

### Review Form 3

Journal Name:	<a href="#">Asian Journal of Environment &amp; Ecology</a>
Manuscript Number:	Ms_AJEE_129363
Title of the Manuscript:	<b>Mercury Metal in Sediment and Water Column of Taluduyunu River and its Control Strategy</b>
Type of the 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:

<https://r1.reviewerhub.org/general-editorial-policy/>

#### **Important Policies Regarding Peer Review**

Peer review Comments Approval Policy: <https://r1.reviewerhub.org/peer-review-comments-approval-policy/>

Benefits for Reviewers: <https://r1.reviewerhub.org/benefits-for-reviewers>

#### **PART 1: Comments**

	<b>Reviewer's comment</b>	<b>Author's Feedback</b> <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 study investigates mercury levels in the sediment and water column of the Taluduyunu River, likely due to unlicensed gold mining activities in the Pohuwato Regency, Gorontalo Province. The authors highlight the dangers of mercury as a heavy metal, its accumulation in the food chain, and its toxic effects on humans and aquatic ecosystems. They emphasize the lack of scientific information regarding mercury content in the river despite the presence of gold mining, which often discharges waste without proper treatment. The study aims to address this gap and analyze the extent of mercury contamination in the river's water and sediment.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	Title lacks specificity and doesn't highlight the particular focus of the study on the Taluduyunu River. The title might include the location and a hint at the main findings. Title may be:  "Assessment of Mercury Contamination in the Taluduyunu River Due to Artisanal Gold Mining" or  "Elevated Mercury Levels in Sediment and Water of the Taluduyunu River, Pohuwato Regency."	
<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 abstract clearly states the problem of mercury pollution from gold mining activities and its impact on the Taluduyunu River. It mentions the sampling locations and analytical methods used. However, it could be improved by briefly stating the key findings and their implications. A quantitative summary of the mercury levels found would strengthen the abstract.	
<b>Is the manuscript scientifically, correct? Please write here.</b>	Partly	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	References are sufficient.	

**Review Form 3**

<p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>English quality is up to the mark but need to improve in many places.</p>	
<p><b>Optional/General</b> comments</p>	<ul style="list-style-type: none"> <li>• <b>Limited Scope:</b> The study focuses on a specific river in a particular region. The findings may not be generalizable to other areas affected by gold mining.</li> <li>• <b>Lack of Temporal Analysis:</b> Seasonal changes or variations over time could influence the results. A longitudinal study would provide a more comprehensive understanding.</li> <li>• <b>Limited Information on Gold Mining Practices:</b> While the study mentions unlicensed gold mining, it would be beneficial to have more details about the specific practices used, the amount of mercury employed, and the waste disposal methods. This information would help to better understand the sources and pathways of mercury contamination.</li> <li>• <b>Lack of Ecological Assessment:</b> The study focuses on mercury levels in water and sediment. Assessing the impact of mercury on aquatic organisms (e.g., fish, invertebrates) would provide a more complete picture of the ecological consequences of contamination.</li> <li>• <b>Limited Discussion of Mitigation Strategies:</b> While the study highlights the problem of mercury pollution, it would be helpful to discuss potential mitigation strategies or remediation efforts. This could include recommendations for improving mining practices, treating contaminated water, or restoring affected ecosystems.</li> <li>• <b>Missing Information on Speciation:</b> The chemical form of mercury (e.g., methylmercury) influences its toxicity and bioaccumulation. Analysing the different forms of mercury present in the river would provide valuable insights.</li> </ul>	

**PART 2:**

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

**Reviewer Details:**

<p><b>Name:</b></p>	<p>Tejas P Joshi</p>
<p><b>Department, University &amp; Country</b></p>	<p>Maharaja Krishnakumarsinhji Bhavnagar University, India</p>