



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2013_BJAST_7051
Title of the Manuscript:	Multivariate statistical analysis and distributional characteristics of heavy metal contamination of soil around Okaba coal mines
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)
Compulsory REVISION comments	This manuscript addresses a timely issue about the impact heavy metal contamination of soil around Okaba coal mines, Nigeria. The paper is based on sampling at 10 different locations, chemical analysis of macro- and microelements, treatment of the data with a several mathematical methods and, finally impact assessments with various indices. To assess the degree of contamination arisen from coal mining is worthwhile and in general the work and the methodology used is well justified. Some of the main findings are interesting, such as the main impact of coal mining on soil Pb, Ni and Cu and the ranking of the studied sites by pollution intensity. However, in its present form the paper does not fulfils requirements for publication in an international journal and several sections of the paper can be improved. My main concern is about the lack of unities in Table 1; thus, I don't know if elemental composition (i.e. Na, K, Ca...) is expressed in % or mg.kg⁻¹ or g.kg⁻¹ Below I address minor comments.	Yes, thank you. Agree with the units and has been corrected.
Minor REVISION comments	Introduction.	

	In the study area subsection I (Study area) recommend to include a general map showing the location of the study area within Nigeria. Material and methods. - Please, indicate depth of soil sampling. - Please change lines 66 to 71 (that are under the subsection 2.1 “Soil Sample collection”) to the subsection 2.2 Analytical methods.	General map not necessary. Other observations have been corrected
<u>Optional/General</u> comments	As a general comment, in many parts of the paper the unfinished style and inadequate usage of English impedes efficient transmission of information. Therefore, before any resubmission, it is commendable to have the text thoroughly edited, preferentially by a native English speaker. To mention only two examples: - Page 1, line 19. Authors state: “..Pb, Ni and Cu were the most impacted heavy metals”. Are they meaning “...The heavy metals that most impacted the soil”?. - Page 4, line 62. It is stated that “samples were collected, located and recorded using GARMIN III Global Positioning System. In my opinion, indeed you can locate samples with a GPS, but you can’t collect samples with a GPS, you will need a spade, for example.	Agree and has been proof read. Agree and corrected