Table 2.1 Summary of California Department of Public Health Water Reuse Treatment Requirements

Purpose of Use	Treatment Requirement
Orchards and vineyards (no contact with edible crops), nonfood- bearing trees, fodder or fiber crops, seed crops (not eaten by humans), food crops (with additional pathogen treatment for crop), and flushing sanitary sewers.	Undisinfected Secondary ^a
Cemeteries, freeway landscaping, golf courses (restricted access), ornamental nursery stock, sod farms, pasture (milk animals), non-edible vegetation (controlled access), commercial/industrial cooling towers (with drift reduction), landscape impoundments (no decorative fountains), industrial boiler feed, soil compaction, mixing concrete, dust control (roads), cleaning roads, nonstructural firefighting.	Disinfected Secondary, 23 MPN/100 mL ^b
Food crops (edible portion above ground – no contact), restricted recreational impoundments.	Disinfected Secondary, 2.2 MPN/100 mL ^c
Food crops, parks and playgrounds, school yards, residential landscaping, golf courses (unrestricted), commercial/industrial cooling towers (mist devices), unrestricted recreational impoundments (with specific pathogen monitoring), flushing toilet and urinals, structural firefighting, decorative fountains, artificial snow making, commercial car washes, groundwater recharge (with additional treatment –see CDPH draft groundwater regulations).	Disinfected Tertiary ^d

Notes:

- a) Undisinfected secondary treatment: means oxidized wastewater (oxidized wastewater: wastewater in which the organic matter has been stabilized, is non-putrescible, and contains dissolved oxygen).
- b) Disinfected secondary 23 MPN per 100 mL recycled water: oxidized and disinfected so that the median concentration of total coliform bacteria does not exceed a most probable number of 23 MPN per 100 mL, and the MPN does not exceed 240/100 mL in more than one sample in any 30-day period.
- c) Disinfected secondary 2.2 MPN per 100 mL recycled water: oxidized and disinfected so that the median concentration of total coliform bacteria does not exceed a most probable number of 2.2/100 mL, and the MPN does not exceed 2/100 mL in more than one sample in any 30-day period.
- d) Disinfected tertiary recycled water: a filtered and disinfected wastewater (see definition below) that meets a CT (product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 mg-min/L at all times, with a modal contact time of 90 minutes (min.) (based on peak dry weather design flow) or provides a 5-log removal/reduction of MS2 F-specific phage or poliovirus or similar virus.

Filtered wastewater: an oxidized, coagulated, clarified wastewater that has been passed through natural undisturbed soils of filter media, such as sand or diatomaceous earth, so that the turbidity, as determined by an approved laboratory method, does not exceed 5 turbidity units more than 5 percent of the time during any 24-hour period, an average of 2 NTU during a 24-hour period, and does not exceed a 10 NTU at any time; in addition, the filter may not exceed 5 gallons per min. per square foot (traveling bridge automatic backwash filters cannot exceed 2 gallons per min.).

Source: Summary adapted from the State of California, 2000.