

**ANALISIS TIMBULAN, KOMPOSISI DAN POTENSI DAUR
ULANG SAMPAH KABUPATEN MANDAILING NATAL**

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**PROGRAM STUDI PENDIDIKAN PROFESI INSINYUR
SEKOLAH PASCASARJANA
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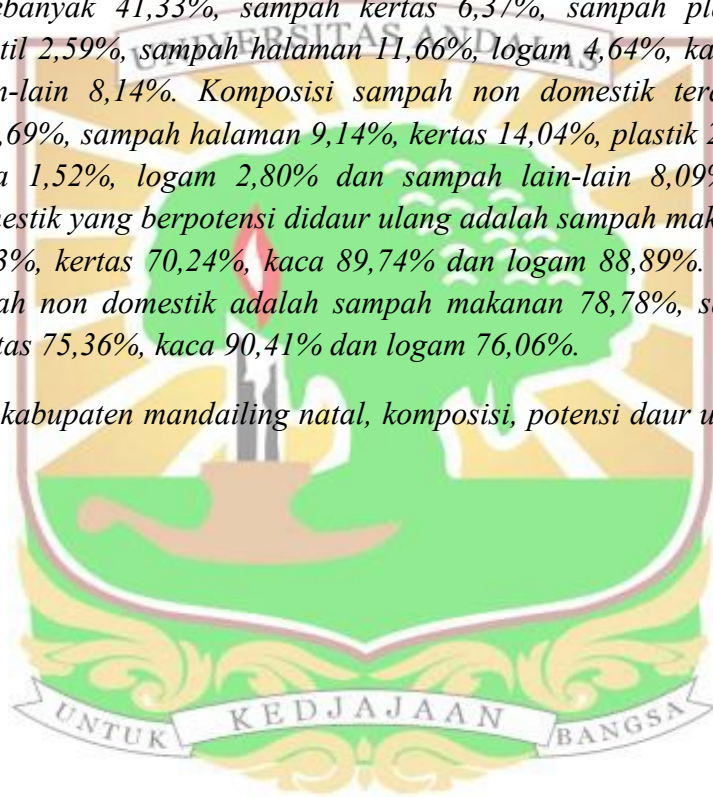


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ABSTRAK

Tingkat pelayanan pengelolaan sampah Kabupaten Mandailing Natal masih rendah. Masyarakat yang belum terlayani mengolah sampah dengan cara dibakar atau di buang ke sungai. Kabupaten Mandailing Natal belum memiliki data timbulan dan komposisi sampah yang diperlukan dalam menyusun rencana _pengelolaan sampah. Penelitian ini bertujuan untuk menentukan besaran timbulan, komposisi, dan potensi daur ulang sampah di Kabupaten Mandailing Natal. Metode sampling berdasarkan SNI 19-3964-1994. Timbulan sampah domestik dalam satuan berat didapatkan sebesar 0,574 kg/o/h, sedangkan berdasarkan volume yaitu 2,357 l/o/h. Timbulan sampah non domestik rata-rata sebesar 0,289 kg/o/h dalam satuan berat dan 2,616 l/o/h dalam satuan volume. Komposisi sampah domestik didominasi oleh sampah makanan sebanyak 41,33%, sampah kertas 6,37%, sampah plastic 24,08%, sampah tekstil 2,59%, sampah halaman 11,66%, logam 4,64%, kaca 1,18% dan sampah lain-lain 8,14%. Komposisi sampah non domestik terdiri dari sisa makanan 38,69%, sampah halaman 9,14%, kertas 14,04%, plastik 24,07%, tekstil 1,65%, kaca 1,52%, logam 2,80% dan sampah lain-lain 8,09%. Komponen sampah domestik yang berpotensi didaur ulang adalah sampah makanan 82,75%, plastik 87,03%, kertas 70,24%, kaca 89,74% dan logam 88,89%. Potensi daur ulang sampah non domestik adalah sampah makanan 78,78%, sampah plastik 90,36%, kertas 75,36%, kaca 90,41% dan logam 76,06%.

Kata kunci: kabupaten mandailing natal, komposisi, potensi daur ulang, sampah, timbulan



ABSTRACT

The level of waste management service in Mandailing Natal Regency is still low. Unserved communities manage their waste by burning it or disposing it in rivers. Mandailing Natal Regency does not yet have data on solid waste generation and composition needed to formulate a waste management plan. This study aims to determine the amount of waste generation, composition, and recycling potential solid waste in Mandailing Natal Regency. The sampling method is based on SNI 19-3964-1994. Domestic waste generation in weight units is 0.574 kg/person/day, while in volume units it is 2.357 liters/person/day. Non-domestic waste generation averages 0.289 kg/person/day in weight units and 2.616 liters/person/day in volume units. The composition of domestic waste is dominated by food waste at 41.33%, paper waste at 6.37%, plastic waste at 24.08%, textile waste at 2.59%, yard waste at 11.66%, metal at 4.64%, glass at 1.18%, and other waste at 8.14%. The composition of non-domestic waste consists of food waste at 38.69%, yard waste at 9.14%, paper at 14.04%, plastic at 24.07%, textile at 1.65%, glass at 1.52%, metal at 2.80%, and other waste at 8.09%. The components of domestic waste with recycling potential are food waste at 82.75%, plastic at 87.03%, paper at 70.24%, glass at 89.74%, and metal at 88.89%. The recycling potential of non-domestic waste is food waste at 78.78%, plastic waste at 90.36%, paper at 75.36%, glass at 90.41%, and metal at 76.06%

Keywords: *Mandailing Natal Regency, solid waste, waste generation, waste composition, waste recycling potential*

