

---

**De:** Bherer, Charles <Charles.Bherer@tc.gc.ca>  
**Envoyé:** 11 février 2015 09:47  
**À:** Boutin, Anne-Lyne (BAPE)  
**Cc:** Lavoie, Anny-Christine (BAPE); Boulianne, Michel  
**Objet:** Complément de réponse - BAPE - Stolt LNGaz

Bonjour madame Boutin,

Voir ci-dessous de l'information qui pourrait compléter les sujets discutés lors des séances de consultations publiques de la commission.

Pour ce qui est des accidents/incidents maritimes; il existe de l'information à ce sujet, entre autres, sur les sites internet suivants:

Pour les incidents/accidents maritimes au Canada, le rapport annuel du bureau de la sécurité des Transports dénombre tous ceux qui ont eu lieu durant l'année. Le rapport de 2014 n'est pas encore disponible, mais il devrait sortir sous peu. Ce rapport regroupe tous les navires naviguant au Canada, donc, il va sans dire que les navires méthaniers y sont très peu représentés.

<http://www.tsb.gc.ca/fra/stats/marine/2013/ssem-ssmo-2013.asp>

Le rapport d'analyse de risque suivant effectué par DNV (société de classification) pour le port de Prince Rupert donne des statistiques sur les incidents mondial de navires méthanier à la page 77.

[http://www.rupertport.com/media/dnv/marine\\_risk\\_assessment.pdf](http://www.rupertport.com/media/dnv/marine_risk_assessment.pdf)

Le rapport du BAPE pour RABASKA, à la page 139. 3 accidents majeurs de méthanier y sont cités. Les trois accident ne résultant pas à des déversements de cargaison.

<http://www.bape.gouv.qc.ca/sections/rapports/publications/bape241.pdf>

Un extrait du rapport de la FERC (Federal Energy Regulatory Commission) des États-Unis qui est disponible à l'adresse suivante: (en anglais seulement) <https://www.ferc.gov/EventCalendar/Files/20070321105806-Robinson-03-21-07.pdf>

"Even in the few instances worldwide where there have been incidents, the integrity of LNG vessel construction and safety systems has been demonstrated. One of the more significant incidents involved the El Paso Paul Kayser which grounded on a rock in the Strait of Gibraltar during a loaded voyage from Algeria to the United States in June 1979. Extensive bottom damage to the outer hull and the ballast tanks resulted; however, the cargo tanks were not damaged, and no cargo was released.

There have been a few other instances where LNG ships have grounded. In 1980, the LNG Taurus grounded near the entrance to Taboata Harbor, Japan. The grounding resulted in extensive bottom damage, but the cargo tanks were not affected and no cargo was released. The ship was refloated and the cargo was unloaded. In 2004, the Tenaga Lima was grounded on rocks, due to a strong current while proceeding to open sea East of Mopko, South Korea. The ship's shell plating was torn open and fractured over an approximate area of 20- by 80-feet. Internal breaches allowed water to enter the insulation space between the primary and secondary membranes. However, the ship was refloated, repaired, and returned to service. Although damage was incurred when these LNG ships were grounded, their cargo tanks were never penetrated and no LNG was released.

In another incident, the Norman Lady was struck by the nuclear submarine USS Oklahoma City while the submarine was rising to periscope depth near the

Strait of Gibraltar in November 2002. The LNG carrier sustained only minor damage to the outer layer of its double hull but no damage to its cargo tanks.

More recently, the Khannur had a cargo tank overfill into the ship's vapor handling system during unloading at Everett, Massachusetts, in 2001. Approximately 100 gallons of LNG were vented onto the protective decking over the cargo tank dome resulting in several cracks. After inspection by the Coast Guard, the Khannur was allowed to discharge its cargo. In 2002, the Mostaefa Ben Boulaid had LNG spill onto its deck during loading operations in Algeria. The spill, which was believed to be caused by overflow, caused brittle fracturing of the carbon steelwork. The ship was required to discharge its cargo and proceed to dock for repairs. Although all these incidents resulted in an LNG release, there were no injuries in any of these incidents.

The most recent incident occurred in 2006 when the Golar Freeze moved away from its docking berth during unloading in Savannah, Georgia. The powered emergency release couplings on the unloading arms activated as designed, and transfer operations were shut down, preventing release of significant amounts of LNG or any structural or environmental damage. After inspection and onsite clearance by FERC staff and the Coast Guard, the arms were reactivated and transfer operations resumed without incident."

Également, nous croyons que ce rapport sur le GNL disponible sur le site de Ressources Naturelles Canada donnent de bons éléments de réponse, particulièrement quant aux normes applicables aux installations.

<http://www.rncan.gc.ca/energie/gaz-naturel/5682>

Pour finir, nous allons vous répondre dans un courriel ultérieur concernant les informations sur le système d'indemnisation canadien.

En espérant le tout à votre satisfaction.

Cordialement,

Charles Bhérier

Inspecteur de la Sécurité Maritime / Marine Safety Inspector Bureau régional de Québec | Quebec Regional Office  
Division des Services techniques | Technical Services Division 401-1550, avenue d'Estimauville, Québec (Québec) G1J  
OC8

Téléphone: 418 648-5340 Télécopie: 418 648-3790

[www.tc.gc.ca](http://www.tc.gc.ca)<<http://www.tc.gc.ca>>