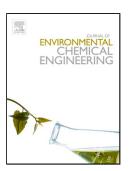
### Accepted Manuscript

Title: A study of the bacteriological quality of roof-harvested rainwater and an evaluation of SODIS as a suitable treatment technology in rural Sub-Saharan Africa



Author: R. Nalwanga C.K. Muyanja K.G. McGuigan B. Quilty

PII: DOI: Reference: S2213-3437(16)30449-3 http://dx.doi.org/doi:10.1016/j.jece.2016.12.008 JECE 1367

To appear in:

Received date:	22-9-2016
Revised date:	20-11-2016
Accepted date:	5-12-2016

Please cite this article as: R.Nalwanga, C.K.Muyanja, K.G.McGuigan, B.Quilty, A study of the bacteriological quality of roof-harvested rainwater and an evaluation of SODIS as a suitable treatment technology in rural Sub-Saharan Africa, Journal of Environmental Chemical Engineering http://dx.doi.org/10.1016/j.jece.2016.12.008

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## ACCEPTED MANUSCRIPT

A study of the bacteriological quality of roof-harvested rainwater and an evaluation of SODIS as a suitable treatment technology in rural Sub-Saharan Africa

SHORT TITLE - The use of SODIS to treat roof- harvested rainwater

R. Nalwanga<sup>1,4</sup>, C. K. Muyanja<sup>3</sup>, K.G. McGuigan<sup>1\*</sup>, B. Quilty<sup>2</sup>

<sup>1</sup>Department of Physiology & Medical Physics, The Royal College of Surgeons in Ireland, Dublin, Ireland <sup>2</sup>School of Biotechnology, Dublin City University, Dublin, Ireland <sup>3</sup>School of Food Technology, Nutrition and Bioengineering, Makerere University, Kampala, Uganda <sup>4</sup>Department of Biological Sciences, Faculty of Science, Kyambogo University, Kampala, Uganda

#### \*Corresponding Author

\*Phone: +353(01)4022207; email: kmcguigan@rcsi.ie

#### **Graphical Abstract**

Two litre bottles of harvested rainwater set out for solar disinfection in a primary school in Southern Uganda.



#### Abstract

Harvested rainwater (HRW) is of great socio-economic importance particularly in areas where water sources are scarce or polluted. This case study was carried out in a rural area of Southern Uganda where the community has limited access to safe drinking water. The aims of the project were to Download English Version:

# https://daneshyari.com/en/article/6663936

Download Persian Version:

https://daneshyari.com/article/6663936

Daneshyari.com