

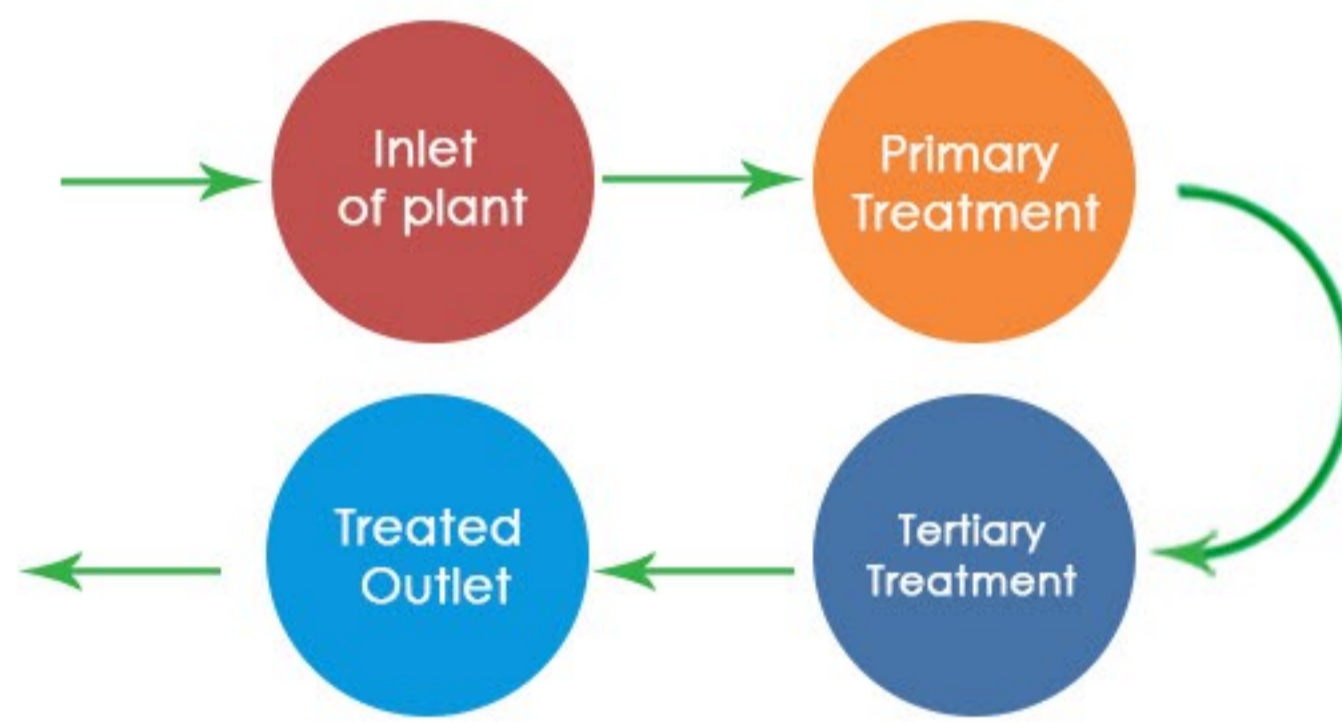


U. S. AQUATREAT CO.

WATER TREATMENT PLANTS



Process Flow Diagram:



Process Description :

Raw water withdrawn from either a surface water body or from underground wells consists of waste. As it is withdrawn from the source, surface water is usually screened through steel bars to prevent large objects such as logs or fish from entering the treatment facility. Finer screens are sometimes employed to remove leaves.

All surface waters have pathogenic microorganisms and must be disinfected prior to human consumption. To remove the suspended solids causing the water to be turbid is done by a sequence of treatment processes typically includes coagulation, flocculation, sedimentation, and filtration. Coagulation is done by adding chemical coagulants, usually aluminium or iron salts, to neutralize the negative charge on the surfaces of the particles (suspended solids) present in the water, thereby eliminating the repulsive forces between the particles and enabling them to aggregate. Coagulants are usually dispersed in the water by rapid mixing.

When the raw water is low in turbidity, coagulated or flocculated water may be taken directly to the filters, bypassing sedimentation referred to as direct filtration. Once the water has been filtered, it can be satisfactorily disinfected. Disinfection is the elimination of pathogenic microorganisms from the water.

Application:

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| 1) Textile Industry | 2) Food processing Industry | 3) Paper Industry |
| 4) Chemical Industry | 5) Solar cell Industry | 6) Pharmaceutical Industry |
| 7) Automobile Industry | 8) Rubber Industry | 9) Sugar Industry |
| 10) Steel Industry | 11) Power Plant | 12) Leather Industry |
| 13) Hotel Industry | 14) Fertilizers | 15) Dairy product Industry |
| 16) Builders and Developers | 17) Agricultural Industry | 18) Beverage Industry |