

March 28, 2019

Marine Accident of Chemical Tanker " GOLDEN SUNNY HANA "  
(Explosion (Cargo oil tank))

Occurred off to the southeast of Kunisaki Port,  
Kunisaki City, Oita Prefecture, Japan  
on April 8, 2018

It is probable that an explosion occurred in the No. 2 port cargo oil tank when the chemical tanker GOLDEN SUNNY HANA was conducting circulation work in the No. 2 port cargo oil tank and the No. 2 starboard cargo oil tank during cargo oil tank cleaning work while off to the southeast of Kunisaki Port, Oita Prefecture.

It is somewhat likely that the explosion occurred in the No. 2 port cargo oil tank because, under conditions in which a combustible gas mixture of vaporized pyrolysis gasoline and air in the explosive range was present in the No. 2 port cargo oil tank and measurements of gas concentration and ventilation with ventilation equipment were not being conducted, electrically-charged steam was injected into the No. 2 port cargo oil tank and discharged, a spark was generated, and ignited the combustible gas mixture.

In view of the result of this accident investigation, the Japan Transport Safety Board recommends that HNCC Co., Ltd., which is the owner of GOLDEN SUNNY HANA, take the following measures for the purpose of preventing the occurrence of a similar accident:

HNCC Co., Ltd., should instruct crew members on chemical tankers on which combustible gas mixtures are present in cargo oil tanks to consistently execute the following.

- (1) Sufficiently provide ventilation with ventilation equipment after the flushing of cargo lines and cargo oil tank bottoms.
- (2) Measure gas concentration before cleaning work and during cleaning work, cease work immediately when a measurement is in the explosive range, and continue work after providing ventilation with ventilation equipment or introducing inert gas and then confirming safety.
- (3) Consider the danger of static electricity present in cargo oil tanks and do not inject steam if safety cannot be confirmed.