

Survey on Concentration of Nitrate in the Network Distribution Drinking Water: Jask city, Iran

Monireh Majlessi¹ , Yadolah Fakhri² , Maryam Mirzaei³

Abstract:

Nitrate is a chemical contaminants that can enter the surface and groundwater resources of drinking water by various ways. The presence of nitrate in drinking water supplies could endanger human health. In this descriptive-cross-sectional study, the concentration of nitrate in 48 water samples which were collected from 8 regions of Jask city, were measured by spectrophotometer device of model DR2800 and by the method of 8153 of Ferrous sulfate (June to March 2014). The mean and range concentration of nitrate in groundwater is 13.2 ± 6.4 and ND-23 mg/l, respectively. The highest and lowest concentration of nitrate is related to the Loran and Yekebeni region, respectively. The mean concentration of nitrate in distribution network Jask city is significantly lower than the WHO and EPA standard limits.

Keywords: Concentration of Nitrate, Distribution Network, Drinking water, Jask city