Waste water in uae

Literature, Russian Literature



Wastewater in UAE al affiliation option Wastewater reuse continues to draw increasing attention globally as an integral part of water resources management. The move stems from the scarcity of freshwater resources and the rapidly heightening environmental concerns. In the arid regions, treated wastewater is a significant environmental, social and economic resourced that requires appropriate management. The reuse of treated effluent discharged into the environment from municipal treatment plants is rapidly receiving attention as a reliable source of water (Madwar, & Tarazi, 2013). Over the recent decades, rapid economic development and an exponentially expanding population have compelled the government to rely on nonconventional water resources. Some of the sources include desalination (Madwar & Tarazi, 2013) or treated wastewater as optional sources of water for irrigation purposes (MoHUD, 2014). The treated wastewater is widely applied as marginal water suitable for the cultivating of forages, in landscaping, in fruit farms among other uses (Alhumoud, et al, 2010). In the UAE, the yearly production of treated wastewater is averagely 450 million cubic meters, approximately 8% of the nation's water capacity (Issa, et al, 2012). However, only approximately 60% percent of the treated wastewater is reused in the required areas. The low efficiency stems from the low capacity of the of the country's distributing system following water treatment (Hamad, et al, 2013: Al-katheeri, 2008). Further, the reuse of treated wastewater presents several forms of risks that extend to the environment, health economic and strategic (Radan, 2010). The disturbing fact, however, is the challenges encountered in measuring the risks. The proposal presents an assessment of different options for the reuse of the

treated wastewater and maps out the risks faced in the various phases. It further creates a basis for coming to terms with the continuation of the work plan that can establish financial functions that represent various risks. Through the synthesis of existing literature, the report seeks to establish the

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