed code language.

While the Division of the State Architect does not propose language at this time that contains regulatory requirements for off-street parking spaces, it does fully co-adopt all the definitions in Section 202 that are proposed for adoption by the California Building Standards Commission.

CAC Recommendation (if applicable):

Forthcoming

Agency Response:

Forthcoming

Item 5

BSC-CG and DSA propose to repeal the definition for VANPOOL VEHICLE since the related code Section 5.106.5.2 for Clean Air Vehicles which mentions vanpool is proposed for repeal. This amendment will maintain consistency within the CALGreen Code.

CAC Recommendation (if applicable):

Forthcoming

Agency Response:

Forthcoming\

Item 6

The California Building Standards Commission proposes, and the Division of the State Architect proposes to co-adopt mandatory measures to provide for an increase in EV capable spaces and for the installation of EVSC at EV capable spaces.

ALMS is used to reduce minimum load capacity to incentivize the installation of additional EVSE beyond the required minimum while able to reduce required minimum load capacity to each EV capable space when EVSE is installed at time of construction.

This incremental change in the mandatory provisions for K-12 public schools and community colleges will support functional EV charging in addition to EV infrastructure to support electric vehicle market penetration.

The intent of the code continues to promote environmentally responsible, cost-effective, healthier places to live and work. The proposed changes to the building standards with statewide application will lead to substantial environmental benefits through reduction in GHG emissions, criteria pollutants, and fossil fuel dependency leading to improved public health, and potentially result in significant cost savings (avoided costs) associated with future installation of EV charging stations at public K-12 schools and community colleges.

CAC Recommendation (if applicable):

Forthcoming

Agency Response:

Forthcoming

Item 7

The Division of the State Architect proposes amendments to the requirements for shade trees to provide clarity to the regulations and to correct an omission in the requirements that excepted play area for organized sport activity, such as basketball courts and foursquare courts, from the total area calculation of the hardscape areas on the campus.

CAC Recommendation (if applicable):

Forthcoming

Agency Response:

Forthcoming

Item 8

The Division of the State Architect proposed to co-adopt new mandatory measures for K-12 public schools and community colleges for thermal insulation.

Adding these amendments will afford greater protection of public health with limited impact

on K-12 public schools and community colleges. Most of these products already meet the required limits.

Considering the availability of these products in the market, we believe that such requirements will be readily accepted by the current market and many manufacturers.

These amendments have been recommended by and have the support of the California Air Resources Board, California Department of Public Health, Underwrites Laboratory, and the United State Green Building Council.

CAC Recommendation (if applicable):

Forthcoming

Agency Response:

Forthcoming

Item 9

The Division of the State Architect proposes to co-adopt the new mandatory measures for K-12 public schools and community colleges for acoustical ceiling and wall panels.

Adding these amendments will afford greater protection of public health with limited impact on K-12 public schools and community college. Most of these products already meet the required limits. Considering the availability of these products in the market, we believe that such requirements will be readily accepted by the current market and many manufacturers. These amendments have been recommended by and have the support of the California Air Resources Board, California Department of Public Health, Underwriters Laboratory, and the United States Green Building Council.

CAC Recommendation (if applicable):

Forthcoming

Agency Response:

Forthcoming

Item 10

CO2 monitors are needed in K-12 public school classrooms so that teachers can identify indoor air quality concerns related to carbon dioxide levels which compromise student and teacher health. An indoor air quality report issued by UC Davis in 2019, and school reopening concerns related to the COVID-19 pandemic have placed an increased focus and urgency to improve classroom indoor air quality. This proposal aims to provide a mechanism to identify and address indoor air quality concerns with the requirement for carbon dioxide monitors in classrooms. The requirement for CO2 monitors applies only to new building construction, and not to alterations and additions.

CAC Recommendation (if applicable):

Forthcoming

Agency Response:

Forthcoming

TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS

Government Code Section 11346.2(b)(3) requires an identification of each technical, theoretical, and empirical study, report, or similar document, if any, upon which the agency relies in proposing the regulation(s).

DSA Statement: There are several technical, theoretical and empirical studies, reports or similar documents used as the basis for the proposed Item 10 to the 2021 California Green Building Standards (CALGreen) Code. Three are listed below:

Whitepaper, Ventilation Rates in California classrooms: Why many recent HVAC retrofits are not delivering sufficient ventilation by Western Cooling Efficiency Center-UC Davis, Lawrence Berkeley National Laboratory- Berkeley, CA

The effect of increased classroom ventilation rate indicated by reduced CO2 concentration on the performance of schoolwork by children, INDOOR AIR 2016, by Department of Engineering, Aarhus University, Denmark

Association of classroom ventilation with reduced illness absence: a prospective study in California elementary schools, March 2013, by Indoor Environment Group, Lawrence Berkeley National Laboratory, Berkeley, CA

STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS

Government Code Section 11346.2(b)(1) requires a statement of the reasons why an agency believes any mandates for specific technologies or equipment or prescriptive standards are required.

DSA Statement: The proposed amendments to California Green Building Standards (CALGreen) Code regulations do not mandate any specific technologies or equipment and do not require any prescriptive standards.

CONSIDERATION OF REASONABLE ALTERNATIVES

Government Code Section 11346.2(b)(4)(A) requires a description of reasonable alternatives to the regulation and the agency's reasons for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall be considered as an alternate. It is not the intent of this paragraph to require the agency to artificially construct alternatives or describe unreasonable alternatives.

DSA Statement: DSA-SS has not identified any reasonable alternatives to these proposed regulations, which do not mandate the use of specific technologies or equipment.

REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS

Government Code Section 11346.2(b)(4)(B) requires a description of any reasonable alternatives that have been identified or that have otherwise been identified and brought to the attention of the agency that would lessen any adverse impact on small business.

DSA Statement: No alternatives were identified that would lessen any adverse impact on small business. Small businesses will not experience an adverse impact due to these amendments.

FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS

Government Code Section 11346.2(b)(5)(A) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business.

DSA Statement: DSA-SS did not identify any facts, evidence, documents, testimony, or other substantiation to make an initial determination of significant adverse economic impact on businesses. DSA-SS has determined that this regulatory action would not have a significant adverse economic impact on California business enterprises and individuals, including the ability of California businesses to compete with businesses in other states.

ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION

Government Code Sections 11346.3(b)(1) and 11346.5(a)(10)

DSA-SS has assessed whether, and to what extent this proposal will affect the following:

A. The creation or elimination of jobs within the State of California.

DSA Statement: These regulations may cause some jobs to be created for the installation, maintaining and manufacturing of Electric Vehicle Supply Equipment and Carbon Dioxide Monitoring Equipment. No jobs are expected to be eliminated within the State of California.

B. The creation of new businesses or the elimination of existing businesses within the State of California.

DSA Statement: These regulations may cause the creation of businesses that expand into the EV and CO2 Monitor market. These regulations will not affect the elimination of jobs within the State of California.

C. The expansion of businesses currently doing business within the State of California.

DSA Statement: These regulations may promote the expansion of businesses currently involved with Electric Vehicle and CO2 Monitoring manufacturing, installation, maintenance, and technology development within the State of California.

D. The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.

DSA Statement: These regulations will increase the sustainability of California's natural resources by reducing fuel use, GHG emissions, criteria pollutants, and fossil fuel dependence. Additionally, updating and clarifying the

minimum requirements in the California Green Building Standards (CALGreen) Code will provide increased protection of public health and safety, worker safety, and the environment.

ESTIMATED COST OF COMPLIANCE, ESTIMATED POTENTIAL BENEFITS, AND RELATED ASSUMPTIONS USED FOR BUILDING STANDARDS

Government Code Section 11346.2(b)(5)(B)(i) states if a proposed regulation is a building standard, the initial statement of reasons shall include the estimated cost of compliance, the estimated potential benefits, and the related assumptions used to determine the estimates.

DSA Statement: The estimated costs to comply with the proposed requirement for the installation of carbon dioxide monitors in classrooms is \$7,000 for new elementary schools, \$12,500 for new middle schools, and \$17,500 for new high schools. The potential benefit is an optimal environment for learning, reduction in absenteeism, and increased academic success for students and faculty. The estimated costs to comply with the proposed requirement for electric vehicle infrastructure and supply equipment is \$13,800 for new elementary schools, \$28,560 for new middle schools, \$103,500 for new high schools, and \$172,500 for new community colleges. The potential benefit is alignment of Governor Newsom's environmental goals for a reduction in greenhouse gas emissions and the opportunity for students and faculty to have access to charging if charging is not available at their place of residence. The assumptions for costs are based on the average annual construction of new campuses in the state.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

Government Code Section 11346.2(b)(6) requires a department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues. These agencies may adopt regulations different from these federal regulations upon a finding of one or more of the following justifications: (A) The differing state regulations are authorized by law and/or (B) The cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment.

DSA Statement: There are no proposed California Green Building Standards (CALGreen) Code regulations that duplicate or conflict with federal regulations.