

ABSTRACT

Municipal solid waste ash is rapidly increasing due to increase of Municipal solid waste. Now days the Municipal solid waste ash can be used as product throughout the world for construction. It is versatile and durable. About 256 Million tons of Municipal solid waste ash is generated and mostly it can be disposed in landfill or low lying areas. It has problem to the environment organization to pressure the professional community to lower the amount of Municipal solid waste ash being discarded as well as to find out the use of Municipal solid waste ash recycled. The Municipal solid waste ash for various applications, in relation the recycling of Municipal solid waste ash as a component in soil gives Municipal solid waste ash a sustainable partly alternative to make it economical. The purpose of this study is for utilizing Municipal solid waste ash in soil as partial replacement of soil particles and material, which offers important benefits related to strength of soil as well as it is eco-friendly. If the Municipal solid waste ash cannot be decomposed it can be harmful for human beings as well as environment. This problem can be greatly eliminated by reusing Municipal solid waste bottom ash as soil replacement. Moreover, reusing waste materials in construction can also reduce the demand of the natural resources materials.

In this project, the bottom ash from municipal solid waste incinerator plants is been characterized to investigate some alternatives for its utilization in road construction and their potential environmental impact. After investigation of physical and geotechnical properties, the study focused on use of bottom ash as an aggregate substitute in pavement applications. The results show that this material may successfully be used as a compacted material in unbound road sub-grade or filling. The bottom ash complies with the technical requirements for sub-grade or filling. The use of bottom ash envisaged application should therefore not result in any environmental impact. So, we are concluding different optimal percentages of usage of bottom ash as road construction material from different studies.