INITIAL STATEMENT OF REASONS FOR PROPOSED BUILDING STANDARDS OF THE CALIFORNIA BUILDING STANDARDS COMMISSION REGARDING THE 2019 CALIFORNIA PLUMBING CODE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 5 (BSC 03/19)

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.

The Building Standards Commission's proposal to amend the 2019 California Plumbing Code (CPC) was presented to the Green/Plumbing, Electrical, Mechanical, and Energy (GREEN/PEME) Ad Hoc Code Advisory Committee during its March 4-5, 2020 meeting. Each committee recommendation is listed below, accompanied by BSC's response.

ITEM 1: PRE-RINSE SPRAY VALVE (Section 420.3.1 and Table H-2)

In coordination with the Department of Housing and Community Development (HCD), the Division of the State Architect (DSA), the Office of Statewide Health Planning and Development (OSHPD), and the California Energy Commission (CEC), the Building Standards Commission (BSC) is proposing this new subsection to align with the Appliance Efficiency regulations adopted by the CEC in Title 20 of the California Code of Regulations. On January 28, 2019, the amended federal standards for all commercial prerinse spray valves went into effect (Title 10, Code of Federal Regulations, section 431, subpart O). The federal standards for flow rate of commercial pre-rinse spray valves manufactured on or after January 28, 2019, shall be equal to or less than the values shown in Table H-2. Table H-2 can be found in Title 20, California Code of Regulations, section 1605.1(h)(4). Per Title 20 Section 1605.3(h)(4)(A), commercial pre-rinse spray valves manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf) [113 grams-force (gf)]. Additionally, Title 20 has a requirement that pre-rinse spray valves need to be labeled per Title 20, Section 1607(d)(7) so BSC is also adding a reference to that code section. Lastly, the model code Section 420.3 has a requirement for valves to be equipped with an integral automatic shutoff and BSC is proposing to duplicate that requirement in new Section 420.3.1. Finally, this code change reflects the same provisions proposed for adoption by BSC in CALGreen Section 5.303.3.4.6. Consistency among federal law and state regulations will benefit the code user, and there is no intended change in regulatory effect.

CAC Recommendation: The GREEN/PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted to the proposed amendment to Chapter 4, **Section** *420.3.1* and *Table H-2.*

BSC Response: BSC accepts the CAC recommendation.

ITEM 2: FIXTURE COUNT and OCCUPANT LOAD FACTOR

The past three code adoption cycles have yielded code language that is conflicting or vague. The most recent edition of CPC Section 422.1 appears to permit the reader to choose, at will, either the California Building Code (CBC, meaning Table 1004.5) or California Plumbing Code (CPC) *Table A* to perform occupant load calculations used in determining minimum fixture counts. This issue is now resolved by indicating alternate *Table 4-1* (proposed to replace *Table A*) as an exception, which can be used if the jurisdiction has adopted it. The proposal includes language to clarify terms also; "occupancy classification" is amended to become "function", aligning with Table 1004.5 format, and more indicative of descriptions associated with plumbing fixture counts, as described in the discussion below, of *Table 4-1*.

Chapter 4 / Table 4-1 (proposed to replace Table A)

This proposal item centers itself on the amendment of an existing alternate table for calculations of occupancy load. Alternate *Table 4-1* is proposed to supersede existing *Table A*, and incorporate numerous additions, deletions and revisions, intending to improve upon *Table A* (*Table A* originated with the International Association of Plumbing and Mechanical Officials' (IAPMO) publication of the 2006 Uniform Plumbing Code (UPC) which was the base code for the 2007 CPC). Following the 2006 UPC edition, IAPMO removed the table from subsequent publications, in favor of CBC Chapter 10 Table 1004.5, for occupant load determination. But California retained the alternate *Table A*, in use since 2010 as a state agency amendment. It was identified that using the CBC Table 1004.5 generated disproportionate increases in fixture requirements for some uses. The CPC alternate *Table A* was seen to provide equitable occupant load figures for the majority of functional uses. The proposed *Table 4-1* improves upon *Table A* and remains an alternative to CBC Table 1004.5 in providing proportionate occupant load figures, used to determine plumbing fixture count minimums.

One of the major issues with the use of CBC Table 1004.5 lies in the use of "net" and "gross" occupant load presumptions, which can make significant differences in calculation outcomes. CPC *Table A* has always had a footnote, permitting "accessory areas" (an undefined term) to be deducted before calculation. BSC surveyed the terms: "floor area, gross"; "floor area, net", "incidental uses", "ancillary functions", "intervening spaces", "subordinate use", and decided to continue use of the term "accessory use", but added descriptors from CBC's "floor area, net" and "floor area, gross" terminologies, since CBC Table 1004.5 makes use of net and gross in determining occupant load. The resulting proposed footnote strives to eliminate the need for gross/net indicators, considering all use function factors as "net". Note that some antiquated or non-pertinent terms have been repealed, in this restructuring of *Table A*. The table and footnotes have been modified to identify the many unique variables that arise, in considering non-occupiable and not normally occupied spaces. This action allows *Table 4-1* occupant load factors to more closely align with those of Table 1004.5, and a goal of a more accurate alignment with actual occupant loads.

Other issues with the use of CBC Table 1004.5 include:

An incomplete listing of functions that will necessitate plumbing fixtures.

Listing of functions that have no bearing on plumbing fixture use.

Consideration has been given to the nature of the actual use for various functions; particularly, "transient" functions versus "destination" functions, which bears directly on plumbing facility use. As an example, a business staff member may use a parking structure (transient) to gain access to a lobby and corridor (transient) to gain access to an office (destination). That staff member can only occupy one of those places at a time and requires the use of parking and lobby/corridor to reach the destination function, office. Thus, the staff member should contribute to plumbing fixture loads only from the standpoint of the primary use, "office". In this light, a number of categories of CBC Table 1004.5 yield excessive occupant load values; hence the notion to retain the availability of *Table A* (proposed as *Table 4-1*) as an alternate method for occupant load calculation.

Over the past few code cycles, UPC Table 422.1 (the second half of calculations used to determine fixture counts, once occupant loads are determined) has been amended by the model code, tempering excessive calculation results. Thus, the need for alternate *Table A* fell into question, but BSC's August 2019 workshop revealed a desire to keep the alternate table. Many comments concerned themselves with improving it, though. It appears that with adjustments to *Table A*, there can be closer alignment to CBC's Table 1004.5, but there still may be unintended consequences in using tables from two model publishers, something that should always be a monitoring concern for agencies considering adoption. There remains, too, a format alignment issue of CBC's Table 1004.5 (used to calculate occupant load) with CPC's Table 422.1 (used to calculate minimum plumbing fixtures); for instance, getting from a description of "assembly without fixed seats/unconcentrated" to "restaurant". The fundamental changes to *Table A* (proposed as *Table 4-1*) seek to achieve both goals, thereby reducing confusion and being more accommodating, as well as achieving higher accuracy.

BSC ran sample scenarios of calculations for 5 occupancy types, in each of two size ranges (square feet of area), showing Table 1004.5 results in contrast to alternate *Table A* results, when coupled with Table 422.1. The results, reviewed during the workshop, pointed out where equilibrium has been reached (a reduction in excessive occupant loads, hence fixture counts). Table 1004.5 and Table 422.1 have experienced changes across the past several cycles, regarding some historically problematic occupancies. The sample scenarios also showed results, using alternate *Table A* and Table 422.1, indicating the opposite effect happening (yielding the underserving of some uses, due to excessively reduced occupant loading, hence fixture counts). Finally, the sample scenarios showed results, using Tables 1004.5 and 422.1 that continue to result in excessive occupant loads, causing unusually high fixture counts. All these scenarios were recognized in the workshop.

Specific modifications proposed:

- 1. **Table title**. Change the title to be consistent with adjacent alternate tables; *Table A* is being proposed to become *Table 4-1*.
- 2. **Column name.** The column name "occupancy" is changed to "function of space". This matches the format of CBC Table 1004.5 and is more indicative of the column's purpose—that of the actual use of a space, not the fire/life safety aspect that is the focus of Table 1004.5. This will reduce perceived ties to CBC Chapters 3 and 5.
- 3. **Occupancy Groups**. "Occupancy" and "group" are two terms proposed to be repealed from the first column in existing *Table A*, in favor of "function" (and the

uses within those functions) that align with Table 422.1 descriptive terms, thus promoting alignment of Tables 4-1 and 422.1, as well as a format alignment with CBC Table 1004.5 (thus easing long-held navigation concerns across multiple tables). ICC has accomplished this with their plumbing code, and with IBC/CBC Chapter 29. BSC believes this is an improved method to disassociate plumbing fixture counts with fire/life safety calculations. *Table 4-1* amendments are consistent with methodologies used in the IPC, also appearing in CBC Table 2902.1.

- 4. **Assembly without fixed seats**. This function is re-bundled to include those uses where one of three conditions occur: a) standing only spaces, b) portable seating spaces, c) portable seating/table spaces. Within each of these functions, illustrative uses have been cited, as a guide to the reader. There are new uses, borrowed from Table 422.1 descriptions, and uses that have been moved to other functions within the table, and uses that have been removed (because they are non-pertinent). There also occur changes in terms (such as "gaming" for "casino"), to align with model code or reach a more common description. There is also a fourth condition that does not fit within the other three assembly types. Galleries, museums and exhibit spaces do not normally make use of tables/chairs and are typically standing only spaces. This fourth category treats them independently, since they are all typically a low-density standing space. This allows a larger factor to be applied, lowering load values to appropriate levels, in alignment with existing alternate *Table A* and with Table 1004.5.
- 5. **Assembly with fixed seats.** This function simply refers now, to CBC 1004.6, which handles determination for occupant loads of fixed seating environments, thus improving uniformity in calculation. There remains a note within this function that indicates the reader to take 50% of the calculated occupant load, before going to CPC Table 422.1. These types of assemblies continue to provide excessively high occupant load values; thus the 50% reduction in occupant load continues to equate to an appropriate fixture count. Of note is that outdoor facilities are largely covered by this function.
- 6. **Business.** This function covers a wider scope than previously covered ("office or public buildings"), picking up other uses listed in Tables 1004.5 and 422.1. Of note is that certain clinics (that would fall to local jurisdictions) are included in this function, conforming with Table 422.1 and since "Group I" uses have been relegated to other tables in CPC, (they fall under OSHPD authority).
- 7. **Dormitory.** This class is separated in Table 422.1 from other long term residential (having centralized toilet facilities) listed in this table, and having more concentrated load factors, due to the nature of use. It aligns closer with values expressed in Table 1004.5.
- 8. **Daycare.** This class (previously scoped in "Group E") is relocated from education and aligned with Table 1004.5, since loading differs from other education settings.
- 9. Education. Previous "Group E" and "Educational Facilities other than Group E", have been re-bundled as one class, with two subclasses to address grade-level differences, and further described to be "classroom" in nature; thus, other campus facilities (gym, library, cafeteria, etcetera) are independently considered. (Note the footnote continues, concerning multi-occupancy consideration, although, CPC Section 422.1 addresses this too)
- 10. **Exercise.** This function covers conditions not aligning well with "gyms" or other functions that tend to increase occupant load values to excessive levels. Even though the factor remains identical to that of Table 1004.5, the proposed footnote

includes a new stipulation for "equipment", that can offset the occupant load (shown as "gross" in Table 1004.5).

- 11. **Industrial.** This function has been re-bundled and expanded to include most industrial uses, typically containing equipment and other features that would raise an occupant load factor, thus lowering fixture counts to appropriate levels, due to such a high percentage of non-occupiable space (machinery & other equipment). Note that existing *Table A*'s "hazardous" function has been repealed, since occupant activity is essentially the same as that for non-hazardous functions.
- 12. **Kitchen/food prep**. This function did not appear in existing *Table A* and is listed in Table 1004.5 as "gross" factor area. Thus, this *Table 4-1* function will yield about the same occupant load value, since kitchens are predominantly equipment. Prior to and during the workshop, BSC received several comments regarding actual historical staff loading for small "take-out" style restaurants to be much higher than calculated values. The proposed factor should yield a more accurate portrayal of actual densities.
- 13. **Institutional.** This function has been repealed, as *Tables 4-2* and *4-3* address all needs for OSHPD authority uses. For I-2 occupancies that fall into local authority responsibility, "clinic" has been folded into "business" use.
- 14. **Laboratory**. Not previously recognized by existing *Table A*, this function aligns closely to Table 1004.5.
- 15. **Library.** Not previously recognized by existing *Table A*, this function aligns closely to Table 1004.5, similar to a "portable seating/table space" type of assembly, but at a lower density, due to book stacks.
- 16. **Mercantile.** This function continues as in existing *Table A*, but revises loading to more closely align with Table 1004.5, considering accessory areas.
- 17. **Mall building.** This function, not previously recognized by existing *Table A*, aligns with Table 1004.5, referring to CBC Section 402.8.2 for detailed steps to arrive at a proper occupant load factor for non-tenant spaces, while considering impacts of tenant spaces.
- 18. **Residential.** This function captures long-term use by occupants, typically using centralized toilet facilities, but not a dormitory, and is not otherwise captured in Table 422.1 as "per sleeping unit". The occupant load factor remains aligned with Tables *A* and 1004.5.
- 19. **Warehouse.** Since Table 422.1 has specifically identified storage/warehouse functions in recent code cycles, closer alignment is now possible to Table 1004.5, for this function. The storage portions have been segregated from other warehouse functions, since use densities vary so widely (so as to reflect a class similar to "industrial"), and since storage functions are typically furnished with a high percentage of non-occupiable space (pallet racks, bins & other equipment).

CAC Recommendation: The GREEN/PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted to the proposed amendment to Chapter 4, **Section 422.1 & Exception and Table 4-1.**

BSC Response: BSC accepts the CAC recommendation.

ITEM 3: ALTERNATE WATER SOURCES FOR NONPOTABLE APPLICATIONS

1502.3 Cross-Connection Inspection and Testing

In response to comments received during a previous code cycle, and in coordination with HCD and DWR, BSC proposes to add language distinguishing steps taken during initial visual inspections and cross-connection tests (i.e. those conducted before initial operation of an alternate water source system) from those taken during subsequent inspections and tests. The benefits of this code change include clarifying code language that will produce sensible and usable state building standards that promote health and safety, consistent with BSC's mission. There is no intended change in regulatory effect.

CAC Recommendation: The GREEN/PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted to the proposed amendment to Chapter 15, **Section 1502.3**.

BSC Response: BSC accepts the CAC recommendation. Based on comments received during the CAC meeting, BSC coordinated with HCD and DWR to determine if provisions regarding subsequent cross-connection tests should be removed. Following this coordination, it was determined that BSC and HCD's proposed amendments (which apply to graywater and onsite treated nonpotable water systems) align with existing language adopted by DWR in CPC Section 1505.13.2 (which apply to recycled water systems) with regard to initial and subsequent cross-connection tests.

1502.3.2 (5) Cross-Connection Test

In response to comments received during a previous code cycle, and in coordination with HCD and DWR, BSC proposes to add language distinguishing steps during an initial cross-connection test from those taken during subsequent cross-connection tests. The benefits of this code change include clarifying code language that will produce sensible and usable state building standards that promote health and safety, consistent with BSC's mission. There is no intended change in regulatory effect.

CAC Recommendation: The GREEN/PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted to the proposed amendment to Chapter 15, **Section 1502.3.2 (5)**.

BSC Response: BSC accepts the CAC recommendation.

1503.3 Connections to Potable and Reclaimed (Recycled) Water Systems—Exc. (2)

In response to comments received during a previous code cycle, and in coordination with HCD and DWR, BSC proposes to add language clarifying that *Exception (2)* allows a temporary connection to the potable water supply for the initial cross-connection test of the untreated graywater system. The benefits of this code change include clarifying code language that will produce sensible and usable state building standards that promote health and safety, consistent with BSC's mission. There is no intended change in regulatory effect.

CAC Recommendation: The GREEN/PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted to the proposed amendment to Chapter 15, **Section**

1503.3, *Exception (2)*.

BSC Response: BSC accepts the CAC recommendation.

1506.4 Connections to Potable or Reclaimed (Recycled) Water Systems—Exc. (2)

In response to comments received during a previous code cycle, and in coordination with HCD and DWR, BSC proposes to add language clarifying that *Exception (2)* allows a temporary connection to the potable water supply for the initial cross-connection test of the on-site treated nonpotable graywater system. The benefits of this code change include clarifying code language that will produce sensible and usable state building standards that promote health and safety, consistent with BSC's mission. There is no intended change in regulatory effect.

CAC Recommendation: The GREEN/PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted to the proposed amendment to Chapter 15, **Section 1506.4**, *Exception (2).*

BSC Response: BSC accepts the CAC recommendation.

ITEM 4: NONPOTABLE RAINWATER CATCHMENT SYSTEMS

Table 1602.9.6 Minimum Water Quality

During the 2012 Triennial Code Cycle, BSC and HCD developed this table to address minimum treatment and water quality for rainwater catchment systems. While IAPMO published a substantially similar version of this table into the 2015 Uniform Plumbing Code (UPC), BSC and HCD have since maintained their co-adopted table. Because the IAPMO table is now virtually identical to the BSC/HCD co-adopted version, and California Building Standards Law requires the adoption of model code whenever possible, BSC and HCD are proposing to repeal their amended table and adopting Table 1602.9.6 from the UPC, carrying forward existing amendments such as the inclusion of the Surface Irrigation category, as well as minor amendments that that show the micron symbol (μ m) and gallon-to-liter conversions. The benefits of this code change include clarifying code language that will produce sensible and usable state building standards that promote health and safety, consistent with BSC's mission. There is no intended change in regulatory effect.

CAC Recommendation: The GREEN/PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted to the proposed amendment to Chapter 16, **Table 1602.9.6**.

BSC Response: BSC accepts the CAC recommendation.

1605.3 Cross-Connection Inspection and Testing

In response to comments received during a previous code cycle, and in coordination with HCD and DWR, BSC proposes to add language distinguishing steps taken during initial visual inspections and cross-connection tests (i.e. those conducted before initial operation of a rainwater catchment system) from those taken during subsequent inspections and tests. The benefits of this code change include clarifying code language that will produce sensible and usable state building standards that promote health and safety, consistent with BSC's mission. There is no intended change in regulatory effect.

CAC Recommendation: The GREEN/PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted to the proposed amendment to Chapter 16, **Section 1605.3**.

BSC Response: BSC accepts the CAC recommendation.

1605.3.2 (6) Cross-Connection Test

In response to comments received during a previous code cycle, and in coordination with HCD and DWR, BSC proposes to add language distinguishing steps during an initial cross-connection test for rainwater catchment systems from those taken during subsequent cross-connection tests. The benefits of this code change include clarifying code language that will produce sensible and usable state building standards that promote health and safety, consistent with BSC's mission. There is no intended change in regulatory effect.

CAC Recommendation: The GREEN/PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted to the proposed amendment to Chapter 16, **Section 1605.3.2 (6).**

BSC Response: BSC accepts the CAC recommendation.

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).

10 Code of Federal Regulations part 431 (O) (2019) provides standards for all commercial pre-rinse spray valves. In coordination with HCD and DSA, BSC relied on these federal regulations to support its amendments specific to pre-rinse spray valves.

CCR, title 20, sections 1605.1 (h)(4), 1605.3 (h)(4), and 1607 (d)(7) highlight the federal standards for flow rate of commercial pre-rinse spray valves manufactured on or after January 28, 2019. BSC relied on these state regulations to support its amendments specific to pre-rinse spray valves.

BSC compiled an Occupant Load Study that was presented at the August 27, 2019 Plumbing Fixture Workshop. BSC relied on this document to support its rulemaking proposal, which contains non-substantive amendments that clarify existing law and regulations, with no intended change in regulatory effect.

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.

California Building Standards Law (Health and Safety Code Section 18901 et seq) requires the adoption of the Uniform Plumbing Code into the California Plumbing Code (CPC), which contains prescriptive building standards. However, this proposal does not mandate the use of specific technologies or equipment beyond the existing requirements already contained within the CPC. This proposal only contains clarifying code language with no intended change in regulatory effect.

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.

BSC has not identified any reasonable alternatives to these proposed regulations, which do not mandate the use of specific technologies or equipment. This proposal includes clarifying code language with no intended change in regulatory effect.

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.

BSC has not identified any reasonable alternatives to these proposed regulations, which would not have an adverse impact on small business. This proposal includes clarifying code language with no intended change in regulatory effect.

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.

Regarding the proposal to align California Plumbing Code Section 420.3.1 with corresponding Appliance Efficiency regulations in Title 20 of the California Code of Regulations (pre-rinse spray valves), BSC coordinated with the California Energy Commission, Department of Housing and Community Development, Division of the State Architect, and the Office of Statewide Health Planning and Development to ensure consistency between Titles 20 and 24 and ensure compliance with federal WaterSense standards. Because this proposed code change aligns with existing law and regulation, BSC has determined that this regulation will not have a significant adverse economic impact on business.

Regarding the proposal to amend CPC *Table A* and Section 422.1, BSC conducted a stakeholder workshop on August 27, 2019, which was attended by representatives from Plumbing and Heating Council of California, Department of Parks and Recreation, Contractors State License Board, Santa Barbara County Building Division, International Association of Plumbing and Mechanical Officials, California Building Industry Association, Department of Housing and Community Development, Division of the State Architect, International Code Council, Plumbing Manufacturers International, Sacramento County Building Division, Sutter Healthcare, and other members of the public. Based on comments and feedback received during this workshop, BSC is proposing this code

change in coordination with the Division of the State Architect. Workshop comments were considered, then BSC issued an email of workshop-modified proposal information on September 25, 2019 to attendees and interested parties. Additionally, economic impact information/opinions were specifically solicited. To date, additional comments have not been received.

Based on comments and feedback received during this workshop, BSC is proposing this code change in coordination with DSA.

PLUMBING FIXTURE COUNT- SYNOPSIS OF WORKSHOP

Salient ideas and issues brought up for discussion:

- 1. A singular source for the calculation would simplify things and reduce confusion.
- There are issues with *Table A*: has not been updated since inception; unfair to smaller food service (& other small) uses; question of whether a restaurant (which can be identified as a B occupancy, in CBC) should remain an A2 for plumbing fixture purposes; exercise rooms get unfairly loaded too high; kitchen uses too low. Table is not always accurate to actual uses.
- 3. Designers occasionally mistakenly use CBC Chapter 29 instead of CPC, despite note at chapter title. Could it not be printed, much like ICC's IBC Chapter 11? Chapter 29 does have more exceptions available for smaller uses, promoting better equity; can some of those provisions be incorporated?
- 4. High-concentration loading of some office concepts (call centers, etc.) result in counts that underserve projects; need flexibility.
- 5. Some jurisdictions find they must use discretion in arriving at proper loading; estimating actual load counts is often more effective than Table 1004.5 or *Table A*.
- 6. Exceptions help for business & mercantile, but not for other uses.
- 7. Using egress loads (Table 1004.5) pushes the loading to excessive & unreasonable numbers, for certain uses and/or sizes. Difficult to relate egress with fixture needs & results in loads higher than encountered with actuals.
- 8. IAPMO uses CBC as its baseline generic "building code".
- 9. Can there be a way to address issues via footnotes to either of the tables?
- 10. Instead of a 422.1 reference to "the building code", consider a more specific reference (like "Chapter 10" or "Table 1004.5"), to reduce Chapter 29 consultation errors. Consider adding a phrase, "unless adopted by the authority having jurisdiction", or something similar, to reduce errors by the code user.
- 11. Confusion in the 2019 edition CPC having a reference to both CBC "or" *Table A*, implying a choice.

Regarding the proposal to amend various sections within Chapters 15 and 16 of the CPC, BSC coordinated with the Department of Housing and Community Development and the Department of Water Resources to co-adopt clarifying code language with no intended change in regulatory effect. Likewise, these proposed code changes will not have a significant adverse economic impact on business.

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) BSC has assessed whether or not and to what extent this proposal will affect the following: **A.** The creation or elimination of jobs within the State of California.

Because this proposal makes only non-substantive, clarifying changes to existing code language resulting in no change in regulatory effect, it 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.

Because this proposal makes only non-substantive, clarifying changes to existing code language resulting in no change in regulatory effect, it will not affect the creation of new businesses or the elimination of existing businesses within the State of California.

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

Because this proposal makes only non-substantive, clarifying changes to existing code language resulting in no change in regulatory effect, it 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.

The benefits of this code change include clarifying code language that will produce sensible and usable state building standards that promote health and safety, consistent with BSC's mission.

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.

Because this proposal makes only non-substantive, clarifying changes to existing code language resulting in no change in regulatory effect, BSC estimates there will be no additional cost for the regulated community to comply with these building standards. The benefits of this code change include clarifying code language that will produce sensible and usable state building standards that promote health and safety, consistent with BSC's mission. In coordination with HCD, DWR, DSA, and other state agencies and stakeholders, BSC's assumption of no additional cost of compliance is based on the fact that the proposal preserves the existing status quo of the CPC with no intended change in regulatory effect.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

Government Code Section 11346.2(b)(6) requires a department, board, or commission within the Environmental Protection Agency (EPA), the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking BSC TP-106 (Rev. 02/20) ISOR April 8, 2020 BSC 03/19 - Part 5 – 2019 Intervening Code Cycle Page 11 of 12 BSC-03-19-ISOR-Pt5 California Building Standards Commission

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.

While BSC is not within the EPA, the Resources Agency, of the Office of the State Fire Marshal, it is important to note that elements of this proposal align with the federal WaterSense standards for pre-rinse spray valves in commercial buildings, which is also consistent with Title 20 Appliance Efficiency regulations adopted by the California Energy Commission. Furthermore, BSC's adoption and amendment of California Plumbing Code Table 1602.9.6 (Minimum Water Quality) more closely aligns the CPC with the Uniform Plumbing Code developed by the International Association of Plumbing and Mechanical Officials.