



EVALUATION OF WATER QUALITY STANDARDS AND SANITARY CONDITIONS IN MONIYA ABATTOIR, IBADAN, NIGERIA

P.A. ADEOYE^{1*}, S.M. DAUDA¹, J.J. MUSA², S.E. ADEBAYO² and M.A. SADEEQ²

¹Department of Biological and Agricultural Engineering, University Putra, UPM Serdang, 43400 Daarul Ehsan Selangor, Malaysia.

²Department of Agricultural and Bioresources Engineering, Federal University of Technology, P.M.B. 65, Minna, Niger State, Nigeria.

*Corresponding Author: Phone: +60166423019; E-mail: pheterhardey@yahoo.com

Received: 14th November 2011; Revised: 13st January; Accepted: 13th January 2012

Abstract: This work examined the sanitary conditions and water quality standards in Moniya abattoir in Akinyele Local Government area of Oyo State, Nigeria. Samples were collected from the hand-dug well, bore hole and from strategic locations inside the stream that serves as discharge point for all the slurry from the abattoir. The samples were analysed for physico-chemical and biological parameters. The results showed that parameter like temperature 36.4°C was having value outside the WHO limits as a result of microbiological activities since the samples contain high level of BOD. Higher value of iron, 3.99mgL⁻¹ is suspected to come from blood washed into the water and leachates to underground water. There is also higher concentration of manganese, 3.73mgL⁻¹ but this was traced to the properties of aquifer on which the abattoir is located. From the bacteria assessment, the samples were polluted with pathogenic organisms of faecal origin.

Keywords: Assessment, sanitary conditions, quality standards, abattoir

INTRODUCTION

Most abattoirs aim at optimising the recovery of edible portions from the meat processing for human consumption but significant quantities of secondary wastes materials not suitable for human consumption are however generated. [1] Since water is often used to wash excessive waste solids to drain. The method used in handling, treatment and disposal of abattoir waste should be put into consideration, as waste dumped in the open environment; storm drainage, channels, creeks lagoons and other impoundment points could cause serious environmental pollutions and hazards which in most cases adversely affects the air, water and probably the soil conditions and it also constitutes public nuisance[2]