

Reducing dry bulk losses at ports



RACE FOR THE BALTIC

Race For The Baltic is a non-profit organization with a mission to ensure a healthy Baltic Sea. We focus on solution-oriented and cost-effective projects with measurable impact.

To achieve the greatest positive impact, we focus our efforts on reducing eutrophication, the predominant issue affecting the Baltic Sea. Eutrophication causes dead sea floors, algal blooms, fish mortality and decreased water transparency.

We join forces with researchers, governmental institutions, non-profit organizations, entrepreneurs, and the private sector to improve the Baltic Sea.

Race For The Baltic was founded and continues to be supported by Zennström Philanthropies.

2

Every year, millions of tonnes of dry bulk mineral fertilizers are transported and handled at ports in the Baltic Sea region. Until now, the loading, transport, and unloading of dry bulk mineral fertilizer in ports has been overlooked as a potentially significant source of nutrients contributing to the inflow of excess nutrients into the Baltic Sea. Because just a few kilograms of nutrients can generate a large amount of algae, it is critical that as little fertilizer as possible is lost when handled in port operations. In collaboration with ports, dry bulk equipment companies, and fertilizer producers, Race For The Baltic has researched and developed costeffective methods to minimize the loss of dry bulk fertilizer during handling in ports. Working with selected ports around the Baltic Sea, we also have been able to implement solutions and pinpoint areas for improvement. Further, as part of this initiative, we have developed a business case, "Reducing Discharge of Nutrients at Ports," with support from Boston Consulting Group. The report includes a hands-on tool to identify and remedy areas of potential fertilizer leakage when unloading and loading. The document is available to all and can be found here: www.raceforthebaltic.com/port-project.

Save the Baltic Sea with your port!

Improved handling of dry bulk cargo in ports can significantly help reduce environmental impact.

The greatest threat to the marine ecosystem of the Baltic Sea is eutrophication. This is evident in harmful algal blooms, dead zones, and fish kills that occur when the sea becomes increasingly enriched with nitrogen and phosphorus, commonly found in mineral fertilizers.

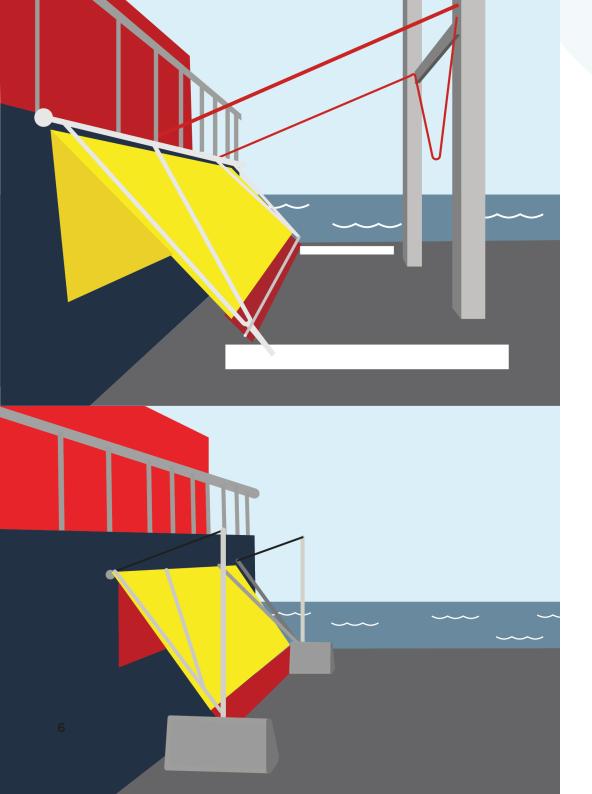
If dry bulk cargo composed of fertilizer or materials used in fertilizer production spills during the loading and unloading process in ports, there's a risk that these substances could end up in the Baltic Sea, leading to more eutrophication.

An effective measure to prevent spillage of dry bulk cargo in port terminals and mitigate this risk is the implementation of prevention covers. These covers are designed to bridge the gap between the quay of the port terminal and the cargo ship. They can be attached to the quay's equipment or stand freely, allowing for movement if needed.

By investing in prevention covers, port operators can not only reduce their cargo losses and financial expenses but also point to a concrete measure that demonstrates their commitment to achieving a more sustainable enterprise.

In short, if port terminals wish to contribute to a healthier Baltic Sea with fewer algae blooms and less spread of dead sea floors, one of the simplest ways to do so is by implementing prevention covers.

5



The Tarpaulin Prevention Cover

Presenting a versatile and practical solution for preventing dry bulk fertilizer spillage into the Baltic Sea—the tarpaulin prevention cover.

Constructed from durable tarpaulin and aluminum, the tarpaulin prevention cover is a lightweight and cost-effective solution for port terminals. Its unique design allows it to be attached to the quay, providing a secure platform for loading and unloading operations while preventing potential spills. Moreover, the tarpaulin prevention cover offers a freestanding option that can be easily moved to wherever it's needed. This versatility makes it a practical choice for port operators requiring flexibility in their operations.

The tarpaulin prevention cover is specifically designed to shield the Baltic Sea from the harmful effects of fertilizer spillage. Its durable construction ensures that it can withstand the weight of the transported fertilizer. This cover suits port terminals located in areas with less windy conditions.



The Wood and Steel Prevention Cover

Introducing a more robust and reliable prevention cover made from a combination of wood and steel materials. This prevention cover is sturdy and capable of withstanding harsh weather conditions, as well as the weight of the transported fertilizer. Its design is specifically intended for attachment to the quay's crane, ensuring that less fertilizer spills into the sea during loading and unloading operations.

This prevention cover is an ideal choice for terminals with larger ships, thanks to its innovative design and construction. The strong and durable materials enable it to handle increased cargo volume, providing a reliable and cost-effective solution for preventing pollution and ensuring compliance with the best environmental practices.

Investing in this prevention cover is a wise choice for port operators prioritizing environmental responsibility. By using this effective solution, you can significantly reduce the risk of fertilizer spills, safeguarding the delicate ecosystem of the Baltic Sea and its inhabitants.



The Wheeled Prevention Cover

A versatile and portable solution for preventing dry bulk spillage into the Baltic Sea—the wheeled prevention cover.

Designed specifically for smaller ships and terminals with portable cranes, the wheeled prevention cover is a mobile and practical solution that can be easily moved to wherever it's needed. Its design includes wheels that enable easy transportation, making it an ideal choice for terminals with limited space or those requiring frequent equipment relocation. Additionally, the wheeled prevention cover includes a container for capturing any leakage, providing an opportunity to limit spillage and cargo contamination.

Constructed from wood and steel materials, the wheeled prevention cover is sturdy and capable of withstanding the weight of the transported fertilizer. Its mobility and versatility make it suitable for various types of terminals. Investing in the wheeled prevention cover is a smart choice for port operators prioritizing environmental responsibility and seeking to minimize their ecological impact.

About Race For The Baltic

Race For The Baltic was founded by Zennström Philantropies in 2013. The organization works to convene forward-thinking politicians, industry professionals, NGOs and local governments who are determind to improve the Baltic Sea environment and ensure the region's long-term economic viability.



www.raceforthebaltic.com