RISK ASSESSMENT IN PT. SEMEN GRESIK (PERSERO) TBK PACKING PLANT CONSTRUCTION PROJECT USING ISO 31000 FRAMEWORK AND VALUE AT RISK (VaR) METHOD

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Abstract
Risk itself is an uncertainty, which could be managed with risk management. A good risk management will become a vital strength for corporate governance. Globalization and complex environment become company’s main challenge in order to win the competition. PT. Semen Gresik (Persero) Tbk is the biggest fertilizer company in Indonesia. To reach its widely dispersed market, Semen Gresik create a distribution network that scatters from West to East Indonesia. Currently, this company still dominate national fertilizer market share up to 45%. In 2009 domestic sales volume increase 7%, this is also supported with increasing production capacity up to 19 million tons. To enhance distribution speed and increase distribution network efficiency, strategic decision was made. The company builds a packing plant in Ciwandan that start operating in late 2009. Packing plant is a solution which able to increase transportation cost efficiency up to 43%. The next construction will be included in company’s long term plan as a strategic decision.
This research will begin with operational and construction process assessment on an already operating packing plant in Ciwandan. The result will becomes the input data on risk assessment based on ISO 31000 framework. The next step is identifying risk to acknowledged risk potential, risk cause and effect received by the company. This step will be continued with further risk analysis to get likelihood and consequences value and also risk level. The next step is risk evaluation, where risk mapping and losses potency calculation conducted using Value at Risk (VaR) method. The final step is choosing risk treatment (action of mitigation) that suits with risk treatment matrix.

The result of this research is a risk assessment on company’s construction and operational activity and also suitable action of risk treatment. In addition, this research also identifies company’s maximum losses on each risk type. VaR calculation was conducted using 95% confidence level, monthly period and Rupiah as unit currency. From risk assessment result, a risk generic model was generated as a baseline to conduct future assessment on packing plant construction and operational activity.

Key words: packing plant, risk assessment, ISO 31000, Value at Risk (VaR), generic model