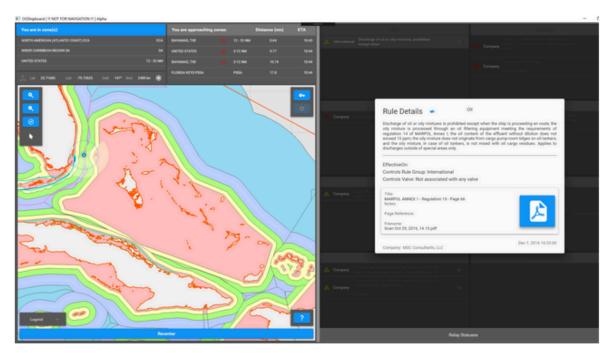


# Putting Environmental Regulations on the Chart



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### [By Alexandra Anagnostis-Irons]

Today's complex regulatory environment makes it difficult for ship owners and operators to ensure compliance. Governing bodies exist in each country and region, each one having multiple regulatory documents for each type of discharge, creating a maze of documentation and guidance. Clean technologies and improved processes and procedures historically have functioned as piecemeal solutions for reducing the risk of noncompliance. However, with today's enhanced enforcement, a comprehensive and collaborative solution is needed.

Ocean Guardian is a flexible digitization tool that is shaping the future for vessel environmental operations with the goal of zero-pollution. It provides operators with immediate and accurate information on environmental regulations pertaining to a vessel's specific location and provides the tools to facilitate compliance throughout their fleet.



# Moving Away from Business as Usual

Vessel operators often rely on paper copies of regulations, e-mail communication, robust electronic workbooks, and in-person visits from ship agents and superintendents to stay current with ever-changing environmental regulations. While these are workable solutions, they have two distinct challenges: (1) timely and uniform updates are difficult to make and (2) fleet management and ship owners have no way to ensure an operator is using the most up-to-date manual.

Ocean Guardian is a digital knowledge bank that eliminates much of that paperwork, bringing environmental compliance into the 21st Century. Information is instantly accessible to an operator through a straightforward user interface, reducing the time it takes to understand the regulations for a specific location. This minimizes the risk of accidental discharges and enhances workflow efficiency. When installed onboard and shoreside, authorized personnel across the fleet can see exactly what is permissible at a vessel's location, enhancing accountability and increasing the visibility of compliance-related actions fleet-wide.

Leaders in the maritime industry recognize that environmental compliance is not an afterthought. The costs of noncompliance are not limited to monetary or legal repercussions. In fact, the visibility of noncompliant discharges in today's age of 24/7 digital communications can significantly impact a company's brand and reputation. Understanding that corporate social responsibility is no longer just a buzz word, but indispensable to doing global business in the 21st Century, Total Marine Solutions, an environmental solutions company, created Ocean Guardian with an eye toward the future.

# Flexibility for the Future

Launched at the 2017 CMA Shipping Conference, Ocean Guardian has received extensive interest from fleet owners and operators. It has been beta tested on vessels around the world with a key result from user feedback being the need for flexibility in real time.

To satisfy this, Ocean Guardian has two integrated components: a Rules Portal and an innovative user interface.

The proprietary Rules Portal is a global regulatory database that includes four tiers of rule groups:

- International: Regulations defined at the global level, such as the IMO Ballast Water Convention, MARPOL, and London Convention and Protocol.
- National: Regulations defined at the national level, such as laws specifically for the United States.



- Region: Regulations defined at the regional, state, or territory level, such as specific laws for certain provinces of Canada, or states of the United States of America.
- Port: Regulations defined at the national, regional, Port Authority or Harbormaster levels for specific ports, such as the Port of Venice, Brisbane or Stockholm.

Understanding that accuracy is critical, Ocean Guardian's Rules Portal is maintained and updated by a team of experienced maritime professionals and further vetted by a third-party maritime law firm. Updates are tracked electronically, providing administrators with an auditable log of changes. Within each rule in the portal, users can access the reference documentation. For further flexibility, Ocean Guardian allows clients to enter and update their internal policies while restricting visibility from outside their organizations.

Ocean Guardian's user interface provides an interactive map showing the vessel's location alongside regulatory information for eight major discharge categories. The map indicates zones related to discharge allowances. As the ship sails, the pertinent regulations update on the screen. The map also can be used in off-line mode for voyage planning purposes.

Feedback from owners and operators during beta testing enhanced the capabilities and flexibility of the system. For example, recognizing the different operating requirements across the maritime industry, Ocean Guardian can be configured as a stand-alone system or added to a vessel's network – allowing for a client/server platform. By allowing multiple user access, information can be shared, updated and distributed simultaneously. The flexibility is further enhanced by a number of application programming interfaces (APIs) designed to easily integrate Ocean Guardian with other operating and planning tools.

Protecting the oceans and being effective environmental stewards goes beyond a software program. Designed with input from vessel owners and operators, ship agents, port authorities and terminal operators, Ocean Guardian is a tool for today and a platform for bringing industry stakeholders together, across company lines, in the future.

## Improving Compliance, Reducing Risk

A zero-pollution culture must come from the top down, with companies giving their employees the tools they need to be successful. The flexible and collaborative nature of Ocean Guardian addresses this head-on by improving regulatory awareness and enhancing communication: Compliance is improved and risk is reduced.

Auditable, integrated, flexible, and user-friendly, compliance goals are attainable with Ocean Guardian. Through the incorporation of feedback from across the industry, Ocean Guardian is positioned to become a platform for collaboration owners and operators can use to confront the challenges of environmental compliance, redefining business as usual.





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https://www.maritime-executive.com/pressrelease/putting-environmental-regulations-on-the-chart