

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_123136
Title of the Manuscript:	Design of Integrated System for the Comprehensive Utilization of Yellow River Sediment-- Sealing Machine Structure and Control System Design
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION 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>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	For the scientific community, this manuscript may be important mainly as a scientific-technical report on the assessment and justification of the effectiveness of its proposed comprehensive solution to the problem of disposal of the Yellow River sediment. If the level of scientific-technical report suits the authors of this manuscript, then it can be published after minor revision, which I will write about below.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title of the article is appropriate and fully consistent with the material presented in this manuscript.	
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 of the article is exhaustive, it describes well the results obtained and their practical value.	
Are subsections and structure of the manuscript appropriate?	The subsections and structure of the manuscript correspond to the level of the scientific-technical report. Although it can still be slightly enriched by adding after the introduction the section: "The main goal and the methodology used to achieve it."	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	The technical work presented in the manuscript is very competent, but its scientific value is poorly substantiated, it is not highlighted, not emphasized in the right way. My recommendation to the authors: - to scientifically justify the need for this work by arguing this with the expected environmental and economic performance indicators. This is of course desirable to do on the example of a brief comparative analysis in relation to existing technologies or machines for the disposal of sediments of the Yellow River.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	<p>The literature used should be enriched.</p> <p>For my part, I can recommend the use of such sources, which can serve as supporting literature for the scientific justification of the feasibility and effectiveness of your approach and the management system provided for its implementation.</p> <p>For example, such sources can be:</p> <ul style="list-style-type: none"> - Wang, Z., Zhang, S., Mao, H., Shen, J., Guo, W. (2023). Analysis of Water and Sediment Characteristics of the Yellow River and Their Correlations. <i>Polish Journal of Environmental Studies</i>, 32(3), 2909-2923. https://doi.org/10.15244/pjoes/157223 - Jandieri, G. V., Janelidze, I. S., Zivivadze, O. B., & Loria, G. G. (2024). On the Potential of Geospatial Artificial Intelligence - GeoAI in Solving Problems of Development of Metal-Bearing Technogenic Deposits. <i>Journals of Georgian Geophysical Society</i>, 27(N1). Retrieved from https://ggs.openjournals.ge/index.php/GGS/article/view/7981 - Wang, S., Fu, B., Piao, S. <i>et al.</i> Reduced sediment transport in the Yellow River due to anthropogenic changes. <i>Nature Geosci</i> 9, 38–41 (2016). https://doi.org/10.1038/ngeo260 - Wang S, Wang X. Changes in Water and Sediment Processes in the Yellow River and Their Responses to Ecological Protection during the Last Six Decades. <i>Water</i>. 2023; 15(12):2285. https://doi.org/10.3390/w15122285 	

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Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The quality of the applied English language level meets the general requirements for scientific communications.	
<u>Optional/General</u> comments	- I strongly recommend that the manuscript should contain data on physical and chemical characteristics of the Yellow River sediment and emphasize the degree of its ecological hazard or safety. - Based on the available factual data, I consider it necessary to make an approximate predictive assessment of reliability and durability of functioning of the integrated technological system of utilization proposed by you; - I recommend to improve the control algorithm presented in Fig. 5, it is very primitive. For example, it does not give an idea of its flexibility. In particular, - it does not answer the question, how will the system act if one of the main units of your proposed technological complex fails?	

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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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