SUMMARY

I Made Wahyu Adigunawan, Department of Urban and Regional Planning, Faculty of Engineering, University of Brawijaya, Agustus 2016, "*Alternative for waste threatment in Transfer Point in Sandubaya District Mataram, Academic Supervisor*: Dr. techn. Christia Meidiana, S.T. M.Eng. Ir. Ismu Rini Dwi Ari, MT.Ph.D

The high volume of waste from household activities in Mataram City force government of Mataram City launched a waste treatment management with 3R concept in a regional scale, one of them is to build in Sandubaya District with a target to reduce 10% of household waste from Sandubaya District. In the existing condition, integrated waste disposal site have not done the effort of reducing household waste so that the purpose of this study is to determine the best combination of several waste treatment types such as composting, reuse inorganic waste and recycle litters.

Determination of waste processing threatment in accordance with the conditions TPST Sandubaya must consider several aspects such as technical aspects, environmental aspects and financing aspects.Variables used in determining the best type of waste treatment is the need of land, air emissions and benefit cost ratio (BCR). The methods used is a mixture design that aims to model the impact of each combination waste treatment types to the needs of land, air emissions and benefit cost ratio (BCR). The results show that Sandubaya District produce waste in the amount of 93,5 m^3/day or 12,15 tons/day. The potential waste that is capable to process is in the amount of 52,7 m^3 which is consists organic waste of 49,1 m^3, plastic waste 6,5 m^3, paper waste 1,1 m^3, glass bins 0,4 m^3 and metal bins 0,03 m^3. From the model, it concludes that in order to process 9,3 m^3/day waste, the right combination waste treatment types that needs to do in Sandubaya District's integrated waste disposal site is to maximize the processing of plastic waste treatment to flakes (recycle) with volume ranges from 4,9-6,2 m^3 /day and limit the type of waste composting with processing volume range 1,3 -2,7 m^3/day and reuse inorganic waste with volume range 1,-2,1 m^3/day

Keywords: *waste treatment, reuse,recycle, transfer point*