

ATTACHMENT A

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

DEFINITION OF TERMS FOR NON-IRRIGATION GENERAL WATER REUSE ORDER NO. R4-2009-0049

Within this General Order, the following terms are defined as follows:

California Department of Public Health (CDPH): The primary State agency responsible for protection of public health and the regulation of drinking water. The Legislature has defined several specific regulatory responsibilities of the CDPH related directly or indirectly to recycled water use activities including: establishment of statewide water reclamation criteria advising Regional Water Boards in the drafting of water reclamation requirements; review and approval of certain proposed water reclamation projects; abatement of contamination resulting from use of reclaimed water where public health is seriously threatened; and control of cross connections between potable and nonpotable water systems.

Coagulated Wastewater: Coagulated wastewater means oxidized wastewater in which colloidal and finely divided suspended matter have been destabilized and agglomerated upstream from a filter by the addition of suitable floc-forming chemicals.

Disinfected Recycled (Reclaimed) Water: Water is as a result of treatment of municipal wastewater in which the pathogenic organisms have been destroyed by chemical, physical or biological means. This water is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource. "Recycled water" and "reclaimed water" have the same meaning. Three different levels of disinfected recycled water include disinfected secondary-23, disinfected secondary-2.2, and disinfected tertiary. See the following definitions;

Disinfected Secondary-2.2: Adequately disinfected, oxidized wastewater in which the median number of coliform organisms in the effluent does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last seven days for which analyses have been completed, and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample in any 30 day period.

Disinfected Secondary-23: Adequately disinfected, oxidized wastewater in which the median number of coliform organisms in the effluent does not exceed 23 per 100 milliliters, as determined from the bacteriological results of the last seven days for which analyses have been completed, and the number of coliform organisms does not exceed 240 per 100 milliliters in more than one sample in any 30 day period.

Disinfected Tertiary: Adequately disinfected, oxidized, coagulated, clarified, filtered wastewater in which meets the following criteria:

- (a) A filtered wastewater which has been disinfected by either:
 - (1) A chlorine disinfection process that provides a CT (chlorine concentration times modal contact time) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak daily design flow (or an equivalent combination of chlorine residual concentration and contact time subject to Executive Officer approval); or
 - (2) A disinfection process that, when combined with the filtration process, has been demonstrated to reduce the concentration of plaque-forming units of F-specific bacteriophage MS-2, or polio virus, per unit volume of water in the wastewater to one hundred thousandths (1/100,000) of the initial concentration in the filter influent throughout the range of qualities of wastewater that will occur during the reuse process. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.
- (b) The median concentration of total coliform bacteria measured in the disinfected effluent does not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does not exceed maximum an MPN of 23 per 100 milliliters in more than one sample in any 30 day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.

Dual Plumbed System: A system that utilizes separate piping systems for recycled water and potable water within a facility and where the reclaimed water is used for either of the following purposes:

- (a) To serve multiple plumbed outlets used by the public within a building.
- (b) Landscape irrigation at individual residences.

Engineering Report: Refers to a report filed with the CDPH to produce or supply recycled water for direct reuse. The report shall clearly indicate the means for compliance with the Title 22 regulations. (Title 22 section 60323).

Filtered Wastewater: An oxidized wastewater that meets the criteria in subsection (a) or (b):

- (a) Has been coagulated and passed through natural undisturbed soils or a bed of filter media pursuant to the following:
 - (1) At a rate that does not exceed 5 gallons per minute per square foot of surface area in mono, dual or mixed media gravity, upflow or pressure filtration systems, or does not exceed 2 gallons per minute per square foot of surface area in traveling bridge automatic backwash filters; and,
 - (2) So that the turbidity of the filtered wastewater does not exceed any of the following:
 - i. An average of 2 NTU within a 24-hour period;
 - ii. 5 NTU more than 5 percent of the time within a 24-hour period; and,
 - iii. 10 NTU at any time.
- (b) Has been passed through a microfiltration, ultrafiltration, nanofiltration, or reverse osmosis membrane so that the turbidity of the filtered wastewater does not exceed any of the following:
 - (1) 0.2 NTU more than 5 percent of the time within a 24-hour period; and,
 - (2) 0.5 NTU at any time.

Incidental Runoff: Refers to unintended small amounts (volume) of runoff from recycle water use areas, such as over-spray from sprinklers that escapes the recycled water use area. Water leaving a recycled water use area as part of the facility design, excessive application, intentionally overflowed or applied, or due to negligence is not considered incidental.

Recycled Water Distributor (Distributor): A municipal or water service agency which receives recycled water from a Producer for the purpose of distribution to users. The Distributor may provide additional treatment to the water, depending upon the intended use.

Recycled Water Producer (Producer): The entity which treats domestic wastewater to obtain recycled water.

Recycled Water Supervisor: A person designated, by the Producer of recycled water, to discharge the responsibility of the Producer for: (a) acting as the supplier's coordinator and direct contact between the supplier and the owner or manager of the property upon which recycled water will be used; (b) proper operation of the system for transporting/distributing recycled water; (c) providing orientation to personnel involved in

transporting/distributing recycled water; (d) implementing and complying with conditions of all Water Reuse Orders/Permits and associated documents relevant to use of recycled water; and (e) monitoring operations at the recycled water use area(s) for prevention of potential hazards.

Recycled Water Use Supervisor: A person designated, by the owner or manager of the property upon which recycled water will be applied, to discharge the responsibility of the owner or manager of the property for: (a) installation, operation and maintenance of a system that enables recycled water to be used; (b) for prevention of potential hazards; (c) implementing and complying with conditions of all Water Reuse Orders/Permits and associated documents; and (d) coordination with the cross-connection control program of the supplier of drinking water and the local health/environmental health agency. (A Recycled Water Supervisor and User Supervisor may be one in the same in some instances).

Recycled Water User (User): means a person or entity that uses recycled water.

Use Site Area (Site): An area of recycled water use with defined boundaries. A use site area may contain one or more facilities.

Water Agency: The public water system, or a publicly or privately owned or operated recycled water system, that delivers or proposes to deliver recycled water to a facility. (Title 22, section 60301.700)

Water Recycling Criteria: Uniform statewide recycling criteria established in California Code of Regulations Title 22 by the CDPH for each varying type of use of recycled water where the use involves the protection of public health (CWC section 13521).