

iSTP: Portable Sewerage Treatment System For Rural Area

TECHNOLOGY DESCRIPTION

This technology is a performance-based solution that meets the required Standard A sewerage discharge into the environment.

TECHNOLOGY FEATURES

The size of this technology is 350 liters compared to 2000 liters current required size (refer to SPAN, 2009, p. 21). It is lighter in total weight when in full capacity and uses light weight media, which has a large area for aerobic activity. The technology utilizes both aerobic and anaerobic treatment methods to reduce the HRT cycle from 24 hours to maximum 7 hours. It can be suspended below the flooring system or separated into three main components on the structural framing system.

ADVANTAGES

- Easy to handle
- Easy to install
- Easy to maintain

INDUSTRY OVERVIEW

Prospect Industry: Water Sewerage Industries

In Malaysia, there are about 20,000 houses in Sabah and Sarawak that are situated in water villages whereas Borneo alone has 400,000 housing units in water villages. 20% of the bottom billion community living along water ways face diseases and degradation of water quality. Approximately, 1.2 million individuals in Malaysia have access to septic tanks but only 35% are accepting scheduled desludging services. The total population equivalent served via connected PE (public plants excluding CSTs) is 19.17 million people. On average, 22,610 cases of blockages were received in a year from the years 2001 – 2010, or 1,884 cases per month. About 97% of the cases were resolved within the level of service of within 48 hours. The number of clean rivers decreased from 334 in 2008 to 306 in 2009 whereas the number of polluted rivers increased from 48 in 2008 to 54 in 2009. Water quality trend shows depreciation in 2008-2009. This is partly contributed by the stoppage of scheduled desludging carried out by operator pursuant to the enforcement of SPAN/WSIA Laws effective from 1st January 2008.



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