ISSN 0511-5728

The West Indian Journal of Engineering Vol.38, No.2, January 2016, pp.33-43

## Potential Consumers' Perception of Treated Wastewater Reuse in Trinidad

Everson J. Peters <sup>a, Ψ</sup>, and Lisa Goberdhan<sup>b</sup>

Department of Civil and Environmental Engineering, Faculty of Engineering, The University of the West Indies, St. Augustine Campus , Trinidad and Tobago, West Indies

<sup>a</sup>E-mail: Everson.Peters@sta.uwi.edu;

<sup>b</sup>E-mail: lisagoberdhan868@gmail.com

<sup>Ψ</sup> Corresponding Author

Abstract: In many countries around the world, the reuse of treated wastewater has been adopted as a means of supplementing dwindling water resources and promoting water conservation. During the dry season of 2010, the Water and Sewerage Authority of Trinidad and Tobago provided treated wastewater from its Beetham Plant for industrial and agricultural purposes. The public's acceptance of reusing treated wastewater is a key element in its successful implementation as a water source. A survey of targeted sections of the population was carried out using unstructured interviews and questionnaires. It was found that the idea of non-potable use of treated wastewater for such purposes as firefighting and watering of public lawns was generally acceptable to the public. However, there was more apprehension about direct uses, particularly those involving human contact. The current perception is significantly influenced by the public's mistrust of the local water authorities to deliver safe and quality water; a general lack of knowledge of the treatment process; and perceived health risks associated with using treated wastewater. The ability to widely use treated wastewater in Trinidad in the future would depend on the relevant authorities mounting appropriate public awareness and education programmes.

Keywords: Wastewater reuse, public perception, Trinidad