

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_123965
Title of the Manuscript:	Assessment of Groundwater Quality Using Water Quality Indices in Illegal Mining Communities: A Case Study of the Atwima-Kwanwoma District and Obuasi East Metropolis, Ghana
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>The manuscript could offer a significant contribution to the field of water quality research, effectively addressing the detrimental effects of illegal mining on groundwater resources. To enhance its impact, further statistical analyses, detailed health implications, tailored policy recommendations, and a transparent acknowledgement of limitations and future research directions are recommended.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title is clear and informative. It accurately conveys the main focus of the study, which is to evaluate groundwater quality in areas affected by illegal mining using water quality indices.</p>	
<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>The abstract is lacking comprehensiveness. It needs a review, and it is advised to</p> <ol style="list-style-type: none"> 1. Include specific quantitative data on the highest or lowest concentrations of contaminants to highlight the severity of the contamination. 2. Compare the measured concentrations with relevant water quality standards to provide a more concrete assessment of the pollution levels. 3. Change the tense of "provide" in "This study demonstrates that integrated use of NPI and CCME-WQI provide a comprehensive assessment of groundwater quality..." to "provides." 4. Consider using "severe contamination." instead of "alarming contamination levels" for more concise word choices to enhance clarity and readability. 5. Briefly emphasize the unique contribution of the study. 	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The overall structure of the manuscript appears appropriate. The sections are well-organized, and the flow of the content is logical.</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>The manuscript could benefit from further enhancement. The lack of comprehensive statistical analysis and a more in-depth discussion of the results' implications limit its potential contribution to the field of water quality research. To further enhance the manuscript, it is recommended to incorporate rigorous statistical analyses, explain the implications of the findings, and provide actionable recommendations for policy decisions and environmental management practices. These improvements would strengthen the manuscript's overall impact and relevance to the scientific community.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :</p>	<ol style="list-style-type: none"> 1. Ensure that the references are formatted consistently throughout the manuscript, following a specific style guide. 2. The references in the manuscript appear to be sufficient and recent, covering relevant sources from 2001 to 2021. It is however important to include references that encompass a good mix of scientific publications, government reports, and technical manuals. 3. The study could also make reference to Duncan, A.E. (2020). The Dangerous Couple: Illegal Mining and Water Pollution—A Case Study in Fena River in the Ashanti Region of Ghana. Journal of Chemistry. citing an up-to-date perspective on the issue in Ghana. 4. Consider including reports from the Ghanaian government or relevant agencies that discuss the impact of illegal mining on water resources and public health in the Ashanti Region. 	

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Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The manuscript could benefit from a more refined scholarly tone, accompanied by clearer definitions of technical terms.	
Optional/General comments	The manuscript requires a major review based on the identified deficiencies, such as lack of statistical analysis, correlation with existing data, discussion of implications, and long-term effects, which significantly limit its depth and impact. These areas are crucial for a comprehensive and rigorous assessment of groundwater quality.	

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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