

Dehydration of Residues from WTP for Application in Building Materials and Reuse of Water from the Waste Treatment: A Feasible Solution to Complete Treatment Systems

Authors : Marco Correa, Flavio Araujo, Paulo Scalize, Antonio Albuquerque

Abstract : The increasing reduction of the volumes of surface water sources which supply most municipalities, as well as the continued rise of demand for treated water, combined with the disposal of effluents from washing of decanters and filters of the water treatment plants, generates a continuous search for correct environmentally solutions to these problems. The effluents generated by the water treatment industry need to be suitably processed for return to the environment or re-use. This article shows an alternative for the dehydration of sludge from the water treatment plants (WTP) and eventual disposal of sludge drained. Using the simple design methodology, we present a case study for a drainage in tanks geotextile, full-scale, which involve five sludge drainage tanks from WTP of the Rio Verde City. Aiming to the reutilization the water drained from the sludge and enabling its reuse both at the beginning of the treatment process at the WTP and in less noble services as for watering the gardens of the local town hall. The sludge will be used to production of building materials.

Keywords : re-use, residue, sustainable, water treatment plants, sludge

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