CALIFORNIA BUILDING STANDARDS COMMISSION AB 2282 RECYCLED WATER REUSE SYSTEMS

DRAFT EXPRESS TERMS for the 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGreen), PART 11, CALIFORNIA BUILDING STANDARDS CODE, TITLE 24, CALIFORNIA CODE OF REGULATIONS

LEGEND FOR DRAFT EXPRESS TERMS

- 1. Existing California amendments or code language being modified are in standard font, modified language is <u>underlined.</u>
- 2. New California amendments: All such language appears underlined.
- 3. Repealed text: All such language appears in strikeout.
- 4. [Information for the reader: All such language is bracketed and in red italics]

DRAFT EXPRESS TERMS

Statement of specific purpose, problem, rationale and benefits:

The California Building Standards Commission (CBSC) is proposing to add a section to the code that requires the installation of recycled water systems for newly constructed non-residential buildings. Pursuant to AB 2282 (Gatto, Chapter 606, Statutes of 2014), which added Section 18940.6 to the Health and Safety Code, the legislature mandated that CBSC, along with the Department of Housing and Community Development (HCD), research, develop, and propose for adoption mandatory recycled water infrastructure standards during the 2016 Intervening Code Adoption Cycle. This would result in the installation of dual plumbed systems in new residential and non-residential construction.

AB 2282 requires the installation of recycled water systems supplied from a municipal source for newly constructed commercial and public buildings and building site landscaped areas within a local jurisdiction that has feasible and cost-efficient access to a water recycling facility, or that have been identified within a planned service area with a specific implementation timeline for recycled water. CBSC proposes to adopt Section 5.305.1. The exceptions added in Section 5.305.1 are for jurisdictions without access to a water recycling facility and where it is not feasible or cost effective, which is consistent with those provided for in AB 2282.

These provisions will aid in the reduction of potable water use. CBSC and HCD are coordinating efforts to propose similar amendments in the 2016 Intervening Code Adoption Cycle.

SECTION 202 DEFINITIONS

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DISINFECTED TERTIARY RECYCLED WATER. Filtered and subsequently disinfected wastewater that meets the approved method of treatment and minimum level of water quality specified in California Code of Regulations, Title 22, Division 4, Chapter 3 for the purpose of direct beneficial use. –

DUAL PLUMBED SYSTEM. A system that utilizes separate piping systems for reclaimed (recycled) water and potable water where the recycled water is used for either of the following purposes:

- (a) To serve plumbing outlets (excluding fire suppression systems) within a building or
- (b) Outdoor landscape irrigation.

OPTION 1:

RECLAIMED (RECYCLED) WATER. Nonpotable water that meets the California Department of Public Health State Water Resources Control Board statewide uniform criteria for disinfected tertiary recycled water. Reclaimed (recycled) water is also known as "recycled water" or "reclaimed water."

OPTION 2:

RECLAIMED (RECYCLED) WATER. Nonpotable water that meets the California State Water Resources Control Board statewide uniform criteria for disinfected tertiary recycled water, disinfected secondary-2.2 recycled water, or disinfected secondary-23 recycled water, as applicable for their use allowed in the California Code of Regulations, Title 22, Division 4, Chapter 3.

RECYCLED WATER SYSTEM. Premises piping, fittings, valves and appurtenances isolated from any potable water distribution system, and intended or used for conveying reclaimed (recycled) water from a recycled water service connection to supply indoor fixtures, landscape irrigation systems and other permitted uses in accordance with Chapter 15 of this code.

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CHAPTER 5 NONRESIDENTIAL MANDATORY MEASURES

Division 5.3 - WATER EFFICIENCY AND CONSERVATION

SECTION 5.305 WATER REUSE SYSTEMS (Reserved)

5.305.1 Recycled Water Systems.

5.305.1.1 Indoor Recycled Water Systems. Recycled water systems shall be installed in all new nonresidential occupancies intended to supply recycled water to water closets, urinals, trap primers for floor drains and floor sinks, industrial or commercial cooling or air conditioning, and other uses as approved by the authority having jurisdiction.

Exceptions:

- 1. <u>Where there is not feasible and cost-efficient access to a water recycling facility, as</u> determined by the authority having jurisdiction.
- 2. <u>A building to be constructed in a water service area providing recycled water as potable water, or in which the water service authority has determined that the net non-potable water supply will remain level or decrease as a result of a potable water reuse program.</u>
- 3. <u>A building to be constructed where the city, county, or city and county, in consultation with the water service authority, has determined that providing recycled water is not feasible or cost effective.</u>

5.305.1.1.1 Reduce service area for mandatory application. In accordance with Health and Safety Code Section 18940.6, a city, county, or city and county, in consultation with the public water system and recycled water producer, may further reduce the area for which the mandate to install recycled water piping applies, if the local public water system or recycled water producer finds that providing recycled water to an area is not feasible or cost effective.

5.305.1.2 Outdoor Recycled Water Systems. Recycled water systems shall be installed in all new nonresidential occupancies intended to supply recycled water to uses such as above ground and sub surface irrigation, and other uses as approved by the authority having jurisdiction.

Exceptions:

1. Where there is not feasible and cost-efficient access to a water recycling facility, as determined by the authority having jurisdiction.

- 2. <u>A building to be constructed in a water service area providing recycled water as potable</u> water, or in which the water service authority has determined that the net non-potable water supply will remain level or decrease as a result of a potable water reuse program.
- 3. <u>A building to be constructed where the city, county, or city and county, in consultation with the water service authority, has determined that providing recycled water is not feasible or cost effective.</u>

5.305.1.2.1 Reduce service area for mandatory application. In accordance with Health and Safety Code Section 18940.6, a city, county, or city and county, in consultation with the public water system and recycled water producer, may further reduce the area for which the mandate to install recycled water piping applies, if the local public water system or recycled water producer finds that providing recycled water to an area is not feasible or cost effective.

5.305.1.3 Recycled Water Systems Commissioning. (TBD)

What entity would commission recycled water systems (i.e., who is qualified)? To what standard would recycled water systems be commissioned?

APPENDIX A5 NONRESIDENTIAL VOLUNTARY MEASURES

Division A5.3 - WATER EFFICIENCY AND CONSERVATION

SECTION A5.303 INDOOR WATER USE

A5.303.2.3.4 Nonpotable water systems for indoor use. Utilizing nonpotable water systems (such as captured rainwater, and treated graywater and recycled water) intended to supply water closets, urinals, and other allowed uses, may be used in the calculations demonstrating the 12-, 20- or 25-percent reduction. The nonpotable water systems shall comply with the current edition of the *California Plumbing Code*.

[Should recycled water be stricken? If recycled water is mandatory can it still be used in the calculations demonstrating potable water use reduction for voluntary credit?]

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A5.303.5 Dual plumbing. New buildings and facilities shall be dual plumbed for potable and recycled water systems for toilet flushing when recycled water is available as determined by the enforcement authority.

[This section is now mandatory]

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SECTION A5.305 WATER REUSE <u>SYSTEMS</u>

A5.305.1 Nonpotable water systems. Nonpotable water systems for indoor and outdoor use shall comply with the current edition of the *California Plumbing Code*. [Should this section be stricken?]

A5.305.2 Irrigation systems. Irrigation systems regulated by a local water efficient landscape ordinance or by the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) shall use recycled water. [Should this section be stricken?]

A5.305.1.1 Indoor Recycled Water Systems (Future Use). Where the local jurisdiction has identified a planned service area for the provision of recycled water for which a specific implementation timeline has

been identified by the public water system in its most recent recycled water master plan, recycled water systems shall be installed for indoor use pursuant to Section 5.305.1.1 and subsections.

A5.305.1.2 Outdoor Recycled Water Systems (Future Use). Where the local jurisdiction has identified a planned service area for the provision of recycled water for which a specific implementation timeline has been identified by the public water system in its most recent recycled water master plan, recycled water systems shall be installed for outdoor use pursuant to Section 5.305.1.2 and subsections.

A5.305.1.3 Onsite Graywater Reuse. Onsite graywater systems shall be installed in new nonresidential occupancies in jurisdictions that do not have access to reclaimed (recycled) water from a local water purveyor.