Seventh Edition - January 2020

Gold BRIDGE SHIPPING Health & Safety Quarterly Bulletin

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Dear Captains and my beloved crews,

Happy New Year 2020.

Annual Management Review was held on 13th January 2020 and the Management praised MT Gas Indonesia for zero incident for two consecutive years of 2018 & 2019. We appreciate the Masters, Officers, and crews on board Gas Indonesia for their dedication to attain this safety achivement.

We thank all ships for taking IMO 2020 seriously, implementing environmentally regulated Annex VI regulations. We thank your timely follow up with IMO Voluntary Ship Implementaion Plan (SIP as per IMO MEPC.1/Circ.878) and thank Owners/operators hand in hand cooperation which made possible for all ships running with compliant fuel of VLSFO.

Our analysis of incidents and NMR shows "Human Factor" contributed 62% and 60% respectively. Thus we are focussing on "Human Performance" in 2020. We will continue to practice on "Just culture, Report mistakes, Learning Culture, Simplify SMS and find a Champion on each ship".

Let all of us continue to serve with prudence, diligence, patience and care.

Best regards, Capt. M. J. Uddin

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Use of Prohibited Filter-type Respiratory mask lead crew casualty

A product tanker, awaiting orders for the next voyage, carried out cargo tank cleaning over a period of a few days at anchorage. Cargo tanks gas-freeing and forced ventilation were reportedly carried and entry permits were completed prior to commencing work.

On this particular day, the deck crews had stopped work for lunch, during which an onset of rain ensued. Due to what appeared to have been a miscommunication, the deck crews awaited to resume their work inside one of the cargo tanks. In the meantime, the Chief Officer and other crew members went ashore. Due to the rain, the ventilation was discontinued and it was not subsequently determined if the atmospheric condition within the cargo tank was suitable for entry. Using an inappropriate mask, one of the deck crew proceeded into the cargo tank with the intention of retrieving a piece of equipment. The Master was unaware of the crew's movements on deck. Based on the Chief Officer's information that the deck crews were only planned to resume work the following day. With a strong odor of gas emanating from the cargo tank, a fellow crew member attempted to dissuade the Seaman from entering the cargo tank. However, based on the fact that this had been done before, he entered the tank utilizing the mask as seen in the photo below. While inside, his physical movements were observed to become abnormal and he eventually succumbed to the toxic gas vapor and collapsed to this death.



Filter-type Respiratory mask is prohibited to use in oxygen deficient spaces by Industry

Lessons Learnt

- A proper entry permit was not issued in the first instance and crew worked with prohibited face mask.
- A very loose administration with poor safety permit system.
- Each entry into enclosed space are subject to approval from top, but such were not implemented.
- PIC of tank cleaning goes ashore without proper instruction to the crew.
- No jobs shall be undertaken without permission of the Master or his nominee.
- Where there is a doubt, such doubt shall be brought to the Master or PIC.

Code of Safe working practices for merchant seafarers Chapter 8.8.8:

Respirators provide no protection against an oxygen-deficient atmosphere.

Entry into the tank from the main deck

Findings

- 1. The Chief Officer is said to have instructed the deck crews to take the afternoon off and resume work the following day. This was communicated to the Master prior to the Chief Officer going ashore.
- The deck crew had utilized the similar type of mask previously for cargo tank cleaning. They were thus of the knowledge that such masks were appropriate and safe enough.
- 3. Although work was said to be adjourned for the day, the cargo tank was not secured and equipment remained inside.
- 4. The casualty had acted on his own and was not instructed or assigned to enter the cargo tank.

REFERENCE:

SMS S-0504 section 4.8:

Filter-type Respiratory Protection is prohibited, as it doesn't make an atmosphere safe. Use of such Filters is BANNED on board all ships.



Health Corner

Coronavirus;

the fast spreading disease

The new coronavirus is thought to have emerged from illegally traded wildlife at a seafood market in Wuhan, China. The virus first detected in the Chinese city of Wuhan has infected thousands and claimed hundreds of lives. The fast-spreading infection, which causes pneumonia-like symptoms, has prompted Chinese authorities to quarantine several major cities and cancel some Lunar New Year events.

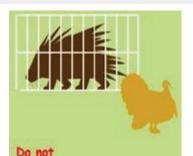
As this disease is spreading very fast, all must take the below preventive measures.

Prevent pneumenia and respiratory tract infection: All persons should always maintain good personal and environmental hygiene. They are advised to:

- Wear a surgical mask when taking public transport or staying in crowded places. It is important to wear a mask properly, including hand hygiene before wearing and after removing a mask.
- Perform hand hygiene frequently, especially before touching the mouth, nose or eyes; after touching public installations such as handrails or door knobs; or when hands are contaminated by respiratory secretions after coughing or sneezing.

seek medical advice promptly

- Maintain drainage pipes properly and regularly (about once a week) pour about half a liter of water into each drain outlet (U-traps) to ensure environmental hygiene.
- Wash hands with liquid soap and water, and rub for at least 20 seconds. Then rinse with water and dry with a disposable paper towel. If hand washing facilities are not available, or when hands are not visibly soiled, performing hand hygiene with 70 to 80% alcohol-based hand rub is an effective alternative.
- Cover your mouth and nose with tissue paper when sneezing or coughing. Dispose of soiled tissues into a lidded rubbish bin, then wash hands thoroughly; and
- When having respiratory symptoms, wear a surgical mask, refrain from work, avoid going to crowded places and seek medical advice promptly.



Consume game meat and patronize food premises where

game meat us served

Avoid

Making close contact with patients, especially those with symptoms of acute respiratory infections



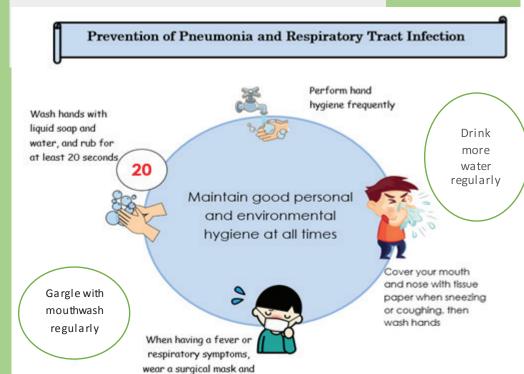
Avoid

Visiting wet markets, live poultry markets or farm



Poultry and egg products must be cooked thoroughly





Electrical Safety Precaution



The electrical equipment on board ship is subjected to a lot of harsh treatment which could lead to their deterioration and hence possible danger for the crew during handling of electrical tools.

Voltage seemingly as low as 110 V can prove fatal; if the associated current is of the order of 0.1 Amps. Since power = voltage * current this means that a power of mere 11 watts can prove deadly hence the need to be insulated as we will see below.

Marine electrical safety is a very elaborate topic having several aspects to cover, so we will highlight about some very basic tips here and continue the discussion in our future articles.

Marine Electrical Safety Tips

- Make sure all electrical cables are physically inspected for any cuts, abrasions or if they are immersed in water due to splash of water etc. The same should be notified and appropriate measures should be taken to rectify or report the fault so that it can be repaired as soon as possible.
- If any sparks are noticed, DO NOT ignore them. They could lead to fire and fire explosion which are two of the deadliest enemies of the ship.
- Always use intrinsically safe equipment especially in places where the presence of spark can lead to disaster.
- Never leave the electrical wiring having loose connections or joints without proper insulation.
- When carrying out maintenance or repair on any equipment make sure to switch off power from the main electrical panel and also make sure to put a notice near that switch which says that "work in progress – do not switch on". This would ensure that no person would accidentally switch on the power without bothering to check why it was off in the first place.

- Wear proper protective gear and follow all instructions, relevant checklists etc. Having understood the equation given in the introduction section, you will realize that since the current flowing also depends on resistance, if you provide an easy path for the current to flow by making your body wet or without much insulation, the current will be sufficiently higher than the minimum required value to harm you.
- Electrical fires on board require special handling and therefore everyone on the ship must be aware of how to react in case of electrical fires in terms of the fire extinguishers to be used and other steps to be followed. This can be drilled into the staff by carrying out regular safety drills which train the crew for such a situation



- Check all electrical fitting ensure the cable gland connected with equipment are well secure and tightly fitted to prevent any moisture come into contact with bare wire.
- Rubber floor mat need to be used in front of electrical main switch board as electrical insulator to avoid any accidental shock.
- Any measurement of low insulation on electrical motor & appliances must address immediately to avoid electrical short circuiting.
- Extension cables should be secured properly without any knots of unnecessary bends. If possible, try to roll it up in a nice manner uniformly and store in a dry place after every task completed.

Always exercise caution when operating electrical equipment's read and understand the instruction manual before operation.

This few guidance will go a long way to ensure that the marine electrical systems do not turn against you to harm you but act as your faithful servants.

References:

• Code of Safe Working Practices for Merchant Seafarers Chapter 5.3, 9.6, 20.12 – 20.21.

2019 BEST PERFORMED SHIP

Awards for ship:

SMS OS-0404 section 2.1.3 requires: Criteria for Best Ship Performance:

> Zero Incident Flawless Operations Good maintenance No 3rd party Complaints PSC inspection Results Number of NMR, etc.

The 2019 AMR "Review Committee agreed to reward GAS INDONESIA 2019 "Best Performed ship"

GAS INDONESIA

Status: PERTAMINA Time Charter

Performance in 2019:

- No incident / accident 2019;
- Vetting 100% passed with PSA rating 85%;
- High number of Significant NMR (10) in 2019
- No operation delay;
- Contributed in GB Health & Safety Bulletin and good SMS Review Feedback.
- Age 29.3 years but well maintained;



PORT CLEARANCE AND INSURANCE EVIDENCES

Now that we are in the new year of 2020, we come to another renewal of the Protection and Indemnity Insurance (P&I Insurance).

Office provides the vessel with below documents:

- 1. Blue Cards
- 2. Certificate of Insurance (COI)
- 3. Civil Liability Convention (CLC) Certificate

Now, what are the difference between the three?

1. Blue Cards

Blue Cards are essentially certificate issued by the Protection & Indemnity Club, which is furnished as evidence that there is insurance in place pursuant to International Convention.

Blue Cards are directed to the Authority of a Country that has ratified those conventions. So for tanker vessel, there are 3 types of Blue Cards.

- 1) for CLC 1969/CLC 1992 Oil Pollution
- 2) for CLC 2001-Bunker Oil Pollution
- 3) for Nairobi Convention 2007 Wreck Removal
- 2. CLC Certificate

From the Blue Cards, Owners to make application for CLC CERTIFICATE to certain Authorities that have already signatories to those International Conventions. Be advised up to this article is written, Indonesia has only ratified the 1992 Oil Pollution International Convention and the 2001 Bunker Oil Pollution.

Indonesia has not ratified the Nairobi Convention 2007 for Wreck Removal.

Therefore, for Indonesian Flag Vessel, the Ship managers could only apply for CLC 1992 and CLC 2001 to Indonesian Authority.

For CLC of Wreck Removal, the Ship Managers must apply to other country who is signatory to the convention for example: United Kingdom.

3. Certificate of Insurance (COI)

Certificate of Insurance is issued by P&I Club to Owners of the vessel, as evidence that Vessel are entered with the Club and are covered for all their 3rd Party Liability Insurances. This document gives information about the Assured and the Insured. The assured of course is the name of P&I Club. The Insured are the object of the insurance itself, that is: The vessel, the owners, the crews, and also what coverages included.

Port Clearance and Requirements to Vessel to show evidences of Insurance

With the CLC Certificate only, Vessel has the valid evidence showing that Vessel is covered with 3rd Party Insurance pursuant to the International Conventions about Oil Pollution and Wreck Removal.

However, when necessary, Master and Officers, can also show BLUE CARD along with CLC Certificate as proofs that Vessel has the Oil Pollution Insurance and Wreck Removal Insurance.

WHAT?	SHOW
Port asks for	CLC 1969/CLC 1992
Evidence of:	OIL POLLUTION
	(BLUE CARD when
Oil Pollution	necessary)
Insurance	
Port asks for	CLC FOR WRECK
Evidence of:	REMOVAL, NAIROBI
	CONVENTION 2007
Wreck Removal	(BLUE CARD when
Insurance	necessary)

If Port Authority ask for Evidence of Insurance of Wreck Removal from Indonesian Authority, please to remind them that:

1. Indonesia has not ratified the convention yet 2. Surat Edaran Menteri Perhubungan Nomor. AL.801/1/2 Phb 2014 tanggal 8 Desember 2014 only requires Vessel to have the insurance coverage for Wreck Removal and /or Protection & Indemnity only.

Master and Officer must not submit to any other request for proof as the above mentioned 3 documents on board are all VALID EVIDENCES showing that vessel is insured not only for Oil Pollution and Wreck Removal but for other 3rd Party Liabilities as well.

When in doubt, please call relevant department at the office.

FUN FACT

"BLUE" IN BLUE CARD DOES NOT REFER TO THE COLOR OF THE PAPER. P&I CLUB NOWADAYS ISSUES THEM IN WHITE PAPER IN ELECTRONIC FORMAT

ANSWERS TO QUIZ NO 6/ OCTOBER 2019

Quiz 1: Your ship's GPS was broken down, what would be the standard operation procedures?

- 1. Obtain ship's position by radar (Bearing x distance or distance x distance) or by shore targets' visual bearings or by celestial observation of star, sun and moon using sextant etc.
- 2. Echo sounder to monitor charted depth and contour.
- 3. Plot such position on ECDIS or paper chart manually and navigate safely.
- 4. Plot historical ship track forward to identify the projected/anticipated position

Other alternatives to get ship's position:

- AIS detects passing vessel's position, distance and bearing, use such ship's position, bearing & distance for own ship position.
- Report office to set up your SSAS to "report office" only, then press SSAS alert button, office receive ship's position / time and resend to ship.
- Dead reckoning (DR) position system used by mariners in the past, study sailing directions for possible set and drift.
- Sextant and a compass used by the ancient mariners and navigated round the world, maintain such technique.
- Crew personal GPS position plotter.

Quiz 2: What are the dangers of H2S? Name of the products that may contain significant concentration of H2S.

Dangers: It is flammable, toxic and corrosive, can be smelled at low levels (smell like rotten eggs), but with continuous low level exposure or at higher concentrations you lose your ability to smell even though it is still present.

Products that contain H2S: Crude oils, particularly sour crudes, Gas Oils, Gasoline blending components, Naptha, Condensates, Unfinished kerosene and Raffinate.

QUIZ NO.7/ JANUARY 2020



All Crews on board are eligible to submit the answers. Please send answers of the quiz by sending it via email to: uddin@gbship.com.

Quiz 1: *"What are the main hazards when working with hands?"*

Quiz 2: "How to avoid injury when working with hands?"

Quiz 3: "What are the common tasks that can lead to injury situations in your routine work?"

Quiz 3: Industry has experienced many enclosed lifeboats a ccident, provide three main causes and provide 3 main process to avoid such accident.

Answers: The Main issues are:

- Corrosion of fall wires,
- Incorrect installation of fall wires or incorrect wires used during replacement,
- Faulty limit switch.

Process to avoid such accident:

- Follow manufacturer's instructions for onboard maintenance,
- Pay close attention to areas where damage may be more likely, such as the winch braking system, sheaves, blocks and rollers,
- Check thoroughly any work undertaken by a service company to make sure the equipment is l eft in good working order.

We thank participation of MT Gandawati 1, MT Gas Kalimantan, MT Celosia, MT Bauhinia and MT Erowati in sending answer to Quiz No.6 WINNER OF QUIZ NO.6, OCTOBER 2019: MT CELOSIA CONGRATULATIONS!

Violation of SMS and SOP in Cargo Squeezing could be LETHAL

What Happened

During the final stages of the discharge of certain vegetable oils, squeezing or manual sweeping of the cargo tanks is usually required to push the semi-liquid residues towards the pump suction to complete the discharge.

The crew squeezed four cargo tanks having RBD Palm stearin from 06:30 to 12:00 hours. At 08:00, the Pump Man complained cramp on his both legs. He was brought inside accommodation and was treated by both ship and terminal and recovered at about 0900 hours. At 1300 hours the deck cadet complained the same cramp and weak. The deck cadet was sent to hospital. The doctor advised it was "Heat Stroke".

Why Happened

- Inadequate planning & briefing the crew.
- Crew felt dizzy / unwell, still continued work & did not leave the tank as per SMS.
- > Mechanical ventilation was not carried out.
- SMS procedures were not implemented.
- No risk assessment for squeezing (non-routine task).

Lesson Learnt!

The purpose to enter the cargo tanks to carry out "squeezing" operations is <u>in order to maximize the cargo outturn</u>. It is essential on such occasions that all Enclosed Space Entry precautions and procedures are in place both prior to and during the entry operations are strictly adhere to.

The potential danger of tank squeezing is:

- 1. The cargo generated vapors because heated.
- 2. An oxygen deficient atmosphere.
- 3. May evolve Carbon monoxide, high concentrations can prove fatal with TLV 30 ppm;
- 4. Familiarity with the practice made crew less awareness and negligent.

SERIOUS HEAT STROKE COULD LEAD TO FATALITY!

DRINK WARM WATER REGULARLY BEFORE AND AFTER GETTING INTO CARGO TANK. DO NOT DRINK COLD WATER!

Standard Operational Procedure (SOP)

If personnel are required to enter cargo tanks for squeezing or hand cleaning with all Enclosed Space Entry precautions and procedures must be observed prior to and during entry, in such cases:

- Risk assessment and approved by the master before execution of squeezing.
- Squeezing plan in place.
- Sufficient rest hour for person conducting tank squeezing.
- Continuously monitor on O2 and CO during tank squeezing operation till complete.
- Ventilation is provided as per SMS.
- Means of communication or signal are provided, agreed and understood by the personnel involved.
- Resuscitator and rescue equipment are available outside the space in case of an emergency.

Reference publications

- SMS Risk Assessment for COT Squeezing (Record No 5/2019).
- SMS S-0503-TC (Appendix) section 3.2.3 (Squeezing or Pudding)



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