

# Ocean Guardian introduces relay function

**O**cean Guardian, the GPS-linked software system for environmental compliance, has introduced a 'relay' function which can be integrated into various systems related to environmental operations onboard.

Ocean Guardian, which was developed by Total Marine Solutions in collaboration with Brenock and brought to the market at the 2017 CMA Shipping Conference, aims to simplify environmental compliance for vessels by combining GPS technology with a comprehensive maritime environmental regulatory database, providing operators with immediate information on regulations relevant to that vessel's specific location.

One application of the new function is a relay to the three-way valve in a vessel's white box, which is downstream from any oily water separator and acts as a discharge protection system, as a final check of treated bilge water before discharging overboard.

"Many of the high-profile cases in the maritime industry over the past 20-plus years have been about the illegal discharge of bilge water," says the company. "There are various conditions which must be met before the normally closed three-way valve will open for discharge – including ppm value of less than 15, flow through a flow switch (to prevent introducing a static sample), and no dilution to the sample. By integrating a relay from Ocean Guardian, even if all these conditions are met, the valve will not open if the vessel is in a non-discharge zone."

Alexandra Anagnostis, Ocean Guardian President, said: "The optional relay function is designed to lock and unlock environmental equipment/valves/pumps based on the environmental regulations that apply to the vessel's location in real time."

Why is such a function needed? "Accidental discharges of oil and fuel can cause significant damage to the environment and extensive standards have been put in place to prevent such accidents," she said. "The relay function provides a way to prevent these accidental discharges."

Ocean Guardian can also record whether the valves are open or closed for audit purposes, she added. An override function is provided for emergency purposes. "For instance, if a vessel is taking on water, the captain must have a way to ensure that discharge is available for safety purposes."

The relay function was added in response to a client's request to add further failsafe measures to their discharge protection system, said Ms Anagnostis. "As our industry moves closer toward autonomous vessels and/or unmanned engine rooms, these types of functionality will prove critical. In fact, a number of items in our work plan are derived

from client feedback. And when we develop a new feature and roll it out to all of clients, no one pays for it. It is included in the annual licence fee. We do this because we believe in true collaboration."

There has been very keen interest in the relay function, which has been deployed onboard a number of tankers to date, she added.

As to the impact of Ocean Guardian on environmental operations, Ms Anagnostis said: "Ocean Guardian simplifies the task of ensuring compliance with environmental regulations worldwide as an operator plans their voyage and while the ship is under way. Trying to stay abreast of rules that change on a daily basis in many regions via emailed spreadsheets or documents is simply not sustainable. When we show Ocean Guardian to anyone shoreside or shipboard, they 'get it' immediately. Things take time in this industry; we're patient. It won't be long before Ocean Guardian is as common onboard a ship as voyage planning software." ●

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