Interactive comment on "Assessment of Uranium concentration in groundwater and its1human health impactin a part of Northern Tamil Nadu, India" *by* S. Parimalarenganayaki et al.

Anonymous Referee #3

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The authors in this paper monitored the levels of U in drinking water of area in Vellore, a city in the Northern part of the Tamilnadu, India. Some parameters such as EC, pH, DO, alkalinity, and hardness were measured also for 53 locations. Unfortunately, this paper could not publish in Drink. Water Eng. Sci. journal in the current quality due to the following comments: (1) In the Abstract, only U was mentioned and the rest of the monitored parameters are ignored. The obtained results are not existed in the Abstract such as U concentrations. (2) In the introduction: # Line 33, the U concentrations should be taken into consideration in surface water, is there is any reference exclude that? # Paragraph (Lines 58-62), the groundwater (GW) is used in this area without any treatment?. Authors did not mentioned the situation of water treatment facilities. # Line

61, the aim of work is only to find the U concentration in the GW?, What about the rest of parameters. Authors did not explain why the measured parameters are sufficient for governing the quality of drinking water. # There is a lack of novelty and the aim of this study is not linked to the international community. (3) In Study area, References for the data of humidity and soil types are missed. (4) In the Methodology: # What is the standard methods reference used for the investigation of alkalinity, hardness, and U?. There is no validation for the method of U detection? # The data for samples collections and the treatment before analysis is missed. # The method for measuring TDS is missed, however TDS results are exist in the Results and Discussion. (5) In the Results and Discussion: # Table 1 and Table 2 can be merged in one table. # Line 93 reference is needed for this sentence "hard rocks resulted in high TDS and EC values" # The importance of Fig. 2 "the relationship between percentage U and its concentration" was not clarified. # What is SEPA in Line 92 and AERB in Line 103. # There is no explanation for the presence of high and low U concentrations in the same area. # Line 110, there is no correlation between U and TDS with $R^2 = 0.2$. # Line 114, what is the other factors that explain the presence of U?. # There is no full picture for the area under study to describe the obtained results such as human activities, depth of wells, etc. # The equation is for determination the value of C and not for the determination of NOAEL and LOAEL. This equation should be clarified. (6) Authors did not recommend solutions for the problem of high U concentration in some samples and conclusion is limited without comparison with literature.