



Bundesstelle für Seeunfalluntersuchung
Federal Bureau of Maritime Casualty Investigation
Federal Higher Authority subordinated to the Ministry of Transport
and Digital Infrastructure

Interim Investigation Report

pertaining to the investigation report No. 198/15

Severe Casualty

**Cargo hold fire on board the PURPLE BEACH
in the deep water anchorage of the German
Bight on 25 May 2015**

25 May 2016

Under the terms of § 28 Para. 1 sentence 1 of the law to improve safety of shipping by investigating marine casualties and other incidents (Maritime Safety Investigation Law – SUG) of 16 June 2002, as amended in the announcement of 1 March 2012 (Federal Law Gazette I, page 390), last amended by Art. 16 Para. 22 of the decree of 19 October 2013 (Federal Law Gazette I, page 3836) in conjunction with Art. 14 Para. 2 of the directive 2009/18/EC of the European Parliament and the Council of 23 April 2009 establishing the fundamental principles governing the investigation of accidents in the maritime transport sector, the Federal Bureau of Maritime Casualty Investigation publishes an interim report in case an investigation report dealing with very serious or serious accidents cannot be prepared within the term of 12 months.

Issued by:
Bundesstelle für Seeunfalluntersuchung – BSU
(Federal Bureau of Maritime Casualty Investigation)
Bernhard-Nocht-Str. 78
20359 Hamburg

Director: Volker Schellhammer

Phone: +49 40 3190 8300
posteingang-bsu@bsh.de

Fax: +49 40 3190 8340
www.bsu-bund.de

Summary

On 25 May 2015 the PURPLE BEACH, flying the Marshall Island's flag, needed to interrupt her voyage to Brake and drop anchor in the deep water anchorage in the German Bight. The ship carried a cargo of several fertilizers in the lower holds of cargo holds 2 to 5. Moreover, general cargo was stowed in cargo holds 3 and 4 in the tween deck. While calling at the anchorage the crew noticed a smoke emission from cargo hold 3 at about 1710. Shortly afterwards the smoke detection system of this cargo hold was activated. A little later the competent Vessel Traffic Services was notified of the smoke emission and thus the German authorities learned about this. The crew attempted to detect the cause of the smoke emission, but did not succeed. Upon consultation with the shipping company the crew discharged CO₂ into the cargo hold. Thereupon the smoke emission declined. First of all, the Waterways and Shipping Administration ordered various auxiliary ships to proceed in the proximity of the distressed ship.

Upon request from the Waterways and Shipping Office Wilhelmshaven, the German Central Command for Maritime Emergencies assumed overall operational leadership at 0200 on 26 May 2015. The same morning the first firefighting unit of the fire department Cuxhaven was flown to the ship. The unit explored the situation on board and detected rising temperatures. A blocking zone was established in an area of 5000 m around the ship. At around 1000 the smoke emission increased heavily. Since an increasing risk of an explosion was assumed, the support staff left the ship. At the same time the crew went into the freefall life boat and abandoned the ship as well. The crew was taken on board the water protection ship MELLUM. Later on, the crew of the PURPLE BEACH was flown onshore, in order to carry out medical examinations and observations.

The auxiliary ships deployed further attempted to fight the continuing development of the smoke emission with water. In the course of 27 May 2015, it was started to flood cargo hold 3 with water, in order to suppress the self-sustaining degradation of the fertilizer. In the night of 30 May to 31 May 2015 the chemical reaction could be considered suppressed. Due to the weather deterioration, the ship was towed to an emergency berth in the JadeWeserPort in Wilhelmshaven. There further action was taken to secure the ship. The Central Command for Maritime Emergencies handed over overall operational leadership on 12 June 2015.

The Federal Bureau of Maritime Casualty Investigation started the investigation on the day of the accident. The crew members were accommodated in the seaman's mission Bremerhaven by the shipping company after they had left the medical institutions. There the relevant crew members were interviewed by the BSU. Since then, the BSU played an active role in the action taken on board of the ship.

The ship is currently being further unloaded at her new berth in Wilhelmshaven. The unloading process was and is still impeded by measures to determine the changed properties of the cargo induced by the incident. This particularly applies to the cargo stowed in cargo holds 2 and 3. Furthermore, the administrative and technical processes intended to lead to the further use of the fertilizer are very time

consuming. Therefore only the tween deck of cargo hold 3 could be examined in detail. It is not foreseeable when the unloading process will come to an end.

The circumstances mentioned result in the fact that the time limit of one year set by the European Union and implemented into national law by the Federal Republic of Germany, to publish an investigation report after a very serious or serious marine casualty has occurred, cannot be satisfied.