

# Review Paper on Marine Pollution and its Removal

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**Abstract:** The oil pollution caused by ship transport mainly includes two categories the first is the pollution caused by normal navigation, eg: cabin bilge water, oil tanker ballast water, washing water and so on. The second category is due to shipping accidents, eg: oil spill. Among all types of marine pollution, oil pollution should be said that the most serious. Because oil is difficult to volatile, making the oil on the sea to form a terrible oil film, resulting in a series of serious consequences. Oil as the basis of industry, it can't be replaced for industry, the oil bring us a lot of convenience in production and life, but also brought the significant pollution to the environment, especially the marine environment, and now, oil Pollution has become one of the most important causes of marine pollution.

**Keywords:** Marine Pollution

## I. INTRODUCTION

The most important pollution of sea is oil. Hence we will discuss it here in details. Oil pollution of the sea normally attracts the greatest attention because of its visibility. There are several sources through which the oil can reach to the sea. Every year, approximately 3.5 million metric tons of the oil is released into the world's oceans.

Even very small quantities of oil will spread, floating on the surface of the water covering vast areas of water. These thin sheets can kill marine larvae, which in turn will reduce the number of marine animals. Almost 4 times the amount of oil which comes from the large tanker spills, 19%, is regularly released into the ocean from routine maintenance, which includes boat bilge discharge as well as other ship operations.

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### 1.1 Objective:

#### Objective of the Work

1. To study about the various types of marine pollution.
2. To treat the oil spilled marine water by absorption using magnetic activated carbon and sugarcane waste, tea waste & corn waste, etc.
3. To compare the characteristics of treated oil spilled water with the existing values.

### 1.2 Scope of Project

1. This study concerns analysis of reinforced concrete moment resisting open frame, open frame with braces and open frame with shear walls only, using Staad Pro program. The effect of brick infill is ignored.
2. This study involves a theoretical 12 storey building with normal floor loading and no in fill walls.
3. The comparison of fundamental period, base shear, inter-storey drift and top-storey deflection is done by using Response Spectrum analysis, which is a linear elastic analysis

### III. LITERATURE REVIEW

Author Name	Paper Name	Publication Year	Technology Used
Aswinraj.c, Geethanjali.s, Kalaivani.v, Mrs. Swedha.T	Marine pollution and its removal (oil spillage)	2019	Oil spill is one of the most series pollution that has a negative effect on the ecosystem and marine life. Among all different adsorbent, Bio-mass waste is preferred as on oil clean up technology due to its Bio Degradation and buoyancy.
Eduart Wolok Jamal Barafi Navneet Joshi Rossella Girimonte & Sudip Chakraborty	This paper describes about A variety of sorbents which are bio-based covered in this review paper are beneficial in treating oily wastewater, a steep reduction in oil content from water, re-utilization of waste, and recovery of oil.	2020	The next challenge lies in curbing the cost effective methods and producing materials which suit mini mal, feasible, and eco-friendly changes but without compromising the beneficiary of the bio-based materials which are native. So non-toxicity and biodegradability must be retained. So as research has shown, some of the biomaterials have the potential ability to remove oil from the environment, and then, the oil can be recovered from it.
Aswinraj.c, Geethanjali.s, Kalaivani.v, Mrs. Swedha.T	Marine pollution and its removal (oil spillage)	2019	Oil spill is one of the most series pollution that has a negative effect on the ecosystem and marine life. Among all different adsorbent, Bio-mass waste is preferred as on oil clean up technology due to its Bio Degradation and buoyancy.
Ahned Bayat	This is an research paper that To determine their potential for oil spill cleanup, the performance of three sorbents was studied.	2017	The sorbents were selected from natural and synthetic categories. Bagasse and rice hull as natural materials and polypropylene nonwoven web as a synthetic sorbent were used.

### III. PROBLEM STATEMENT

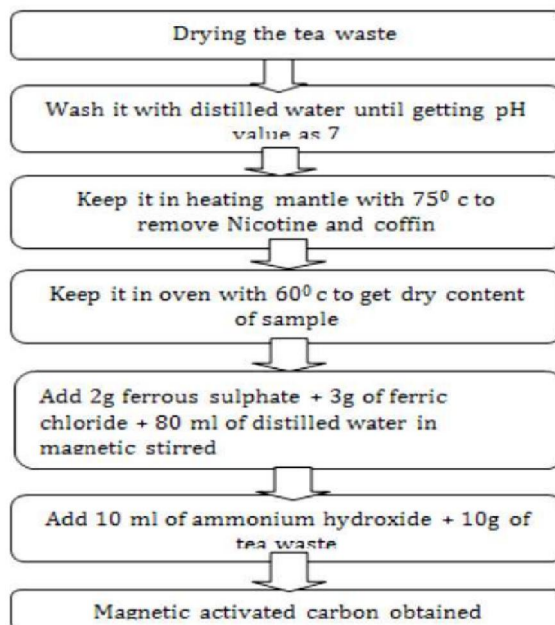
The most important pollution of sea is oil. Hence we will discuss it here in details. Oil pollution of the sea normally attracts the greatest attention because of its visibility. There are several sources through which the oil can reach to the sea. Every year, approximately 3.5 million metric tons of the oil is released into the world's oceans.

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#### IV. METHODOLOGY

##### 4.1 Methodology/Planning Work



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