

Abstract

**LAUNCHING OF A NEW ONSITE WASTEWATER TREATMENT
TECHNOLOGY**

by

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Through this paper, I aim to conduct a thorough evaluation of the market, regulatory environment and competition within the Onsite Wastewater Treatment Systems (OWTS) industry, with the intention to validate and determine the viability of launching a new onsite wastewater treatment technology known as the Water Effluent Treatment (WET) System.

Historically, US wastewater treatment has been performed by centralized wastewater treatment systems. However, these systems imply high infrastructure and maintenance costs, along with lacking the ability to adequately address storm surges and adapt to growing environmental issues and technological innovations. As a solution, the industry is rapidly shifting towards OWTS. The U.S. market represents the largest and highest growth market for OWTS worldwide. On-Site U.S. sewage facilities collect, treat and release an estimated 4 billion gallons of treated effluent per day.

Increased frequency of storm surges, a decaying infrastructure, population increase and poor water treatment practices have created a national environmental crisis in water quality. There is a growing concern and recognition of the impact of inadequate wastewater treatment on ground and surface water quality. Enhanced by the lack of

budgets to improve wastewater treatment infrastructure, municipalities are faced with a major challenge in acquiring onsite wastewater treatment technologies that are cost efficient, environmentally sound, and adaptable to technology changes.

Preferred OWTS technologies used in the market include centrifuge and variations of belt press filters. After a thorough evaluation, which includes technical performance, health and a cost competitive analysis of these systems versus the WET System, I conclude that the WET System is not only a viable option, but has significant competitive advantages which could make it a major player in the market.

Technical performance, environmental, health and cost advantages are further strengthened through the recommended plan to launch the system using Public Private Partnerships and financial lease models that accommodate the need for financing being faced by municipalities.

Prior to launching the system, recommendations are made to complete a formal business strategic plan, perform further testing of the system on municipal wastewater treatment, and enhance the automation features of the system

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