

# Navigating the Complexities of Compliance

## Ocean Guardian



**TOTAL MARINE**  
SOLUTIONS

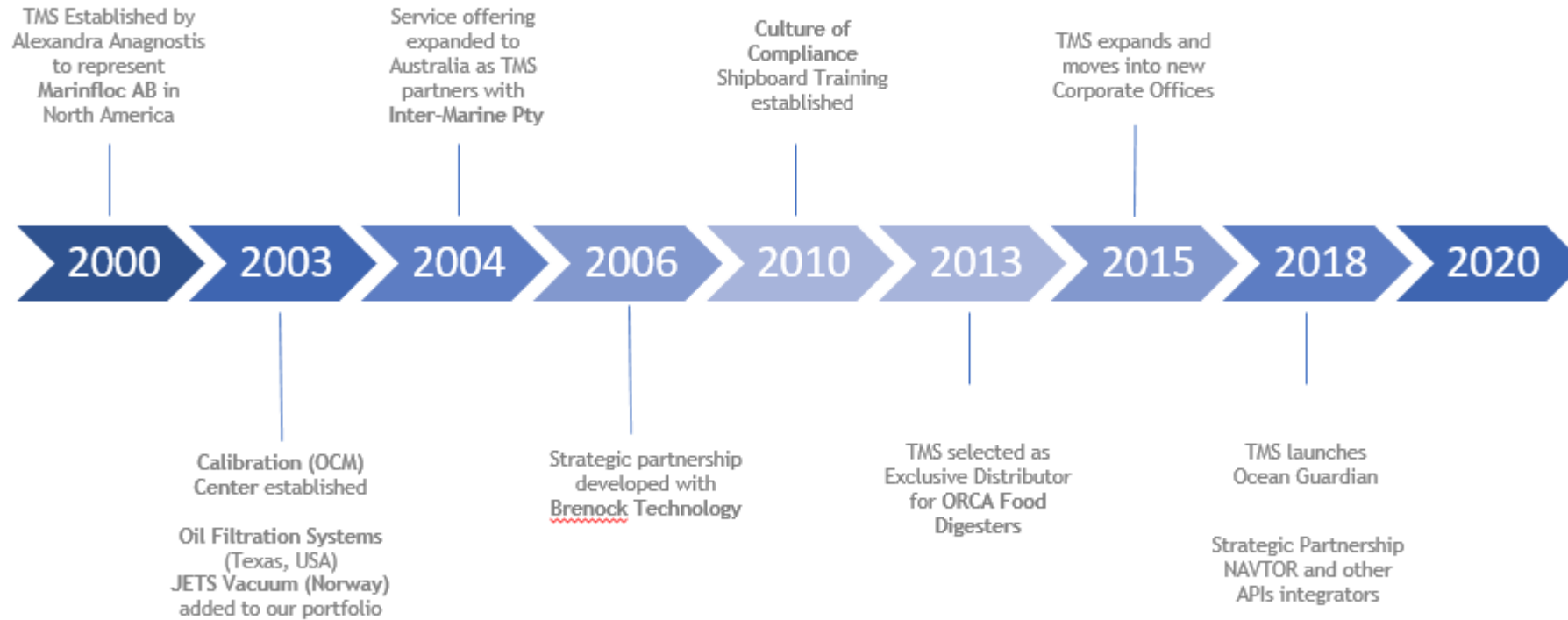


**AAPALATINO**

XXVIII CONGRESO LATINOAMERICANO DE PUERTOS  
MIAMI 2019

19-21 DE NOVIEMBRE DE 2019 | HOTEL INTERCONTINENTAL MIAMI, EEUU

# Brief background on Total Marine Solutions



**TOTAL MARINE**  
SOLUTIONS



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# Description in brief

## What does it do?

### The basics – Integration of Environmental Rules, GIS Data, & Predictive Alerts

- Simple easy-to-use program for operators to access the latest environmental regulations based on the vessel's current location
- Integrated environmental operations planning

### Additional features:

- Ability for clients to digitize their environmental policies
- Audible alerts requiring User acknowledgements
- Relay outputs to equipment controls
- Complete audit trails of User interaction, updates and system actions



# Improving upon Best Practices

	B	E	F	G	H	I	J	
1	Central America & Caribbean							
2	Country	Untreated Black Water	Treated Black Water MEPC.2 (VI)	Untreated Gray Water	Treated Gray Water	Food Waste	Ballast Water	Recreational Facilities
3	Anguilla	> 12 NM > 6 Knots	> 3 NM > 6 Knots #3528	> 3 NM > 6 Knots #3527	> 3 NM > 6 Knots #3527	#2487 Wider Caribbean Region is designated a Special Area per MARPOL V; therefore, ground food waste is the only discharge allowed. Per company policy discharge allowed at	If deballasting planned in local waters, conduct ballast water exchange whenever possible > 200 NM & >2,000m depth. If above not practicable then > 50NM & >200m depth if possible. (IMO Ballast Water Convention)	> 3 NM
4	Antigua & Barbuda	> 12 NM > 6 Knots	> 3 NM > 6 Knots #3528	> 3 NM > 6 Knots #3527	> 3 NM > 6 Knots #3527	#2487 Wider Caribbean Region is designated a Special Area per MARPOL V; therefore, ground food waste is the only discharge allowed. Per company policy discharge allowed at	#128 If deballasting planned in local waters, conduct ballast water exchange whenever possible > 200 NM & >2,000m depth. If above not practicable then > 50NM & >200m depth if possible. (IMO Ballast Water Convention)	> 3 NM
5	Bahamas	> 12 NM > 6 Knots	> 3 NM > 6 Knots #3528	> 3 NM > 6 Knots #3527	> 3 NM > 6 Knots #3527	#2487 Wider Caribbean Region is designated a Special Area per MARPOL V; therefore, ground food waste is the only discharge allowed. Per company policy discharge allowed at	#128 If deballasting planned in local waters, conduct ballast water exchange whenever possible > 200 NM & >2,000m depth. If above not practicable then > 50NM & >200m depth if possible. (IMO Ballast Water Convention)	> 3 NM
6	Barbados	> 12 NM > 6 Knots	> 3 NM > 6 Knots #3528	> 3 NM > 6 Knots #3527	> 3 NM > 6 Knots #3527	#2487 Wider Caribbean Region is designated a Special Area per MARPOL V; therefore, ground food waste is the only discharge allowed. Per company policy discharge allowed at	#128 If deballasting planned in local waters, conduct ballast water exchange whenever possible > 200 NM & >2,000m depth. If above not practicable then > 50NM & >200m depth if possible. (IMO Ballast Water Convention)	> 3 NM
7	Belize	Outside 12 NM of Belize's Barrier Reef Complex or any island/ atoll claimed by the Government of Belize & >6 kts	Outside 12 NM of Belize's Barrier Reef Complex or any island/ atoll claimed by the Government of Belize & >6 kts	Outside 12 NM of Belize's Barrier Reef Complex or any island/ atoll claimed by the Government of Belize & >6 kts	Outside 12 NM of Belize's Barrier Reef Complex or any island/ atoll claimed by the Government of Belize & >6 kts	#2487 Wider Caribbean Region is designated a Special Area per MARPOL V; therefore, ground food waste is the only discharge allowed. Per company policy discharge allowed at >12 NM & >6 kts.	Outside 12 NM of Belize's Barrier Reef Complex or any island/ atoll claimed by the Government of Belize	Outside Belize's Barrier Reef Complex or any island/ atoll claimed by the Government of Belize
8	Bermuda	> 12 NM > 6 Knots	Treated effluent shall not be discharged into Bermuda's territorial waters without the prior approval of the Department of Environmental Protection #2855	Outside 12 NM per country requirements & >6 kts A ship shall not discharge liquid effluent, including raw sewage, grey water, pulper wastes, photoprocessing fluids #2855	Outside 12 NM per country requirements & >6 kts A ship shall not discharge liquid effluent, including raw sewage, grey water, pulper wastes, photoprocessing fluids #2855	Must be ground so it is capable of passing through 25 mm screen, and ship must be > 12 NM & > 6 Knots as per Company Policy.	No discharge of any ballast water within 12 NM of Bermuda except to preserve the safety of the ship, environment, & life. #2852	> 3 NM
9	British Virgin	> 12 NM > 6 Knots	> 3 NM > 6 Knots	> 3 NM > 6 Knots	> 3 NM > 6 Knots	#2487 Wider Caribbean	If deballasting planned in local waters,	> 3 NM





MANAGE RULES



ADVANCED SEARCH



ATTACHMENTS



TO VET 0



TO REVIEW 4



RULE PROPOSAL



ARCHIVE



FLEET OPERATIONS



CSA2020



FEATURE INDEX



PORT INFORMATION

The Ocean Guardian team digitizes environmental regulations and maintains this database on our web-based port.



# Administration Portal

[Rules](#) [Ports](#) [Fleet Ops](#) [Vetting](#) [Updates](#) [Administration](#) [TMS Website](#) [Help](#) [Hello tmsalex \(TMS Admin\)](#)

Search:

Detailed View

Simplified View

Rule Details - National

Back

Copy Rule

Delete

Override Status

Update/Modify Rule

Rule No

2144

Rule Name

Norway: Ballast water discharge - Treated ballast water

Rule Description

\*Ballast Water Regulations\* Section 5 Ballast water Management  
Ships which are to discharge ballast water, and which have taken on board ballast water from areas outside the region in point 1.1 of Annex 1, or from another area within the region than the area in which it is to be discharged, shall manage ballast water by employing exchange, treatment or delivery to reception facilities pursuant to this chapter.  
Section 7 Ballast water treatment  
Ballast water shall be treated with technology approved in accordance with the IMO Guidelines before it is discharged. Treated ballast water that is discharged, shall contain less than 10 viable organisms per cubic metre greater than or equal to 50 micrometres in minimum dimension, and less than 10 viable organisms per millimetre less than 50 micrometres in minimum dimension and greater than or equal to 10 micrometres in minimum dimension

Rule Status

Deployed

Detailed Category

Ballast Water

Simplified Category

Ballast Water

Valve

Not associated with any valve

Rule Active

☐

This rule is applicable for

CRUISE

TANKER

CARGO

ships

N/A

Tons.

Flag State

All

Change Log

Friday, February 08, 2019 11:19:39 AM - roulakis

Tuesday, March 20, 2018 2:13:56 PM - tmsalex  
Status Updated - Status changed from OG Ready to Deployed.

Monday, March 19, 2018 9:25:09 PM - roulakis  
Is Active Updated - Is Active changed from True to False.

Monday, August 28, 2017 12:32:43 PM - roulakis  
Rule Vetted

Monday, August 28, 2017 12:32:43 PM - roulakis  
Status Updated - Status changed from Edited to OG Ready.

See All Changes

Created

3/14/2017 1:40:30 PM

Created By

tmsanna

Updated

2/8/2019 10:17:54 AM

Updated By

roulakis

Effective On

7/1/2010

Expires On

Vetted Date

8/28/2017 11:32:43 AM

Vetted By

Stefanos Roulakis

Comments

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# Administration Portal

Rules ▾

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TMS Website

Help



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PORT INFORMATION



## Port Administration Search

Region  
All Regions

Country  
All Countries

Port  
Miami (United States)

Tags

View Selected Port

Vetted By:



## Miami - United States - (8640)

Show on map

### Port Information

Save

UN LOCODE USMIA

### Port Authority

Name Miami Dade County

Address 1015 N. America Way, 2nd Floor, Miami, FL 33132

Phone Number 305-371-7678

Email JUK@miamidade.gov

Website https://www.miamidade.gov/portofmiami

### Port Tags

Tags

### Port Change Log

### Simplified View

### Global Rules

### Port Attachments

### Company Activation

Categories	Global
Air Emissions: Fuel Requirements	⚠
Air Emissions: Incinerator	⚠
Air Emissions: Other- See Detailed View	⚠
Air Emissions: Ozone Depleting Substances	✖
Ballast Water	⚠
Ballast Water: Treated Ballast Water	✖
Ballast Water: Untreated Ballast Water	✖
Cargo	✖
Cargo: Noxious Liquid Substances	✖
Garbage	✖
Garbage: Animal Carcasses	✖
Garbage: Cargo Residue	✖
Garbage: Cleaning Agents & Additives/Deckwater Washing	⚠
Garbage: Comminuted Food Waste	✖
Garbage: Noncomminuted Food Waste	✖
Garbage: Tank Washings	⚠
Greywater	✖
Greywater: Untreated Greywater	⚠
MISC: Burials at Sea	✖
MISC: EGCS Washwater	⚠

Developed by

v 1







MANAGE RULES



ADVANCED SEARCH



ATTACHMENTS



TO VET **0**



TO REVIEW **4**



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PORT INFORMATION





OCEAN GUARDIAN

Administration Portal

Rules

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TMS Website

Help

Hello tmsalex (TMS Admin)

You are in zone(s)

WIDER CARIBBEAN REGION ...	SA
BAHAMAS, THE	12 - 25 NM

Approachi...

BAHAMAS, ...	25 - 50 NM	0.45	13:40
UNITED ST...	25 - 50 NM	2.02	13:47
UNITED ST...	4-12 NM	12.12	14:34
NORTH AM...	ECA	2.03	13:47
UNITED ST...	Inland	29.1	15:53
Port Evergla...	Port	28.96	15:53
UNITED ST...	Baselines - ...	26.06	15:39
UNITED ST...	12 - 25 NM	5.1	14:02

Distance

ETA

Ship:

Demo Vessel

Last Reported: 03-04-2019, 2:38:23 PM (Eastern Standard Time)

Course:

Speed:

Lat: 26° 08' 54" N

Lon: 79° 33' 15" W

263°

12.9kn

+

-

+

+

+

Legend

High Seas

100 - 200 NM

50 - 100 NM

25 - 50 NM

12 - 25 NM

4-12 NM

Baselines - 4 NM

Port

Inland

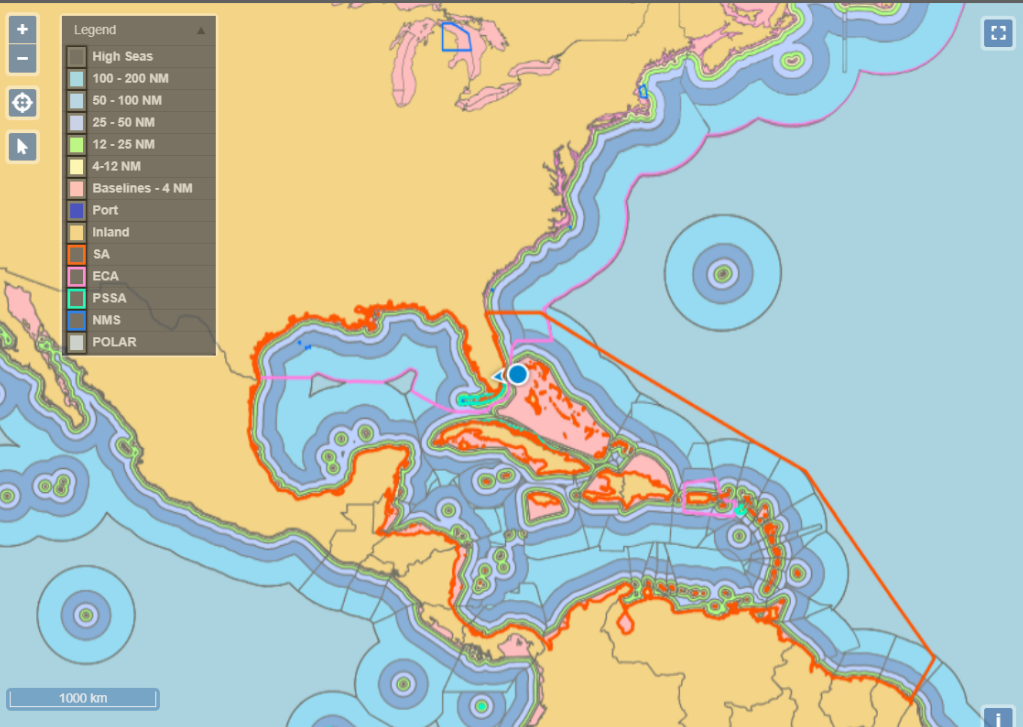
SA

ECA

PSSA

NIMS

POLAR



1000 km

i

Categories

Air Emissions: Fuel Requirements	!	✓
Air Emissions: Incinerator	!	
Air Emissions: Ozone Depleting Substances	✗	
Ballast Water	✗	✗
Ballast Water: Other- See Detailed View		✗
Cargo		✗
Cargo: Noxious Liquid Substances		✗
Garbage	✗	
Garbage: Animal Carcasses	✗	
Garbage: Cargo Residue	!	✗
Garbage: Cleaning Agents & Additives/Deckwater Washing	✓	
Garbage: Comminuted Food Waste	!	!
Garbage: Noncomminuted Food Waste	✗	✗
Greywater	!	✗
MISC: EGCS Washwater	!	
MISC: Other- See Detailed View	✗	
Oil	✗	✗
Oil: Slops		✗
Oil: Treated Bilge Water	!	
Sewage: Other- See Detailed View	!	
Sewage: Treated Sewage	!	
Sewage: Untreated Sewage		✗





# The Ocean Guardian Database



3,860

Active and Deployed Rules



306

Countries and Territories With Rules



53

Special Areas, such as Marine Sanctuaries, ECAs, etc..



2,518

Ports With Rules Assigned



## Rich with Features



### Environmental Operations Planning

Brings voyage planning and environmental operations together to simplify compliance and enhance workflow efficiencies.



### Discharge Guidance

The at-a-glance simplicity helps operators immediately understand what can and cannot be discharged.



### Easy to Integrate

Easily integrates with existing onboard systems and operations.



### Configurable & Customizable

User interface is easily configurable to meet company and operator needs.



### Fleet Operations

Fleet wide visibility in real-time, enhancing operations, workflow and capacity shore side and on the vessel.



### Rules Portal

Client accessible rules portal can be customized to include company or vessel specific guidance.





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