

**FINAL STATEMENT OF REASONS
FOR PROPOSED BUILDING STANDARDS OF THE
CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
REGARDING THE 2022 CALIFORNIA PLUMBING CODE,
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 5
(HCD 02/21)**

The Administrative Procedure Act requires that every agency shall maintain a file of each rulemaking that shall be deemed to be the record for that rulemaking proceeding. The rulemaking file shall include a Final Statement of Reasons. The Final Statement of Reasons shall be available to the public upon request when rulemaking action is being undertaken. The following are the reasons for proposing this particular rulemaking action:

UPDATES TO THE INITIAL STATEMENT OF REASONS:

Government Code Section 11346.9(a)(1) requires an update of the information contained in the Initial Statement of Reasons. If the update identifies any data or any technical, theoretical or empirical study, report, or similar document on which the state agency is relying that was not identified in the Initial Statement of Reasons, the state agency shall comply with Government Code Section 11347.1.

The Department of Housing and Community Development (HCD) has made no changes to the Initial Statement of Reasons (ISOR) as originally proposed.

MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS

Pursuant to Government Code Section 11346.9(a)(2), if the determination as to whether the proposed action would impose a mandate, the agency shall state whether the mandate is reimbursable pursuant to Part 7 of Division 4. If the agency finds that the mandate is not reimbursable, it shall state the reasons for the finding(s).

HCD has determined that the proposed regulatory action would not impose a mandate on local agencies or school districts.

OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S).

Government Code Section 11346.9(a)(3) requires a summary of EACH objection or recommendation regarding the specific adoption, amendment, or repeal proposed, and an explanation of how the proposed action was changed to accommodate each objection or recommendation, or the reasons for making no change. This requirement applies only to objections or recommendations specifically directed at the agency's proposed action or to the procedures followed by the agency in proposing or adopting the action, or reasons for making no change. Irrelevant or repetitive comments may be aggregated and summarized as a group.

The text with proposed changes was made available to the public for a 45-day comment period from May 28, 2021, until July 12, 2021. There was no subsequent public comment period. A total of 13 comments were received during the public comment period. HCD responded to all the comments received during the 45-day public comment period. Please see below.

Item 16

Chapter 15, Section(s) 1503.8.1 Residential Occupancies.

Commenter(s) and Recommendation (if applicable):

Laura Allen, Greywater Action

Commenter noted that flow rates for clothes washers, showers, baths, and lavatory faucets are outdated and will result in wasting resources and overdesigning systems. The flow rates, from the 1999 Residential End Use of Water Study (REUS), should be updated to reflect the new REUS study released in 2016 which shows reduction in per capita water use.

Agency Response:

HCD acknowledges the commenter's recommendations. However, HCD is only proposing to continue adoption of the model code section and existing California amendments unchanged from the 2019 California Plumbing Code (CPC). Therefore, there are no changes proposed in the Express Terms or as a result of this comment.

Item 16

Chapter 15, Section 1503.9.2 Gray Water Pipe and Fitting Materials.

Commenter(s) and Recommendation (if applicable):

Laura Allen, Greywater Action

Commenter noted that some graywater systems route graywater into a tank under a building or in the basement so drainage pipe would not be used for this type of system. In addition, the commenter notes use of drainage piping outside a building is not connected to health or safety, but a design consideration. Commenter recommends amendment of section 1503.9.2 to delete text prohibiting extension of drainage materials to less than two feet outside the building.

Agency Response:

HCD acknowledges the commenter's recommendations. However, HCD is not proposing any changes to this model code section. HCD proposes to adopt the model code section without amendments. Therefore, there are no changes proposed in the Express Terms or as a result of this comment.

HCD also recommends that amendments that may be of interest to the general plumbing community be proposed at the model code level to ensure that the proposal is vetted through the International Association of Mechanical and Plumbing Officials' code development process as part of updating the Uniform Plumbing Code.

Item 16

Chapter 15, Table 1504.2 DESIGN OF SIX TYPICAL SOILS

Commenter(s) and Recommendation (if applicable):

Laura Allen, Greywater Action

Leigh Jerrard, Principal, Greywater Corps.

Sherry LeeBryan, Program Manager, Ecology Action

Agency Response:

HCD acknowledges the commenters' recommendations. The commenters note that names of the soils in the table are not typical soils. Commenters have been unable to find the source material for Table 1504.2 and the creators of the table may have used some unknown infiltration rate and applied an unknown factor to derive the coefficients for infiltration of graywater into various types of soils. The commenters include a proposed table incorporating steady state infiltration rates from the Minnesota Stormwater Manual 2013 and noted that the City of San Francisco Public Utilities Commission uses the same table in their manual for sizing stormwater systems. The commenters noted that the proposed table would result in less overloading of slower draining clay soils and has higher infiltration rates for sandy and loam soils.

HCD recommends coordinating with the federal Natural Resources Conservation Service as related to soil types and taxonomy. HCD also recommends that amendments that may be of interest to the general plumbing community be proposed at the model code level to ensure that the proposal is vetted through the International Association of Mechanical and Plumbing Officials' code development process as part of updating the Uniform Plumbing Code.

HCD is only proposing to continue adoption of model code Table 1504.2 and existing California amendments unchanged from the 2019 California Plumbing Code (CPC). Therefore, there are no changes proposed in the Express Terms or as a result of this comment.

Item 31

Appendix M, Peak Water Demand Calculator

Appendix M provides a method for estimating the demand load for the building water supply and principal branches for single- and multi-family dwellings with water-conserving plumbing fixtures, fixture fittings, and appliances. (2021 UPC Appendix M, Section M1010.1)

Commenter(s) and Recommendation (if applicable):

Steffi Becking

The Statewide Codes and Standards Enhancement (CASE) Team
(Pacific Gas and Electric Company, San Diego Gas and Electric, Southern California Edison, Los Angeles Department of Water and Power, Sacramento Municipal Utility District and their consultants)

The Honorable Wendy Carrillo, Chair
Assembly Budget Subcommittee No. 4

Martin Cooper, City of Foster City

Jeremy Diaz*, Business Manager/Financial Secretary-Treasurer
United Association of Journeymen and Apprentices of the Plumbing & Pipe Fitting Industry of the United States and Canada, UA Local Union 78

Mike Hartley*, Business Manager/Financial Secretary-Treasurer
United Association of Plumbers & Pipefitters, Local Union 230

Gary Klein, President
Gary Klein and Associates, Inc.

Michael Lopez
U.A. Plumbers and Pipefitters, Local Union 114

Al Powers*, Business Manager,/Financial Secretary-Treasurer
United Association of Plumbers & Pipefitters, Local Union 364

The Honorable Henry Stern, Chair
Senate Natural Resources and Water Committee

Che Timmons*, Business Manager and Financial Secretary
Plumbers & Steamfitters Local Union 342

Commenters recommend HCD to reconsider the non-adoption of 2021 UPC, Appendix M, into the 2022 California Plumbing Code (CPC), and further propose HCD consider the adoption of Appendix M during the next Intervening Code Adoption Cycle. Comments identify the following reasons for adoption of Appendix M:

- Both the CALGreen Code and the California Code of Regulations specify that plumbing fixtures, fixture fittings, and appliances sold in California be water efficient. This enables the voluntary use of Appendix M for all residential occupancies within the jurisdiction of HCD, Division of the State Architect (DSA) and the Office of Statewide Health Planning and Development (OSHPD).
- Reduced public health and safety risk due to shorter water dwell times in the plumbing systems.
- Water and embedded energy savings due to faster hot water delivery times.
- Additional energy savings due to less heat loss.
- Construction cost savings due to smaller diameter pipes and fittings, less pipe insulation material and reduced water service entrance size.
- Supports Urban Water Management Plans, 2018 Water Conservation and Drought Planning legislation (Assembly 1668 and Senate Bill 606) directing the State Water Board to adopt long-term standards for the efficient use of water by June 30, 2022.
- Use of smaller pipe sizes will allow more space for other plumbing systems such as onsite water reuse systems.
- Better application and use of low-flow rate fixtures, appliances and monitoring systems.
- Adoption of Appendix M will align and assist with the Governor's Executive Order N-10-19 and development of state agency Water Resilience Portfolios.
- Appendix M would be part of the pipe size selection method contained in Appendix A, Both Appendices are voluntary.

Comments with asterisks (*) were received after the Code Advisory Committee meeting but prior to the 45-day public comment period.

Agency Response:

HCD appreciates the commenters' points of view and the commenters' suggestions. These comments may have merit; however, HCD's intent for this code adoption cycle was to not

adopt Appendix M, however, leave the Appendix available for local adoption. This was discussed at the March 24-25, 2021, Code Advisory Commission (CAC) meeting and may not be considered this cycle since the state agencies did not have time to vet specific adoption of Appendix M during the pre-cycle process. All agencies, including HCD, the California Building Standards Commission (CBSC), DSA- Structural Safety/Community Colleges (DSA SS/CC), OSHPD, have proposed to not adopt Appendix M. In addition, the CBSC's CAC recommendation for HCD's proposed non-adoption of Appendix M was "Approved as Submitted."

HCD would like to note that HCD is proposing continued adoption of Appendix A Recommended Rules for Sizing the Water Supply System which makes Appendix A mandatory. Appendix M, however, would remain available for voluntary local adoption. HCD will consider the comments received related to potential adoption of Appendix M during the 2022 Intervening Code Adoption and thanks the commenters for their support of this future endeavor. Therefore, there are no changes proposed in the Express Terms as a result of this comment.

DETERMINATION OF ALTERNATIVES CONSIDERED AND EFFECT ON PRIVATE PERSONS

Government Code Section 11346.9(a)(4) requires a determination with supporting information that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, or would be as effective and less burdensome to affected private persons than the adopted regulation, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

HSC Section 18928.1 requires building standards adopted or approved by the CBSC to incorporate the text of the model codes, applicable national specifications, or published standards, in whole or in part, only by reference, with appropriate additions or deletions. In addition, HSC Section 18928 directs each state agency adopting or proposing adoption of a model code, national standard, or specification to reference the most recent edition of applicable model codes, national standards, or specifications. The 2022 CPC implements this requirement by proposing to adopt by reference the selected contents of the 2021 UPC (i.e., model code). No other alternatives have been considered since there is a recent model code available for adoption, including any necessary existing and new California amendments. In addition, adoption of the most recent building standards on a statewide basis, as required by statute, results in uniformity and promotes affordable construction costs.

REJECTED PROPOSED ALTERNATIVE THAT WOULD LESSEN THE ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES:

Government Code Section 11346.9(a)(5) requires an explanation setting forth the reasons for rejecting any proposed alternatives that would lessen the adverse economic impact on small businesses, including the benefits of the proposed regulation per 11346.5(a)(3).

There were no alternatives available to HCD. HCD is required by statute to adopt this model code by reference. Providing the most recent methods and applying those building

standards on a statewide basis, as required by statute, results in uniformity and promotes affordable construction costs.