

### Review Form 3

Journal Name:	<a href="#">International Journal of Environment and Climate Change</a>
Manuscript Number:	Ms_IJECC_128349
Title of the Manuscript:	COMPARATIVE ASSESSEMENT OF AQUIFER VULNERABILITY NEAR MAJOR DUMPSITES AROUND KARU-ABUJA AND KEFFI IN NASARAWA STATE, NIGERIA USING INTEGRATED GEOPHYSICAL METHODS
Type of the Article	Original Research Article

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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#### PART 1: 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>
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.</b>	The comparative study integrating geophysical techniques is a pilot study for subsurface characterization and evaluating aquifer vulnerability. The study adopted integrated geophysical techniques to delineate leachate infiltration zones and leachate plume. The study evaluated subsurface parameters such as Aquifer thicknesses $h$ (m), Electrical conductivity $\sigma$ ( $\Omega.m^{-1}$ ), Longitudinal Conductance $S$ (mhos), Transverse Resistance $T_R$ ( $\Omega.m^{-2}$ ), Hydraulic conductivity $K$ (m/day), Transmissivity $T$ ( $m^2/day$ ), Quantity of water ( $Q$ ) and porosity $\phi$ (%) to delineate Aquifer Protective Capacity (APC).	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	The topics is suitable for the manuscripts as it depicts the aims of the study.	
<b>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.</b>	The necessary corrections have been highlighted in the abstract section of the manuscript	
<b>Is the manuscript scientifically, correct? Please write here.</b>	<u>Introduction</u> The aim of the study is not clear. The aim of this study should be well spell out in the introduction section. <u>Material and Methods</u> State the basic principles behind the methodologies adopted in this study and back it up with basic equations in a concise and comprehensive way. <u>Results</u> Merge the results of the methodologies adopted for this study under the section "RESULTS". <u>Discussion</u> The discussion sections should be concise and comprehensive, merge the subsections 3.31 – 3.3.3 under the discussion as one. There is need for major re-structuring of the manuscript for instance all the results should be arranged under the section "RESULT" and all the discussion should be arranged under the section "DISCUSSION." <u>SUMMARY AND CONCLUSION</u> Make the summary and discussion concise and comprehensive and it should reflect the major findings of the study. The authors should implement the necessary corrections indicated in the manuscript.	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	Inconsistency in the reference style, some references in the body of the manuscript was not found in the reference list. Check the manuscript for correction.	
<b>Is the language/English quality of the article suitable for scholarly communications?</b>	The English Language used as the medium of expression in this manuscript is of good quality and suitable for publication.	
<b>Optional/General</b> comments	<ul style="list-style-type: none"> <li>What is the proximity of the borehole logs to the study areas? Please specify their distances from the two study areas to verify the reliability of the correlation.</li> <li>What could be responsible for the low resistivity and low SP responses at the control center.</li> <li>Make the Legend of Figure 2 legible</li> </ul>	

#### PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

#### Reviewer Details:

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