ABSTRACT

PT XYZ is a company located in Subang, West Java. This company is a State-Owned Enterprise (BUMN) in strategic industry that provides integrated explosives services for the general mining, quarry and construction, oil and gas sectors as well as for defense. PT XYZ's business lines include explosives manufacturing, drilling & blasting, related services, and defense related services for customers throughout Indonesia and the ASEAN region. The problem faced by the company is regarding the inventory of raw materials for sodium perchlorate which is overstocked, overstock is a condition of inventory in the warehouse caused by excess inventory at the warehouse facility, this causes an increase in the cost of inventory costs from PT XYZ.

To overcome these problems, the final project of designing a policy for raw material inventory of sodium perchlorate using the continuous review (r, Q) method of PT XYZ is carried out with the aim of optimizing the quantity of goods when refilling inventory so as to minimize the amount of overstock and minimize inventory costs.

The results of this final project using the model used to produce the optimum number of ordering lots and reorder points that can minimize the total cost of inventory at the Subang Warehouse with a total decrease in inventory costs of 58%.

So, it can be concluded that the results of this final project can minimize the total cost of inventory from the actual conditions that exist in the company. It is recommended to conduct further studies regarding the results of this final project.

Keywords - sodium perchlorate, overstock, backorder, explosives inventory, continuous review, inventory cost