

## **2024 Pacific Ballast Water Group Meeting Presentation**

Marine & Aquatic Biosecurity Section

24 April 2024

Drew Cornelius / Sonia Gorgula Ballast Water Unit / Marine & Aquatic Biosecurity / Animal Division





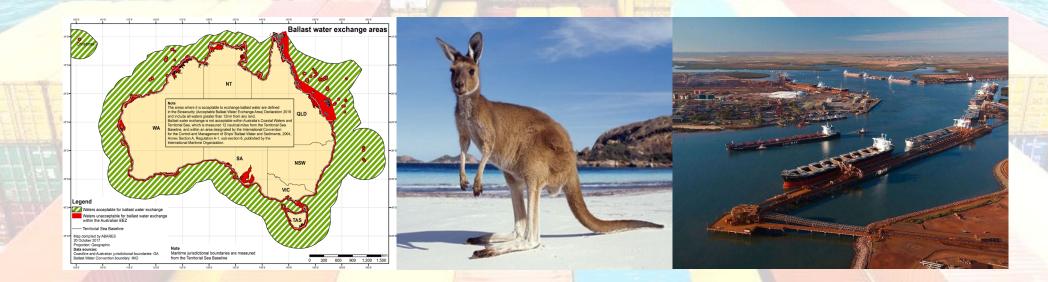
# Marine Biosecurity Unit Protecting Australia

### **A Maritime Nation**

- In the second second
- 60,000 km of coastline with 12,000 islands
- 🔶 68 ports in Australia
- 6 maritime boundaries

### In 2023

- Received 16,981 international vessel arrivals and 5,958 unique vessel entries
   Top two ports of origin: Singapore
- and Yoesu (Republic of Korea)
  - 68% Bulk Carriers



# **Marine and Aquatic Biosecurity Section**

Chris Starkey A/g Principal Director – EL2

Sonia Gorgula Director - EL2

Ballast Water Unit

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APS6	A/g APS6	APS 6



Peter Wilkinson

EL2

Mae Allen APS 6



# Functions & Responsibilities

Operational Work

Policy Work

**National Advice** 







### Science Priorities

- Facilitate complementary research programs for ballast water management between Australia and other nations
- Assess database of challenging water quality ports
- Continuation of sampling, molecular surveillance, and biosecurity risk assessments/research for Australian ports
- Consider projects to improve understanding of biosecurity risk posed by sediments in ballast water tanks
- Improve understanding of the effects of BWMS bypass on efficacy of BWMS

### **Policy Priorities**

- Revise current policies, requirements and guidelines, following stakeholder and state/territory engagement
- Identify policy gaps, and areas where administrative burden for government and industry can be reduced

### **Operational Priorities**

- Expanding in-house capacity for ballast water inspections and sampling, supported by operational policy
- Implement IMO guidance for challenging water quality
- Interpret the relationship between the Type Approval process and BWMS efficacy
- Auditing of recognised organisations relevant to Flag State responsibilities held by DAFF

### **BWM Convention Review Priorities**

- Ongoing engagement at MEPC and PPR
- Contribute to finalisation of package of priority amendments to the BWM Convention

### Australia's Priorities in Asia-Pacific Region

• Engage with neighbours in Asia-Pacific region to facilitate improvements in regional ballast water management and coordinate efforts to prevent and manage the spread of marine pests in the region

### **Ballast Water** Management Convention



**Biosecurity Act 2015** No. 61, 2015

### **Compilation No. 3**

Compilation date:	18 May 2017
Includes amendments up to:	Act No. 34, 2017
Registered:	22 May 2017
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Act No. 34, 2017
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**Compilation No. 3** 

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AUSTRALIA,	

**Biosecurity (Ballast Water and Sediment) Determination 2017** 

Australia's Ballast Water

**Management Requirements** 

I, Daryl Quinlivan, Director of Biosecurity, make the following determination. Dated 30 August 2017

Daryl Quinliva Director of Biosecurity

Director of Biosecurity Daryl Quinlivar

Dated 30 August 2017

I, Daryl Quinlivan, Director of Biosecurity, make the following determination.

**Determination 2017** 



### Australian Ballast Water **Management Requirements**

Version 8



# Sampling Ballast Water to ensure compliance with Regulation D-2

### ~30% failure rate in BWMS since DAFF began sampling in 2019

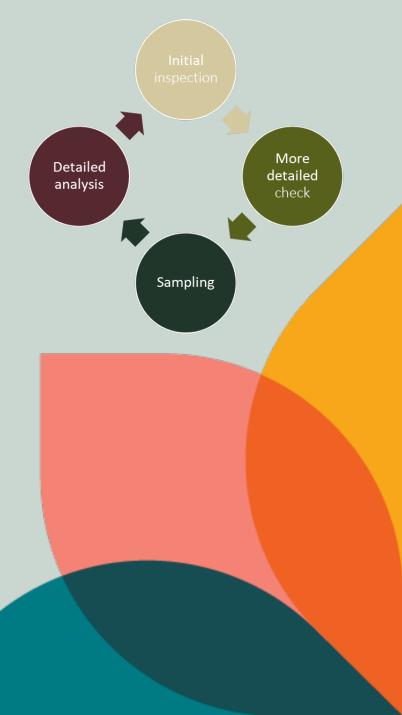
- Ports included: Fremantle, Kwinana, Bunbury, Sydney, Gladstone & Dampier This year in Newcastle
- > Data submitted to the IMO reports available.

Previously a data gathering exercise – results were not used for enforcement. This year plan to establish specialised team to meet Australia's obligation to the convention.



# The need to upskill

- DAFF are responsible for implementation of the BWM Convention
- Ballast water advisors in each state and territory and a national advisor
- Focal areas:
  - Increasing capacity to undertake detailed inspections to ensure compliance and enforcement of the BWM Convention.
  - Establish more detailed procedures for assessing proper operation and maintenance of BWMS
  - Enhancing communication with ship administration and classification societies; possible RO audits
- Policy focus reviewing (7+ years since implementation); new policies e.g. CWQ.
- Science (one) objective: improve consistent performance of BWMS e.g. sampling on uptake and discharge; the effect of BWMS bypass.



# **Demerit point Overview**

### Vessel Compliance Scheme (VCS) for Commercial Maritime Vessels

Australian Government Department of Agriculture and Water Resources	Sei	Compliance Scheme (VC Understand and consistently follow these					
<ul> <li>reduced intervention:</li> <li>a minimum of 3 voyages to At</li> <li>below the individual inspecti</li> <li>below the collective threshold</li> </ul>	istralia i on thresh d of 20 pc	hold of 10 points for a voyage	During an inspection demerit actions m To stay on the scheme, a vessel must sta The application of a demerit action does	ay be acci y under th not repla	ts determines vessel eligibility for the VCS. ued. For each negative finding, demerit points will be applied. he identified point thresholds. ce any other enforcement actions available to the department that commits an offence may be liable to penalties in addition to		
Reporting			Sanitation				
Demerit Action	Demerit Points	How You Can Comply	Demerit Action	Demerit Points	How You Can Comply		
Failure to report illness on board Failure to update illness report	10 10	Report al instances of illness on board (new and passengers), as part of pre-arrival reporting. Sobmit updated reports for any changes to interest on board during the voyage in Australia	Inadequate storage of waste — minor Inadequate storage of waste — major	3 7	Secure all waste on board in designated areas and waste bins. Waste should not be left unsecured, open and accessible to insects, animals and binds. The severity of any waste related issue will be determined by a biosecurity officer during the inspection, and		
Failure to notify the department of medivac as a result of illness Cruise vessel failing to report percentage of cases of gastro- intestinal illness on board	10	Report all instances of gastro-intentival illness on board cruise vessels, if greater than 3 per cent of the total number of crew and passengers on board as part of pre-arrival reporting. Submit updated reports for any changes to gastro-intestinal illness information	Inadequate storage of waste —critical Infestation of insects found on board - minor Infestation of insects found on board - major	10 3 6	may incur between 3 and to demerit points Inspect galleys, superstructures, lood storage, deck and cargo areas for any insect activity as part of pre-arrival reporting. Submit updated reports for any charges or evidence of insect activity during the wayage in Australia. The sevenity of any insect related issue		
Failure to report death on board Failure to declare a ship's pet/animal	10	during the wyage in Australia Report all deaths on board	Infestation of insects found on board - maps Infestation of insects found on board - critical Evidence of rodent infestation — minor	10	will be determined by a biosecurity officer during the inspection, and may incur between 3 and 10 demerit points		
Failure to declare a snip's pet/animal Undeclared deceased animal/s found on board Undeclared hitchhiker animal	10 6 10	Declare all ships pets and animals (dead or alive) on board including birds and reptiles as part of pre-arrival reporting Keep a look out for hith/hiter pests. Report any insects or animals (not a pet) on the vessel during the voyage in Australia	Evidence of rodent infestation — major Evidence of rodent infestation — critical	5	Geg a lock of for indent activity and report any widered (the dual or indent despitight during the vyogen h Australia, and		
Failure to report plants on board	3	Declare all live plants and soil on board as part of pre-arrival reporting or provide the information when sought by a biosecurity officer during the inspection	Spillage of food material presenting saritation risk — minor Spillage of food material presenting saritation risk — major	3			
Incorrect reporting on Ballast Water Report — minor Incorrect reporting on Ballast Water Report — major Incorrect reporting on Ballast Water Report — critical	2 7 10	Accurately report ballast water information in all ballast water reports during a voyage. The severity of any incorrect ballast water reporting issue will be determined by a biosecurity officer during the inspection, and may incur between 2 and 10 dement points	Evidence of seeds, meal or organic material on deck — light contamination	2	biosecurity officer during the inspection, and may incur between 3 and 6 deriverit points		
Entry to a non-first point of entry without prior approval Submission of a Pre-Arrival Report less than 12 hours from	10	Seek prior approval to enter a non-first point of entry. Submit an application to enter a non-first point prior to arrival at a non-first point of entry.	Evidence of seeds, meal or organic material on deck — moderate contamination Evidence of seeds, meal or organic material on deck - heavy	5	Maintain good hygiene and samitation on the vessel and have a system to regularly manage splittige of seeds, meal or other organic material that could attact insects, notes, holds or other manakes. How serving for any annihation netiated issues will be determined by a biosecurity officer during the inspection, and may incur between 2 and to dement points.		
Submission of a PIE ATING Report less unan 12 nouis from arrival at port or anchorage Failure to submit a PIE-Arrival Report prior to arrival at port or anchorage	8	Submit pre-arrival reporting information 96-12 hours prior to arrival at an Australian port or anchorage	contamination Mosquito risk — low	10	Eliminate any breeding sites for mosquitos and larvae. Monitor for any water accumulation in either vessel structures or other		
Failure to report the previous carrying of high risk cargo on the Pre-Arrival Report Failure to report crew changes	3	Accurately respond to questions in pre-arrival reporting including information on identified high risk cargo that the vessel may have carried as part of previous vagas. Report crew discurating the vessel and not returning to the vessel on its current vayage in Australian waters. Submit updated reports	Mosquito risk — medium Mosquito risk — high	4	neoptables which could harborn adult mospations and lawaa. Avoid placing receptacles such as buckets, tyres and drums in the open. The secretly of source relating to any mospation foks will be determined by a biosecurity officer during the impection, and may incur between 1 and to dement points.		
Undeclared biosecurity risk material from crew leaving the vessel	7 2	négat citér utentisating investés à la toit tearing to la révisió d'in 15 cai en vivigage in rabusana wans, sounn spousoi spois lo any changes noise momentes dans la fait de la révisió d'in 15 cai en vivigage in rabusana wans, sounn spousoi Accuratély déclare biosecurity risk material including personal effects and foot that crew members are taking off vesséls, prior to departing the vessel. It unsure, constant à biosecurity officer	Failure to clean decks that result in minor issues Failure to clean decks that result in significant issues	4	Throughly clean and treat livestock decks in accordance with department requirements. Fodder must be appropriately contained and stored socarely. The serveity of any livestock sanitation related base will be determined by a biasecurity officer during the impection, and may incur between 4 and to demetic points.		
Documentation			Directions				
Failure to present medical log		Maintain all medical logs on board and keep updated at all times	Failure to follow directions on the Biosecurity Status Document	10	Follow all directions contained in the latest version of the BSD		
Failure to present Biosecurity Status Document (BSD)	4	The latest version of the BSD must be made available to a biosecurity officer on request	(BSD) Failure to follow conditions on the Ship Sanitation Control				
Failure to present Ship Sanitation Certificate	10	The latest version of the Ship Sanitation Certificate as declared must be made available to a biosecurity officer on request	Failure to follow conditions on the ship sanitation control Certificate	10	Follow all directions contained in the latest version of the Ship Sanitation Control Certificate		
Failure to present Freedom from AGM Certificate	10	The latest version of the Freedom from AGM Certificate as declared must be made available to a biosecurity officer on request	Declared ship's pet/animal not managed as directed	10	Follow all directions for declared pets or animals on board		
Failure to present approved and valid ballast water documentation Failure to demonstrate indications of competence in using and maintaining the treatment system as specified in the Ballast	8	timum the vessel has a lutilist water record system and a valid bullist water certificate available to a biosecurity officer on request Demonstrate that the vessel bullist water treatment system has been operated in accordance with the bullist Water Management Plan and manufacture's instructions. Demonstrate that the responsible vessel officer's are completer with the peration of the system to a	Incorrect discharge of waste	10	Manage biosecurity waste in accordance with department requirements, Biosecurity waste must be collected, transported and disposed of under an Approved Arrangement or under the supervision of a biosecurity officer		
Water Management Plan Failure to present approved Ballast Water Management Plan or ballast water operations not conducted in accordance with	8	aftri analysis, and the second s	Plants not kept in accordance with the Biosecurity Status Document (BSD)	7	Follow all directions contained in the latest version of the BSD including any specific conditions for plants on board		
the Ballast Water Management Plan Failure to maintain accurate ballast water records	7	Ute vester's balask water water and angement wat and Australian requirements Ensure all ballast water related records on board are kept up to date	Unauthorised discharge of ballast water	10 Follow all ballast water information contained in the latest version of the BSD			
Failure to keep Ballast Water Records on board for		Keep the last 2 years of ballast water records on board and make them available to a biosecurity officer on request	Any changes in circ	umstance	s must be reported to the department as soon as practicable.		

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#### **Demerit point Overview** $( \rightarrow )$

### Demerit point breach category and reason

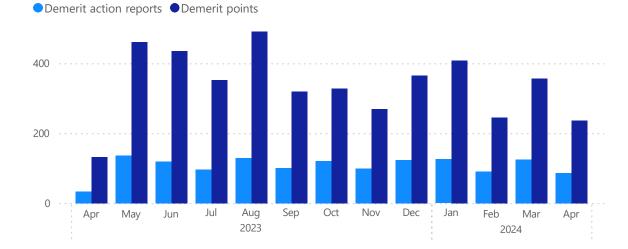
22/04/2023	

Date selection

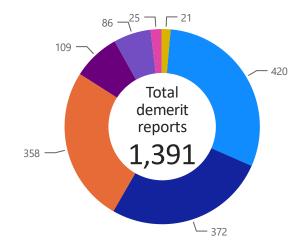
22/04/2024

Breach category	Demerit action reports	Demerit points
☐ Ballast	1,391	4,400
Ballast water operations not conducted in accordance with the Ballast Water Managemer Plan and/or Australian requirements	it 69	400
Failure to demonstrate indications of competence in using and maintaining the treatmen system as specified in the Ballast Water Management Plan	t 106	606
Failure to keep Ballast Water Records on board for 2 years	216	53
Failure to maintain accurate ballast water records	231	997
Failure to present a valid BWMC	68	440
Failure to present a valid BWMP	168	809
Incorrect disposal of sediment	5	16
Incorrect reporting on Ballast Water Report - Critical	4	30
Incorrect reporting on Ballast Water Report - Major	13	77
Incorrect reporting on Ballast Water Report - Minor	506	922
Unauthorised discharge of ballast water	5	50
Total	1,391	4,400

### Demerit points and Demerit action reports lodged per month

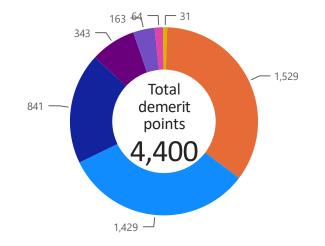


Demerit action reports by Visit port state



Visit port state • WA • QLD • NSW • NT • VIC • SA • TAS

Demerit points by Visit port state



Visit port state ONSW WA OLD NT VIC SA OTAS

### **Demerit Point Overview**



### Demerit reports per location



6	Location of demerit	reports and points		Location of demerit	t reports and point	ts
Sea	Visit port state (groups)	Demerit action reports	Demerit points	Visit port state (groups)	Demerit action reports	Demerit points
	New South Wales	358	1,529	Tasmania	21	3
	NEWCASTLE	309	1,444	BURNIE	2	
	PORT KEMBLA	21	42	DEVONPORT	1	
	SYDNEY	28	43	HOBART	13	2
	In Northern Territory	109	343	LAUNCESTON	5	
	DARWIN	109	343	Victoria	86	16
Coral Sea	Queensland	372	841	GEELONG	32	6
	BOWEN	17	49	MELBOURNE	41	9
	BRISBANE	134	167	PORTLAND	7	
	CAIRNS	22	50	WESTERNPORT	6	
6	GLADSTONE	106	338	Western Australia	420	1,42
	HAY POINT	37	115	ALBANY	5	1
	LUCINDA	1	7	BROOME	1	
	MACKAY	8	32	BUNBURY	21	5
	MOURILYAN	1	2	DAMPIER	50	15
	THURSDAY ISLAND	1	1	ESPERANCE	1	
	TOWNSVILLE	22	39	FREMANTLE	162	58
	WEIPA	23	41	GERALDTON	28	4
	South Australia	25	64	PORT HEDLAND	133	52
	PORT ADELAIDE	11	26	PORT WALCOTT	17	5
	PORT GILES	1	0	USELESS LOOP	1	
	PORT LINCOLN	9	20	WYNDHAM	1	
	WALLAROO	1	2	Total	527	1,62
	WHYALLA	3	16			
	Total	864	2,777			

Date selection

22/04/2023

22/04/2024

merit points	Visit port state (groups)	Demerit action reports	Demerit points
1,529	Tasmania	21	31
1,444	BURNIE	2	1
42	DEVONPORT	1	0
43	HOBART	13	28
343	LAUNCESTON	5	2
343	Victoria	86	163
841	GEELONG	32	65
49	MELBOURNE	41	90
167	PORTLAND	7	0
50	WESTERNPORT	6	8
338	Western Australia	420	1,429
115	ALBANY	5	16
7	BROOME	1	0
32	BUNBURY	21	56
2	DAMPIER	50	150
1	ESPERANCE	1	0
39	FREMANTLE	162	580
41	GERALDTON	28	44
64	PORT HEDLAND	133	525
26	PORT WALCOTT	17	54
0	USELESS LOOP	1	2
20	WYNDHAM	1	2
2	Total	527	1,623
16			

# Simplify Ballast Workshop



- NEW REGULATORY **GUIDELINES**
- DIFFERENT BWMS TECHNOLOGIES
- RECORD BOOK ENTRIES CHALLENGING WATER ISSUES

simplify ballast

- WHEN TO REQUIRE BWE+BWT
- WHEN TO TEST A DISCHARGE

### **CONTACT US**

TO SCHEDULE A TRAINING OR CONSULTATION



mark@simplifybaliast.com

www.simplifyballast.com

TRAINING We can develop tallored two- and threeday training classes specifically designed to meet the needs of your team and your

#### CHECKLIST DEVELOPMENT

local rules and guidelines.

WE CAN HELP

At MEPC 80, the IMO encouraged Administrations to enforce the BWM Convention through inspection and testing, but are you ready?

Develop meaningful checklists for inspectors on what to look for, what to verify, and how to complete an inspection quickly and efficiently



time

book and the EWMS alarm and data logto learn how systems are operating and make sure that systems are used every

MAKING BALLAST SIMPLE AGAIN





# Ballast Water Sampling & Assurance Team.





# Ballast water sampling equipment procurement

The department has invested in the following equipment for ballast water sampling and analysis.

- Turner Ballast Check 2 Fluorometer
- > ATP (adenosine triphosphate) testing equipment
- HACH (Chlorine test kit) for testing Total Residual Oxidants pumped from BWMS which use active substances





## Questions?

### Contact marinepests@agriculture.gov.au