ABSTRACT

PROPOSED MAINTENANCE PROGRAM BY RELIABILITY-CENTERED MAINTENANCE II METHOD FOR PRILLING SYSTEM IN UREA FACTORY KALTIM-3 (CASE STUDY : PT PUPUK KALTIM) By Angga Gumilang NIM: 112080191 (Study Program : Industrial Engineering)

PT Pupuk Kaltim is the largest fertilizer manufacturer company in Indonesia. Kaltim have five fertilizer plants, namely Kaltim-1, Kaltim-2, Kaltim-3, Kaltim-4, and POPKA. Kaltim-1, Kaltim-2, Kaltim-3, and Kaltim-4 consists of utility plant, urea plant and ammonia plant. While POPKA consists only urea plant. This plant have five total urea production capacity by 2.98 million tons /year, ammonia 1.85 million tons /year, and NPK fertilizers 500 thousand tons /year.

In nowadays, PT.Pupuk Kaltim has done maintenance schedule with according to preventive maintenance schedule that come from manual vendor or Turn Around that done every 2 years (21 days). In 2003-2012, PKT have have been unexpected shutdown of 12.7 days / year. Because PT. Pupuk Kaltim has vision of company to be world class company, so the company must compare with world standaritation, such as a company must have availability is 98% or equal with downtime is 7 days/year (include unscheduled dan schedule downtine)- (SKF Asset Management).

So, based on the above data showing that one of failure can happen on maintenance strategy in Urea Factory Kaltim-3. Then after determining optimalization maintenance strategy with RCM II Method, so making maintenance schedule for complement maintenance strategy before.

Keyword : Maintenance, Reliability-Centered Maintenance (RCM) II, Maintenance Schedule.