

**15-DAY EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
CALIFORNIA BUILDING STANDARDS COMMISSION

REGARDING PROPOSED CHANGES TO
CALIFORNIA GREEN BUILDING STANDARDS CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11**

(The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific. (PART 1 – ADMINISTRATIVE CODE)

Legend for 15-Day Express Terms:

1. **Existing California amendment:** California 45-Day language will appear in underlined and ~~strikeout~~.
2. **Amended, or repealed language:** Amended or repealed 15-Day language will appear in double underline and ~~double strikeout~~.
3. **Rationale:** The justification for the change is shown after each section or series of related changes.
4. **Notation:** Authority and reference citations are provided at the end of each chapter.

15-DAY EXPRESS TERMS

ITEM 1

~~**ET ADJUSTMENT FACTOR (ETAF) [BSC]** For the purposes of this Part, ETAF means a factor of 0.55 that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape.~~

Notation

Authority: Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

Rationale: CBSC proposes to repeal the ET Adjustment Factor (ETAF) definition which was approved as part of the May 29, 2015 Emergency Regulation. This definition was necessary for the emergency as it specified the ETAF factors. DWR's MWELO was revised July 15, 2015, requiring a more restrictive ETAF rate. CBSC determined during the emergency regulation certifying rulemaking process that many of the approved MWELO CALGreen regulations require amendments to more accurately align with the revised DWR MWELO regulations.

ITEM 2

~~**SPECIAL LANDSCAPE AREA (SLA) [BSC]** means an area of the landscape dedicated solely to edible plants, areas irrigated with recycled water, water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface. For the purposes of this Part, the additional water allowance for SLA's shall be 0.45.~~

Notation

Authority: Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

Rationale: CBSC proposes to repeal the Special Landscape Area (SLA) definition which was approved as part of the May 29, 2015 Emergency Regulation. This definition was necessary for the emergency as it specified the additional water allowance for Special Landscape Areas. CBSC determined during the emergency regulation certifying rulemaking process that many of the approved MWELo CALGreen regulations require amendments to more accurately align with the revised DWR MWELo regulations.

ITEM 3

5.304.1 Scope. The provisions of Section 5.304 Outdoor Water Use reference the mandatory Model Water Efficiency Landscape Ordinance (MWELo) contained within Chapter 2.7, Division 2, Title 23, California Code of Regulations.

5.304.2 Outdoor water use in landscape areas equal to or greater than ~~2,500~~ 500 square feet, or greater. ~~[BSC] When water is used for outdoor irrigation for landscape projects 2,500 square feet or greater, one of the following shall apply:~~ When water is used for outdoor irrigation for new construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review, one of the following shall apply:

1. A local water efficient landscape ordinance that is, based on evidence in the record, at least as effective in conserving water as the updated model ordinance adopted by the Department of Water Resources (DWR) per Government Code Section 65595 (c), including an evapotranspiration adjustment factor (ETAF) of 0.55 and an additional water allowance for special landscape areas (SLA) of 0.45.
2. The California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELo) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, California Code of Regulations, including an evapotranspiration adjustment factor (ETAF) of 0.55 and an additional water allowance for special landscape areas (SLA) of 0.45.

Notation

Authority: Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

Rationale:

Section 5.304.1: CBSC proposes to create a new scoping section to clarify the mandatory provisions in CALGreen Section 5.304 to reference DWR's MWELo regulations contained in Title 23.

Section 5.304.2: CBSC proposes to amend this section to align with DWR's July 15, 2015 revised MWELo regulations, specifically Section 409.1 Applicability, which reduced the outdoor water use trigger from 2,500 square feet of landscape area to 500 square feet of landscape area. In addition, CBSC proposes to renumber the section as necessary to accommodate the new scoping section.

Section 5.304.2 - Items 1 and 2: CBSC proposes to repeal the ETAF and SLA factors in the body of text as the revised MWELo regulations are more restrictive, thereby avoiding a conflict with Title 23.. These suggested edits are consistent with the MWELo regulations.

ITEM 4

5.304.3 Outdoor water use in rehabilitated landscape projects equal to or greater than 2,500 square feet. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than

2,500 square feet requiring a building or landscape permit, plan check, or design review shall comply with Section 5.304.2, items 1 or 2.

Notation

Authority: Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

Rationale: CBSC proposes to add this new section to address outdoor water use in rehabilitated landscape projects equal to or greater than 2,500 square feet. DWR's July 15, 2015 MWELo update to Section 490.1 Applicability, added water efficient requirements for rehabilitated landscape projects. This section is consistent with the MWELo regulations contained in Title 23, Section 490.1 Applicability.

ITEM 5

5.304.4 Outdoor water use in landscape areas of 2,500 square feet or less. Any project with an aggregate landscape area of 2,500 square feet or less may comply with the performance requirements of MWELo or conform to the prescriptive compliance measures contained in MWELo's Appendix D.

Notation

Authority: Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

Rationale: CBSC proposes to add this new section to address outdoor water use in landscape areas 2,500 square feet or less. DWR's July 15, 2015 update to MWELo Section 490.1 Applicability added water efficient requirements for these smaller landscape areas. The revised MWELo added a Prescriptive Checklist Option which simplifies compliance with smaller landscaped areas. This section is consistent with the MWELo regulations contained in Title 23, Section 490.1 Applicability.

ITEM 6

5.304.5 Graywater or rainwater use in landscape areas. For projects using treated or untreated graywater or rainwater captured on site, any lot or parcel within the project that has less than 2,500 square feet of landscape and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with treated or untreated graywater or through stored rainwater captured on site is subject only to Appendix D section (5).

Notation

Authority: Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

Rationale: CBSC proposes to add this new section to address the use of graywater or rainwater in landscape areas. DWR's July 15, 2015 MWELo Section 490.1 Applicability contains regulatory language to address these alternative water sources used in landscape areas. This section is consistent with the MWELo regulations contained in Title 23, Section 490.1 Applicability.

ITEM 7

Notes:

- ~~1- MWELo prescriptive measures are listed in Sections 492.4 through 492.8, 492.10 and 492.11 of the Chapter 2.7, Division 2, Title 23, available at the following link: <http://www.water.ca.gov/wateruseefficiency/docs/WaterOrdSec492.cfm>~~
- ~~2- The Department Of Water Resources (DWR) landscape ordinance webpage is available at the following link:~~

1. DWR's Model Water Efficient Landscape Ordinance, definitions and supporting documents are available at the following link: <http://water.ca.gov/wateruseefficiency/landscapeordinance/> *[verify link with DWR]*
2. ~~3. The A water budget calculator for use with the 0.55 ETAF is available at the following link: <http://water.ca.gov/wateruseefficiency/landscapeordinance/> *[verify link with DWR]*~~
3. The MWELO prescriptive compliance measure Appendix D may be found at the following link: *[verify link with DWR]* In addition, a copy of MWELO Appendix D may be found in Chapter 8 of this code.

Notation

Authority: Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

Rationale:

Note 1: CBSC proposes to repeal Note 1 and Note 2 and replace with a link to DWR's MWELO regulations, definitions, and supporting documents, which combines the information previously provided in Notes 1 and 2.

Note 2: CBSC proposes to amend Note 3 by repealing the ETAF factor as it is included in the ETAF definition. CBSC suggests linking directly to DWR's revised water budget calculator as previously provided in the prior emergency rulemaking. CBSC also suggests renumbering Note 3 to Note 2.

Note 3: CBSC proposes to add Note 3 directing the code user to the MWELO prescriptive compliance measures contained in Appendix D and providing a link to those regulations for code user convenience. In addition, CBSC proposes to indicate that MWELO's Appendix D may be found in Chapter 8 of CALGreen.

ITEM 8

~~**5.304.2 Methods to reduce potable water use. [BSC] Other methods to reduce potable water use in landscape areas include but are not limited to:**~~

- ~~1. Use of captured rainwater, recycled water, or graywater designed per the California Plumbing Code.~~
 - ~~a. The use of potable water may be used as a back-up water supply for on-site water recycling and/or reuse systems may be allowed by the Authority Having Jurisdiction (AHJ), provided that it can be demonstrated to the AHJ that the amount of potable water used as back-up in the water recycle or reuse system is less than that which would have been used by other means authorized by the AHJ.~~
- ~~2. Water treated for irrigation purposes and conveyed by a water district or public entity.~~

~~**5.304.2.1 Authorized potable water use.** The use of potable water shall be authorized where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency.~~

Notation

Authority: Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

Rationale:

Section 5.304.2: CBSC proposes to repeal Section 5.304.2 Methods to reduce potable water use. The Commission and the public commented on this section during the May 29, 2015 Commission meeting, stating the language is more informative than regulatory. Although the language was Approved as

Submitted during the emergency rulemaking hearing, CBSC staff was directed to review the language during the certifying rulemaking process. As part of the 45-day review, CBSC staff suggests repealing the language.

Section 5.304.2.1: CBSC proposes to repeal Section 5.304.2.1 Authorized potable water use. The Commission and the public commented on this section during the May 29, 2015 Commission meeting, stating the language is more informative than regulatory. Although the language was Approved as Submitted during the emergency rulemaking hearing, CBSC staff was directed to review the language during the certifying rulemaking process. The use of potable water is already authorized for outdoor water use. As part of the 45-day review, CBSC staff suggests repealing the language.

ITEM 9

~~**5.304.3 Outdoor water use in landscape areas 1,000 to 2,500 square foot. [BSC]** When water is used for outdoor irrigation for landscape projects at least 1,000 square foot but not more than 2,500 square foot, the following shall apply:~~

~~**5.304.3.1 5.304.3 Irrigation design controller and sensor application.**~~

~~In new nonresidential construction or building addition or alteration with at least 1,000 but not more than 2,500 square feet of cumulative landscaped area (the level at which the MWELO applies), install irrigation controllers and sensors which include the following criteria, and meet manufacturer's recommendations.~~

~~**5.304.3.2 5.304.3.1 Irrigation Controllers.**~~

~~Automatic irrigation system controllers installed at the time of final inspection shall comply with the following:~~

- ~~1. Controllers shall be weather or soil moisture based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.~~
- ~~2. Weather based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture based controllers are not required to have rain sensor input.~~

~~**Note:** More information regarding irrigation controller function and specifications is available from the Irrigation Association.~~

Notation

Authority: Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

Rationale:

Sections 5.304.3, 5.304.3.1 and 5.304.3.2: CBSC proposes to repeal these sections, which require irrigation controllers and sensors in landscape areas 1,000 - 2,500 square feet. DWR's revised MWELO regulation reduced the performance compliance measures from 2,500 square feet of landscape area to 500 square feet of landscape area. CBSC suggests adding new Section 5.304.3, which directs the code user to MWELO's Appendix D for outdoor water use in landscape areas of 2,500 or less. Irrigation controllers and weather based sensors are required in the prescriptive compliance measures contained in Appendix D of the MWELO regulations. Therefore, Section 5.304.3 – 5.304.3.2 CALGreen provisions are no longer necessary and are in conflict with the revised MWELO regulations.

ITEM 10

5.304.4 ~~5.304.2~~ **Outdoor potable water use meters.**

~~For new water service or for addition or alteration requiring upgraded water service for landscaped areas of at least 1,000 square feet but not more than 5,000 square feet (the level at which Water Code §535 applies), separate submeters or metering devices shall be installed for outdoor potable water use.~~

Notation

Authority: Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

Rationale:

Section 5.304.4: DWR's revised MWELo regulation now requires landscape water meters to be installed for all non-residential irrigated landscape areas of 1,000 square feet, but not more than 5,000 square feet as part of the Irrigation Design Plan in MWELo Section 492.7. Therefore CBSC proposes to repeal this section as it is no longer applicable.

ITEM 11

A5.304.2 ~~A5.304.2.1~~ **Outdoor potable water use.**

~~For new water service not subject to the provisions of Water Code Section 535, separate meters or submeters shall be installed for indoor and outdoor potable water use for landscaped areas of at least 500 square feet but not more than 1,000 square feet. (the level at which Section 5.304.2 applies)~~

Notation

Authority: Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

Rationale:

Section A5.304.2: CBSC proposes to delete the reference to CALGreen Section 5.304.2. DWR revised the MWELo regulation requiring landscape water meters to be installed for all non-residential irrigated landscape areas of 1,000 square feet, but not more than 5,000 square feet as part of the Irrigation Design Plan. Therefore, the CALGreen Section is no longer necessary.

ITEM 12

CHAPTER 8 COMPLIANCE FORMS, ~~AND~~ WORKSHEETS AND REFERENCE MATERIAL

Note: Appendix D – Prescriptive Compliance Option is reprinted from the Model Water Efficient Landscape Ordinance (MWELo) contained in the California Code of Regulations, Title 23, Division 2, Chapter 2.7, Section 490, as adopted by the Department of Water Resources (DWR) on July 15, 2015. The language contained in Appendix D is reprinted herein as a resource. Please contact DWR to verify the applicable Title 23 requirements prior to using this document for enforcement purposes. For questions regarding this appendix (interpretation, effectiveness, applicability, etc.), DWR may be contacted by the following information:

[THE FOLLOWING IS A REPRINT OF MWELO'S APPENDIX D AND IS NOT ADOPTED BY BSC]

California Department of Water Resources
Urban Water Use Efficiency Unit
ATTN: Julie Saare-Edmonds, Senior Environmental Scientist

P.O. Box 942836
Sacramento, CA 94236-0001 Email: Julie.Saare-Edmonds@water.ca.gov
Telephone: 916-651-9676
<http://water.ca.gov/wateruseefficiency/landscapeordinance/>

Appendix D – Prescriptive Compliance Option

(a) This appendix contains prescriptive requirements which may be used as a compliance option to the Model Water Efficient Landscape Ordinance.

(b) Compliance with the following items is mandatory and must be documented on a landscape plan in order to use the prescriptive compliance option:

- (1) Submit a Landscape Documentation Package which includes the following elements:
 - (A) date
 - (B) project applicant
 - (C) project address (if available, parcel and/or lot number(s))
 - (D) total landscape area (square feet), including a breakdown of turf and plant material
 - (E) project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed)
 - (F) water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well
 - (G) contact information for the project applicant and property owner
 - (H) applicant signature and date with statement, “I agree to comply with the requirements of the prescriptive compliance option to the MWELO”.

- (2) Incorporate compost at a rate of at least four cubic yards per 1,000 square feet to a depth of six inches into landscape area (unless contra-indicated by a soil test);

- (3) Plant material shall comply with all of the following:
 - (A) For residential areas, install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 75% of the plant area excluding edibles and areas using recycled water; For non-residential areas, install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 100% of the plant area excluding edibles and areas using recycled water;
 - (B) A minimum three inch (3”) layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated.

- (4) Turf shall comply with all of the following:
 - (A) Turf shall not exceed 25% of the landscape area in residential areas, and there shall be no turf in non-residential areas;
 - (B) Turf shall not be planted on sloped areas which exceed a slope of 1 foot vertical elevation change for every 4 feet of horizontal length;
 - (C) Turf is prohibited in parkways less than 10 feet wide, unless the parkway is adjacent to a parking strip and used to enter and exit vehicles. Any turf in parkways must be irrigated by sub-surface irrigation or by other technology that creates no overspray or runoff.

- (5) Irrigation systems shall comply with the following:
 - (A) Automatic irrigation controllers are required and must use evapotranspiration or soil moisture sensor data and utilize a rain sensor.

(B) Irrigation controllers shall be of a type which does not lose programming data in the event the primary power source is interrupted.

(C) Pressure regulators shall be installed on the irrigation system to ensure the dynamic pressure of the system is within the manufacturers recommended pressure range.

(D) Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be installed as close as possible to the point of connection of the water supply.

(E) All irrigation emission devices must meet the requirements set in the ANSI standard, ASABE/ICC 802-2014. "Landscape Irrigation Sprinkler and Emitter Standard," All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802-2014.

(F) Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.

(6) For non-residential projects with landscape areas of 1,000 sq. ft. or more, a private submeter(s) to measure landscape water use shall be installed.

(c) At the time of final inspection, the permit applicant must provide the owner of the property with a certificate of completion, certificate of installation, irrigation schedule and a schedule of landscape and irrigation maintenance.

Rationale:

Reprinting MWELO Appendix D in CALGreen Chapter 8:

As suggested in the public comment submitted by the California Building Industry Association (on behalf of the multiple stakeholders that make up the Industry Coalition), CBSC proposes to reprint the MWELO Appendix D Prescriptive Compliance Option within CALGreen Chapter 8. According to the Coalition's comments, "there is significant benefit to having an easy-to-read listing of the basic provisions of the updated MWELO available to code users in the same document with all of the other provisions of CALGreen." CBSC has determined that reprinting MWELO Appendix D within Chapter 8 of CALGreen, which currently contains compliance forms and worksheets, would be an appropriate way to assist local enforcement agencies without having to duplicate Title 23 regulations within Title 24, which would violate the nine point criteria in Health & Safety Code Section 18930. As MWELO Appendix D would be reprinted for reference only, CBSC proposes to add a note that clarifies the source of the appendix (Title 23), and directs code users to contact DWR for questions regarding interpretation, effectiveness, applicability, etc. Lastly, the heading of Chapter 8 is proposed for amendment to include the term "Reference Material," which would encompass the reprinting of MWELO Appendix D. CBSC also proposes to amend the matrix adoption table at the beginning of CALGreen Chapter 8 to clarify that MWELO Appendix D is not adopted by CBSC.