# INITIAL STATEMENT OF REASONS FOR PROPOSED BUILDING STANDARDS OF THE DEPARTMENT OF WATER RESOURCES

#### REGARDING THE ADOPTION OF THE 2019 CALIFORNIA PLUMBING CODE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 5

(DWR 01/18)

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:

**Problem Statement**: Section 13557 of the Water Code directed the Department of Water Resources (DWR) to develop regulations to establish a state version of what was Chapter 16 of the Uniform Plumbing Code (UPC) to provide design standards to safely plumb buildings with both potable and recycled water systems. DWR promulgated regulations in 2009 that were incorporated in the 2010 California Plumbing Code (CPC). Water Code Section 13557(b) directs DWR to periodically update these regulations as necessary.

In 2014, AB 2282 was enacted instructing Department of Housing and Community Development (HCD) and California Building Standards Commission (BSC) to research and adopt mandatory building standards for installation of recycled water systems for newly constructed single- and multi-family residential, commercial, and public buildings. AB 2282 did not expressly repeal or remove DWR's authority for recycled water building standards. Therefore, the statutory authority for recycled water building standards now resides with BSC for commercial and public applications, with HCD for residential, and with DWR for all of these categories, as well as for industrial or other applications.

DWR updated the regulations in the 2016 Intervening Code Adoption Cycle to accommodate reorganizational changes to the CPC and to harmonize its regulatory language with new overlapping regulations issued by BSC and HCD pursuant to AB 2282.

The proposed amendments to the regulations are necessary because, since the 2016 Intervening Code Adoption Cycle amendments:

- (i) The 2018 UPC has been reorganized moving recycled water subject matter to Section 1505.0 of Chapter 15 of the CPC from Section 1503.0 of Chapter 15 of the 2016 CPC;
- (ii) DWR's authority continues to overlap with HCD and BSC authorities (granted by AB 2282) and plumbing code amendments need to be coordinated between the agencies, and
- (iii) The applicability of DWR amendments needs clarification to be consistent with DWR's statutory authority.

DWR's proposed amendments are non-substantive and, for the most part, address the need for organizational restructuring of the CPC for consistency, clarity and ease of use, as well as the need to harmonize regulatory authority granted by AB 2282 with DWR's existing authority.

Benefits: This DWR proposed code adoption will result in clearer organization and greater ease of use of the CPC and clarify the respective responsibilities of administrative agencies working with recycled water, as well as facilitate the safe installation of dual plumbed systems using both recycled and potable water supplies, as well as other alternative water supplies. Recycled water is the result of the treatment of municipal wastewater and its use could present a public health concern if it is not adequately treated, managed and properly used. There are state standards in Title 22 of the California Code of Regulations adopted by the State Water Resources Control Board that establish the required treatment and allowed uses of recycled water. The CPC establishes the standards to safely plumb buildings and surrounding landscape where recycled water is used. It also establishes standards for testing and periodic inspection of systems to prevent cross-connections between recycled and potable water systems.

<u>Specific Purpose and Necessity of the Proposed Regulatory Actions</u>: DWR proposes to carry forward sections 00023420.1

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of the 2016 California Plumbing Code into the 2019 California Plumbing Code to provide clarity, specificity and direction to the code user and to implement existing state laws. The rationale for each amendment by chapter and section is listed below.

Item numbers used coordinate with the items listed in the Express Terms.

#### 1. DWR PROPOSES TO ADOPT THE FOLLOWING SECTIONS OF CHAPTER 1 OF THE CPC AS FOLLOWS:

#### CHAPTER 1 **ADMINISTRATION DIVISION I CALIFORNIA ADMINISTRATION**

#### 1.13.1 Department of Water Resources (DWR)

DWR proposes to amend section 1.13.1 of the 2016 California Plumbing Code (CPC).

- The purpose is to correctly describe the scope of applicability of sections of the Uniform Plumbing Code (UPC) as adopted or amended by DWR in the CPC.
- This is necessary because the current language does not accurately describe the scope of DWR's regulatory authority under California Water Code Section 13557.
- There is no intended change in regulatory effect.

#### 2. DWR PROPOSES TO ADOPT THE FOLLOWING SECTIONS OF CHAPTER 2 OF THE CPC AS FOLLOWS:

#### **CHAPTER 2 DEFINITIONS**

DWR proposes to carry forward the following definitions from the 2016 CPC, as amended by the 2016 Intervening Code Adoption Cycle (2016 CPC as Amended) into the 2019 CPC. Such amendments included the deletion of one model code definition.

Disinfected Tertiary Recycled Water 206.0 220.0 Reclaimed (Recycled) Water 220.0 Recycled Water Supply System

- The purpose is to define the terms.
- This is necessary to ensure accuracy and consistency with existing definitions that have been co-adopted by HCD and BSC.
- There is no intended change in regulatory effect.

#### 3. DWR PROPOSES TO ADOPT THE FOLLOWING SECTIONS OF CHAPTER 6 OF THE CPC AS FOLLOWS: CHAPTER 6

#### WATER SUPPLY AND DISTRIBUTION

#### 601.2 Hot and Cold Water Required

DWR proposes to adopt Section 601.2 from the 2018 UPC into the 2019 CPC carrying forward the 2016 CPC as Amended.

- The purpose is to carry forward 2016 CPC as Amended.
- This is necessary to retain the provisions of the 2016 CPC as Amended.
- There is no intended change in regulatory effect.

#### 601.3.3 Alternate Water Sources

DWR proposes to adopt Section 601.3.3 from the 2018 UPC into the 2019 CPC carrying forward the 2016 CPC as Amended

- The purpose is to carry forward the 2016 CPC as Amended, with an additional amendment to clarify that paragraph two (2) applies to outdoor applications, in contrast to Section 1505.7 which applies to recycled water supply systems that are within or part of a building.
- This is necessary to retain and clarify the provisions of the 2016 CPC as Amended.
- There is no intended change in regulatory effect.

## 4. DWR PROPOSES TO ADOPT SECTIONS 1501, 1502 AND 1503 OF CHAPTER 15 OF THE CPC AS FOLLOWS:

#### **CHAPTER 15**

#### Intent

#### ALTERNATIVE WATER SOURCES FOR NONPOTABLE APPLICATIONS

#### Intent

DWR proposes to delete the non-regulatory Intent section.

- The purpose is to remove language carried forward from previous CPC versions that no longer serves a
  purpose.
- This is necessary to be consistent with HCD and BSC amendments.
- There is no intended change in regulatory effect.

#### **CHAPTER 15**

#### §1501,1502, and 1503

#### ALTERNATIVE WATER SOURCES FOR NONPOTABLE APPLICATIONS

DWR adopted the following sections into the 2016 CPC during the 2016 Intervening Code Adoption Cycle exactly as they are presented in the 2018 UPC. DWR proposes to adopt the following sections as presented in the 2018 UPC into the 2019 CPC without amendments.

1501.0	General
1501.2	System Design
1501.4	Component Identification
1501.8	Material Compatibility
1501.10	System Controls
1502.0	Inspection and Testing

- The purpose is to adopt the 2018 UPC language into the 2019 CPC.
- This is necessary because these sections are applicable to DWR's responsibility under the CPC.
- There is no intended change in regulatory effect.

DWR adopted the following sections as amended into the 2016 CPC during the 2016 Intervening Code Adoption Cycle. DWR proposes to adopt sections from the 2018 UPC into the 2019 CPC and carry forward the 2016 CPC as Amended.

1501.1	Applicability
1501.1.1	Allowable Use of Alternate Water
1501.3	Permit

- The purpose is to carry forward the 2016 CPC as Amended that include the deletion of specified text.
- This is necessary to retain the provisions of the 2016 CPC as Amended.
- There is no intended change in regulatory effect.

DWR proposes to adopt sections from the 2018 UPC into the 2019 CPC, carrying forward the 2016 CPC as Amended, renumbering sections, and editing section references in text.

1501.5	Maintenance and Inspection
1501.7	Minimum Water Quality Requirements
1501.9.1	Commercial, Industrial, Institutional, and Residential Restroom Signs
1501.9.2	Equipment Room Signs
1502 1	General

- The purpose is to retain the 2016 CPC as Amended, and to renumber certain sections and to edit references in the text.
- This is necessary to retain the provisions of the 2016 CPC as Amended, and to facilitate the use of the code with appropriate section numbering.
- There is no intended change in regulatory effect.

DWR proposes to adopt the following sections from the 2018 UPC into the 2019 CPC.

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1501.12 Abandonment.

1501.12.1 General.

1501.12.2 Underground Tank.

1501.13 Sizing.

- The purpose is to maintain the organizational structure of the 2016 CPC. These sections, included under the heading of Inspection and Testing in Section 1502.0 of the 2018 UPC, do not pertain to this heading.
- This is necessary to avoid confusing the code user.
- There is no intended change in regulatory effect.

#### 1501.5.1 Frequency.

DWR proposes to delete section 1501.5.1 of the 2018 UPC from inclusion in the 2019 CPC.

- The purpose of this amendment is to delete a redundant section because the frequency for recycled water supply systems that are within or a part of a building is addressed in section 1505.15, and to be consistent with HCD.
- This is necessary because the section is redundant with section 1505.15.
- There is no intended change in regulatory effect.

#### 1501.5.2 Maintenance Log.

DWR proposes to delete section 1501.5.2 from the 2019 CPC.

- The purpose is to carry forward the deletion from the 2016 CPC as Amended.
- This is necessary to retain the provisions of the 2016 CPC as Amended.
- There is no intended change in regulatory effect.

#### 1501.5.1 (formerly 1501.5.3) Maintenance Responsibility

DWR adopted this section into the 2016 CPC during the 2016 Intervening Code Adoption Cycle. However, the section number differs from that presented in the 2018 UPC. DWR proposes to adopt this section from the 2018 UPC into the 2019 CPC with non-substantive section renumbering (including section references in text).

- The purpose is to renumber Section 1501.5.1 because of the deletion of two preceding sections.
- This is necessary to locate this section under the appropriate number and to indicate that it is applicable to DWR's responsibility under the CPC.
- There is no intended change in regulatory effect.

#### 1501.6 Operation and Maintenance Manual

DWR proposes to adopt this section from the 2018 UPC into the 2019 CPC carrying forward the 2016 CPC as Amended, with new non-substantive clarifying amendments and editing section references in text.

- The purpose is to retain the 2016 CPC as Amended, to edit section references in the text, and to insert the word "gray" to be consistent with Section 1506.0.
- This is necessary to retain the provisions of the 2016 CPC as Amended, and to facilitate the use of the code with appropriate section numbering.
- There is no intended change in regulatory effect.

#### 1501.9 Signage

DWR proposes to carry forward this section from the 2016 CPC as Amended for adoption into the 2019 CPC, renumber the section, and edit section references in the text. This section is not present in the 2018 UPC but is present in the 2016 CPC.

- The purpose is to retain the 2016 CPC as Amended, to renumber the section, and to edit references in the text.
- This is necessary to retain the provisions of the 2016 CPC as Amended and to facilitate the use of the code with appropriate section numbering.
- There is no intended change in regulatory effect.

#### 1501.11 Separation Requirements

DWR proposes to adopt this section from the 2018 UPC into the 2019 CPC carrying forward the 2016 CPC as Amended, with new non-substantive clarifying amendments and section renumbering.

- The purpose is to retain the 2016 CPC as Amended, and to renumber this section, and to add an exception to point the code user to the section that applies to plumbing in buildings.
- This is necessary to retain the provisions of the 2016 CPC as Amended and to facilitate the use of the code.
- There is no intended change in regulatory effect.

#### 1501.14 Hose Bibbs for Single-Family Dwellings.

DWR proposes to adopt section 1504.14 from the 2016 CPC into the 2019 CPC, with amendments.

- The purpose is to carry forward the language from the 2016 CPC and to clarify that hose bibbs that are a part of a building are addressed in section 1505.9.
- This is necessary to provide clarity to the code user by referencing the appropriate section.
- There is no intended change in regulatory effect.

#### 1503.0 (formerly 1502.0) Gray Water Systems

This section heading is shown for context only.

#### 1503.3 (formerly 1502.3) Connections to Potable or Reclaimed (Recycled) Water Systems.

DWR proposes to adopt section 1503.3 from the 2018 UPC into the 2019 CPC with non-substantive clarifying amendments.

- The purpose is to carry forward the 2016 CPC as Amended, including the deletion of specified text of the 2018 UPC and the renumbering of certain sections to conform to the current 2018 UPC organization.
- This is necessary to retain the provisions of the 2016 CPC as Amended.
- There is no intended change in regulatory effect.

#### 5. DWR PROPOSES TO ADOPT SECTIONS 1505 AND 1506 OF CHAPTER 15 OF THE CPC AS FOLLOWS:

#### CHAPTER 15 §1505 and 1506 ALTERNATIVE WATER SOURCES FOR NONPOTABLE APPLICATIONS

DWR proposes to adopt sections from the 2018 UPC into the 2019 CPC carrying forward the 2016 CPC as Amended, renumbering the sections, and editing section references in text.

1505.0	Recycled Water Supply Systems in Buildings	
1505.1	General	
1505.1.1	Allowed Uses	
1505.2	Permit	
1505.2.1	Plumbing Plan Submission	
1505.3	System Changes	
1505.4	Connections to Potable or Reclaimed (Recycled) Water Systems	
1505.5	Initial Cross-Connection Test	
1505.6	Recycled Water Supply System Materials	
1505.7	Recycled Water Supply System Color and Marking Information	
Figure 1505.9 [No title]		
1505.10	Required Appurtenances	
1505.11	Pipe Separation in Trenches	
1505.12	Signage	
1505.13	Inspection and Testing	

- The purpose is to retain the 2016 CPC as Amended, to renumber certain sections and to edit references in the text.
- This is necessary to retain the provisions of the 2016 CPC as Amended and to facilitate the use of the code with appropriate section numbering.
- There is no intended change in regulatory effect.

DWR proposes to carry forward sections from the 2016 CPC as Amended for adoption into the 2019 CPC, renumbering the sections, and editing section references in text. These sections are not present in the 2018 UPC but are present in the 2016 CPC.

- 1505.1.2 Structures Allowed for Toilet and Urinal Flushing 1505.8.1 Valve Seals Valve and Appurtenance Access Door Signs 1505.8.2 Commercial, Industrial, Institutional, and Residential Restroom Signs 1505.12.1 1505.12.2 Tank-Type Toilet Signs 1505.12.3 Equipment Room Signs 1505.13.1 Supply System Inspection and Test 1505.13.2.1 Visual System Inspection 1505.13.2.3 Discovery of Cross-Connection 1505.13.2.4 Periodic Inspection Minimum Water Quality Requirements for Reclaimed (Recycled) Water 1505.14 1505.15 Maintenance and Inspection Table 1505.15 Minimum Reclaimed (Recycled) Water Source Testing, Inspection, and Maintenance Frequency
- Table 1303.13 will influent Reclaimed (Recycled) water 300/10e Testing, inspection, and Maintenance Frequency
- The purpose is to retain the 2016 CPC as Amended, to renumber certain sections, and to edit references in the text.
- This is necessary to retain the provisions of the 2016 CPC as Amended and to facilitate the use of the code with appropriate section numbering.
- There is no intended change in regulatory effect.

#### 1505.0 (formerly 1503.0) Recycled Water Supply Systems in Buildings

DWR proposes to adopt this section title from the 2018 UPC into the 2019 CPC carrying forward the 2016 CPC as Amended.

- The purpose is to carry forward the 2016 CPC as Amended, that included the deletion of specified text of the 2018 UPC.
- This is necessary to retain the provisions of the 2016 CPC as Amended.
- There is no intended change in regulatory effect.

#### 1505.8 Valves

DWR adopted this section into the 2016 CPC during the 2016 Intervening Code Adoption Cycle exactly as presented in the 2018 UPC. DWR proposes to adopt the section as presented in the 2018 UPC into the 2019 CPC without amendment.

- The purpose is to adopt the 2018 UPC language into the 2019 CPC.
- This is necessary because this section is applicable to DWR's responsibility under the CPC.
- There is no intended change in regulatory effect.

#### 1505.9 Hose Bibbs

DWR proposes to adopt this section from the 2018 UPC into the 2019 CPC carrying forward the 2016 CPC as Amended, renumbering the section, editing section references in text, and adding "Section" preceding each section number in accordance with UPC convention.

- The purpose is to retain the 2016 CPC as Amended, to renumber this section and to edit references in the text.
- This is necessary to retain the provisions of the 2016 CPC as Amended and to facilitate the use of the code with appropriate section numbering.
- There is no intended change in regulatory effect.

#### 1505.13.2 (formerly 1503.13.2) Cross-Connection Inspection and Testing

DWR proposes to carry forward the 2016 CPC as Amended from Section 1503.13.2 into the 2019 CPC, renumber the section, edit section references in text, and correct terminology.

- The purpose is to use consistent and defined terminology as provided in Chapter 2 of this code and to renumber referenced sections to conform to the current 2018 UPC organization.
- This is necessary to retain the provisions of the 2016 CPC as Amended and provide understanding to the code user.
- There is no intended change in regulatory effect.

#### 1505.13.2.2 (formerly 1503.13.2.2) Cross-Connection Test

DWR proposes to carry forward the 2016 CPC as Amended from Section 1503.13.2.2 into the 2019 CPC, renumber the section, edit section references in text, and correct terminology.

- The purpose of amending paragraph three (3) is to use consistent and defined terminology as provided in Chapter 2 of this code.
- This is necessary to retain the provisions of the 2016 CPC as Amended, and provide clarity to the code
  user
- There is no intended change in regulatory effect.
- The purpose of amending paragraph nine (9) is to provide clarity.
- This is necessary to avoid confusion and promote compliance by the code user.
- There is no intended change in regulatory effect.

#### 1506.0 (formerly 1504.0) On-Site Treated Nonpotable Gray Water Systems

This section heading is shown for context only.

#### 1506.4 (formerly 1504.4) Connections to Potable or Reclaimed (Recycled) Water Systems.

DWR proposes to adopt section 1506.4 from the 2018 UPC into the 2019 CPC carrying forward 2016 CPC as Amended.

- The purpose is to carry forward the 2016 CPC as Amended, including the deletion of specified text of the 2018 UPC and renumbering sections to conform to the current 2018 UPC organization.
- This is necessary to retain the provisions of the 2016 CPC as Amended.
- There is no intended change in regulatory effect.

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

DWR proposes to update the CPC as part of its responsibility under Water Code Section 13557. Primarily, the proposed amendments of the Plumbing Code migrate existing standards on how to design, construct, maintain, and test a building plumbed with both potable and recycled water from Section 1503.0, Chapter 15, to Section 1505.0 Chapter 15, to accommodate a reorganization of the UPC model code and the CPC. Pursuant to AB 2282 (2014) BSC and HCD are also proposing amendments to the CPC regarding recycled water. DWR, BSC, and HCD have been coordinating efforts to draft Express Terms for this code cycle.

DWR relied upon the following documents in development of the proposed regulations:

Water Code Section 13557
2018 Uniform Plumbing Code
2016 CPC, as amended by the 2016 Intervening Code Adoption Cycle

#### STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS:

Prescriptive standards provide explicit guidance for certain mandated requirements; consistent application and enforcement of building standards while also establishing clear design parameters and ensuring compliance with minimum health, safety, and welfare standards for owners, occupants, and guests.

Additionally, BSC is statutorily required to adopt by reference model building codes, which are the basis of California building codes, and contain prescriptive standards. Such is the case with the California Plumbing Code which provides prescriptive standards for the installation of recycled water supply systems. Some of the prescriptive standards in the CPC are from the recycled water use criteria in Title 22 of the California Code of Regulations.

#### **CONSIDERATION OF REASONABLE ALTERNATIVES**

Two alternatives were evaluated in addition to the proposed amendments: (1) Keep existing regulations in Plumbing Code Section 1503.0 Chapter 15 without update. (2) Move Plumbing Code Section 1503.0 Chapter 15 content to Section 1505.0 Chapter 15 to conform to current Plumbing Code organization. DWR has determined that no reasonable alternative considered by DWR or that has otherwise been identified and brought to the attention of DWR would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

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

No alternatives were identified to lessen the adverse impact on small business. With minor exceptions, the proposed amendments constitute a migration of existing regulations from Section 1503.0 Chapter 15 of the CPC to Section 1505.0 Chapter 15, with edits to improve clarity and harmonize with the current organization of the CPC. Proposed amendments are justified to implement the statutory mandate contained in Water Code Section 13557, which is to provide design standards to safely plumb buildings with both potable and recycled water systems.

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

DWR has determined that this regulatory action would have no 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

The DWR has assessed whether or not and to what extent this proposal will affect the following:

	The creation or elimination of jobs within the State of California.
	The proposed amendments will not create or eliminate jobs.
	The creation of new businesses or the elimination of existing businesses within the State of California.
	The proposed amendments will not create or eliminate businesses.
	The expansion of businesses currently doing business with the State of California.
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The proposed amendments will not affect the expansion of businesses currently doing business with the State of California. The CPC as currently in effect and as changed by the proposed amendments facilitates the use of recycled water, and thereby could allow business to expand in areas that are constrained by water availability.

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

The proposed amendments will update and improve California Plumbing Code standards for the safe use of recycled water when buildings are plumbed with both potable and recycled water.

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

These regulations will likely result in the following:

- No increased cost of compliance for those regulations that make technical, non-substantive or clarifying changes.
- Benefits to the State of California from potable water savings. Use of recycled water will increase local water supply and reliability during shortages. Building owners may save operating costs because of reduced water costs. Local water districts may save costs of increasing water supply from other sources. Public is health protected by safe use of recycled water.
- The protection of public health and safety, worker safety and the environment.
- The promotion of the general welfare of California residents.

#### **DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS**

There are no comparable federal regulations.