EVALUATION OF SOLID WASTE TRANSPORTATION IN THE STUDY AREA OF SEMARANG

Student Name : Egi Yuniarto
Student Number : 3311202812
Supervisor : Dr. Ir. Ellina S Pandebessie, MT

ABSTRACT

The study area covers the areas of BWK II, VI and VII in Semarang. Disposal solid waste is in place to the final disposal (TPA) approximately 516 m³/day with 53% of solid waste service level. This study aims to evaluate the waste transportation in the study area for the activities of transporting solid waste from temporary disposal (TPS) to final disposal (TPA).

This study is conducted using field observation on all vehicles transporting solid waste which are 14 units consisting of 3 units of Dump Truck and 11 units of Armroll Truck in the study area. Field observations that are conducted is by noting the observed length of travel time and distance to the disposal, off route time, lowering container and lifting container and unloading the solid waste at the final disposal.

Evaluation of the results obtained by the number of trips could be increased further, specially for vehicles H 9598 PS, H 9586 HA and H 9587 KA. Increase the trip varies from 2 trips per day to 4 trips per day, from 3 trip become 4 trip per day and from 4 trip per day become 5 trip per day. Thus the operating costs of existing waste transportation which from Rp 1.442.551.200, become Rp 1.710.793.200, -, while the revenue potential retribution of the study area reached Rp 3.847.807.104,-. For service target of 70% in 2015 operational costs of transporting waste Rp 2.313.400.700,-, while the revenue potential retribution reached Rp 5.653.739.040, -. Institutions Department of Hygiene Semarang City is good enough because of the organizational structure and the number of personnel is sufficient to implement the waste transportation system.

Keyword : Final disposal, institutions, observation, personnel, retribution, service level, transportation route, solid waste