

ABSTRACT

INDEPENDENT WASTEWATER TREATMENT SYSTEM

EMPLOYING INTEGRATED REACTION AND SEDIMENTATION TANKS

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A wastewater treatment system utilizes chemical coagulating technology. A chemical dosing pump (4) pumps the liquid chemical in a chemical vessel (1) into the reaction tank (2). An agitator (5) stirs and coagulates
10 the liquid chemical and the delivered wastewater in the reaction tank (2). The wastewater is stirred properly to form flows and then directed into sedimentation tank (3) for the separation of sludge and treated wastewater. The treated wastewater is then discharged from the upper
15 part, and the sludge is discharged from the bottom of the sedimentation tank through the opening of the automatic valve (6). The different elements of the system may be assembled in one supporting board. The assembly may be transported to different operating site. In this system,
20 the reaction tank (2) and the sedimentation tank (3) are integrated together. A helical guiding element (3-2) in the form of a series of tilted panels surrounding the reaction tank (2) is disposed in a grain collecting chamber (3-1) of this system. The system is simple in
25 structure and easy to use. This system can be applied to treat various types of wastewater. The treated water quality can meet a predetermined standard.

[Figure 1]