

Lessons Learned LL2022 – 5004

Cargo contamination due to cleaning of loaded cargo tank



Type of Incident: Cargo

Description

Cargo contamination due to cleaning of loaded cargo tank.

Pre-cleaning conference was done the day before the incident and the plan was to start tank cleaning early morning next day.

After the pre-cleaning conference a wall wash of 7CP was analysed was found to contain a relatively high concentration of chlorides (5ppm).

It was decided by Chief Officer to do a flush down using technical freshwater.

7CP was not included in the original cleaning plan and was not included in the pre-cleaning conference.

Written instruction for additional flush down was given to the pumpman by Chief Officer.

The pumpman planned for doing the flush down at the same time as other cleaning operation was on-going. One of the crew was posted on the manifold to open and close valves as the tank cleaning operation was progressing.

As the rest of the tank cleaning crew were occupied otherwise, the crew placed at the manifold decided to help and went to the fixed tank cleaning machine on 7WP instead of the correct cargo tank 7CP.

Tank cleaning freshwater valve open and the valve on the tank cleaning machine open.

Even though the communication was clear that Cargo tank 7CP was to be flushed down the crew member connected to cargo tank 7WP which contained cargo. (Epichlorohydrin)

The tank cleaning machine was well marked with stencils and easy to identify.

When the pumpman started freshwater cleaning, nobody had verified that the correct tank was connected.

During the freshwater another crew came to the machine and noticed it was connected to cargo tank 7WP. He immediately closed the valve at the tank cleaning machine.

It is estimated based on interviews that approximately 250-500 liters of water entered 7WP.

Note:

It shall be noted that the outcome of this incident was low due to comparability of the cargo, however the potential consequence for a serious incident was present if other cargo had been contaminated with water.

Causes (Immediate and Root Cause)

Immediate cause:

Tank cleaning of loaded cargo tank.

Failure to follow procedure and tank cleaning checklist.

Root causes:

Lack of skill or knowledge.

Double check / Verification according to procedures not done prior start.

Actions / recommendations:

- Review of tank cleaning procedures and checklist to be done, to ensure that all crew participating in tank cleaning operations understand their tasks and understand the importance of double checks prior start up.
- Share this LL with the crew and discuss the event at next GSM