



Fact Sheet

Frequently Asked Questions

Regulations for Onsite Treatment and Reuse of Nonpotable Water

1. Why is the State Water Board proposing the regulations?

In September 2018, [Senate Bill 966 \(SB 966\)](#) was enacted, adding sections 13558 and 13558.1 of the Water Code. SB 966 requires that the State Water Board adopt the onsite treatment and reuse of nonpotable water regulations on or before December 1, 2022. By December 1, 2023, the Department of Housing and Community Development is required to develop and propose for adoption any necessary corresponding building standards to support the regulations adopted by the State Water Board.

2. Where will the proposed State Water Board regulations be located in the California Code of Regulations?

Once approved by Office of Administrative Law and filed with the Secretary of State, the regulations will be published in the California Code of Regulations, Title 22, Division 4, Chapter 3.5 Onsite Treatment and Reuse of Nonpotable Water.

3. What is the scope of the proposed regulations?

The proposed regulations are pathogen risk-based water quality standards for the onsite treatment and reuse of nonpotable water for nonpotable end uses in multifamily residential, commercial, and mixed used buildings.

SB 966 authorizes and mandates the State Water Board to address in the regulations, at a minimum, the following elements to ensure that the regulations are protective of public health:

- (1) Risk-based log reduction targets for the removal of pathogens such as enteric viruses, parasitic protozoa, and enteric bacteria for nonpotable water sources, graywater, rainwater, stormwater, and blackwater, and nonpotable end uses, toilet and urinal flushing, clothes washing, irrigation, and dust suppression.
- (2) Water quality monitoring requirements.
- (3) Reporting requirements for the water quality monitoring results.
- (4) Notification and public information requirements.
- (5) Cross-connection controls.

The proposed regulations will not address untreated graywater systems that are used exclusively for subsurface irrigation and untreated rainwater systems that are used exclusively for surface, sub-surface, or drip irrigations. Existing regulations for these



systems are in the California Plumbing Code (California Code of Regulations Title 24 Part 5) Chapter 15 and Chapter 16, respectively.

4. When is the effective date of the proposed regulations?

The State Water Board proposed regulations will be effective upon approval by Office of Administrative Law and based on filing with the Secretary of State. State Water Board DDW staff will update the progress of the rulemaking process on the State Water Board program page:

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/onsite_nonpotable_reuse_regulations.html.

The California building standards code (California Plumbing Code) rulemaking process undertaken by the Department of Housing and Community Development and California Building Standards Commission will be conducted separately from the State Water Board rulemaking process. Information on the California building standards rulemaking activities is available on this page: <https://www.dgs.ca.gov/BSC/Rulemaking>

5. What is an onsite treated nonpotable water system?

An onsite treated nonpotable water system (OTNWS):

- (1) treats one or more of the following water sources, in whole or in part: rainwater, stormwater, graywater, or blackwater;
- (2) collects, treats, and uses the treated water sources onsite (within the OTNWS project boundary which can consist of an individual property parcel or contiguous parcels) for nonpotable purposes;
- (3) is served by and connected to a centralized wastewater collection and treatment system. OTNWS treating and reusing blackwater or onsite wastewater (comingled blackwater and graywater) must be connected to a community sewer system as its only means for disposal.

OTNWS subject to the proposed regulations is limited to those for nonpotable end uses in multifamily residential, commercial, and mixed used buildings.

6. How does the State Water Board determine the risk-based water quality standards?

Risk-based water quality standards are developed to meet a specific risk goal. For the proposed regulations, the risk goal is 1 in 10,000 (10^{-4}) infections per person per year. The risk goal is achieved by treating each source water to reduce the concentration of pathogens down to acceptable levels for each use (fit-for-purpose). The level of required treatment is expressed in \log_{10} reduction, where 1 log reduction equals 10-fold reduction in concentration, 2 log reduction equals 100-fold reduction in concentration, etc. The log reduction targets are developed using quantitative microbial risk assessment (QMRA), based on concentration, to relate human health risk with exposure to microbial hazards in the source water for a particular end use.

7. Will daily total coliform sampling be required in the regulations?

No. Verification of the log reduction credits must rely on continuous treatment train monitoring using the required or validated surrogate parameters to ensure proper operation of each treatment process ability to achieve the log reductions targets.

8. Will OTNWS projects be permitted by the State Water Board?

No. The State Water Board does not have permitting authority for OTNWS projects. [Water Code section 13558.1\(a\)](#) states that an OTNWS shall not be installed except under a local jurisdiction program established pursuant to [Water Code section 13558\(b\)](#). [Water Code 13558\(h\)](#) defines “local jurisdiction” as a city, county, or city and county.

9. How will the proposed regulations impact existing OTNWS in operation prior to the regulations effective date?

[Water Code section 13558\(f\)](#) allows existing OTNWS in operation before the effective date of the regulations to comply with the new regulations within two years of the effective date of the State Water Board regulations. The permitting local jurisdiction may grant an extension to comply with the regulations up to five years after the effective date of regulations.

10. How should a new OTNWS be permitted ahead of State Water Board regulations effective date?

Until the State Water Board regulations are effective, the current permitting requirements apply. State Water Board staff encourages project proponents to discuss with local jurisdictions permitting entities (e.g., building permitting authorities and local health department) the prospect for a local jurisdiction program adoption to ensure that the OTNWS permitted and constructed prior to the State Water Board regulations effective date is not at risk for operating in violation of Water Code section [Water Code section 13558.1\(a\)](#).

11. Who will enforce the requirements of the proposed regulations?

Local jurisdictions have the discretion to adopt a program through local ordinance that includes the regulations established by the State Water Board. The requirements of the program will be enforced as a local jurisdiction ordinance. The regulations will eventually be incorporated into the California Building Standards Code (California Code of Regulations Title 24), which local jurisdictions are required to enforce. If a local jurisdiction does not adopt a program, an OTNWS operating outside a local jurisdiction program is in violation of [Water Code section 13558.1\(a\)](#).

12. Will the proposed regulations apply to municipal stormwater capture and use systems?

No. The regulations are intended for building-scale or district-scale (multiple buildings or campus) systems onsite reuse. Watershed-scale stormwater capture projects designed to collect and store watershed-wide runoff during dry or wet weather conditions would not fit into the definition of OTNWS since the collection of the source water (stormwater) and in many cases, the use, are not onsite.

13. Will the proposed regulations apply to water recycling projects receiving source water from municipal sewer (sewer mining)?

No. The regulations are intended for building-scale or district-scale (multiple buildings or campus) systems onsite reuse. Municipal wastewater collected and conveyed by municipal sewer system would not fit into the definition of OTNWS since the collection of the source water is from a sewershed and is not onsite. Sewer mining projects must consult with the local Regional Water Quality Control Boards and local jurisdictions to determine the appropriate regulatory pathway and requirements.

14. These regulations do not apply for residential scale onsite reuse. Where can I get information regarding onsite reuse for my home?

The regulations do not address nor supersede the current California Plumbing Code requirements for untreated graywater systems that are used exclusively for subsurface irrigation and untreated rainwater systems that are used exclusively for surface, subsurface, or drip irrigations. Existing regulations for these systems are in the California Plumbing Code (California Code of Regulations Title 24 Part 5) Chapter 15 and Chapter 16, respectively. Contact your local jurisdiction building permitting authority to confirm the local jurisdiction requirements for graywater and rainwater onsite reuse activities (e.g., laundry to landscape or rainwater catchment).

15. How do I find more information about the proposed regulations?

More information on the proposed regulations can be found on the State Water Board Regulations for Onsite Treatment and Reuse of Nonpotable Water webpage: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/onsite_nonpotable_reuse_regulations.html. To receive e-mail notification and the latest update on the regulatory effort, please subscribe to the mailing list on the "Subscribe to Mailing List" fields on the webpage.

Please contact ddwrecycledwaterunit@waterboards.ca.gov for any other questions not addressed in this Fact Sheet.

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