



Application of reverse osmosis to the regeneration of wastewater in the Southeast of the Island of Gran Canaria (Spain)

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Received 21 January 2020; Accepted 11 August 2020

ABSTRACT

Water is a necessary resource for human activity and especially for agriculture. In regions with a lack of water resources to obtain the water needed for crops is a handicap which solution should be establishing adequate management and treatment of the available water. This work details the quality of the water obtained by applying reverse osmosis treatment to wastewater which comes from a secondary treatment by a plant located in the Southeast Zone on the Island of Gran Canaria is detailed. The Southeast of Gran Canaria is a region with a large area intended for agricultural use, so water needs are high. Another aspect to take into account is that the main crops in the area are salinity sensitive crops, so water quality is a fundamental parameter for the choice of using regenerated water in agriculture, so this work is valued if the quality of the water obtained meets the limit values established by Royal Decree 1620/2007 for the reuse of regenerated water and for what uses it is appropriate.

Keywords: Wastewater; Reuse; Water treatment; Reverse osmosis; Regenerated water

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