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Academic project:

Awareness of Maintenance in Sewerage Treatment System on Residential

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Chapter 1

1.1 Overview

Sewerage services are a process for collection, transmission, treatment of waste water and maintenance of sewerage systems and septic tanks. In Malaysia, sewerage services are divided to two types of sewerage treatment system:

- a) Directly to public sewage treatment plants
- b) Individual septic tank system.

In Malaysia, there have more than 6000 types of sewage treatment systems which are connected and 1.3 million individual septic tank.

Sewerage systems are built to collect and transport wastewater from residential and commercial area, which typically has a relatively high concentration of biodegradable organic and inorganic compound that can be easily utilized by microorganisms (especially heterotrophic bacteria) for cells growth and life maintenance. Many chemical, physical and biological transformations of wastewater may take place and cause degradation of organic matters in sewer network. In order word, “treatment process” of wastewater has already started before the treatment plant (*Abdul Talib, 2002*)

Sewerage systems are connected to public sewage treatment connecting sewer pipes in the house to a public sewage treatment plant located at the back of the premises. Premises with a sewerage system connected to the plant usually has a



“space inspection” which is covered with a rectangular metal cover. It is usually located outside the premises either at the front, back or side the premises.

Sewage is created by residences, institutions and commercial and industry establishments. Raw influent (sewage) includes household waste liquid from toilets, baths, showers, kitchens, sink and so forth that is disposed of via sewers. This system is very important for large building like housing. The objective of sewage treatment is to produce a disposable effluent without causing harm or trouble to the communities and prevent pollution.

The problems of treatment will always be a part of the community concerns. Sewerage treatment system can solve the problem but this system not fully perfect and have some upgrade. The construction cost is very high and many local authorities cannot support and maintain this system.

In treatment of sewage, highly specialized knowledge is needed for design, construction, maintenance and operation of this system. The art of sewage treatment is in a state of flux owing to the ever changing and increasing knowledge of the chemical and biological activities involved. The engineer in sewage treatment plants may be designed and operated so as to give required services with greatest satisfaction at the lower cost.