

Fly Ash Ammonia Leaching Characteristics

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ABSTRACT

Because of the NO_x emission requirement, there will be many SCR or SNCR systems in operation in the next few years. The ammonia used for SCR/SNCR may have negative impact on fly ash utilization and disposal. This study focuses on the issue of potential environmental impact from the disposal of fly ash in landfills or ash ponds. Based on previous work on the adsorption of ammonia on fly ash, the objective of this study is to obtain ammonia leaching characteristics from ammoniated fly ashes. Laboratory batch leaching tests are conducted to identify the total amount of ammonia released in water and various leachants, and the release kinetics for several utility ashes. The preliminary results of the study will be presented and the data can be used to estimate the environmental impact on soils and waters around disposal sites.