

## **Waste Recovery: A Sustainable Way for Application of Solid Waste from WTP's in Building Materials**

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**Abstract :** Water treatment residues (WTR) are solid waste produced during drinking water treatment and have recently been seen as a reusable material. The aim of this research was show how to use the residue generated in a Water Treatment Plant, located in Goiania, Brazil, following the considerations of the law of solid waste to obtain normative parameters and consider sustainable alternatives for reincorporation of the residues in the productive chain for manufacturing various materials construction. In order to reduce the environmental liabilities generated by sanitation companies and discontinue unsustainable forms of disposal. The analyzes performed: Granulometry, Scanning Electron Microscopy and X-Ray Diffraction demonstrated the potential application of residues to replace the soil and sand, because it has characteristics compatible with small aggregate and can be used as feedstock for the manufacture of materials as ceramic and soil-cement bricks, mortars, interlocking floors and concrete artifacts.

**Keywords :** residue, sustainable, water treatment plants, WTR, WTP

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