

DESIGN A SELF FLUSHING FILTER BED INCORPORATING A CYCLONE/VORTEX CHAMBER FOR REMOVAL OF SUSPENDED PARTICLES

Prepared by: Tan William, Lim Chin Loong, Lee Jiunn Jye, Chan Chuan Pin

ABSTRACT

The project title is Design a Self Flushing Filter Bed Incorporating a Cyclone/Vortex Chamber for Removal of Suspended Particles. And it can be called Auto-Flush Hydrocyclone.

Hydrocyclone is use for the separation of solid contents from waste water gravity on its own can be used if a sufficiently fast settling speed is given, enabling, even under the influence of turbulences, a sedimentation of non-coagulating solid particles in reasonably sized sedimentation tanks. The centrifugal force which created in the cyclone effect with the addition of gravity forces will separate the solid particles from the fluids.