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**BAPE-2.6**

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**Référence:**

2. La sécurité terrestre et maritime et la planification des mesures d'urgence

**Demande ou Question:**

- 2.6 En cas d'effet de tonneau, quelle serait la pression dans le réservoir et quels seraient les moyens pour évacuer le gaz de façon sécuritaire ?

**Réponse:**

The design code requires sizing of relief valves for rollover based on 100 times the normal boil off rate. A study has been done by ioMosaic (<http://archives1.iomosaic.com>) considering 41 LNG roll-over incidents. The peak vapor evolution rate exceeded 20 times the normal boil-off rate in a few cases only. The buffer of up to 100 times the normal boil off rate is significant meaning that most roll-over incidents will not cause overpressure in the tank.

In most cases, the additional boil-off resulting from a roll-over can be managed by the terminal's vapour recovery system and only in extreme upset conditions, the excess vapour would be vented safely through the vent stack.