Analisis Risiko Semi Kuantitatif Instalasi Onshore Receiving Facility = Semi Quantitative Risk Analysis of Onshore Receiving Facility Installation

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Abstrak

Selama masa operasional pada instalasi Onshore Receiving Facility ditemukan potensial hazard yang dapat mengakibatkan kegagalan pada peralatan utama penunjang operasional. Oleh karena itu perlu dilakukan analisis risiko dengan cara mengidentifikasi hazard, menentukan probabilitas kegagalan dan konsekuensi kegagalan serta melakukan perhitungan risiko sehingga profil risiko pada operasional instalasi ORF dapat diketahui beserta akibatnya terhadap keselamatan, lingkungan, asset, dan reputasi perusahaan. Dari hasil analisis risiko didapat nilai total forecast risiko pada instalasi Onshore Receiving Facility sebesar 3,86. Jika mengacu pada matriks risiko termasuk ke dalam low risk level yang menunjukkan bahwa profil risiko pada instalasi ORF dapat diterima dan instalasi dapat berfungsi dengan aman. Untuk analisis sensitivitas didapat faktor-faktor yang paling berkontribusi terhadap risiko kegagalan pada operasional ORF yaitu laju korosi (29,4%), pengaruh usia (18,4%), dan kelebihan tekanan (11,4%). Hal ini dapat membantu untuk menentukan rekomendasi yang tepat untuk diterapkan pada fasilitas sehingga risiko dapat dikendalikan.
.....During the operational period of the Onshore Receiving Facility installation, potential hazards were found which could result in failure of the main operational equipment. Therefore, it is necessary to carry out a risk analysis by identifying hazards, determining the probability of failure and the consequences of failure and performing risk calculations so that the risk profile of the ORF installation operation can be known and its consequences to safety, environment, assets, and company reputation. Based on the results of the risk analysis, the total risk forecast value for the Onshore Receiving Facility installation is 3.86. Refers to the risk matrix, it is included in the low risk level which indicates that the risk profile of the ORF installation is acceptable and the installation can function safely. For sensitivity analysis, the factors that most contribute to the risk in ORF operations are the corrosion rate (29.4%), equipment service life (18.4%), and excess pressure (11.4%). This result can be used as a reference to determine appropriate recommendations to be applied to the facility so that risks can be controlled.