

## Deoiler Reduces Oil-In-Water Content to meet Discharge Requirements

### Introduction

Oil pollution unarguably poses a big threat to the environment and yet it is an everyday reality contributing to ongoing pollution which has its own inevitable repercussions. Companies are working on preventing such pollution both on a local and an international level.

After the waste oil, bilge water or ballast is collected from both onshore and offshore industries, the waste is treated in order to remove the oil.

It is worth noting that all operations have to be carried out with strict conformity to the terms of the Integrated Pollution Prevention issued by Environment and Planning Authority.

### Challenge

An European industrial oily waste treatment platform needed an economical solution to treat oily waste to achieve the environmental discharge targets of less than 20 ppm oil in water. Due to the plant location, it was critical for the operator to 100% comply with the discharge limitations.

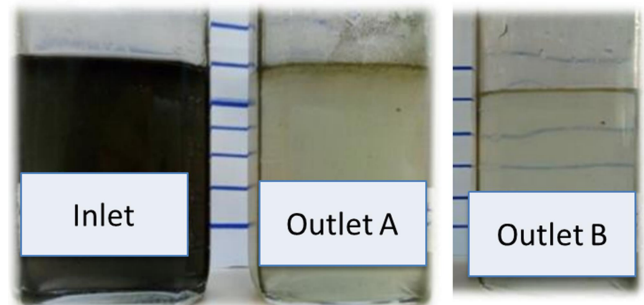
In a collaborative effort with the operator, LW proposed using its LW RD deoiler technology to treat the oily waste to improve water quality and meet discharge limits.

### Evaluation & Results

LW technical team conducted a series of field bottle tests to determine the most cost-effective chemistry for this application.

Preliminary results indicated that the selected LW RD deoiler improved the water quality.

It helped clarify the water by separating the emulsified and free hydrocarbons present in the water. This allowed the oil to be recovered, reducing the total oil-in-water content of the water and meeting the strict oil in water discharge specifications.



LW's deoiler was tested in a field trial and performed as indicated in the bottle testing image. The injection rates were optimized during the field trial period. The oil-in-water (Total Oil & Grease) was reduced from down to 10 ppm. Hence, the operator could meet the discharge limits of less than 20 ppm.

In addition to meeting discharge limitations, the oil recovered helped offset the chemical cost.

The LW RD deoiler continues to be utilized to meet discharge specifications for this operator's system.