



**BUILDING AND SAFETY DIVISION**  
1685 Main Street  
P.O. Box 2200  
Santa Monica, California 90407-2200  
310.458.8355                      [www.smgov.net](http://www.smgov.net)

## **GUIDELINES AND PROCEDURES FOR INSTALLATION AND USE OF NON-POTABLE WATER REUSE SYSTEMS**

**AUGUST 30, 2016**

This document is for public information as a guideline to the regulatory procedures for the installation and use of Non-Potable Water Reuse Systems. Non-Potable Water Reuse Systems may be known by various names such as Recycled Water Systems, Alternate Water Sources, “Purple Piping System” and may have its source of water from recycled water, stormwater-recycled runoff produced from the Santa Monica Urban Recycling Runoff Facility or SMURRF, or other reusable sources, as permitted by State laws. This document is intended to provide guidance as to the application of agency review and approvals, applicable codes and standards, and general technical requirements.

The major agencies involved in the requirements for the installation and use are the: City of Santa Monica Building And Safety Division, City of Santa Monica Planning and Zoning Division, City of Santa Monica Water Resources Division, County of Los Angeles Department of Public Health. The general requirements of each of these agencies are contained in this document.

The following are general guidelines for projects utilizing Non-Potable Water Reuse Systems for toilet, urinal and water closet flushing.



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Technical Codes and Standards

- Installation of the Non-Potable Water Reuse System and associated equipment, components, controls, supportive systems shall meet the requirements of the current version of California Building Standards Law, or Title-24 of the California Code of Regulations.
- Specific code compliance to the 2016 California Plumbing Code or the current version in effect per the State of California and the City of Santa Monica.
- Specific code compliance to the 2016 California Plumbing Code, Chapter 16A, Non-Potable Water Reuse Systems and all content therein.
- Compliance with applicable technical standards of Chapter 17 of the 2016 California Plumbing Code.
- Compliance with the American National Standards Institute / National Sanitation Foundation (ANSI/NSF) standards for onsite residential water reuse and other applicable standards.
- Compliance with the applicable regulations of the California Department of Public Health related to water reuse.
- All relevant and applicable rules and regulations pertaining to cross connection protection, including but not limited to Santa Monica Municipal Code section 7.12.370 Cross Connection Control.



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- The most recent version of: Guidelines for Alternative Water Sources: Indoor and Outdoor Non-Potable Uses, Los Angeles Department of Public Health.

Technical Requirements

- The design and installation of the Non-Potable Water Reuse System in any building shall not risk or jeopardize the health of any occupant or resident. The system shall be designed and installed with both passive and active protective measures.
  - Passive measures can be devices such as:
    - Backflow prevention devices and check valves
    - Isolation and separation of non-potable and potable water systems
  - Active measures can be:
    - Frequent and annual maintenance by trained personnel
    - Logs and records of maintenance activity
    - Testing and sampling
    - Life-cycle analysis of system components
    - Replacement plan of equipment and components based on life-cycle analysis
- The plumbing and piping system of the Non-Potable Water Reuse System shall be of identifiable color that meets the color and information requirements of the 2016 California Plumbing Code. Generally, purple background Pantone color #512 with black uppercase lettering is acceptable.



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- The necessary protective devices to prevent cross-contamination between non-potable and potable water is assured and permanent.
- The design of the Non-Potable Water Reuse System shall demonstrate measures to ensure that human error or mechanical failure of any system equipment or components will not cause contamination of the potable water system, or jeopardize the health of building occupants and residents.
- No portion of the Non-Potable Water Reuse System shall be used for plumbing fixtures that are associated with human contact. This includes bidets and similar sanitation fixtures.
- All relevant and applicable rules and regulations pertaining to the permitted uses of non-potable alternative water sources required by the County of Los Angeles Department of Public Health and/or the State of California. "Non-potable use" includes all reuse permitted or approved by the Los Angeles County Department of Public Health (LACDPH) that is not intended for human consumption.

Maintenance and Annual Reporting

- Backflow prevention devices, check-valves, pumps, pump controllers, monitoring components, associated electrical system circuitry and other associated portions of the Non-Potable Water Reuse System shall be frequently and annually maintained in accordance to a maintenance schedule. An annual report shall be made available to the City of Santa Monica upon request. The report shall be prepared by a maintenance supervisor of the system.



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- Analysis and Contingency Plan. An analysis shall be conducted with recommendations for replacement of equipment that will minimize the interruption of the Non-Potable Reuse Water System. Replacement equipment and components may be subject to a building permit and inspection by the City of Santa Monica.

Plan Review and Approval

Design plans shall fully represent the operational and technical aspects of the Non-Potable Water Reuse System. The design plans shall show full compliance with the Technical Codes and Standards and Technical Requirements as indicated in this document. Plans of the Non-Potable Water Reuse System shall be submitted for plan check review and approval to the following agencies:

- City of Santa Monica Building And Safety Division;
- City of Santa Monica Planning Division;
- City of Santa Monica Water Resources Division;
- County of Los Angeles Department of Public Health;
- Additional agency that may be necessary for the review of the Non-Potable Water Reuse System.

Please contact the Building and Safety Division at (310) 458-8355 with questions related to these guidelines and procedures.