LNG Decision Making Approaches Compared

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Hazard zones associated with LNG handling activities have been a major point of contention in recent terminal development applications. Debate has reflected primarily worst case scenarios and discussion of these. This paper presents two alternative approaches, maximum credible event and quantitative risk assessment (QRA) approaches. These are demonstrated for spills associated with shipping activities in typical USA ports. The three approaches present very different pictures of the risk inherent in the LNG terminal activity. The author argues that worst case scenarios provide a poor decision framework for LNG activities and distort the debate towards unrealistic scenarios and perhaps inappropriate safeguarding strategies. Maximum credible event approach provides a better basis as realistic hole sizes are modeled. The superior approach is a QRA as this considers a full range of events, but the lack of agreed risk standards in the USA hinders the full application of this method.