

8 Fuel and Residues Transportation Costs

There are many variables that make up the cost to transfer haul MSW, RDF, and residues from one location to another, including items such as travel distance, average load weight, travel speed, cost of fuel, truck mileage, labor rates, and so forth. There are various ways of estimating haul costs, including using an average cost per ton-mile, an average cost per hour, or an average cost per mile. For purposes of this analysis, Foth & Van Dyke used a “Transfer Haul Cost Model” developed previously for the Project Board. The model is a spreadsheet in which values for each of the variables can be entered and the corresponding annual cost along with the cost per ton calculated.

Initially, the cost to transfer haul the 394,200 tons of RDF from Newport to Rock-Tenn were estimated using three different ranges of number for the variables. These provided a mid-range, conservative, and aggressive set of cost estimates. The mid-range approach appeared to be most accurate for current prices and was selected as the cost estimate to be used.

The mid-range approach was also used to develop estimates for the annual cost to haul ash from Rock-Tenn to an area landfill. Cost estimates were likewise prepared to haul the process residue and by-pass residues from the Newport Facility to an area landfill. It is also noted that there will be costs associated with hauling recovered metals (ferrous and aluminum) from the Newport Facility to the metals processors. Foth & Van Dyke will address these costs by using a market price for the recovered metals that is net of transportation costs.

The model has some “cross checks” to industry “rules of thumb” generally used. These include cross checks to “cost per ton-mile,” “cost per hour” (labor and vehicle), and cost per mile (labor and vehicle). The cost per ton-mile (i.e., the cost to haul one ton of material one mile) in this analysis varies from 9.9 to 13.2 cents. These estimates are reasonable for this feasibility level of analysis.

Table 8-1 provides a summary of the estimated annual costs (rounded to the next \$5,000) for the various transfer hauling operations. The total transportation related costs in the system serving Rock-Tenn is \$2,145,000.

Table 8-1 Transfer Haul Cost Estimates

Category	Cost per Ton-Mile	Annual Cost Estimate (2006\$)
RDF from Newport to Rock-Tenn	\$0.117	\$1,390,000
Ash from Rock-Tenn to a Landfill	\$0.099	515,000
Process Residue from Newport to a Landfill	\$0.118	115,000
By-pass Residue from Newport to a Landfill	\$0.132	125,000
Total		\$2,145,000