Coal is one of the largest energy sources that are still used today. The demand for coal generally comes from power generation companies (power plant) that absorbing more than 80% of the domestic coal’s demand followed by cement companies, metallurgy, and other industries. With the completion of the power plant projects with a total capacity of 10,000 MW by PLN and the endorsement of no.1 2014 Government Regulation whih bans on minerals export in the form of ore ore / raw material without going through processing and refining. Coal demand is projected to continously increased. PT. X is one of the companies engaged in mining, trade, processing, and utilization of coal. To meet the projected production rate increases due to future demand raie, PT. X improves its production capacity on one of its mining unit. With the completion of the construction of infrastructure at the Tarahan Port, re-evaluation related to Tarahan Port’s throughput is necessary to anticipate capacity increase. This study generates simulation models that represent all activity in the Coal Terminal. Average throughput resulting from the facility development is about the value of 10,447,740 Tons. Low throughput level mainly caused by low levels input rate. Average input rate is about 10,549,242 Tons that caused by the presence of 111 minutes headway SOP between trains. to meet the required demand of 25,660,000, headway between trains required to drop below 55.56 minutes. Minimization headway can be done by building a double track lines.

Keywords : Coal Handling Facility, Coal Terminal, Evaluation, Optimization, Throughput