ABSTRACT

PT. Liku Telaga is one of the companies engaged in chemical industry production base with sulfuric acid and aluminum sulfate. To be able to produce a product according to customer's specification, PT. Liku Telaga wanted to make improvements in the process, especially in procurement division. It relates to the process of selecting suppliers for the supply of raw materials in the production process.

Problems encountered in this study is to determine the supplier selection and allocation of orders in accordance with the company specification. Fuzzy Method-Quality Function Deployment is used to measure supplier performance and goal programming to determine the allocation of orders to suppliers. The purpose of this research is to be able to meet optimal solutions in selecting suppliers accordance to company criteria.

The results of this study is to count the allocation order to the supplier of sulfur: (1) Standard Chemical Corp., Pte.Ltd of 3.646,7 tons, (2) PT. Lautan Luas of 803,3 tons, (3) PT. Yosomulyo Jajag of 300 tons, (4) CV. Archindo of 150 tons, with a minimum price of sulfur for $513.720. Allocation orders to suppliers of aluminum hydroxide: (1) Bisindo Kencana 3,000 tons, (2) Hindalco Industries Limited 1.114 tons, (3) Sumitomo of 1.946 tons, (4) Chemindus SDN BHD to 890 tons, with a minimum price aluminium hydroxide for $2,137,578.

Keywords: Supplier Selection, Quality Function Deployment, Fuzzy Set, Goal programming.