

# FSO Safer

## A Floating Ticking Bomb

Case Analysis | 14 December 2021



Studies and Research Division

# **Safer Tanker: A Floating Ticking Bomb**

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## **Introduction**

The turmoil in Yemen can spill over to neighboring countries and affect the whole region due to its geopolitical location. The destabilization of this part of the world can negatively affect western countries whose economic and political interests are associated with this region. The outcomes of defragmenting the state and replacing it with militias and de facto authorities will go beyond Yemen. The 40-year-old decaying vessel, Safer tanker, is only one case that proves that a local Yemeni issue could frighten the whole world. The environmental calamity caused by any spillage from the vessel would rapidly cause an economic catastrophe combined with a humanitarian crisis. It is an example of how everyone will suffer from endorsing and recognizing a radical militia's authority. The Houthis keep their fingers on the trigger, hindering all the U.N. preventative efforts to access the tanker to maintain it before the catastrophe occurs. It is not a matter of 'if'; it is a matter of 'when.' The crisis that might happen would be a multi-faceted environmental, economic, humanitarian, diplomatic, and political disaster. According to environmental experts, the economic damage will exceed a billion dollars, and the developed world will pay these billions because Yemen certainly cannot. The Atlantic Council describes the looming catastrophe as "the worst humanitarian and environmental disaster of the century."

## **About the Tanker**

The Safer tanker was used to store and export oil from Yemen's inland oil fields around the province of Marib in the East of Yemen. The vessel Safer has been moored off Hodeida, Yemen's main port on the Red Sea, since 1988. The tanker, measuring 362 meters (1,188 ft) long and 70 meters (230 ft) wide, carried an estimated cargo of 1.148 million Marib light crude oil barrels (47.9 million gal.). In its storage configuration, Safer has a capacity of about three million barrels of oil. However, when the Houthis took over Sanaa and the northern part of Yemen in 2014 and 2015, the vessel fell under their control and was not maintained. Despite many requests by the U.N. for an inspection, the Houthis refused to cooperate.

Safer was built in 1976 by the Hitachi Zosen Corporation in Japan as the oil tanker Esso Japan. Ten years later, Esso Japan was turned into a storage vessel and renamed Safer in 1987 and owned by the Yemeni government via the national oil company. In 1988, she was anchored about 7 kilometers (4.3 mi) off of the coast of Yemen and used to store and export oil from inland oil fields around Ma'rib province.



# FSO SAFER

## A FLOATING TICKING BOMB

**1976** SAFER WAS FIRSTLY BUILT BY THE HITACHI ZOSEN CORPORATION IN JAPAN AS THE OIL TANKER ESSO JAPAN

**1987** ESSO JAPAN WAS TURNED INTO A STORAGE VESSEL AND RENAMED SAFER AND OWNED BY THE YEMENI GOVERNMENT VIA THE NATIONAL OIL COMPANY

**1988** SHE WAS ANCHORED ABOUT 7 KILOMETRES (4.3 MI) OFF OF THE COAST OF YEMEN AND USED TO STORE AND EXPORT OIL FROM INLAND OIL FIELDS AROUND MA'RIB PROVINCE.

**2016** HER STRUCTURAL STATE WORSENEED SIGNIFICANTLY, PUTTING HER AT RISK OF A CATASTROPHIC HULL BREACH OR AN EXPLOSION OF OIL VAPORS THAT WOULD NORMALLY BE CONTROLLED BY INERT GAS CREATED ON BOARD

**2018** IN MARCH 2018, THE YEMENI GOVERNMENT AND THE HOUTHIS FORMALLY ASKED UN AID TO ADDRESS THE SHIP'S PRECARIOUS CONDITION

**2020** THE UNITED NATIONS SECURITY COUNCIL HELD A SPECIAL MEETING IN JULY 2020 DISCUSSING THE NEWS ABOUT A LEAK IN THE COOLING SYSTEM, WATER ENTERED THE MACHINE ROOM WHEN ITS ENGINE ROOM FLOODED IN LATE MAY 2020

**2021** ON FEBRUARY 25, 2021, THE UNSC ISSUED THE RESOLUTION 2564 (2021) HOLDING THE HOUTHIS RESPONSIBLE FOR THE CONSEQUENCES OF SUSPENSION THE MAINTENANCE PROCESS OF THE TANKER

**2021** THE UNSC HELD ANOTHER MEETING IN JUNE 2021 TO DISCUSS THE DEVELOPMENTS OF THE NEGOTIATIONS WITH THE HOUTHIS

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Infographic: About Safer Tanker

## How did we get here?

Since the war broke out in Yemen in March 2015, the vessel has not been maintained. In 2016, its structural state worsened significantly, putting the tanker at risk of a catastrophic hull breach or an explosion of oil vapors that would typically be controlled by inert gas created on board.

In March 2018, the Yemeni government and the Houthis formally asked U.N. aid to address the ship's precarious condition, citing concerns over its situation. Due to a stalemate in negotiations with the Houthis over the deployment of a U.N. technical team to the ship, OCHA officials have been routinely updating the Security Council on these talks since April 2019 during their monthly briefings on Yemen's humanitarian situation. The United Nations Security Council held a special meeting in July 2020 discussing the news about a leak in the cooling system; water entering the machine room when its engine room flooded in late May 2020. On July 15, 2020, the U.N. warned that the FSO Safer might spill four times the amount of oil that the [Exxon Valdez](#) spilled and affect up to 28 million people that rely on the Red Sea ecosystem for their livelihoods.

Later on, the Houthis assured the U.N. that they would provide the team access to the vessel; however, the discussions to finalize approval halted. In November 2020, the U.N. announced that the Houthis had sent an official letter to approve the team's deployment and said it hoped to deploy it by February 2021. However, in February, the U.N. released a new statement raising concerns that the Houthis were planning to review their earlier approval. The U.N. further said it could no longer predict when the mission might be able to deploy.

On the 25th February 2021, the UNSC issued resolution 2564 The resolution held the Houthis responsible for the consequences of the suspension of the maintenance process of the tanker. In June 2021, the UNSC held another meeting to discuss the developments of the negotiations with the Houthis. In the meeting, the Executive Director of the U.N. Environmental Programme, Inger Andersen, and OCHA's Director of Operations and Advocacy, Reena Ghelani, briefed the Security Council about the increasing environmental and humanitarian risks posed by the decaying Safer oil tanker located in

the Houthi controlled territory of Yemen. "The members of the Security Council reiterated Houthi responsibility for the situation and their extreme concern at the growing risk that the Safer oil tanker could rupture or explode, causing an environmental, economic, maritime, and humanitarian catastrophe for Yemen and the region. This could further threaten and worsen the situation in Yemen and the region."

## **The Catastrophic Scenarios**

Due to the lack of maintenance of the Safer tanker, two scenarios are increasingly likely to occur:

### **First Scenario: Oil spill**

Some of the oil may leak into the Red Sea due to corrosion and a lack of maintenance of the FSO. The leaking in the engine room, along with uncontrollable water flow, might destabilize and sink the entire body of the vessel, resulting in a significant oil spill.

### **Second Scenario: Explosion and Fire on Board**

This scenario could occur when gas collected in cargo tanks is accidentally ignited, resulting in most or all of the oil leakage into the Red Sea.

## **Who will be affected?**

If the tanker spills its cargo into the sea, the immediate consequences will be environmental and ecological. According to a statement published last month in the Yemen-based NGO website [Holm Akhdar](#) "Green Dream," an oil spill from the Safer could wipe out the livelihoods of 126,000 fishermen. According to the report, 850,000 tonnes of fish could perish in the Red Sea, the Bab El Mandab waterway, and the Gulf of Aden, it said. According to the same source, a Safer oil spill could impact 115 Yemeni islands in the Red Sea. It might also clog the Bab el Mandeb strait, the route to the Suez Canal through which up to 12% of global trade flows.

Because the stored oil is light, some of it may evaporate fast, but the majority of it will flow quickly on the ocean's surface and cause greater devastation than heavier oil. As a result, more than 100 islands in the Red Sea may lose biodiversity, and possibly cause the

extinction of coral reefs from Yemeni waters due to the oil coating preventing oxygen and sunlight from reaching them. Economically, the port of Hodeida, the main port on the Yemeni West Coast, will be closed for months.

Ecologically, the calamity will decimate bird life in addition to destroying most of the Red Sea. Approximately 1.5 million migrating birds will be at risk when they transit the Bab el-Mandeb each year on their way to Africa. The catastrophe impact would reach the neighboring countries as the traveling oil film will reach the Arabian Peninsula, the African coast, and Red Sea desalination plants. The damage to desalination systems will impact millions of people's lives and water supply in Egypt, Sudan, Eritrea, and Saudi Arabia, as raw and industrial water output will diminish noticeably.

Subsequently, millions of people may be forced to migrate to more livable areas due to such deplorable conditions. The significant Red Sea damage could close maritime lanes for weeks or even months on both coastlines. These developments would jeopardize the region's security and stability, and redirect international maritime traffic between Asia and Europe. Yemen's dire humanitarian situation would also worsen if the Red Sea naval channels, which carry 20,000 ships and account for 10% of global trade, were shut down, even temporarily. Yemeni ports will be unreachable, blocking the country's only source of international help. Because up to 90% of Yemen's food supplies are imported, and 80% of the population relies on humanitarian aid, this will negatively impact the people's livelihoods.

### **Who is responsible?**

All the attempts made by the U.N. to inspect and assess the damage have failed due to the Houthis' reluctance. Safer tanker with its cargo of crude oil valued at millions of U.S. dollars is used as a bargaining card by the Houthis, who should fully understand the risks. There are miscalculations with the Houthis when they estimate the value of the vessel. They may not realize that storing crude oil in a hot, rusty, and poorly maintained ship for more than five years damages the cargo and makes it difficult to sell. Therefore, the

Houthis' estimate is not only unrealistic, but now the cost to maintain the vessel and cargo will likely exceed the value of the potentially contaminated oil.

Realizing that they can no longer profit from the oil, the Houthis still use the tanker as a bargaining chip. The Houthis, understanding the dire situation of war, starvation, and poverty, implicitly threaten to allow the catastrophe. However, this tactic could quickly turn away from their hands, resulting in an unprecedented disaster with environmental, humanitarian, political, and economic ramifications. Later, the focus, which had primarily been on the monetary value of the vessel's contents and its function as an export terminal, has changed. The Houthis began by claiming that the Safer Tanker could not be addressed separately and should be included in a broader agreement.

In August 2019, the U.N. had gotten as far as procuring a recovery vessel stationed on the Djibouti coast. However, the night before its departure, the Houthi authorities withdrew permission. The UN team remains ready to deploy within three weeks of receiving all the necessary permits, said Martin Lowcock in a [briefing to the Security Council](#).

In November 2020, the Houthis again agreed to allow a U.N. team to board the Safer for a month to inspect its condition and make minor repairs. However, after the Houthis refused to sign off on mission plans, the visit, which had been scheduled for February, had to be postponed. The main issue was the Houthi decision to "review" the entire mission, causing the U.N. to miss a deadline to hire a ship.

Even before the latest attempt stalled, some experts were convinced the long-delayed U.N. assessment would never happen. "I give the U.N. mission less than a 1% chance of going ahead," said Ralby, the maritime-law expert, who has argued that the U.N. Security Council should authorize military action to resolve the crisis. "Even if the Houthis signed their agreements in blood, their track record shows that they will renege on that agreement before anything happens."

By September, the talks were still ongoing between OCHA and the Houthis on the process. In early November, a technical document was published by UNOPS, which underlined the technical challenge the operation would involve. In late December, the U.N. issued a Q&A on the mission, whose scope was now:

- To assess the condition of the SAFER oil tanker through analysis of its systems and structure.
- To conduct urgent possible initial maintenance that might reduce the risk of an oil leak until a permanent solution is applied.
- To formulate evidence-based options on what solutions are possible to remove the threat of an oil spill permanently.

By early February 2021, the plans were on hold after the Houthis had failed to provide written security assurances to the U.N. The total cost of the U.N. in the preparations until this point was \$3.5 million.

On February 25, 2021, the UNSC issued resolution 2564 (2021), which determined that the conditions in Yemen constitute a threat to international security and peace, holding the Houthis responsible for the consequences of the suspension of the maintenance process of the tanker. The resolution states that: "Emphasizing the environmental and humanitarian risk and the need, without delay, for access of U.N. officials to inspect and maintain the Safer oil tanker, which is located in the Houthi-controlled north of Yemen, and stressing Houthi responsibility for the situation and for not responding to this major environmental and humanitarian risk, and underscoring the need for the Houthis to urgently facilitate unconditional and safe access for United Nations experts to conduct an assessment and repair mission without further delay, ensuring close cooperation with the United Nations."

In his monthly briefing to the UNSC in March, the Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, Mark Lowcock, criticized the Houthis for lack of flexibility and said that the U.N. continued to discuss logistical support issues. "Resolution 2564 of February 25, which most recently renewed the Yemen sanctions, and an April 16 press statement on Yemen, stressed "Houthi responsibility" for the situation of the FSO Safer and underscored that the Houthis need to facilitate the U.N.'s "unconditional and safe access" to the tanker."

## Every Second Counts: Ways Out Before the Catastrophe Occurs

There are two main solutions that require immediate action to prevent the looming catastrophe:

- 1. Continuing the Political Negotiations:** This solution has been applied for the past few years. The U.N. and international community may use stronger language and stricter measures with the Houthis to force them to cooperate with the U.N. team to get on board the vessel as soon as possible. The Houthis have wasted many opportunities to fix this issue, and their behavior may not change in the future unless they are treated differently.
- 2. Military Intervention:** This way out may have side consequences on the people and the country's economy.

The military intervention is the only possible solution left after all the previous political negotiations to get onboard have failed. The Houthis showed indifference when dealing with such an alarming issue. The U.N. has spent millions of dollars preparing for this mission, but they did not reach any settlement with the Houthis. The looming catastrophe duration is minimal, and no preventive measures could be taken once the spill occurs; therefore, the only way to prevent the disaster is to prevent any possible leaking. In August 2021, I.R. Consilium proposed an approach to address this issue. Reviewing all the past efforts and experiences with the Houthis, I.R. Consilium concludes that the world could not wait until the Houthis agree to the U.N. plan, as they may withdraw their approval any time as it happened previously. "A limited military authorization, paired with a mandate for response planning in case a spill from the vessel or pipeline does occur, may do better than just resolving the SAFER."

To carry out a military action, the United Nations Security Council needs to issue a resolution authorizing it to prevent the spill of the FSO SAFER. The UNSC resolution 2564 (2021) has already determined that the Yemen conditions constitute a threat to international security and peace– the first bar needed for implementing Chapter VII (under art 39, UN Charter). And the text of the resolution already contains measures under Chapter VII, such as economic sanctions and efforts to reduce flows of weapons from

Yemen. To authorize using force under article 42, the text would need to include language permitting states to take "all necessary measures/means," in this case, to address the humanitarian and environmental threat posed by the SAFER.

## **Conclusion**

The aging Safer tanker constitutes a looming catastrophe in the Red Sea and the riparian countries. The disaster would cost billions of dollars, and millions of people would be affected. Unfortunately, we have not seen effective measures from the international and regional countries that will face the disastrous consequences equally in the case of an oil spill or fire. Political negotiation is usually the best way to settle disputes; however, it has not worked in this case. Every second counts, and prompt measures have to be taken before the calamity takes place. Even though it is the more likely practical solution, the military intervention may face many political and legal challenges. Such action also needs international will and determination, which has not been achieved yet.