

Review Form 1.7

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_112183
Title of the Manuscript:	PHYSICAL AND CHEMICAL SCRUTINY OF OBIZI RIVER IN AWKA SOUTH LOCAL GOVERNMENT AREA OF ANAMBRA STATE, NIGERIA FOR DOMESTIC PURPOSES.
Type of the Article	Original Research

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Compulsory REVISION comments</p> <ol style="list-style-type: none"> 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>1. The provided text discusses the physical and chemical scrutiny of Obizi River in Awka South Local Government Area of Anambra State, Nigeria. The study aims to analyze the pollution level of the river and determine its suitability for domestic purposes, such as drinking, cooking, fishing, and recreational activities. Various parameters, including nitrate, nitrite, magnesium, zinc, total dissolved solids (TDS), hardness, sulphate, phosphate, alkalinity, acidity, sodium, biochemical oxygen demand (BOD), chemical oxygen demand (COD), total suspended solids (TSS), total solids (TS), oxygen demand (OD), and potassium, were analyzed to assess the water quality.</p> <p>The methods employed for analysis include spectrophotometric methods, turbidimetric analysis, titration, multi-meter measurements, flame photometric method, and various other techniques specific to each parameter. The data obtained from the analysis were subjected to ANOVA (analysis of variance) to determine if the results were statistically significant. The results of the analysis showed that most of the physicochemical parameters were within the World Health Organization (WHO) water quality standards for domestic drinking water and other purposes. However, nitrite and oxygen demand were found to be above the WHO limits, indicating that the water quality is not suitable for drinking without treatment. The ANOVA results concluded that there is no significant difference between the physicochemical characteristics of the water samples. The study recommends further research to determine the microbial load, raising awareness about the dangers of consuming untreated water, and urgent government intervention to control contaminant influx into water bodies and improve water treatment processes.</p> <p>In conclusion, while some parameters met WHO standards, the presence of contaminants like nitrite and high oxygen demand suggests that the water is unfit for drinking without treatment. The study highlights the importance of regular water quality monitoring and intervention measures to ensure the provision of safe and clean water for domestic use. I think the manuscript is well written and very important for the scientific community. I recommend it for publication in the journal</p> <p>2. The title of the article is appropriate</p> <p>3. The abstract of the article is comprehensive</p> <p>4. yes</p> <p>5. I think the manuscript is scientifically correct</p> <p>7. I suggest that the authors of the article add or change the literature to more recent literature. Since there are 8 pieces of literature in the reference point above 2010, and the rest are old.</p>	
<p>Minor REVISION comments</p> <ol style="list-style-type: none"> 1. Is language/English quality of the article suitable for scholarly communications? 		

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Optional/General comments		
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PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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