

Measurement of Radon Activity Concentration in Underground Water of Bureti Sub-County of Kericho County Kenya

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Abstract

The activity concentration of radon in underground water of Bureti sub-county was measured using liquid scintillating counter device. The average radon activity concentration in all the water samples was 12.41 Bq⁻¹. The maximum and minimum activity concentrations of radon were 22.5 and 4.57 Bq⁻¹, respectively. In total, 53% of the total samples analysed had radon concentration levels above the US Environmental Protection Agency-recommended limit of 11.1 Bq⁻¹. The annual dose received by an individual as a result of waterborne radon was determined according to the United Nations Scientific Committee on the Effect of Atomic Radiation reports and was found to be 33.23 μSv⁻¹. All the samples recorded a value

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