INITIAL STATEMENT OF REASONS FOR PROPOSED BUILDING STANDARDS OF THE DIVISION OF THE STATE ARCHITECT REGARDING THE 2025 CALIFORNIA GREEN BUILDING STANDARDS CODE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11 (DSA-SS 03/24)

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 particular 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.

General purpose, problem, rationale, and benefits: The Division of the State Architect (DSA) proposes to carry forward existing adopted sections of the 2022 California Green Building Standards Code and amendments included herein for inclusion in the 2025 California Green Building Standards Code, effective January 1, 2026.

ITEM 1

Chapter 5, NONRESIDENTIAL MANDATORY MEASURES, Division 5.5, ENVIRONMENTAL QUALITY, Section 5.303, INDOOR WATER USE

DSA is proposing to amend Section 5.503.4.6 Pre-rinse spray valves to repeal references to *California Code of Regulations, Title 20 (Appliance Efficiency Regulations)* and amend the section to add "Commercial Pre-Rinse Spray Valves". A new reference to the *California Plumbing Code*, Section 420.3 is being added. This change is necessary to align with 2024 *Uniform Plumbing Code* adopted standards for pre-rinse spray valves and California adopts the same standards by reference. A reference to Title 20 is no longer needed as model codes include Title 20 requirements for this section. The proposed changes provide the proper reference based on recent model plumbing code updates. This amendment has been coordinated with the Energy Commission, BSC and HCD with no change in regulatory effect.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 2

Chapter 5, NONRESIDENTIAL MANDATORY MEASURES, Division 5.5, ENVIRONMENTAL QUALITY, Section 5.506, INDOOR AIR QUALITY

Section 5.506.3 Carbon dioxide (CO2) monitoring in classrooms.

In response to AB-2232 (Chapter 8 to Part 10.5 of Division 1 of Title 1 of the Education Code) that requires DSA to research, develop, and propose for adoption mandatory standards for carbon dioxide monitors in classrooms of a covered schools and Community Colleges DSA has developed this proposal.

An indoor air quality report issued by Indoor Environment Group, Lawrence Berkely National Laboratory and the Western Cooling Efficiency Center, at the University of California-Davis entitled Ventilation rates in California classrooms: Why many recent HVAC retrofits are not delivering sufficient ventilation published in 2019, formed the basis for the passage of Assembly Bill AB841 which also addresses indoor air quality concerns in classrooms. According to the report many California classrooms were found to have very high carbon dioxide levels, and school reopening concerns related to the COVID-19 pandemic have placed an increased focus and urgency to improve classroom indoor air quality.

According to a research report for <u>Association of classroom ventilation with reduced illness</u> by EHP Publishing, E. Satish, et al (2012); initial conclusions found that the "direct adverse effects of CO₂ on human performance may be economically important and may limit energy-saving reductions in outdoor air ventilation per person in buildings."

Improving indoor air quality in classrooms has shown to reduce absenteeism, reduce COVID-19 exposure, and maintain an improved environment for academic success. This proposal aims to provide a mechanism to identify and address indoor air quality concerns in classrooms with the requirement for carbon dioxide monitors in new classrooms and alterations.

CO₂ monitors are needed in school classrooms so that teachers or facilities personnel can identify and address indoor air quality (IAQ) concerns related to carbon dioxide levels that may compromise student and teacher health. This proposed code amendment for CO₂ monitoring applies to both new construction and qualifying additions and alterations to existing classrooms for community colleges. Existing regulations adopted for the 2022 CBC require CO₂ monitors to be installed in K-12 new classrooms and in alterations.

The CO₂ monitors required are not costly and would add little to the overall construction cost of even small alterations. It is estimated to cost approximately \$600/monitor.

DSA is amending existing language to clarify and bring this section in line with statute. AB 2232, McCarty signed by the Governor Sept 29, 2022 and added Chapter 8 to Part 10.5 of Division 1 of Title 1 of the Education Code, relating to school facilities. The bill requires, upon the next triennial update of the California Building Standards Code, the Division of the State Architect to research, develop, and propose for adoption mandatory standards for carbon dioxide monitors in classrooms of K-12 schools and community colleges.

DSA is proposing to amend language that references California Energy Code Table 120.1-A which defines various classroom spaces and which prescribes minimum ventilation rates. The table does not prescribe C02 levels and are inapplicable to the requirements for C02 levels. The distinctions made in Table 120.1-A are extraneous and unnecessary. The proposed language is based upon the definition found in the Cambridge Dictionary: "A room in a school or college where groups of students are taught."

DSA is also clarifying language that a standalone sensor only needs to record the highest reading in the space. This proposed amendment will align with the requirements of Assembly Bill 841 (Ting), Public Utilities Code section 1600 et seq.

CAC Recommendation:

Approve

Agency Response:

Disagree. Comments received from Office of Legal Services to further revise existing language have been incorporated. The revision is a non-substantive change from "have exceeded" to "exceeds", which has no regulatory affect.

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).

No technical, theoretical, or empirical studies or reports were used.

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.

No new prescriptive standards are proposed.

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-SS has not identified any reasonable alternatives to the proposed action, and no adverse impact to small business due to these proposed changes is expected.

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-SS has not identified any reasonable alternatives to the proposed action, and no adverse impact to small business due to these proposed changes is expected.

FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE ECONOMIC 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-SS has no facts, evidence, documents, testimony, or other evidence indicating any potential significant adverse impact on business with regard to the proposed action.

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

Government Code Sections 11346.2(b)(2) and 11346.3(b)(1)

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.

 These proposed regulations will not affect the creation or elimination of jobs within the State of California
- B. The creation of new businesses or the elimination of existing businesses within the State of California.

These proposed regulations will not affect the creation or elimination of existing businesses within the State of California.

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

These proposed regulations will not affect the expansion of businesses currently doing business 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.

These proposed regulations are consistent with the California Schools Healthy Air, Plumbing and Efficiency Program (AB841 (Chapter 372, Statutes of 2020), and will support the health and welfare of California residents, worker safety and the states 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.

The regulations proposed clarify will have minimal overall cost impact. The additional cost of these regulations to California community colleges of approximately \$600 (for a single C02 monitor) per each new and altered classroom.

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.

The proposed regulations do not conflict with federal regulations.