



Panama Canal – deck cooling during transit

Tankers transiting the Panama Canal and carrying cargoes with flashpoints of less than 18°C must cool their main decks with water to prevent the automatic activation of the pressure relief valves.

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From 18 January 2016 and until further notice, the Panama Canal Authority (ACP) has introduced special procedures to prevent the automatic activation of pressure relief valves on tankers transiting the Panama Canal. This as a means to enhance the safety of Canal operations, as well as Canal customers, and to reduce or eliminate possible disruptions in transit scheduling.

According to ACP's [Advisory to Shipping No. A-02-2016](#):

- *Transiting crude oil tankers, product carrier, and chemical tankers carrying cargoes with flashpoints of less than 18°C are required to cool their main decks with water by means of the on-deck water sprinkler system or any other means available in order to prevent automatic activation of their pressure relief valves during transit.*
- *The cooling of the main deck shall be performed between 1000 and 1600 hours while the vessel is underway at Gatun Lake or Gaillard Cut, or at anchor in Canal waters. However, this procedure should be stopped while the vessel is transiting through the locks or is in the vicinity of the locks, and when Canal deckhands are on board.*
- *If this procedure fails to prevent automatic activation of pressure relief valves, it may be necessary to reduce the pressure by manually opening pressure relief valves. This shall be done only after the Master has ascertained the following:*
 - *The situation has been reported to the ACP's Canal Port Captain on duty through the pilot on board or to the Canal signal stations at Flamenco or Crsistobal when there is no pilot on board.*
 - *All necessary actions have been implemented to prevent exposing ACP personnel to vapours.*
 - **Shipboard and nearby ignition sources have been controlled. **

Gard's correspondent in Panama, C. Fernie & Co. S.A., has been in contact with the Canal Port Captain and confirms that the main reason for introducing these measures is to protect ACP personnel in the locks and onboard Canal line handlers. Apparently there have been incidents in the past where ACP personnel onboard vessels have taken ill due to fumes from relief valves onboard tankers. The decision to implement the measures at this time is based on the current climatic conditions as this is Panama's dry season and the temperatures are high.

Gard's Members and clients are advised to take note of the above and to carefully address all ship-specific risks prior to effectuating the procedures required by the ACP. Some factors to consider:

- When cooling decks with water, attention should be paid to the cleanliness of decks and the potential risk of pollution caused by cooling water discharged overboard. Caution should be exercised when using water monitors (high pressure jets) for cooling purposes.
- To manually open the valves to reduce tank pressure may have an impact on crew health and safety. All potential sources of ignition should be identified and controlled prior to opening the valves. Of particular concern is the manual operation of high-velocity venting valves which are designed to direct the vapour/air mixture upwards in an unimpeded high velocity jet. Such valves can be placed close to decks and walkways and a manual release of vapours without the upward velocity may lead to an increased risk for the crew working on deck.

Most international maritime regulations distinguish between cargoes with a flashpoint above or below 60°C. At the time of writing Gard holds no information on the basis for ACP's decision to apply 18°C as the limiting flashpoint criteria for the measures introduced.

Information received with thanks from Gard's correspondent C. Fernie & Co. S.A in Balboa, Panama.**