U. S. AQUATREAT CO.

SEWAGE TREATMENT PLANTS

Process Flow Diagram:

Inlet of plant → Primary Treatment → Secondary Treatment → Tertiary Treatment → Treated Outlet
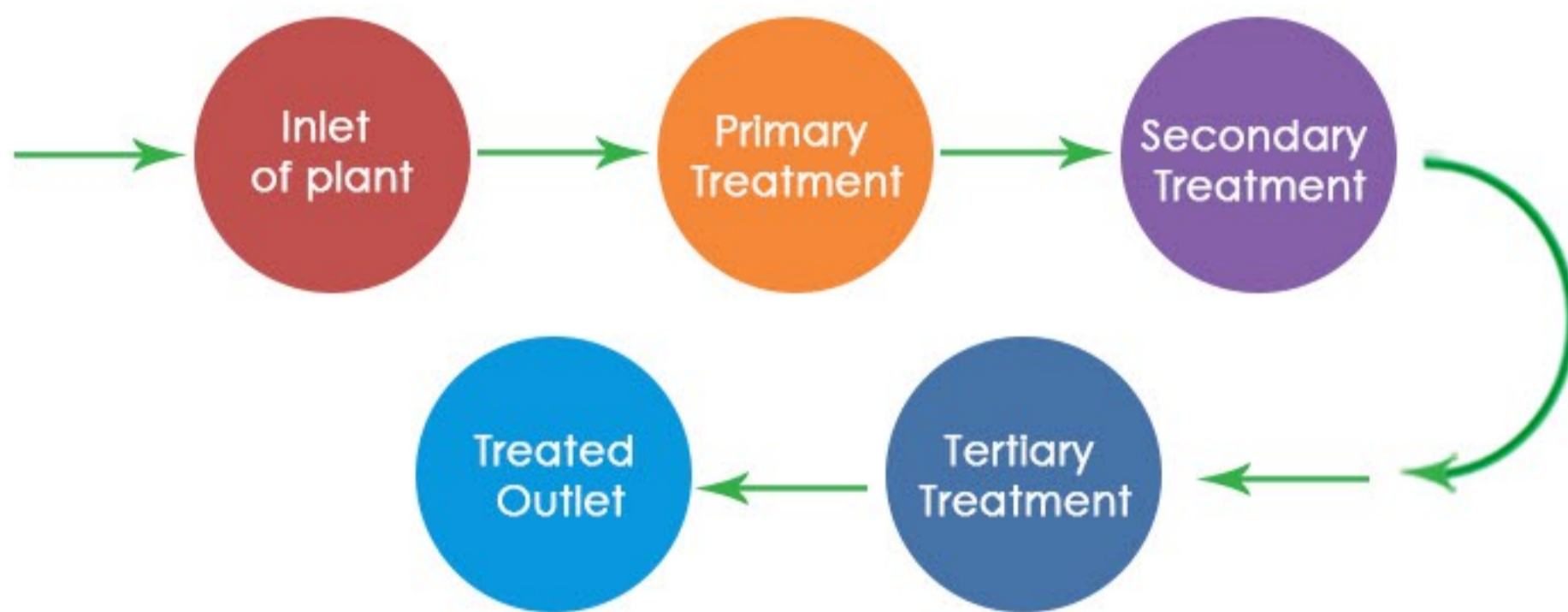
Process Description:-

Industrial Sewage treatment, or domestic wastewater treatment, is the process of removing contaminants from wastewater and household sewage. It includes physical, chemical, and biological processes to remove physical, chemical and biological contaminants.

Pre-treatment removes materials that can be easily collected from the raw wastewater before they damage or clog the pumps and skimmers of primary treatment clarifiers like trash, tree limbs, leaves, etc., The influent sewage water is strained to remove all large objects carried in the sewage stream. This is most commonly done with an automated mechanically raked bar screen, or manual screen.

Primary Treatment:

It removes gross, suspended and floating solids from sewage. It includes screening to trap solid objects and sedimentation by gravity to remove suspended solids. Primary treatment can reduce the BOD of the incoming wastewater and the total suspended solids to certain extent. Primary treatment is usually the first stage of sewage water treatment.

Secondary Treatment:

Secondary treatment is designed to degrade the biological content of the sewage which is derived from human waste, food waste, soaps and detergent. The plant treats the sewage using aerobic or anaerobic biological processes. In all these methods, the bacteria consume biodegradable soluble organic contaminants & reduce COD, BOD of sewage.

Tertiary Treatment:

Supernatant from the secondary Settling tank is collected by gravity into the Supernatant Tank. The Sodium Hypochlorite solution is dosed online for disinfection from where it will be fed to filtration for final polishing of water.

Application:

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