

UTILIZATION OF SLUDGE, RECYCLED COARSE AGGREGATES IN PRODUCTION OF CONTROLLED LOW-STRENGTH MATERIALS A REVIEW

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ABSTRACT

The technological development led to rapid industrialization, which is always associated with the problem of environmental degradation. Industrial activities generate quantities of wastes more than 1,500 million tons per year, creating problem to the environment. It is now a global concern to find a socio, techno-economic and eco friendly solution to dispose industrial solid wastes. The recycling of solid wastes as a substitute for building materials is not only environmentally friendly but also cost effective. It serves as an alternative way to sustain a cleaner and greener environment. These materials are, in general, incompatible for use in the construction industry due to their high content of very fine particles, or due to their poor mechanical properties. Controlled Low Strength Materials (CLSM), can serve as an excellent means to utilize large quantities of fines without impairing its properties. American Concrete Institute 229 R describes uses of number of nonstandard materials and industrial by-products in developing controlled low-strength material. This paper presents and an overview of the work published on CLSM developed with industrial sludge, recycled concrete aggregates.

KEYWORDS: Controlled Low Strength Materials CLSM, Non-Standard Materials, Industrial Sludge, Recycled Concrete Aggregates