

USING OF PAPER SLUDGE WASTE MATERIAL, MADE OF CORRUGATED CARDBOARD AND SOLID FIBREBOARD

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ABSTRACT

Our objective is to analyse the paper sludge, which is a clay-like material consisting of clays and short fibers. In the paper recycling process, waste paper is received and de-inked prior to recovery of the fiber. During the de-inking process fiber sludge is generated, which contains particles of ink and fibers too short to be converted to a finished paper product. In the past, paper sludge has typically been land filled. With landfill costs rising and the potential for ground water contamination from landfill operations, many environmentally conscious paper producers are recovering the energy from this waste stream. Thanks to the chemical analyses was FOUND, that in the paper sludge, there are elements useful for next industrial use. Whatever kind they are, it is important to get rid of the present ink, there is a possibility of using sludge in building industries. Interesting is the rate C:N (carbon to nitrogen), which is from 16:1 to 20:1. This makes the possibility to compose DE-inked material. There is stil a problem with the composing of the paper sludge, there are often present heavy metal particles like cadmium or zinc. THE vermi-composing will be our further target.

Key words: paper sludge, landfill, fiber, de-inked, compose, contamination, particles

