



SDI Review Form 1.6

Journal Name:	<a href="#">Journal of Geography, Environment and Earth Science International</a>
Manuscript Number:	Ms_JGEESI_44666
Title of the Manuscript:	Heavy Metal Concentration and Physiochemical Parameters in Soil and Plants near Unengineered Dumpsites in Port Harcourt, Nigeria
Type of the Article	

**General guideline for Peer Review process:**

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 guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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)
<b>Compulsory</b> REVISION comments	<p>Line 11-15: Authors might have made a hasty and unguided assertion about the transfer of metals from soil to plants.</p> <ol style="list-style-type: none"> <li>1. There was no control to prove that the movement was as a result of the peculiarity of the dumpsite rather than usual occurrence</li> <li>2. No statistical analysis to show the inter-relationship or inter-dependency of metals in soils and plants</li> <li>3. Sampling location is close to a dumpsites and the plants might have absorbed metals from air, fly ash, etc and not necessarily from soil as authors thought.</li> <li>4. Authors are misconstruing "forms of metal" with "variety of metals". Only in speciation studies are different forms in which metals exist are decided. You can't talk about forms when you have not done speciation study!</li> </ol> <p>Line 15: Again, chloride ion, being hardly absorbed by plants! Is there a backup for this or was it because its concentration was negligible in the plants? Plants take up as much Chloride as possible, and because chloride ion is highly soluble in soil water, it makes it easier for them.</p> <p>In a nutshell, it's more appropriate to report your observations without giving controversial reasons without references.</p> <p><b>Line 83:</b> the method is less than adequate. Sampling procedure, sampling tools, preservation, sample preparation and analysis were all lacking. No quality control! Authors did not state how many samples collected, how the samples were collected and composited, etc.</p> <p>Line 202: Authors mentioned edible parts of the plant; which part of Pawpaw is the edible part please? How did you prepare the edible part for analysis.</p> <p>Line 115-119: kindly verify those equations a-d again. Even if Hankanson had used it, it isn't correct. Eqn b inferred that when CF is greater or equal to 1 or greater than 3, it's moderate CF. this doesn't make any sense. Eqn c also says CF less or equal to 3 but less than 6, it's considerable. This also doesn't make sense. I believe the eqns should be:</p> <ol style="list-style-type: none"> <li>a) <math>CF &lt; 1</math> = low CF,</li> <li>b) <math>1 \leq CF &lt; 3</math> = moderate CF,</li> <li>c) <math>3 \leq CF &lt; 6</math> = considerable CF and</li> <li>d) <math>CF &gt; 6</math> = very high CF.</li> </ol> <p>Kindly make necessary correction.</p> <p><b>Line 179:</b> Authors shouldn't just start result and discussion with Tables. There must be short description of the contents of the Table.</p> <p>The Figures and Tables captions are not appropriate. For instance, use Figure 3 instead of Figure 3.1. The caption of Table 3.4 is inappropriate, kindly review. What do the authors mean by field data? Where they measured in situ?</p> <p>The tables have no units for the parameters</p> <p>Authors should have compared the average concentrations of the heavy metals with set limits before then employing different health and pollution indices.</p>	<p><b>Corrections done</b></p>



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<b>Minor</b> REVISION comments	<p>Topic: <b>Physiochemical</b> has to do with physiological chemistry; I guess authors meant physicochemical. Kindly change.</p> <p>Line 18: what are S1, BAF and S2? Before using acronyms, ensure they have been explained initially.</p> <p>Line 31: The citation is not appropriate. The authors started with [13] instead of [1]. It should be serial starting from [1]. No matter the alphabet the reference starts with, the focus is not on it, since the number method is being used. For instance, Christensen et al., [13] should be made [1]</p> <p>Also, bracket [ ] should be used instead of parenthesis ( ).</p> <p>Line 60: Are there such things as anthropogenic chemicals? Am certain the authors meant those chemicals that are introduced by man and its activities, but that doesn't make them anthropogenic chemicals; they're just chemicals please.</p> <p>Introduction ended without the authors stating their aims and objectives for the study.</p> <p>Line 101: The listed are just assessment tools and not analytical procedures</p>	
<b>Optional/General</b> comments	A complete overhaul of the work is suggested.	

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <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>	