

Waste from Drinking Water Treatment: The Feasibility for Application in Building Materials

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Abstract : The increasing reduction of the volumes of surface water sources supplying most municipalities, as well as the rising demand for treated water, combined with the disposal of effluents from washing of decanters and filters of 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 alternatives for sludge dehydration from the water treatment plants (WTP) and eventual disposal of sludge drained. Using the simple design methodology, it is presented a case study for drainage in tanks geotextile, full-scale, which involve five sledge drainage tanks from WTP of the city of Rio Verde. Aiming to the reutilization of drained water from the sledge 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 in the production of building materials.

Keywords : dehydration, effluent discharges, re-use, sludge, WTP sludge

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