Review Form 3

Journal Name:	**Asian Journal of Environment & Ecology**
Manuscript Number:	**Ms_AJEE_129199**
Title of the Manuscript:	**Evaluation of Concentration of Polycyclic Aromatic Hydrocarbons in Otamiri River Owerri Southeast Nigeria**
Type of the Article	**Original article**

General guidelines for the 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 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** *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
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.	This manuscript provides a critical assessment of polycyclic aromatic hydrocarbons (PAHs) in the Otamiri River, highlighting significant contamination levels that exceed regulatory standards. It is important for scientific community because it addresses gaps in understanding PAH distribution in Nigerian aquatic systems, especially in regions with limited data. The findings underscore the urgent need for environmental monitoring, source identification, and effective remediation strategies to mitigate risks to human health and ecosystems.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title is descriptive and gives a clear indication of the study's focus. However, it could be slightly refined to make it more concise and engaging while maintaining clarity. Here is a possible alternative: "Assessment of Polycyclic aromatic hydrocarbon contamination in Otamiri River, Southeast Nigeria."	
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.	The abstract provides a decent overview of the study's objectives, methodology, findings, and implications, but it could be more comprehensive and balanced. Below are some suggestions for improvement: Additions: a) Objective/Significance: Explicitly state the purpose of the study and why it is significant to the scientific community or local context. b) Specific results: Include more detail on the types of PAHs detected, their concentrations, and how they compare to regulatory limits (e.g., FMEnv standards). c) Conclusions/Implications: Briefly summarize the key implications of the findings for public health, environmental safety, and potential remediation actions. Deletions: a) Redundant details: Omit overly technical or procedural information that is not crucial for a general understanding of the study (e.g., details on GC-ECD settings). b) Over-specific coordinates: If not essential, omit the sampling point coordinates to keep the abstract concise.	

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Is the manuscript scientifically, correct? Please write here.	Based on the provided content, the manuscript appears scientifically sound in its general approach and methodology. However, a few aspects should be scrutinized to ensure scientific rigor. Areas to Verify or Improve: i. Consistency of Results: Ensure that all data (e.g., PAH concentrations) are consistently reported with appropriate units and significant figures. ii. Comparative Standards: The manuscript mentions FMEnv standards but could benefit from additional comparison with international benchmarks (e.g., WHO, EPA). iii. Statistical Analysis: If not already included, statistical tests should confirm the significance of the results, particularly differences in PAH concentrations across locations. iv. Source Identification: While contamination is documented, the study would be strengthened by a discussion on potential PAH sources, such as industrial activities or urban runoff. v. Health and Environmental Impact: Ensure that the link between PAH levels and their potential impacts on human health and ecosystems is supported by relevant references and data.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are adequate but could benefit from a few recent and regionally focused additions to strengthen the manuscript's context and findings. Additional references are: 1. Nwokanma, V. C., Kpee, F., & Edori, O. S. (2021). Polycyclic aromatic hydrocarbons levels in Nta-Wogba stream water in Port Harcourt, Rivers State, Nigeria. Direct Research Journal of Chemistry and Material Science, 8, 1-7. 2. Ekpete, O. A. Edori, O. S., & Okidhika, C. U. (2024). Concentration of Polycyclic aromatic hydrocarbons in water from Hand-dug Wells in some communities in Ekpeyeland, Rivers State, Nigeria. Asian Journal of Chemical Sciences, 14(1), 80-95. 3. Asagbra, M. C., Adebayo, A. S., Anumudu, C. I., & Ugwumba, O. A. (2015). Polycyclic aromatic hydrocarbons in water River at Ubeji, Niger Delta, Nigeria. African Journal of Aquatic Science, 40(2), 193-199.	
Is the language/English quality of the article suitable for scholarly communications?	The language quality of the article is generally adequate for scholarly communication, but it could benefit from professional proofreading or editing to polish the language and ensure it meets the standards of scholarly communication. An editor with expertise in environmental science would be particularly useful to refine technical expressions.	
Optional/General comments	• Conduct a thorough review for grammatical errors, typos, and inconsistencies in formatting. • Refine the abstract to make it concise yet informative, summarizing objectives, methods, results, and implications effectively. • Mention any quality control or validation steps taken during sample analysis to ensure data accuracy and reliability. • Ensure consistent use of units and scientific terms throughout the manuscript. • Consider adding maps or charts to visually represent PAH concentration trends across sampling sites. • Strengthen the discussion by linking findings to global studies or comparable cases, providing a more comprehensive context.	

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?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

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