

# **Marine Casualty Caused by Ever Judger in Balikpapan Bay: Human Error or Technical Factors?**

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**Abstract.** A marine casualty involved MV Ever Judger has occurred on 30 March 2018 in Balikpapan Bay. The vessel was about to leave the terminal and headed to Malaysia. Unfortunately, the ship underwent problem on main engine and the departure was delayed. Later in the evening, the crews resolved the issue and planned to drop the anchor in Balikpapan Bay. The anchor hit and dragged the submerged crude oil pipeline of Pertamina which caused pipeline damage and crude oil pollution. There were three ships impacted by the fire blast, the vessel itself and two other wooden vessels. One of the vessel's crew was badly injured, and five people died at the scene. The report says that crude oil spread onto the bay and damaged marine life and mangrove forest. The accident has caused one of the five pipes broken into V-shape. Pertamina underwater survey reported there was an anchor scar, assumingly the vessel's anchor. Balikpapan District Court passed a judgment that the Master found guilty of breaching Article 98 (3) of Law Number 32/2009 on Protection and Management of Environment. The study aims to discuss the liabilities of parties in this casualty. This research uses normative juridical approach, namely analyzing document study and literatures using secondary data, consist of primary, secondary and tertiary legal resources, such as relevant statutory regulations, international conventions, court's hearings and judgments, books and journals combined with interview with relevant parties. The study is explanatory in nature by studying the case through information, statements and other sources.

**Keywords:** *marine casualty, liability, Balikpapan Bay, Pertamina*

## **1. INTRODUCTION**

Safety is very important and occupies a central position in all aspects of the shipping world. Shipping safety concerns the characteristics, attitudes, values and activities. The problem that often occurs in sea transportation is the loss caused by damage or error in the transportation of goods caused by the carrier's negligence, even matters relating to passenger safety and security are problems that require juridical arrangements. In this case the carrier is responsible for the safety of passengers and the security of the goods carried in accordance with the type and quantity stated in the cargo document and /or the transportation agreement or contract regulated in accordance with the legal source of sea transportation arrangements.

Much international effort has gone into making ships safer over the last decade, and there are encouraging signs that there have been significant improvements in ship structures and the standards of equipment. Compared to the improvements in construction, equipment and environmental ship standards, much more remains to be done to address the human side of shipping, to prevent loss of life, injury, injustices and the inhumane treatment of seafarers.

According to a report published by [1], South China, Indo-China, Indonesia and the Philippines remain as the main loss hotspot in the world accounting for almost thirty percent (30%) of the total losses [1]. The majority of marine casualty or shipping accident can be caused due to human factor/manning issues, crew negligence, abnormal weather conditions, technical failures, route conditions, ship related factors, cargo-related factors. Shipping accidents have become more environmental nowadays and ends up with huge financial losses almost every new ship built today are fitted with sophisticated shipboard equipment to reduce navigational risks, sustain and enhance safety of life and property and preserve the environment.

On March 30, 2018 at around 22:00 local time, the anchor of a coal bulk carrier with a Panama flag hit and dragged Pertamina's crude oil pipeline. On March 31, 2018 at around 11:05 local time, large flames with thick black smoke began to spread in Balikpapan Bay. Starting at the front of the MV Ever Judger and then spreading to the North and South. Flames spread over the water from the front towards the stern of the MV Ever Judger. One of the crew of the MV Ever Judger Ship who was on the stern deck was burned in several parts of his body and five

Balikpapan residents who were on the two ships located in front of the Ever Judger Ship were victims of the fire. Knowing this the officer in charge of Pertamina ordered Field Officers at Lawe-Lawe to stop the remaining operating pumps moving crude oil throughout the Gulf and to avoid the possibility of fire spreading to the refinery area and endangering the refinery in operation and forced to stop production. Pertamina did not know where the source of the oil spill was at that time. Pertamina deployed its own fire extinguisher (multipurpose boat with fire-fighting equipment) and asked the nearby oil companies to work together to help extinguishing the fire in Balikpapan Bay.

At the same time, the Port of Balikpapan ordered a multipurpose ship to extinguish the fire. All ships were ordered to leave the bay immediately, especially the tankers. In less than an hour the fire had been completely extinguished. All crew members of the MV Ever Judger have been evacuated to shore. Several days after the disaster, oil spread along the bay and out of Balikpapan Bay. Marine ecosystems are heavily affected by crude oil pollution. Many fishermen were also negatively affected by this accident. The National Transportation Safety Committee (NTSC) identified several safety issues that contributed to accidents and issued safety recommendations to prevent similar incidents in the future. Bridge resource management has been found to be a major problem in this accident. Therefore, a number of safety measures are basically necessary to prevent the same accident from recurring in the future.

## **2. RESEARCH METHOD**

The research uses normative or juridical legal research method. Normative legal research is carried out by analyzing library materials or secondary data. The statutory approach is usually used to investigate the rules of the statute where there is still a shortage or even burial of overlapping practices either in technical terms or in its field implementation. This approach is carried out by applying all the rules of the law relating to the problems that are being faced. These approaches are, for example, made by studying consistency or consistency between laws, implementing regulations, decrees and other regulations.

## **3. RESULTS**

### **3.1. The Accident**

#### *3.1.1. Marine Casualty, Human Error or Technical Factor?*

According to IMO's Casualty Investigation Code and IMO Circular MSC-MEPC.3/Circ.3, marine accident is any marine casualty or marine incident. An accident does not include a deliberate act or omission, with the intention to cause harm to the safety of a ship, an individual or the environment. Further, accident may be classified as very serious marine casualties, serious, less serious casualties and marine incident. Marine casualty means any event, or a sequence of events, that has resulted in any of the death of, or serious injury to a person, the loss of a person from a ship, material damage to a ship, the loss, presumed loss or abandonment of a ship, material damage to a ship, the stranding or disabling of a ship, or the environment of a ship in a collision, material damage to marine infrastructure external to a ship, that could seriously endanger the safety of the ship, another ship or an individual and severe damage to the environment, or the potential for severe damage to the environment, brought about by the damage of a ship or ships which occurred in connection with the operation of a ship. Further, very serious marine casualties mean casualty involving total loss of the ship, a death or severe damage to the environment.

Ship accidents can be any form of collision, grounding, explosions and fires. According to Article 244 paragraph 3 of Law Number 17 Year 2008 on Shipping, Law, the Captain shall take precaution and inform the other parties if he knows that his ship/ other ship or any person in danger. Further, the paragraph 4 obligates the Captain to report the danger to Harbour Master nearest to the port. In this case, when the accident occurred, the Captain did not inform the Harbour Master whatsoever.

Ship accident or in this regard marine casualty is an event experienced by the ship that can threaten the ship or people in the form of ship sank, fire, collision and aground. Despite at the beginning the vessel experienced engine problem, but later the engine was alright and ready to disembark. The Researchers regarded the event as a very serious marine casualty. Therefore, the Researchers do not agree with previous research who considered the marine pollution caused by weather factor as force majeure, not human factor.

**3.1.2. Ships and People**

There were three ships that were affected by the fire on March 31, 2018, which were a cargo ship and two fishing boats. In general, the MV Ever Judger was burnt and totally wet, especially at the port side. The portal side is worse than the right side because the fire on the portal side is much bigger than the other side. The equipment is made of plastic, composites, aluminum and crushed glass. For example, the rear mooring lines, lifeboats, accommodation ladders by the harbor were badly burned, and most of them became ashes. The sidewall of the portal, windows, lights, hydrant hoses and cranes were partially destroyed. The hulls around him were black smoking. In addition, fire and smoke reached the top of the mast on the divination deck and the roof of the side bridge.

One of the Ever Judger crew, who was working on the rear deck, suffered burns to several parts of his body as a result of the boat accident. After being rescued from the water, he was then taken to the hospital. After about two weeks of intensive care, he was allowed to leave the hospital for outpatient therapy. There were no reports of marine pollution due to coal or fuel on the MV Ever Judger. The internal parts and chambers of Ever Judger are in acceptable condition. The anchor and port chain were not damaged. Meanwhile, all wooden ships

caught fire because of their location near the source of the fire. Five people died at the scene. Their whole bodies were soaked and part of their clothes were torn off. Two of the five victims killed were found around noon on the same day. Another death was found the following day.

**3.1.3. Subsea Pipes**

There are five pipelines under the sea including one buried gas pipe. The northernmost pipe owned by Pertamina is the only pipe affected. RU V's 20-inch pipeline that connects the crude oil tank from Lawe-Lawe station to the crude oil buffer tank in Balikpapan for the Crude IV Distillation Unit (CDU IV). The 20-inch pipe was cut in half at a depth of about 20-22 m below sea level. One of them is folded in a V-shape. Based on the underwater survey conducted by Pertamina, there is a former anchor with a depth of about 1.5, 1.6 width and 1,000 m long. These marks match the location where the MV Ever Judger anchor was dropped and climbed as well as the size of the Ever Judger anchor. The post-leak survey by the Indonesian Navy also confirmed these findings. The Multibeam Echosounder catches anchor marks and clipped pipe carcasses. Then the two edges were more than 25 m apart. The location of the damaged pipe was moved about 120 m from the original location.

**3.2. Human Error**

**TABLE 1.** Human Errors in 100 accidents at sea

<b>Category of error</b>	<b>No of accidents</b>
False hypothesis	51
Habits	46
Decisions	35
Training	35
Personality	35
Ergonomics	34
Social Pressure	34
Stress	17

Source: Wagenar and Groeneweg (1987)

**3.3. Court Cases and Verdicts**

The Court has passed the judgments on the marine casualty. So far, there are 1 criminal case against the Captain, 2 cases at Administrative Court and 1 civil case. The judgments of all cases have been passed, hence they are all final and binding.

However, the trial of civil case filed by the Minister of Environment and Forestry against PT. Pertamina (Persero), Zhang Deyi, Fleet Management Limited (Hong Kong) and Holding Company Limited (British Virgin Island) is still being on going at Central Jakarta District Court.

**TABLE 2. Case and Verdicts**

<b>No.</b>	<b>Case/Verdict No</b>	<b>Date</b>	<b>Parties</b>	<b>Remarks</b>
1.	Balikpapan District Court Verdict No: 749/Pid.B/LH/2018/P N.BPP	11 March 2018	Republic of Indonesia v. Zhang Deyi	Convicted of breaching Environmental Law, 10 years imprisonment, Rp. 1,5 trillion fine. The Appeal and Cassation courts both passed the same judgments.
2.	Central Jakarta District Court Case No: 407/Pdt.G/LH/2019/P N Jkt Pst (on going hearing)	17 July 2019	Minister of Environment & Forestry v. PT. Pertamina (Persero), Zhang Deyi, Fleet Management Limited (Hong Kong), Holding Company Limited (British Virgin Island))	Jointly qualified and responsible for pollution and environmental damage due to crude oil spill in Balikpapan Bay (strict liability based on Article 88 Law Number 32 Year 2009 on Protection and Management of Environmental with compensation of Rp. 10.147.503.577.055 (ten trillion one hundred and forty seven billion five hundred and three million five hundred and seventy seven thousand fifty five ( <a href="http://sipp.pn-jakartapusat.go.id/index.php/detil_perkara">http://sipp.pn-jakartapusat.go.id/index.php/detil_perkara</a> accessed on 27 November 2020)
3.	Jakarta Administrative Court Verdict No:89/G/2019/PTUN.JKT	23 Oct 2019	Zhang Deyi v. Minister of Energy and Mineral Resources	Not admissible (niet onvankelijk verklaard) <a href="https://putusan3.mahkamahagung.go.id/direktori/putusan/629a42bd58455d7bf02545cb65af262a.html">https://putusan3.mahkamahagung.go.id/direktori/putusan/629a42bd58455d7bf02545cb65af262a.html</a>
4.	Jakarta Administrative Court Verdict No:174/G/2019/PTUN-JKT	4 March 2020	Zhang Deyi v. Ministry of Energy and Mineral Resources	Certificate of Pipe Use No: 412/PP/SKPP/18.03/DJM.T/2016 (10 Nov 2016), Decree No. 588/18.01.DMT/2019 (4 April 2019) annulment of previous certificate <a href="https://putusan3.mahkamahagung.go.id/pengadilan/profil/pengadilan/ptun-jakarta/page/9.html">https://putusan3.mahkamahagung.go.id/pengadilan/profil/pengadilan/ptun-jakarta/page/9.html</a>

5.	Balikpapan District Court No:60/Pdt.Bth/2020/P N Bpp	15 Sept 2020	Tnb Fuel Services Sdn. Bhd v. Balikpapan Prosecutor Office	Cargo owner is also liable for the pollution and environmental damage caused by the Captain (confiscation of coal) <a href="https://putusan3.mahkamahagung.go.id/direktori/putusan/4b564c0819f65e105daec4de83ddfb47.html">https://putusan3.mahkamahagung.go.id/direktori/putusan/4b564c0819f65e105daec4de83ddfb47.html</a>
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Source: Researcher (2020)

1. It was proven that Zhang Deyi as the captain of the MV Ever Judger Ship was legally and convincingly found guilty of “Contamination and Destruction of Life Pollution”.
2. Zhang Deyi was sentenced to 10 years in prison and a fine of Rp. 15,000,000,000, - (fifteen billion rupiah) subsidiary 1 (one) year imprisonment Sentenced the Plaintiff to pay court fees of Rp. 416,000, - (four hundred and sixteen thousand rupiah);
3. Determining the length of time that Zhang Deyi was detained is fully deductible from the sentence imposed;
4. Ordered Zhang Deyi to remain in custody

This case has been brought to the civil domain but no court decision has yet been made. The civil suit is still in court proceedings. With the lawsuit number 407 / Pdt.G / LH / 2019 / PN.JKT.PST. The Ministry of Environment sued PT Pertamina, Zhang Deyi, Fleet Management Limited and Ever Judger Holding with the aim of holding accountability for ship accidents that resulted in environmental damage due to spilled oil and casualties.

PTUN

Number: 89 / G / 2019 / PTUN-JKT

1. To declare that the plaintiff's claim is not accepted (niet onvankelijk verklaard);
2. Ordered the plaintiff to pay a court fee of Rp. 416,000, - (four hundred and sixteen thousand rupiah);

### **3.4. Parties Liable to Marine Casualty**

#### **3.4.1. The Captain**

##### **Marine Pilot**

Balikpapan Harbour Master (KSOP Blikpapan) recently passed a new regulation Number: UM.002/16/18/KSOP.BPN-2020 on Technical Guidelines of Pilot and Safety in Passing Oil and Gas

Facility in Pilot Areas in Balikpapan Port. The regulation requires any ships approach the facility or pass the oil and gas subsea pipeline in Balikpapan Port to send data information through vessel communication radio at Vhf channel frequency 12 about the ship name, flag, size, show it to pilot radio station and monitored by Local Port Service (LPS) radio station. It regulates further passing subsea pipeline of SKK and Pertamina, restricted area with special Radio telephone Operator’s Permit (SROP) or Vessel Traffic System (VTS) and Marine Pilot Station as well as ships are prohibited to anchor or stop at the restricted area.

#### **3.4.3. International Safety Management (ISM) Code**

Its purpose is to provide an international standard for the safe management and operation of ships and for pollution prevention.

## **4. CONCLUSION**

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