The Semirara Oil Spill: Its Implications to Maritime Legislations

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**ABSTRACT:** In the stormy morning of December 18, 2005, Power Barge 106 operated by the National Power Corporation (NAPOCOR) ran aground some 200 meters off Barangay Semirara. Approximately 364,120 liters, equivalent to 1,734 barrels or 364 tons of bunker oil was spilled in the area. The study unraveled the circumstances which led to the grounding of the tugboat and the barge off Semirara Island: the captain going near a coral reef and taking the very big risk of grounding; responsible person handling the wheel of the tugboat at the time of the grounding; the supervisor’s competence and qualifications as deck officer; the position of the vessel prior to grounding; the navigational equipment of the tugboat; and the absence of clearance from the Coast Guard. Findings revealed that the captain of the tugboat towing the power barge did not inform the Coast Guard about the incident.

1 **INTRODUCTION**


The grounding ruptured tanks 3 and 4 of the power barge which caused a massive oil spill along the seashores of the island. This was aggravated by the huge waves pounding on the reef.

The National Power Corporation blamed the inclement weather for the incident. The oil spill had contaminated 236 hectares of mangrove forests and 40 square kilometers of marine life including the fish sanctuary off the coast of Semirara.

It was the worst oil spill in the Philippines according to the Coast Guard. The vessel was estimated to be carrying 800,000 liters of bunker oil. Clean-up was projected to last for six months, was estimated to cost P90 million (Philippine Daily Inquirer, Feb. 3, 2006).

Aware of this development related to the incident, the JBLCF was moved to do its share by determining the implications of the oil spill to maritime legislation.

2 **OBJECTIVES OF THE STUDY**

This study aimed to determine and present the following:

1 The underlying factors and circumstances which resulted in the oil spill,

2 The implications of the oil spill to maritime legislations, particularly those concerning the Philippine Coast Guard; and

3 The implications of the oil spill to safe navigation and passage planning.

3 **SIGNIFICANCE OF THE STUDY**

This study maybe beneficial in terms of the following:
The data presented in this study maybe of significance to the maritime-related government agencies for they will be made aware of how seriously and religiously are the maritime laws, policies and regulations implemented and observed in the country. The Semirara incident could be a springboard for them to review and evaluate existing maritime legislations and make decisions as to their appropriateness and adequacy at present. They may likewise be moved to conduct rigid regular monitoring and inspection of sea vessels to prevent tragic and harmful incidents like the Semirara oil spill.

This study may also be found important by sea vessel managements for the Semirara incident can serve as reminder for them to take all possible measures to prevent the occurrence of accidents such as oil spill, which pose great danger to people and the environment.

The Semirara oil spill, as presented in this research, can serve as a model topic for discussion and analyses among maritime faculty and students in related subjects. Said discussion and analyses can delve into the causes and triggering factors, preventions, and effects of sea vessel accidents.

The ultimate beneficiary of this study are the public in general and the marine environment for when precautionary measures are appropriately and adequately made and taken by the authorities concerned- seafaring vessels shall have been made and become environment-friendly for the benefit of human beings in the vicinity.

4 METHODOLOGY

This descriptive-qualitative study looked into the causes and extent of damage of the oil spill in Semirara. It further looked into the implications of the oil spill to the Coast Guard Regulations, safe navigation and passage planning. Interviews and documentary analysis were employed as techniques in data-gathering.

5 FINDINGS

5.1 Unanswered Questions

What were the circumstances which led to the grounding of the tugboat and the barge on December 18, 2005 off Semirara Island? A seasoned captain or master of a vessel would never go near a coral reef because, by doing so, he would be taking a very big risk of grounding. Who was handling the wheel of the tugboat at the time of the grounding? Was he under the supervision of a competent and licensed deck officer? What was the position of the vessel prior to its grounding? What electronic navigational equipment did the tugboat have? Did the tugboat and the barge being towed have clearance from the Coast Guard?

5.2 Bad Weather

How valid was the National Power Corporation’s claim that bad weather caused the grounding of their tugboat and barge? Or was there misjudgment on the captain and management’s part to order the tugboat and barge to proceed to Mindoro despite the low-pressure warning in the Visayas area? Did they have clearance from the Coast Guard station in Masbate?

Is it true that the NAPOCOR tugboat and barge, being government vessels are exempted from securing Coast Guard clearance?

Had the captain of the officers at tempted to secure clearance from the Coast Guard as any commercial vessel would usually do, they would not have been allowed to sail in the bad weather. Had they not sailed, they would not have run aground. Had they not run aground, there would have been no oil spill.

5.3 Negligence

In the event of an oil spill, the primary obligation of the spiller is to inform the Philippine Coast Guard, the agency responsible for preventing and controlling pollution in the country’s territorial waters.

Findings revealed that the master or captain of the tugboat towing the power barge did not inform the Coast Guard about the incident. They learned about the spill only because Malayan towage informed them that they were conducting a salvage operation in Semirara.

5.4 Extent of Damage

The oil spill spread over 236 hectares of mangrove forest. The area included 100 hectares of fully grown mangrove, 56 hectares was reforested by Semirara Mining Corporation and 80 hectares reforested by the Department of Environment and Natural Resources (DENR). A 40 sq. km. marine area was also heavily affected, including declared fish sanctuary. Bunker oil had likewise seeped in as deep as three feet from the surface of a 5 km. stretch of shoreline, resulting in heavy concentrations of dead sea-grass in the area.
5.5 Actions to Contain the Oil Spill
A few days after the incident, an oil spill boom was deployed in the area. A 120-meter solid boom was positioned as barrier at Phase 1 of the area. Meanwhile, a 60-meter fence-type boom was placed as barrier at Kaybilo Cove. Unfortunately, the oil spill boom was rendered useless during strong winds and heavy seas.

5.6 Clean-up Operations
Clean-up operations were done both manually and with the use of high-pressure compressors in the application of oil dispersant.

Aside from the deployment of the oil spill boom and the application of oil spill dispersant, manual clean-up was also undertaken by 255 local work force hired by the National Power Corporation in coordination with the CENRO personnel and the Barangay Captain Reynante J. Lim. Over-all clean-up operation was done by the Philippine Coast Guard with 23 personnel assigned to work at site of the oil spill. The Coast Guard advised an improvised oil-spill strainer made of bamboos and cogon grass to contain the oil from spreading further into the open sea.

A canal was also dug to facilitate the flow of bunker oil from different areas under the mangroves to a pit which served as reception facility. Using drums, the local workers manually collected the oil from the pit for transport to a safe place provided by the barangay officials. The contaminated soil and sand was collected in sacks and also transferred to, and secured, in a permanent dumping site designated by the CENRO Officer and the barangay officials.

5.7 Area Covered by the Clean-up Operations
As of January 30, 2006, only 6% of the area had been cleaned manually and applied with oil spill dispersant. A total of 9,640 liters (46 drums) of dispersant had been applied, covering 40,000 sq. m. of the affected area.

6 GENERALIZATIONS
Following are certain generalizations concerning the Semirara oil spill incident:

1. Had correct maritime protocol been observed, the Coast Guard would not have cleared the NAPOCOR tugboat to sail and tow the power barge from Masbate to Mindoro due to the bad weather.

2. The route taken by the master of the tugboat defied practical navigation principles. The chosen route was, in the first place, not the safest and shortest route from Masbate to Mindoro. The tugboat could have opted for a safer alternative route in accordance with established and accepted principles in the practice of navigation.

7 RECOMMENDATIONS
In the light of the above generalizations, the following are recommended:

To avoid other catastrophic incidents similar to Semirara oil spill, the NAPOCOR management should consider an evaluation of competencies among its captains and officers in-charge of tugboats towing power barges. A needs assessment training will help in the enhancement of said competencies among the personnel concerned.

The Philippine Coast Guard should strictly require all vessels to secure a clearance from their office prior to their departure. It is suggested that the Coast Guard establish a vessel traffic service to facilitate the passing vessels reporting in their position, cargo and port of destination for close monitoring of their movements.

The NAPOCOR management should require its captains to prepare and submit a passage plan for every intended voyage or trip. The NAPOCOR should closely monitor that the passage plan is strictly followed by the captains and officers in command of the tugboats of the company.

The government through the Maritime Industry Authority (MARINA) should implement the 2003 Amendment of the Marpol 73/78-the phasing out of single hull tankers.

REFERENCES