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 general quality of this review is weak

-The authors just mentioned the previous studies without any discussion or analysis

-The introduction part is too weak and should be enhanced

-The level of English is weak. The English should be checked by a qualified special editor

-The unqualified references should be replaced by ISI Web of Science references

-In this sentence “Since fly ash is a pozzolonic material, it has been widely used in civil engineering applications“, please correct “pozzolonic” to “pozzolanic”. Please make the same correction in other positions throughout the full paper

-For this sentence, “Since fly ash is a pozzolonic material, it has been widely used in civil engineering applications [“, the authors can cite this review reference:

“A brief on high-volume Class F fly ash as cement replacement – A guide for Civil Engineers”, International Journal of Sustainable Built Environment (2015) 4, 278–306

-In this paragraph “Classes of Fly Ash. Based upon the proportions of its chemical constituents, fly ash can be classified into class ‘C’ and class ‘F’. Although researchers have not limited themselves to this classification…….”, the authors should highlight the methods of classification of fly ash (ASTM C618-12 and Canadian Standards Association). -According to the ASTM C618-12, the classification is based on the chemical composition of fly ash. The major delimiter for this classification is the sum of silica, aluminium, and iron oxide percentages in the fly ash, being a minimum of 70% for a Class F and a minimum of 50% for a Class. According to the Canadian Standards Association, the classification of fly ash is based on the ratio of CaO, of which fly ash is generally low-calcium (Class F) when CaO is less than 10%. Please check and cite the previously recommended reference

-Table 1 should include at least 5-10 different chemical compositions from different studies

-In this sentence “while class ‘F’ is produced from lignite or sub-bituminous coal; the former class exhibits pozzolanic properties and the latter possesses cementitious properties [15].”, please replace reference [15] by an ISI Web of Science reference

-In this sentence “….were conducted in the past on evaluating the use of fly ash in concrete such as that done by Das et al. [16”, please replace reference [15] by an ISI Web of Science reference

-In the part titled “Use of Fly Ash in Asphalt Concrete” on pages 5-8, the authors just included some of the earlier studies without any analysis or discussion

-In the part titled “Use of fly ash in base layers” on pages 8-10, the authors just included some of the earlier studies without any analysis or discussion

-In the part titled “Use of fly ash in soil stabilization and improvement” on pages 10-14, the authors just included some of the earlier studies without any analysis or discussion