عنوان مقاله:

Evaluation and Consequence Modeling of Fuel Gas Compression Unit Using PHAST Software- A Case Study in South Pars Feild

محل انتشار:

سومین کنفرانس نوآوری های اخیر در مهندسی صنایع و مهندسی مکانیک (سال: 1395)

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خلاصه مقاله:

Consequence modeling involves the determination of the impacts of process accidents involving hazardousmaterials on people, the environment and the process. The amount and form of hazardous material released isdetermined for toxic materials, flammables, and explosives (called the source term). Accidental release oftoxic/flammable chemicals and its accompanying vapor cloud dispersion are worthy of concerns in industrial safety andsocial security. In today's competitive environment, the management of hazardous facilities to ensure safe and costeffective operation is high on the corporate plan. DNV's PHAST software is one of the most useful and reliable tools tosimulate the progress of a potential incident from the initial release to far-field dispersion. As a related exampledispersion of the released material through and beyond the facility, the area covered and discharge rates gas, twophase,and liquid releases can be determined.The consequence modes of toxicity by gas dispersion ,fire(Jet fire) and explosion of Fuel Gas CompressionUnit from the Gas Refinery Phase 15 & 16 south pars gas field development are analyzed respectively in this paper andthe degree and area of influences are also forecasted using PHAST software, which can provide scientific referencesfor the identification of the main risks, adoption of the corresponding safe countermeasures and .the controlling afteraccidents

کلمات کلیدی:

Industrial Safety, Consequence Modeling, Gas Dispersion, Jet Fire, Explosion