

Russian ISU member responds to toxic gas casualty

On February 19, the Russian Federation Maritime Rescue Service (MRS), Kerch unit, received a report that six of the eight crew had been poisoned on board the dry cargo vessel APRIL in the southern part of the Azov Sea. The vessel was laden with 1540 tonnes of ferrosilicon but the reason for the poisoning was unknown. It then emerged that the chief engineer had lost his life and it was necessary to arrange urgent medevac of the victims.

Within one hour of notification, the ocean going tug MERCURY of Azov-Black Sea Branch of the MRS arrived to assist the seafarers. However, due to severe weather conditions and the APRIL's very low freeboard, it was only possible to carry out the medevac after the vessel reached coastal refuge and anchored in the northern part of the Kerch Strait near the port of Kavkaz.

On 20 February, medevac was required for the two remaining crew members on board who also now had symptoms of poisoning. According to expert assessment, the cause of the poisoning was the cargo - ferrosilicon - an alloy of iron and silicon with a typical silicon content of 15 - 90% by weight. When stored improperly or wetted, it emits the toxic gases phosphine and arsine as well as hydrogen.

After the crew had left the vessel, an increasing list to starboard was observed and a salvage team boarded the damaged vessel in chemical protection suits and breathing apparatus, with gas analysis monitors and equipment to carry out any urgent salvage work.

An inspection of the entire vessel (picture above right) revealed a spontaneous inflow of water into the isolated ballast



tanks on the starboard side. The rescuers closed all the doors and portholes on the casualty and, with power supplied by MERCURY, activated the vessel's diesel generators and, using its ballast pumps, pumped out the starboard tanks and the list was eliminated.

Dive inspection of the hull showed a crack in the side ballast tank and a small hole in the bottom ballast tank and these were patched. After stabilization, the salvors from the tug MERCURY made a tow connection to ensure her safety without a crew in adverse weather conditions. The salvage team regularly measured the water level in the ballast tanks, as well as gas concentrations.

During the first days, the level of safe gas concentration on the damaged vessel was significantly exceeded and all works were carried out in chemical protection suits and breathing apparatus. The operation was constantly monitored by specialists

from the Ministry of Emergency Situations and there was no danger to settlements nearby and no leakage of chemical substances has been reported.

Until the shipowner decides how to proceed, MRS is continuing to ensure safe anchorage of the vessel without crew on board near the port of Kavkaz with the two tugs of MRS Azov-Black Sea Branch, MERCURY and DERZKIY, standing by.

All seven surviving crew members received good medical aid and their health and lives are not in danger.

Commenting on the operation, MRS First Deputy Director, Victor Chernov, said: "It could have been a very routine salvage operation except for the consideration that all the crew was poisoned by gas and disembarked. It was unusual for our team to do their regular salvage work wearing chemical protection suits and breathing apparatus."

New quality standard for bulkers

Intercargo and RightShip, the third-party maritime due diligence organisation, have announced the launch of a new quality standard for the dry bulk sector, DryBMS. The standard will be governed by a new NGO to be established later this year and will support the improvement of safety in the dry bulk sector.

Both organisations say they have "strongly and consistently" advocated the need for significant improvements to dry bulk safety standards and in 2020 they combined to create a single framework for the whole industry.

Supported by the International Chamber of Shipping (ICS) and BIMCO,

DryBMS now exists as a simple set of best practices and key performance indicators and raises standards in safety, environmental and operational excellence.

ISU statistics show that bulkers represented 20% of the vessels to which ISU members provided services in 2020.