

64658 New Treatment Plants

(a)

Suppliers that propose to construct new filtration and disinfection treatment facilities or to modify or make additions to existing treatment facilities which require permit approval from the State Board pursuant to Health and Safety Code sections 116525 through 116550 shall submit an engineering report to the State Board describing how the proposed new treatment facilities will be designed to comply with the treatment, design, performance and reliability provisions required pursuant to this chapter. Modifications requiring permit approval include those that have a significant effect on plant performance, change the plant design rating or capacity, or change a major treatment process.

(b)

All new filtration and disinfection facilities shall be designed and constructed to comply with the following criteria: (1) Achieve an average daily effluent turbidity goal of 0.2 NTU when using conventional, direct, and diatomaceous earth filtration plants. (2) Be free of structural and sanitary hazards. (3) Protect against contamination by backflow. (4) Meet the capacity and pressure requirements prescribed in 22 CCR sections 64554 and 64602. (5) Provide flow measuring and recording equipment. (6) Take into consideration the effects of events such as earthquakes, fires, floods, freezing, and sabotage that are reasonably foreseeable. (7) Provide reasonable access for inspection, maintenance, and

monitoring of all unit processes. (8) Provide for filter-to-waste for each filter unit or addition of coagulant chemicals to the water used for backwashing. (9) Provide backwash rates and surface or subsurface wash facilities using air, water or a combination thereof to clean the filter after use to its original condition. (10) Provide solids removal treatment for filter backwash water if it is recycled into the treatment process. Recycled backwash water shall be returned to the headworks of the treatment plant. (11) Provide for the future addition of pretreatment facilities in the design of direct filtration, slow sand, or diatomaceous earth filtration plants. (12) Provide disinfection equipment sized for the full range of flow conditions expected and capable of feeding accurately at all flow rates. (13) Provide for treatment plant operation without frequent shutdowns and startups or rapid changes in filtration rates.

(1)

Achieve an average daily effluent turbidity goal of 0.2 NTU when using conventional, direct, and diatomaceous earth filtration plants.

(2)

Be free of structural and sanitary hazards.

(3)

Protect against contamination by backflow.

(4)

Meet the capacity and pressure requirements prescribed in 22 CCR sections 64554 and 64602.

(5)

Provide flow measuring and recording equipment.

(6)

Take into consideration the effects of events such as earthquakes, fires, floods,

freezing, and sabotage that are reasonably foreseeable.

(7)

Provide reasonable access for inspection, maintenance, and monitoring of all unit processes.

(8)

Provide for filter-to-waste for each filter unit or addition of coagulant chemicals to the water used for backwashing.

(9)

Provide backwash rates and surface or subsurface wash facilities using air, water or a combination thereof to clean the filter after use to its original condition.

(10)

Provide solids removal treatment for filter backwash water if it is recycled into the treatment process. Recycled backwash water shall be returned to the headworks of the treatment plant.

(11)

Provide for the future addition of pretreatment facilities in the design of direct filtration, slow sand, or diatomaceous earth filtration plants.

(12)

Provide disinfection equipment sized for the full range of flow conditions expected and capable of feeding accurately at all flow rates.

(13)

Provide for treatment plant operation without frequent shutdowns and startups or rapid changes in filtration rates.

(c)

Whenever a coagulation process is used, the process selection shall be based on pilot plant or laboratory scale (jar test) or equivalent results that demonstrate

effectiveness of the coagulant chemicals over the full range of water quality conditions expected.