Review of: "Effective use of Waste Materials: A Case Study of Utilization of Fly Ash in Flexible Pavement Structures"

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Potential competing interests: No potential competing interests to declare.

The Authors have tried their best to focus on the effective utilization of Flyash (Coalash) in flexible pavement construction through review of different papers, authored by several other researchers. The effort is commendable. Further, the following points need clarification / corrections.

1. The initial remark within “Abstract”, which is “Class ‘C’ flyash is used for soil stabilization and class ‘F’ is used in concrete,” is not correct.
2. Though coal combustion residues (CCR) are generally termed as “flyash,” there lies a distinct differentiation within that which is termed as Flyash (Fa) and Bottomash (Ba). Though the ratio varies depending upon the coal variety, combustion procedure adopted, chemical constituents, etc., mostly the Ba variety remains unutilized. The utilization of Ba has not been reflected in the entire paper with pros and cons of the material, case studies, etc. It is an established fact that CCR is having so many advantageous properties, and Ba in particular, for road construction and embankment construction work and alike.
3. The leaching effect of such ash, while being used in the sub-base, has neither been mentioned in any paper nor highlighted by the Authors in this review paper.
4. The sand equivalence factor also was not highlighted.
5. The environmental impact of legacy ash accumulation and aftereffects also should have been highlighted, and the benefit out of such ash utilization in pavement construction could have been quantified, and such papers with the analogy might have been appropriate.

Overall, the paper needs much improvement.